

**PROTECTING YOUTH MENTAL HEALTH:
PART I—AN ADVISORY AND CALL TO ACTION**

HEARING

BEFORE THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

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FEBRUARY 8, 2022
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PROTECTING YOUTH MENTAL HEALTH: PART I—AN ADVISORY AND CALL TO ACTION

TUESDAY, FEBRUARY 8, 2022

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10 a.m., via Webex, in Room SD–215, Dirksen Senate Office Building, Hon. Ron Wyden (chairman of the committee) presiding.

Present: Senators Stabenow, Menendez, Carper, Cardin, Brown, Bennet, Casey, Warner, Whitehouse, Hassan, Cortez Masto, Warren, Crapo, Grassley, Thune, Portman, Cassidy, Lankford, Daines, and Young.

Also present: Democratic staff: Shawn Bishop, Chief Health Advisor; Elizabeth Dervan, Health Counsel; Eva DuGoff, Senior Health Advisor; and Michael Evans, Deputy Staff Director and Chief Counsel. Republican staff: Kellie McConnell, Health Policy Director; and Gregg Richard, Staff Director.

OPENING STATEMENT OF HON. RON WYDEN, A U.S. SENATOR FROM OREGON, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. On behalf of Senator Crapo and myself, it is our hope that this morning's hearing on the state of mental health for our youth serves as a wake-up call. Millions of young Americans are struggling under a mental health epidemic; struggling in school; struggling with addiction or isolation; struggling to make it from 1 day to the next. Our country is in danger of losing much of a generation if mental health care remains business as usual. For families across the land, this is the issue—the issue—that dominates their living rooms and their kitchens.

The Children's Health Insurance Program and Medicaid—the largest payers of mental health care for vulnerable young people—are within our jurisdiction, and that means the Finance Committee has got to come up with solutions.

I hear way too many heartbreaking stories from parents and young people at Oregon town hall meetings, at the grocery store, and in the schools that I have visited all across the State. I am certain that is the same for every member of this committee.

Imagine being a parent scrambling desperately to find help for your kid who is in crisis—who may be a danger to themselves or somebody else. Too many parents are making call after call after call, only to find there are not any beds available, or that the wait list to see a psychiatrist could be weeks or months long, or they are told that their insurance company won't pay for the care that a

psychiatrist says their child needs, even though the law requires equality between coverage for physical health and coverage for mental health. Yet too many families in America are put through bureaucratic torment when they try to get that coverage—coverage that they pay vast sums for. Your kid is suffering, the insurance company takes thousands of dollars in premiums from your pocket, and yet often you get little more than jazz in your ear while you sit on hold.

So there is new urgency. Diagnosing an issue and getting the right care for young people was plenty hard before anybody ever heard of COVID-19. The crisis is significantly larger today. Kids are feeling isolated. Depression is up. Suicide attempts are up. An estimated 140,000 kids have lost a parent or a caretaker to COVID-19, and that number will continue to rise.

The bottom line is, every loving parent wants what is best for their child, so as a Nation, can't we come together and show the same level of concern for our young people? That is why having Dr. Murthy here is so valuable, because he put out, at the end of the year, a clarion call to the country to come together and recognize how serious this is and to take it on.

So we are very fortunate to have him. He has been a crusader for improving mental health care for our kids. He spent some time in Eugene, OR, where of course our now famous CAHOOTS program that brought together mental health providers and law enforcement people to tackle mental health got started. And Dr. Murthy can help us attack the challenge from all sides, including how to help families navigate a broken, complicated mental health-care system; how to respond to a young person in crisis without demonizing them or criminalizing them; how to build on what has proven to work when it comes to health care for kids, specifically CHIP and Medicaid. And when it comes to showing what works, our colleague Senator Stabenow has done terrific work on behavioral health. In our part of the world, we call her a trailblazer for showing us how to make sure that kids get help.

So here is the road ahead for the committee, and I want to thank Senator Crapo. We have spent months and months saying that this is going to be a bipartisan effort. We know that the political scene is polarized. We believe this is so important, we've got to work on a bipartisan basis.

And with today's hearing, the Finance Committee ramps up our legislative efforts. Several of our members are going to be partnering on specific policy challenges. We will have one Democrat and one Republican. The goal is to produce a bipartisan bill that brings it all together.

Senators Carper and Cassidy will be focusing on the subject of today's hearing: mental health care for America's children. I have heard both of them, Senator Carper and Senator Cassidy, talk passionately about how taking care of kids here is the ball game, because we all understand that you have a choice. You can get there early or, if you don't, you play catchup ball for years and years to come.

Then we will have Senator Stabenow and Senator Daines working on the mental health-care workforce. So, part of this—and you see it with Senator Stabenow's great work on behavioral health—

we can have a great program, but we need more workforce. And all over the country, we are hearing about challenges there.

Senator Cortez Masto and Senator Cornyn will look at how to make mental health care more seamless, because too many people fall between the cracks. Senator Bennet and Senator Burr will focus on how mental health care finally gets treated the same way as physical health care—a special passion of mine, particularly because we launched our investigations after the debacle at the Oregon Health Sciences Center, where they could not get their claims paid early on in the pandemic because the insurance companies were stalling. And Senators Cardin and Thune will team up on making it easier to get mental health care via telehealth.

And finally, I want to just mention what the direction here is, really the lodestar for what the committee has talked about in the past. Everybody in America must be able to get the mental health care they need when they need it. That is really the North Star. So we are going to stay busy with hearings featuring mental health experts and advocates.

This morning's hearing will be the first of two that put a special focus on our young people. And before wrapping up, I would like to say—because he is not here—today I want to thank the Senator from South Carolina, Senator Scott, who has talked with me at considerable length about the CAHOOTS bill that I mentioned, when we were able to secure a billion dollars in Medicaid for it. He was just instrumental in this alliance between mental health people and law enforcement, because both groups want to focus on what they have been trained for. Mental health folks want to focus on mental health. Law enforcement says, “We do not want to focus on mental health; we want to focus on what we are trained for.” Senator Scott has been very helpful.

So, Dr. Murthy, thank you for joining us. I am going to turn it over to Senator Crapo for his opening remarks, and then we are looking forward to hearing from you.

[The prepared statement of Chairman Wyden appears in the appendix.]

The CHAIRMAN. Senator Crapo?

**OPENING STATEMENT OF HON. MIKE CRAPO,
A U.S. SENATOR FROM IDAHO**

Senator CRAPO. Thank you, Mr. Chairman, and thank you, Dr. Murthy, for being here today. This discussion comes at a crucial time. Our Nation is confronting an unprecedented range of challenges, many of which have serious implications for the mental health of all Americans—especially children. From school closures to lockdowns to other COVID-related restrictions, the pandemic has intensified feelings of social isolation, helplessness, and anxiety. Since the pandemic began, we have witnessed alarming spikes in suicide attempts and suicidal ideation among teenagers, along with a staggering rise in drug overdose deaths.

Dr. Murthy, as you noted in your advisory, rates of psychological distress among young people appear to have increased across the board in the past few years. Unfortunately, even prior to COVID-19, many of these trends pointed in the wrong direction. That said,

I share your sense of optimism in tackling the urgent issues at hand.

In communities across the country, we have seen families, faith leaders, policymakers, and health-care providers come together to craft creative and sustainable mental health prevention, access, and treatment solutions.

Thanks to the chairman's leadership, we have the opportunity to bolster these efforts through a bipartisan process to advance targeted, consensus-driven, and fiscally responsible policies that drive better outcomes for all Americans. By focusing on shared priorities and adhering to core guiding principles, this process can culminate in comprehensive legislation that our colleagues across the political spectrum will enthusiastically support. Building consensus will maximize our ability to see the work we conduct here signed into law.

We must also uphold fiscal integrity, fully paying for any and all provisions we look to enact. As working families across the Nation contend with the highest inflation in 40 years, strained finances pose a grave threat to health-care access. Unrestrained government spending risks pushing inflation even higher—further accelerating the decline of Americans' purchasing power.

Moreover, with each passing year, we are steadily moving closer to the Medicare trust fund's exhaustion date, at which time the program will no longer be able to pay full benefits for our Nation's seniors. We must be thoughtful and cautious to avoid exacerbating the fiscal challenges we face.

Likewise, we must ensure that any pay-fors that we advance do not in any way compromise economic growth, undermine biomedical innovation, or undercut our recovery. Across-the-board bipartisan support will prove essential. By aligning our process with these basic principles and guard rails, we can produce a meaningful bill, carefully tailored to meet the challenges that confront us.

This committee has a strong track record of generating consensus-based bills, from the CHRONIC Care Act to the Retirement Enhancement and Security Act, which ultimately passed as the SECURE Act in 2019. I believe that we can replicate that success here. As the committee begins its work, we do so having built a strong foundation of shared interests and objectives. For instance, the pandemic has highlighted the pressing need for expanded access to telehealth, especially for Medicare beneficiaries.

Our committee took an essential first step toward addressing these barriers by codifying permanent Medicare coverage for mental health services, regardless of geographic location, including services provided in the home. However, gaps remain, and we will work to bridge them here. Strengthening the mental and behavioral health workforce will also prove vital, especially in the face of widespread provider stress, fatigue, and burnout, which the pandemic has escalated. I hear every day from doctors, nurses, and other health-care professionals across Idaho who are looking to reduce hours or leave their practices entirely in the months to come, confronted with an unprecedented range of demands.

Too often, sadly, policymakers have inadvertently added to these challenges, imposing bureaucratic requirements and tasks that divert attention from patient care and hinder providers' workplace

wellness. As we navigate potential policy options, we should look to avenues for enhancing flexibilities, both for providers and for States, as they seek to improve and innovate across the continuum of care. These and other focal points, from encouraging service integration to promoting modernization, present opportunities for bipartisan discussions that will enable our health-care system to serve all Americans more effectively.

In that spirit, I look forward to your testimony, Dr. Murthy, and to a timely discussion of mental and behavioral health solutions. And thank you again for being here.

[The prepared statement of Senator Crapo appears in the appendix.]

The CHAIRMAN. Thank you, Senator Crapo. And I was glad you mentioned the telehealth issue, because it sort of highlights how this committee keeps building on its bipartisan work.

General Murthy, when Chairman Hatch was head of the committee, Senator Crapo and I and Senator Stabenow all worked together, because Medicare is no longer primarily an acute-care program. It is primarily a chronic disease program: cancer and diabetes and hearts and stroke. And the big provision was the telehealth expansion. And we were really pleased when Seema Verma, looking at the landscape, said, "Hey, we've got something that has already been fleshed out." And what the Finance Committee did in the CHRONIC Care bill on telehealth largely became the first telehealth provision. So we are going to keep working with you; we just have to keep building.

Now before you testify, we have to give you an official introduction. And so, Dr. Murthy is the Nation's doctor. He is the Vice Admiral of the U.S. Public Health Service Commission Corps. This is his second tour in the role, serving as Surgeon General from 2014 to 2017. During that time, he undertook initiatives to address Ebola and Zika, the opioid crisis, and the growing threat of stress and loneliness to Americans' physical and mental health.

Prior to serving as Surgeon General, he co-founded multiple organizations aimed at improving people's health and well-being, both here and abroad. He also practiced as a physician at Brigham and Women's Hospital in Boston, where he completed his medical training in internal medicine. He received his medical degree from Yale, his masters in public administration from the Yale School of Management, and his bachelor of arts from Harvard.

Dr. Murthy, we now turn to you. The formalities are over. We would like to hear from you.

STATEMENT OF HON. VIVEK H. MURTHY, M.D., MBA, SURGEON GENERAL, OFFICE OF THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, WASHINGTON, DC

Dr. MURTHY. Well, thank you so much for that kind introduction, Chairman Wyden. And to you, Ranking Member Crapo, and to members of the committee, thank you for the opportunity to be here today and to speak with you.

I have the privilege of speaking to you today as Surgeon General of the United States, and as a Vice Admiral in the Public Health Service Commissioned Corps, one of our eight uniformed services in the U.S. Government. And I am most importantly here as the

father of two young children. My son is 5, and my daughter is 4, and they are the reason that I am grateful for this opportunity to speak with all of you today.

Over the next few years, my children and many of their peers will start down the path to adulthood. Each of their paths will be different. All will be filled with challenges along the way. It is these challenges that I want to talk to you about today, because I am deeply concerned, as a parent and as a doctor, that the obstacles this generation of young people face are unprecedented and uniquely hard to navigate. And the impact that is having on their mental health is devastating. There are a number of longstanding, preventable factors that are driving this crisis.

The recent ubiquity of technology platforms, especially social media platforms, has had harmful effects on many children. Though undoubtedly they serve as a benefit to the lives of many in important ways, these platforms have also exacerbated feelings of loneliness and futility and low self-esteem for some youth. They have also contributed to a bombardment of messages, both the traditional and social media, that undermine this generation's sense of self-worth, messages that tell our kids with greater frequency and volume than ever before that they are not good-looking enough, not popular enough, not smart enough, not rich enough—simply not enough.

Similarly, while bullying has always been a problem, cyberbullying has expanded the playing field. Anyone anywhere at any time can be tormented or be a tormentor. And meanwhile, progress on the issues that will determine the world this generation will inherit, like economic inequality, climate change, racial injustice, LGBTQ rights, the opioid epidemic, and gun violence, feels too slow. It is undercutting the fundamental American promise for many of our children—their hope in the possibility of a better future.

All of these factors affecting youth mental health were true before the COVID-19 pandemic, but the last 2 years have dramatically changed young peoples' experiences at home, at school, and in their communities. It's not just the unfathomable number of deaths or the instability, it is also the pervasive sense of uncertainty and the nagging sense of fear. It is the isolation from loved ones, from friends, and from communities at a moment when human support systems are irreplaceable and more needed than ever before.

But at the heart of our youth mental health crisis is a pervasive stigma that tells the young people they should be embarrassed if they are struggling with depression, anxiety, stress, or loneliness. It makes a human condition feel inhuman.

I felt that stigma myself 35 years ago, growing up in Miami as a kid who did not look the same as other children, whose immigrant parents did not eat the same food or dress the same way as other parents did. And when that led me to feel persistently lonely, isolated, and anxious—when it led me to get bullied and called racial slurs by classmates who constantly told me that I didn't belong—I felt a deep sense of shame, like it was somehow my fault, like I had nowhere to go and no one, not even my unconditionally loving and supportive family, whom I could turn to for help.

A world of shame and stigma, where children cannot get the help that they need, this is not the world that I want for my kids, for your children and grandchildren, and for kids across our country. But, Senators, we are on the verge of beating back one public health crisis in COVID-19, only to see another grow in its place.

In 2019, the year before the pandemic, one in three high school students reported feeling persistent feelings of sadness or hopelessness, up 40 percent—40 percent—from a decade prior. From 2011 to 2015, youth psychiatric visits to emergency departments for depression, anxiety, and behavioral challenges increased by 28 percent. Between 2007 and 2018, suicide rates among youth aged 10–24 increased by 57 percent—a total of 65,026 young people lost.

As devastating as these numbers are, the real tragedy is that we are failing as a country to adequately respond to them. Even before the pandemic, we were not doing enough to provide adequate care and treatment options in every community. And COVID-19 has only made that disparity worse.

We are not doing enough as a country to build and maintain a sufficient and diverse mental health workforce. And we are not doing enough to integrate our mental health-care system with the rest of the health-care system—particularly primary care. We are not, as a country, doing enough to prevent, and not just treat, this crisis. Many mental health challenges first emerge early in life, and studies suggest that the average delay between the onset of mental health symptoms and treatment is 11 years—11 long, confusing, isolating, and painful years.

Now we have an opportunity, and I believe the responsibility, to make change happen now. Late last year, I released my Surgeon General's Advisory on Youth Mental Health, which outlines the policy, institutional, and individual changes it will take to reframe and address these challenges. Out of the many recommendations in the advisory, I would like to highlight four today.

First, ensuring that every child has access to high-quality, affordable, culturally competent mental health care. To do this, we must make sure that children are enrolled in health-care coverage. We also need to expand our mental health workforce, from clinical psychologists, school counselors, and psychiatrists, to recovery coaches and peer specialists. And we need to make sure care is delivered at the right place and the right time, whether that's in health-care settings like primary care practices, or community-based settings like schools, or whether it is in-person or through telehealth.

Second, focusing on prevention by investing in school and community-based programs that have been shown to improve the mental health and emotional well-being of children at low cost and high benefit. We have seen the extraordinary potential of certain strategies and programs—from Project AWARE, to Beyond Differences, to the Family Check-Up—and these are just a few examples. We need to invest in scaling these programs across the country. And that must go hand-in-hand with continuing to address the systemic economic and social barriers that contribute to and create the conditions for poor mental health for young people, their families, and their caregivers.

Third, we need to better understand the impact that technology and social media have on mental health. At a minimum, if tech-

nology companies are going to continue to conduct a massive, national experiment on our children, then public health experts and the public at large must be the ones to analyze the data, to draw conclusions, and to draft recommendations—not the companies alone. That is how we give parents and caregivers the ability to make informed choices about their kids' use of technology.

The final recommendation concerns individual and community engagement—the role that we each have to play in overcoming the stigma associated with mental illness and with seeking help. No child should feel ashamed of their hurt, their confusion, their isolation, and no one should feel too ashamed to ask for help.

If we do not keep working toward a culture that normalizes and promotes mental health care, then the consequences of our inattention and neglect will continue to ripple across generation, across class, and across geography. It is something we each, as parents and siblings, as teachers, as friends, as leaders, have the power to start changing today, by choosing to reach out to the children in our lives, by letting them know that they are not alone in their struggles, and by sharing our own stories.

Our obligation to act is not just medical—it is moral. It is not only about saving lives. It is about listening to our kids, who are concerned about the state of the world that they are set to inherit, and it is about our opportunity to rebuild the world that we want to give them—a world that fundamentally refocuses our priorities on people and community, and builds a culture of kindness, inclusion, and respect.

My job as the Surgeon General is to help lay the foundation for a healthier Nation, but that foundation is not built solely by putting warning labels on cigarette packs. It is built by focusing our attention on our Nation's most pressing public health concerns, and by fostering connection, community, and resilience. A house where people are isolated; where they feel left behind economically, socially, and professionally; where they feel unsafe; and where they feel like they don't matter, this is a house that cannot stand. But I believe that, if we seize this moment and step up for our children and families in this moment of need, we can lay that foundation right now.

I appreciate you having me here today. I appreciate you coming together to help take on this issue for our Nation, for my sake, and for millions of kids across this country, and I appreciate you giving this issue the attention it sorely deserves. Thank you, Senators.

[The prepared statement of Dr. Murthy appears in the appendix.]

The CHAIRMAN. Doctor, thank you. And this is exactly what we hoped for: a powerful kickoff, a call to action. And I want to start in another area where we have a bond. It is very clear to me that this is personal to both of us.

You described as a young person, how you felt the stigma, the hot scorn and cruelty. My brother struggled with schizophrenia for years. Not a night went by in the Wyden household when we went to bed not worried that he was going to hurt himself or hurt somebody else. And I felt right at the heart of what he was dealing with was the stigma. And he looked at me, and he said, "My brother plays basketball. Look at me; I'm sick." And it just really got me every single night.

And the numbers just take your breath away. In early 2021, emergency department visits for suspected suicide attempts were 51-percent higher for adolescent girls. That is what I meant when I said I was concerned about the possibility of losing much of a generation.

So, tell us your assessment of where we are with respect to tackling stigma, because it sure looks to me like the problem has not gotten better. And what do you think—because you have the bipartisan leadership of the committee here, you have our attention—we need to do about it? Your thoughts.

Dr. MURTHY. Well, thank you, Senator. I realize that one cannot legislate stigma away, yet it stands as one of the great challenges to us being able to address our mental health crisis. Stigma fundamentally, Senator, as you know, is about shame. It is not shame of something we are going through, but shame of who we are. And the challenge for people who are struggling with their mental health—because they often come to believe that it is their fault, that it is reflective of a fundamental flaw they have—is that shame simply drives them further and further into a dark corner at the exact time when they need more human connection and support.

There are things I think we can do as a country to address this stigma. Number one, we can reach out to the children in our lives. We can open up the conversation about mental health and help them understand it is okay to struggle from time to time; that it is human; that it is what we all go through; and that it is okay to ask for help.

The second thing we can do is, we can share our stories with the people in our lives, and with the public more broadly. One of the things I have been grateful to see is more athletes, more elected leaders, more community leaders stand up and share their own struggles with mental health. Every time that happens, it tells another young person that they are not alone. And one of the great difficulties in the struggle with mental health is the feeling that you are alone. But cultural change ultimately takes all of us stepping up and recognizing the role we play in shaping how people talk about mental health and shaping the conversation around mental health; that we need to be talking about it more, not less.

We need to be addressing it not just in our families, but talking about it in the halls of Congress, as all of you have done, which I so appreciate. But that is how stigma changes. It is when people stand up, speak up, and choose to think differently about an issue like mental health.

The CHAIRMAN. We will certainly be talking to you often about that in our work.

I want to turn now to the question of parity. And for all of our families who have watched loved ones suffer, that day when Paul Wellstone, a liberal Democrat, and Pete Domenici, a conservative Republican, got the parity law passed, we felt like a big boulder had been lifted off our shoulders. We were going to get a fair shake for mental health in America.

And so, I have been doing oversight on these insurance companies for years, and I will tell you, I think the commitment to parity which is embedded in Federal law is honored more in the breach than in the observance. And particularly during the pandemic, the

insurance companies just seemed to find one excuse after another to not follow through and cover people. And families could not find providers who take insurance. There were all kinds of games about could you get somebody in the network, out of the network, mountains and mountains of red tape. Because my time is out, we are going to talk to you, obviously, more about it.

I would be interested in your take with respect to this parity issue, because I think I mentioned to you that my Oregon Health Sciences University, they could not get claims paid for months. I opened an investigation. All the claims got paid at once. That is not a system, that the only way they will pay claims is if their Senator puts it in the newspaper. So give us your assessment of where we are on the parity issue, and particularly what you see with respect to compliance. And I know this is not a scientific judgment of what you think.

Dr. MURTHY. Well, Senator, I remember where I was when I learned about the 2008 parity law. I was practicing medicine in Brigham and Women's Hospital. I had seen the toll of mental health on my patients, and I knew how hard it was for people to get mental health care. And I was hopeful when that law passed, that it would change that reality.

I think the honest truth is that we still have a gap; that for many people parity does not exist in terms of the coverage they get for mental health services versus traditional health-care services. That is a travesty, and we have to close that gap.

The Biden administration, and the Department of Health and Human Services in particular, have issued a report recently on these gaps that we currently face where health insurance companies need to step up and reimburse adequately for mental health services. The administration is expanding, in a multiagency way, the number of individuals to do the investigations. It is also moving to require insurers to provide proof that they are in fact meeting the parity requirements and are working to provide additional technical assistance to States so that they can also work to hold insurers accountable. This is going to be essential for access.

The CHAIRMAN. I am over my time, and we are going to work on that with you as well.

Senator Crapo?

Senator CRAPO. Thank you, Mr. Chairman.

Dr. Murthy, in your advisory you note the rapid shift toward telehealth at the start of the pandemic, as well as the potential for telemedicine to serve a lasting role in improving health-care quality for our young people.

Given your medical background and your ongoing engagement with health-care providers, what do you see as some of the best practices for clinicians as they work to integrate telehealth into their practices for the long term? And what factors should they consider as they tailor these models and services to younger patients?

Dr. MURTHY. Well, Senator, thank you for that question. I am a big believer in the power of technology to improve the quality and delivery of health care, if it is used appropriately. I think currently, telehealth has tremendous promise to expand access to mental health care.

We still have challenges to address, including expanding broadband access. We still need to ensure that not only in the public payer system, but in the private payer system, that there is adequate reimbursement for virtual care. And we also have to ensure that privacy is protected at all times on these platforms. I think as individual clinicians look to utilize the virtual platforms in telemedicine, it is important not only for them to recognize and to honor those privacy concerns, but also to recognize that there are times when we do need to see people in person.

The advent of telemedicine is not entirely a substitute for in-person care, but it is a good supplement, especially for people who have traditionally had difficulty accessing care. But finally, it requires a conversation with patients themselves. Not everyone will be comfortable utilizing telemedicine. Some will be more comfortable than others.

Young people tend to be much more comfortable with technology, and this is the kind of tool that I believe, if appropriately introduced and utilized, can increase access for young people's mental health care.

Senator CRAPO. Well, thank you.

Moving to the issue of providers, our Nation's health-care workforce has provided unparalleled resilience and expertise and dynamism as they have dealt with the COVID-19 crisis. Unfortunately, while the pandemic response efforts of these past 2 years have highlighted these strengths, the COVID-19 problem has also exacerbated the stress, fatigue, and strain facing far too many of our front-line providers.

A recent study found that one in every five physicians would likely leave their current practice within 2 years, and that nearly one-third of health-care professionals planned to reduce their hours in the next 12 months.

Dr. Murthy, in the past you have discussed the pressing challenges posed by physician burnout, which has serious implications not just for health-care workers but for patients, particularly in communities plagued by shortages of providers.

Expanded access to telehealth and other virtual health technologies could help to bridge these gaps. But other interventions, however well-intentioned, seem likely to increase bureaucratic strain and divert time and attention from patient care.

My question to you is, what role do you see technology, from telehealth to AI and other cutting-edge innovations, playing in reducing provider burnout moving forward? And how can we promote these tools without creating needless new burdens and stressors for our health-care professionals?

Dr. MURTHY. Senator, I appreciate you highlighting the issue of clinician burnout. I am deeply concerned about it. I think it has gotten worse, not better. And I do think technology can play a positive role. But it can also be harmful if not utilized properly. I think if technology is used to provide greater access to telemedicine, which gives flexibility to both patients and clinicians, that can be a net benefit.

If technology is designed around the needs of patients and health-care providers, that can also be beneficial. To give you a counter-example, if you look at electronic health records right now,

many of them are designed for billing purposes much more so than for patient care. And that creates strain and burden for clinicians at a time when that technology should be used to enable easier care for their patients.

Senator CRAPO. Well, thank you very much. I appreciate this. And as the chairman said, we look forward to continuing the pursuit of these issues with you and the many that we have not had time to talk about in our questioning. Thank you very much.

The CHAIRMAN. Thank you, Senator Crapo. And we are seeing it all the time in Oregon and Idaho, and we are working together.

Senator Stabenow?

Senator STABENOW. Thank you very much, Mr. Chairman and Ranking Member. I so appreciate the focus that you are giving, and the leadership you are giving to this. I have to say, Dr. Murthy, I so appreciate your report and focus on young people. We know that one out of five Americans will have a mental illness in their lifetime, and that number actually may be going up as it relates to the pandemic.

As the chairman talked about, I think there are many, many of us in this chamber who have had experiences ourselves or in our families. For me, it was my dad being bipolar before there was a diagnosis, before there was treatment, before there was medication. I saw what happened when he did not have those things, and then when he did, and the transformation in him and our family. And so, I wish that for everyone, which means we have to treat health care above the neck the same as health care below the neck. So that is part of getting rid of the stigma.

But we know that children and young adults have been particularly hard hit, and certainly your report shows that anxiety, depression, other issues, have become way too common in far too many children, and young people have gone without treatment. And social media only makes it worse every single day.

So, our children need help, and I would like to talk about two different venues to do that. One is school-based health centers, which I think are absolutely essential in addressing what has been happening, particularly now with the pandemic, on school-aged youth. And school-based health centers can provide critical behavioral health services, both addiction services and mental health services, as well as physical. And we are inching along.

And back during the Affordable Care Act negotiations, I was able to get \$200 million over 5 years into the ACA for infrastructure to create health clinics, but we have never actually put money into the operations every year. And so this year, there is \$60 million included in the Senate appropriations money, in the House as well, for the first time, for operations. And we need to do more to really strengthen that.

Senator Capito and I are working—we have legislation, the Hallways to Health Act, to move forward to really aggressively address what we need for our children's schools. So, could you speak to the importance and benefits of reaching children in school-based settings like the school-based health clinics? And how can we use them to expand what we need to do in behavioral health?

Dr. MURTHY. Well, Senator, thank you for that question. And thank you also for your leadership on this issue, for all of your

work to support and get certified community-based behavioral health centers in communities across the country.

One general principle in health care that I believe applies here as well is that you are better off if you bring care to people where they are. Our kids are in school. The better we are able to bring care to schools through counselors, school nurses, school psychologists, the more easily we are going to be able to identify mental health struggles early and get kids the care that they need.

That is why I think school-based clinics are so important. It is why the investments that were made through the American Rescue Plan to give billions of dollars to schools, in part to help them hire more mental health providers and counselors in schools, were so important. But we have to sustain those investments over time.

I mentioned earlier that it is 11 years, typically, between the onset of symptoms and when a child ultimately gets treatment. We have to shorten that time frame. We cannot let kids struggle, and their family struggle, for 11 years. And getting care to them where they are, in schools, is one important way to help do that.

Senator STABENOW. I totally agree.

And then the second piece of that is that, after they have been identified, they are getting help in school. If there is no community-based care, then it all drops off, which is why, as we talk about Certified Community Behavioral Health Clinics, this is about institutionally creating parity in the community between physical health clinics and behavioral health clinics.

And that is why this movement—I am so proud that Senator Blunt has joined me in this, and members of our committee, certainly the chairman. And the work that has been done in Oregon on this is really significant. We have a broad bipartisan bill to extend the opportunity across the country, which is absolutely critical because first, you have to have services in the community. The services that are being provided now in places with funding are providing services to children.

We know that about 25 percent of the services now being provided through the behavioral health clinics are to children, and more can be done. And they are working with juvenile delinquency facilities, and criminal justice facilities, and so on. And the most important thing is that they are meeting people where they are, meeting children where they are. Traditionally now, the mental health system has taken only those who are very seriously mentally ill under Medicaid. This is about everyone who presents themselves, every parent who presents themselves at a clinic with their child. And they are required to be able to get access to services and so on within a week, which is transformative, as well as the psychiatric crisis services provided.

So I wonder if you might speak more about what we have dubbed the CCBHCs, which is a mouthful, dealing with behavioral health services, and the important role of community-based services?

Dr. MURTHY. Well, thank you, Senator. I cannot emphasize enough how important it is to have treatment accessible to people in their communities, and ideally, to have that combined with virtual care services to provide maximum points of access.

Mental health is a delicate issue for many families, and being able to go to places and people they trust is often essential. Know-

ing that there is a center in your community can make a big difference for someone who is wondering whether they should step forward and get care.

But what is also important is that the care that is delivered—whether it is for mental health concerns, or substance use disorders—is actually evidence-based care, which is why I believe the CCBHCs and the standards that they are working to uphold, such that all evidence-based treatment is being made available, are very important.

So my hope is that, through a combination of in-person services and virtual services, we can ultimately provide the networks of access that young people need to get the health care they deserve.

Senator STABENOW. Thank you, Mr. Chairman.

The CHAIRMAN. And Senator Stabenow is going to continue to pioneer in this area, since she has taken on the workforce issue, which we all know is absolutely crucial. So we look forward to her continuing her good work.

Senator Grassley is next.

Senator GRASSLEY. Thank you for being here, and congratulations on your appointment to this very important position. I am going to ask some questions about legislation that I have sponsored and how it is being implemented. And so, if you do not know the details of that, you can answer in writing. But let me ask you anyway.

I am going to start out with this lead-in. I passed the bipartisan ACE Kids Act with the cooperation of Senator Bennet of this committee. It aligns Medicaid rules and payments to incentivize care coordination, including mental health care for kids with complex medical conditions.

This Congress, I am working with Senator Bennet again to pass the Accelerating Kids' Access to Care Act, to streamline access to out-of-State providers for these same kids and their families.

My question is this: the Accelerating Kids' Access to Care Act builds onto the ACE Kids law that is now on the books, by cutting red tape for providers and families. As a health-care provider, is access to an out-of-State provider a challenge for families who have children with complex medical needs? And let me add a second question so you can answer both at one time. How important is it that a child have mental health support services coordinated with their physical health?

Dr. MURTHY. Well, Senator, thank you for that question and for your leadership on this issue. I could not agree with you more that we need to reduce the barriers to people getting care, including from out-of-State providers.

One of the things that we saw during the pandemic was that there were emergency measures that were put in place that allowed people to essentially provide care across the State lines and then also allowed for the greater use and adoption of telemedicine. I think we should not go back on some of those measures. I think the more we are able to ensure that people can get care from wherever they need to, whether it is in their State or out of State, the better off kids will be.

And finally, this is not just about children. It is about their families. As you know better than most, Senator, from the work you

have done, when kids have complex medical conditions, that creates certain stressors for their family at large. That is not always easy for parents to handle while also juggling their jobs. You have to make this easier for parents, not harder. And allowing those families to be able to get the best quality care, wherever it is, is a key part of that process.

Senator GRASSLEY. Thank you for that. In my State of Iowa, and even some States further west that are less populated, mental health in rural areas is a very important thing. So I want to ask about rural use. Your 53-page advisory mentions youth in rural areas, who are at higher risk of mental health challenges, as they may face additional challenges in participating in school or in accessing mental health services. The advisory does not speak to specific resources for youth living in rural America.

Could you explain why that might not be included? And maybe give me a short answer to that so I can ask for a longer answer on my last question.

Dr. MURTHY. Oh sure, Senator. Well, the advisories by nature are limited documents that are intended to call out challenges, and lay out actions that people can take. You are absolutely right that we need more resources for youth in rural areas.

There are some governmental resources that are under development, like the 988 hotline. There are private platforms like Crisis Text Line, which currently serves many youth in rural areas. But this is one of the disparities in health that I am worried about: that in rural areas, it is harder for children to get the care they need.

Senator GRASSLEY. Okay.

My last question: I helped pass the Seeding Rural Resilience Act with Senator Tester. The law requires the U.S. Department of Agriculture to work with HHS, including the Surgeon General, to raise mental health awareness among farmers and ranchers.

Can you work with your USDA colleagues to ensure that this effort is developing as urgently as is possible and report back to me?

Dr. MURTHY. Yes, Senator, I would be happy to do that.

Senator GRASSLEY. I think I will submit the rest of my questions for answer in writing.

[The questions appear in the appendix.]

The CHAIRMAN. Thank you very much, Senator Grassley.

We are going to be calling some audibles, because members have hectic schedules. I think now Senator Carper is available online, and if you did not hear it, we wanted to give a special shout-out to Senator Carper, because he is making a personal commitment to standing up for kids as they wend their way through the mental health system.

Senator Carper?

Senator CARPER. Thanks, Mr. Chairman. General, welcome. Thank you for joining us. Thank you for your service.

I want to thank you for joining us today and for your testimony. I want to thank our chairman, Senator Wyden, for the opportunity to serve as the co-chairman of this bipartisan working group. I am delighted to be chairing the Pediatrics and Young People portion of this effort with my friend and colleague Senator Cassidy.

The pediatric and mental health crisis is not a challenge that this committee can meet by itself. But with those of us in this room

working with others who share our vision, like you, Dr. Murthy, we can forge the way, and I believe we will do just that.

In one of my first acts as Governor I established something called the Family Services Cabinet Council devoted to strengthening families, the basic building block of our society. The goal of our Council, which united five different departments across the government of the State of Delaware, was to focus on prevention, the root causes of it. Rather than spending our resources treating the symptoms of our problems relating to families, we would attack the root causes of those problems.

And, General, in your opening statement you mentioned investing in schools and community-based programs that have been shown to improve mental health and emotional well-being of children at a low cost and high benefit. And my question, a simple question, would be, how can Congress build on these preventive and effective services?

Dr. MURTHY. Well, Senator, it is good to see you, and thank you for that question about prevention. I am particularly grateful for it, because I think, historically as a health system, we have focused the lion's share of our attention and energy on treatment, and not so much on prevention. And we are seeing the consequences of that with mental health. About 75 percent of people who struggle with mental illness, their struggles appear before the age of 24. So, we have to get to kids early.

Now the good news is that, within the CDC and NIH there are a number of programs that have been supported and funded over the years, and research that is ongoing that has demonstrated that there are in fact programs, prevention programs, that are school- and community-based that are effective in reducing the likelihood of mental health challenges down the line and are also cost-effective.

The Family Check-Up program is one of those examples. When I was Surgeon General in the Obama administration, I had also published a report on alcohol, drugs, and health which laid out an entire chapter on prevention-based programs that worked not only to reduce substance use disorders, but also mental health challenges for young people, including programs like the Nurse-Family Partnership, the Good Behavior Game program, and others like that.

The challenge we have right now, Senator, is these programs are often under-funded, under-studied, and under-appreciated by the public. I have talked to many educators over the last few years who, if they have heard of these programs, they do not know how to go about beginning to implement them. So this is a place where I do believe resources and technical assistance can make a big difference in helping our kids early in the time course of these challenges.

Senator CARPER. Thanks very much. The Family Services Cabinet Council that we established in Delaware, which Governor John Carney has resurrected, among the things that we did was, we focused largely not on the symptoms, but on the root causes. One of the things we found out in working with actually the faith community in Kent County in providing for the education of kids in schools, we learned they had been thrown out of school because of

violence and disruption. And rather than just saying, well, we are going to send you back home to sit it out, we actually provided alternatives for them.

One of those was with a church just north of Dover—an African American pastor, large church. And they created an alternative educational program for students, with remarkably good results, kids who just could not perform, could not behave at all in school—middle school, high school students. And I remember visiting the church and school, which was right beside the church. I said to the pastor of the church, I said, “What is the problem with these kids? What is the problem with these kids who are showing up at your doorstep and being sent by schools?”

She said, “The problem with these kids is, nobody loves them.” That is what she said. She said the problem with these kids is nobody loves them. She said too many of them do not have a father around, will never have a father around, and they just need to be loved and have someone who has high expectations for them.

And you know what? We went to work on that. We just went to work on that and focused on, among other things, training—partnering with thousands of parents in neighborhoods across our State, offering in-home parenting services. It was the same thing in our prisons, doing the same thing in our prisons.

So I have some questions for the record that I am going to submit to you, but I would just say to you, we can address the symptoms of these problems, but if that is all we do and we do not go after root causes—which are many and varied, and I mentioned a couple of big ones. And I would submit that one of my priorities in taking on this opportunity is to do just that.

Thank you, Mr. Chairman and my colleagues. I look forward to working with all of you. General, great to see you. Thanks, my friend.

The CHAIRMAN. Thank you, Senator Carper. And I am so glad that you are taking this on with Senator Cassidy. Both of you have a long tradition of working in a bipartisan way, and this issue is so crucial. It is exactly what we are going to need.

Senator Thune is next.

Senator THUNE. Thank you, Mr. Chairman. And thank you, Dr. Murthy. And thanks to the chair and Senator Crapo for addressing this subject. This is a subject that is increasingly on the minds of administrators and teachers, parents, and students across the country. It is very real. When you talk to school administrators, there is this uptick. The statistics do not lie. Clearly these mental health issues are having a tremendous impact on young people, to the point that they are in many cases taking extreme measures. And we hate to see what is happening to our youth across America.

I want to ask one question. This is a controversial subject and I know it, but we are in the 3rd year of the pandemic. Fatigue with public health measures has set in. We know a lot more about this than we did in 2020 in March, and yet communication is still confusing, and in some cases inconsistent. And I think it has undermined America’s confidence in public health officials.

Specifically, HHS has pushed a toddler mask mandate in Head Start programs in the U.S., including outside on the playground. Not even the WHO is recommending masking kids under five. And

at the end of last year, President Biden said the pandemic response needs to be at the State level, yet the administration is taking decisions out of the hands of folks on the ground.

There are a number of States that are announcing now that they are going to do away with mask mandates in their States.

So I know this is—again, as I have said, it probably requires a lot more time than we have, but could you just tell me where the science is on this, on masks? And what should it be? Should it be a Federal Government thing, or should the States be able to make these decisions on their own?

Dr. MURTHY. Well, Senator, I appreciate that question. And I think you are exactly right to point out the fact that, year 3 going into this pandemic, there are a lot of people who are frustrated, who are tired, who are exhausted. And I think we have to take that into account as we think about the next stages of the response.

When it comes to masks, Senator, what we know, what we have learned in the last few years in particular, is that masks are a helpful tool to help reduce spread of the virus. When we look at schools in fact that have masking, there is less spread and there are in fact fewer school closures as a result of there being less spread of the infection.

Now do parents in an ideal setting want their kids in masks? No parent would want a mask if it is not needed, but I think our goal should be to get to a place where we can pull back on these types of restrictions as quickly as possible, and as safely as possible. And in that process, there will be, I think, a very important role that States and localities play in tailoring the approach based on their individual community circumstances.

I think increasingly, finally, as we look at this pandemic, we see that we have more tools now to help address the pandemic, to empower people to keep themselves safe, whether those are masks, or therapeutics, vaccines and boosters, and an increasing supply of tests. These are all tools now that we can use to live our lives more normally than we did 2 years ago.

Senator THUNE. I think it is just for parents, kids, everybody, very frustrating, and I hope that we can get to a point—and I agree. I mean, I think States need to be tasked and enabled and empowered to make a lot of those decisions.

Changing gears quickly: telehealth. We have a couple of bills. I have one with Senator Menendez that would incentivize States to pursue certain health services initiatives under CHIP, providing greater flexibility to States that design initiatives to address behavioral health in schools. And we look forward to working with you on that.

But a number of these solutions now include, within Medicaid and CHIP, telehealth. Do you think that has been a valuable thing? In my State, we have Avel School Health that provides access to a school nurse and behavioral health services remotely, where the workforce is not available. And we all talk about the need for more providers, which we do not have, but it seems to me at least telehealth can make a big difference there. Would you agree?

Dr. MURTHY. Absolutely, Senator. I think telehealth has to be part of our health-care delivery apparatus going forward. I think

the pandemic has helped us see how powerful it can be in increasing access to care. I think it is particularly helpful for rural areas where people currently often have to drive many miles to see a mental health provider, if there even is one in their area.

So I absolutely think we have to have them implemented. That means expanding access to broadband. It means ensuring that we reimburse adequately for those services, and that we have appropriate privacy measures in place for patients.

Senator THUNE. Thank you.

Finally, the big tech companies' influence on young people today. We have seen all kinds of analyses and investigations and reporting on that. For example, *The Wall Street Journal* detailed how TikTok's algorithm serves up highly inappropriate videos to minors.

I have a bill that addresses that. It would give consumers the option to engage with Internet platforms without being manipulated by opaque algorithms. And just a quick question. Do you agree that users should be able to use social media without being manipulated by algorithms that are designed to keep them engaged on the platform for hours on end?

Dr. MURTHY. Well, Senator, I do believe that people should be able to use social media without being manipulated, without having their data used in ways that they do not consent to. And I think all of us, particularly parents and children, deserve to have the data that technology companies have about the impacts of these technologies on our children.

Currently there is a grand national experiment that is taking place upon our kids when it comes to social media, and we need to understand more about what is happening: which kids are at risk, what impact these algorithms and the broader platforms are having on our children. We need to understand so that parents can make informed decisions for their children.

Senator THUNE. A big part of this problem, and I think one of our challenges, Mr. Chairman, in addressing mental health issues is the influence of a lot of these algorithms that manipulate the content that people—and particularly young people—see online.

Thank you.

The CHAIRMAN. I think your point is important. Senator Booker and I introduced the Algorithmic Accountability Act, which really speaks to the proposition that, so often, people think algorithms are just purely computer science, nobody's biases and the like. I think we have come to learn that that is not always the case, that people bring their biases to the construction of these algorithms. I look forward to working with you on it.

Senator PORTMAN is next.

Senator PORTMAN. Thank you, Mr. Chairman. And, Dr. Murthy, I appreciate you being here and the work you have done on this topic of mental health, and behavioral health more broadly, for our kids.

I looked at your recommendations for communities. One was that responding to mental health crises for young people should involve implementing evidence-based programs at the community level. And you cite what is called the Drug-Free Communities Act as an example of that.

I am happy to see that, because I do believe that that is part of the answer here, to not just break down social isolation, but also deal with the drug issue and its interaction with mental health. We authored that legislation years ago, but I also started my own coalition back home that is still very active and that I am involved with.

Can you elaborate on how drug use prevention intersects with mental health? And in particular, talk about how that investment in prevention might keep people from using or abusing drugs starting at a young age?

Dr. MURTHY. Well, Senator, first I thank you for your leadership on this issue. I know you have been a champion in addressing the addiction crisis in America, and we need that kind of leadership especially because, during this pandemic, we have seen overdose deaths increase to their highest levels.

I am also glad that you raised the point about prevention. In 2016, when I published the Surgeon General's Report on Alcohol, Drugs, and Health, I had devoted an entire chapter to prevention programs, most of which were school- or community-based. And the powerful thing about those programs, Senator, was that they not only helped to reduce the likelihood that children would develop a substance use disorder down the line, but they also improved the mental health outcomes, improved graduation rates, and reduced teen pregnancies. They had a multiple benefit to the kids who participated in them.

The other important point is that these were cost-effective programs, Senator. They saved somewhere between \$2 to \$11 for every \$1 that was invested in them. I think we need more of these programs, not less. I think we need to provide not only more funding, but more technical assistance to schools and communities to implement these programs. I think prevention is always better than cure, and we have a lot more prevention that we can do.

Senator PORTMAN. Well, thank you for your work on that, and I look forward to continuing to work with you on the prevention side. You are absolutely right in terms of the efficiency of it and the cost. It is absolutely the best way to deal with the issue. We also do a lot of work, as you know, on the treatment and long-term recovery issues which are necessary. But prevention, I think, remains the most effective and has the most potential.

On social isolation, you talked earlier about in-person learning. I am very big on getting our kids back to school because of the data that I have seen about what that does to a child not to have that interaction with their classmates and with their teachers.

One of the things we have heard in Ohio is that people want to get their kids back to school, and schools in Ohio are for the most part responding to that. Eighty-seven percent of Ohio schools were open for 5-day in-person learning as of May 2021. Unfortunately, during Omicron that number decreased.

But talk about testing. They have said that there is inadequate testing as a contributing factor that prevents in-person learning. CDC put forward this test-to-stay strategy which uses contact tracing and serial testing to allow kids to stay in school.

Can you talk a little about that? With about 55 million kids enrolled in school in the country, that is a lot of tests, but I think

it is absolutely essential to get them back to school. And can you speak to the effectiveness of this test-to-stay strategy and the scale of testing resources that would be needed to successfully implement that nationwide?

Dr. MURTHY. Well, thanks, Senator. I could not agree with you more that getting our kids back to school is essential. My children were not in school in 2020 during the pandemic. In the fall of 2021, they were able to go back to school. It has made a huge difference for them, and also for me and my wife, as parents.

In order to keep our kids in school, I appreciate you pointing out the test-to-stay program. There are several things that can actually help our kids stay in school. One is basic prevention measures that can be used both to reduce the overall state of infections. Second, when kids are vaccinated per the CDC's quarantine rules, they also do not need to leave school if they are exposed. They can mask and then they can be tested. But third, even if children are not vaccinated, the test-to-stay program is a series of regular tests that allow them to stay.

The administration is recognizing exactly what you said: that more tests are needed to implement that program for some schools, and they have doubled, in fact, the number of tests that they have made available to send to schools.

We have also, more broadly for the country, increased the overall number of rapid tests that are available, with the President announcing about a month ago 1 billion tests that would be available to deliver directly to homes, as well as the additional tests that we were commissioning to be produced for the broader community.

So, if there are schools or communities that are struggling and need access to tests, Senator, I would be happy to follow up with you afterwards and find out how to connect them to the right resources in the Federal Government so they can get the tests that they need.

Senator PORTMAN. We would love to follow up with you on that as it relates to Ohio, and thanks for your service.

Dr. MURTHY. Thank you, sir.

The CHAIRMAN. Senator Cardin?

Senator CARDIN. Well, thank you, Mr. Chairman. Dr. Murthy, it is a pleasure to have you here. Thank you very much for your service to our country. We really appreciate that.

I just really first want to concur in the comments that have been made by our chairman and ranking member in regards to mental health parity. We have had some great moments of moving forward, and yet there is still a lot more that we need to accomplish in regards to mental health parity.

I appreciate the recommendations that are being made here, and I want to start with the recommendation to expand the use of telehealth for mental health challenges, addressing the regulatory barriers, ensuring appropriate payment, and expanding broadband access, all of which I agree with.

But here, I think, is the challenge that we have. We worked, bipartisanly, to expand telehealth on this committee. We did it as a necessity during COVID-19, and now, as we are coming out of COVID-19, we would like to make permanent changes in our health-care system that permit the broader use of telehealth.

It is particularly helpful for mental health, but other services as well. And one of the challenges is that when we go to do this, we are told that there will be an extra cost to the health-care system in using telehealth, which is counterintuitive. Telehealth is much more efficient for direct health-care costs, let alone the indirect costs to the patient who has to travel, and maybe get a hotel room, or whatever else is involved in an in-person visit.

So how can you help us in the data we need to show that telehealth is not just more convenient, it is not just increasing access to people who would otherwise not get access, but it is also more cost-efficient to our health-care system?

Dr. MURTHY. Well, Senator, I think you raise a really important point, because we have to look at the costs globally, just as you said. I talk to providers all the time who tell me what is not working about our current health-care system. I think one of the most common examples, Senator, I hear is the doctor who says, "I need to call my patients and ask them to come in to give them lab results, even though I could just tell them on the phone, because the system does not adequately allow me to have those kind of virtual care test appointments."

When something like that happens, a patient is taking time off from work to come in. The clinician is spending time in-person, with office staff supporting, et cetera. You have more time spent that does not need to be spent, time that could be saved. And time is money for individuals, for patients, as well as for the office staff.

So I think, when you look at the cost globally, it makes sense that it is more efficient for us to use technology as an adjunct. To me, it would be not that different from saying that it is more efficient to be able to call a relative or a friend rather than go and visit them at their house every time you want to say "hello" or have a question.

Technology can make things more efficient. I think what is critical though, as you mentioned, is that we have to use it appropriately. We have to ensure that practices are set up to use telemedicine appropriately. We have to reimburse for it adequately. We have to make sure that it has privacy measures in place.

And from an equity perspective, we have to expand broadband access so that everybody has access.

Senator CARDIN. I totally agree with you; absolutely. But I also think we have to educate those who are doing the score-keeping here to explain that when you make our health care more efficient, it saves money. It does not add to the cost.

I want to ask you one additional question—I have a little bit more time—and that is, the number one issue I hear from our health-care providers today is workforce, workforce, workforce. They just do not have enough individuals in any one of these capacities.

Certainly, in mental health we do not have the adequate workforce that we need in order to provide the services. That has even been highlighted in a much more severe manner as a result of COVID-19. We have increased demands and less workforce that is available. But there is a chronic shortage in underserved communities because we do not have the diversity in the mental health providers that we desperately need.

So, I would hope that you would be forceful in recommendations not just to increase the workforce in mental health, but to increase the opportunities so that we have a workforce that represents our community. In that regard, I would make a strong recommendation to engage the HBCUs, MSIs, and institutions that can reach out and offer opportunities to traditionally underserved communities.

Dr. MURTHY. Thank you, Senator. I could not agree with you more about the diversity of the workforce. I remember being in Maryland at Morgan State when I served the last time, talking about the workforce diversity issue that we have with dealing with the substance use disorder treatment. And there are similar disparities we are seeing, and gaps, when it comes to mental health-care treatment.

I think there are a number of measures that we can take, from loan forgiveness to much more effective recruitment of racial and ethnic minorities into the workforce from early on in the education system. And this is critical. Because as you mentioned, this is going to help us provide better care to the communities across America if we have a more diverse workforce.

Senator CARDIN. Well, I look forward to working with you on that. I will be at Morgan on Friday, assuming we are not here. It is an incredible resource, not just for the students they educate, but for our community at large, in providing opportunities to underserved communities. And I think they can play a role, as other HBCUs can play a role, in helping us meet these needs.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Cardin. I am sorry I had to be out of the room for a minute, but I just want everyone to—

Senator CARDIN. Do you want me to repeat everything I just said?

The CHAIRMAN. Well, I am just going to take note of the fact that you have been advocating for these issues since your days in the Maryland legislature and the House Ways and Means Committee. We partnered often. And thank you for taking on some of the communications issues with Senator Thune. That is going to be really important.

You might be interested, Dr. Murthy, that one of the responses we got with respect to the hearing on telehealth was the number of communities that are lacking broadband, worried that they are not going to get it any time soon. And they said, by the way—and I will be telling Senator Cardin and Senator Thune about this—if you have to, just get us audio-only until we get to the point where we have broadband. So we have a lot to do.

Senator Lankford is here. Thank you, Senator.

Senator LANKFORD. Thank you. Thanks very much. Thanks for being here, Dr. Murthy, and thanks for your service to the country.

I have a ton of questions, and I will start trying to be able to run through some of them. Your report references children who lost a parent to COVID-19, which has been dramatic for us in Oklahoma, obviously. We have had a lot of children who have lost a parent, and bereavement is a very real issue in dealing with mental health issues for children.

Somewhere around 15 to 20 percent—we are still getting the exact numbers in—of children who have lost a parent, lost a parent

to COVID-19, which would mean 80 to 85 percent of the children who have lost a parent, lost their parent to something else than this.

So my question is, for your report, just on the focus here of how we deal with bereavement in children. How do we keep this as a broader focus and not just make this a COVID-19 focus in particular? Because obviously, we are going to get through COVID-19 together on all this, but we are still going to have the other issues of cancer and suicide and so many other issues where children deal with bereavement. How do we keep that broader perspective?

Dr. MURTHY. Senator, I appreciate you broadening the lens there, because you are right. Many of our kids have been struggling with losing a caregiver before the pandemic, and this is going to be a charge for us post-pandemic.

I think there are a few things that are important. Right now, as you know, there are Federal funds that are provided, often to support services for foster care and other services that kids may need when they lose a caregiver. And, while I think there is more that we can do legislatively, Senator, in terms of providing more support to those local institutions that provide the safety net for kids, I think this is a time also where, in addition to the government, we need communities to pull together around these kids.

These kids are not just going to need help for a few months or for a year—

Senator LANKFORD. It is a lifetime.

Dr. MURTHY. It is a lifetime. And the trauma also that goes into the loss of a caregiver is extraordinary. We are learning more and more, Senator, as you know, about adverse childhood experiences and the impact of that trauma in the long-term health of a child. Having trauma-informed care, ensuring our health-care providers are trained in how to address trauma early on in the provision of care, making sure schools have counselors who are also attuned to how to provide trauma-based care, is going to be essential in caring for—

Senator LANKFORD. It is a big deal for us long-term. Neighborhoods, communities, extended family, churches, we've got to have a whole engagement within communities for this.

But one of the things that we need to be able to look at as a committee—and be able to partner with HHS on—is how we actually fill the gap. I have learned that about 50 percent of the kids who have lost a parent are not getting their Social Security benefits based on that. And so we have to be able to find a way to be able to make sure that we are getting some of that support to them. And that is something that I would like to be able to partner together on.

Your report also mentions dealing with marijuana use in children. We have seen substance abuse go down in several areas during COVID-19. The exception has been marijuana use. That has gone up. I am sure there are a lot of factors on that—obviously, the availability. Some of the different States have found ways to be able to make marijuana legal in their State. But for youth and adolescents, this has become a very serious issue.

You have made some comments on this. I would be interested in you being able to drill down on the effects on youth of marijuana use and depression.

Dr. MURTHY. Yes, Senator. So, when it comes to youth, I worry that there is a perception that marijuana is completely harmless in children. Our data tells us otherwise. Our data tells us in fact that a portion, a substantial minority of people who use marijuana will actually develop an addiction to marijuana. And that number is significantly higher among youth.

When kids also have underlying mental health conditions, the impact of marijuana use can also be more significant. And so I worry, Senator, about the messages that we may send that say this is utterly harmless and there is no problem here.

I think we need to be responsible in how we teach our kids about marijuana. I think how we talk to families about marijuana use—and I think health-care providers also need to be empowered to have these conversations with youth early on, as well as teachers.

Senator LANKFORD. Yes. We have to find a way to get that message out. That message is not getting out. Obviously, they are seeing role models and other individuals using marijuana, and there does not seem to be any voice that is out there talking about the real damage, in this area especially, and how to deal with depression and other issues.

I have a challenging set of questions I want to be able to walk through as well, on dealing with another mental health issue and its long-term effects. And it deals with gender dysphoria, among children especially, and how we process this on the medical side—so puberty-blockers, cross-sex hormones, receiving surgical procedures to attempt to change the appearance from the biological sex among children.

There have been some studies that have happened here, but there are also studies around the world that are raising new questions for adolescents in those areas, and saying you have got someone 12, 13, 14 years old who is taking some of these medications long-term that have serious effects. And when you are dealing with a 12- or 13-year-old, what is the standard for them actually when they are living with those consequences when they are 20, 30, 40? And is there responsibility to be able to put some warnings out and some precautions in this? How do we manage through that right now on a medical side?

Dr. MURTHY. Well, Senator, I appreciate you raising this. I mean, this is a very complex issue, as you know well, and I think what families need at a point like this is, they need clear guidance from the medical community.

I think as the research has evolved, and as guidance has evolved on how best to take care of children in these circumstances, one of the things I worry about is that change propagates slowly in the medical profession. The time from when you make the discovery, for example, to when it is completely reflected in a clinical practice often takes years.

We cannot afford that kind of time frame here. We have to do a better job putting our best minds together, in government and outside of government, in terms of medical expertise to figure out

how best to care for these kids and make sure their caregivers and families have that information as well.

We have more work to do there.

Senator LANKFORD. Yes, we do. I do not want the politics today to get in the way of just sound medical advice. It is also important to make information available, and a lot of the unknowns that are there, or what is known in other countries that are now stepping up and saying we are learning more, and there are real problems that are here with infertility and other issues that are there with depression and other things with youth long-term that we cannot just ignore based on the politics of the conversation so that we lose the health issues. So we need you to give us good health information in that area.

Dr. MURTHY. Absolutely. And, Senator, I have always believed something I was taught in the first days of medical school, that science and compassion are what should guide care. Those two things, not politics, not opinions, not bias, but science and compassion. We have to bring the benefit of science to deliver that compassion to families during a time that can be very difficult.

The CHAIRMAN. Thank you, Senator Lankford.

Colleagues, what we are going to do is, we are going to keep this going. I know a number of colleagues just raced in, because the door opened so quickly it almost blew me out of the room with your enthusiasm, and I thank you for it.

Let's go next to Senator Cassidy. We are just going to keep going. And just so we know, Senator Cassidy has been the lynchpin around here to doing something bipartisan in health. We got the bipartisan prescription drug bill out in the last Congress. It was Senator Cassidy bringing people together.

Senator, go ahead.

Senator CASSIDY. Thank you for that, Mr. Wyden, and thank you, Dr. Murthy.

Just for a second, you and I are going to be doctors once more in a kind of literature review session, okay? There is an article that just came out, "A Literature Review and Meta-Analysis on the Effects of Lockdowns on COVID-19 Mortality: Studies in Applied Economics," coming out of Johns Hopkins, a prestigious institution, prestigious well-accomplished authors doing a meta-analysis of, I think, 16 different studies.

In fairness, it is not peer-reviewed, but it is pretty good. Now, a couple of things. They spoke about nonpharmaceutical interventions. And one thing they say—they use it to describe any government mandate which directly restricts people's possibilities, not including information campaigns, mass testing, social distancing, but including closing schools or businesses, mandated face masks, et cetera. So it is pretty broad.

Now they found no statistical correlation—in fact, let me read the second paragraph of their abstract: "While this meta-analysis concludes that lockdowns have had little to no public health effects, they have imposed enormous economic and social costs where they have been adopted. In consequence, lockdown policies are ill-founded and should be rejected as a pandemic policy instrument."

Now we speak of science guiding what we do. Clearly, we have seen that children have suffered, both in terms of learning loss and

the lack of a detection of their possible mental health issues, physical health issues, et cetera.

I think I know that you have opposed school shutdowns. Is that a fair statement? And what do you think in general of what these economists out of Johns Hopkins suggest, that what the government has done, well-intentioned and without having facts, has, it turns out, worsened the situation, particularly for child mental health, as opposed to improving it.

And by the way, Mr. Chairman, I would like to submit this for the record.

The CHAIRMAN. Without objection.

[The study appears in the appendix beginning on p. 47.]

The CHAIRMAN. Also, I will put into the record at this time, in January of this year, 2022, 95 percent of public elementary and medical schools were open and engaged in in-person learning, compared to 46 percent of schools in January 2021. So I just wanted to put that document into the record at this time as well.

[The document appears in the appendix beginning on p. 177.]

The CHAIRMAN. And then I believe Dr. Cassidy had a question for Dr. Murthy.

Senator CASSIDY. And you are going to extend my time?

The CHAIRMAN. Yes, absolutely. And we are going to get to Senator Hassan and Senator Warren.

Dr. MURTHY. Senator Cassidy, thank you for that. And I always appreciate our opportunities to talk as doctors, and to think about medicine in a human way.

I think we have learned a lot during this pandemic. And I think one of the things that we learned early on is that in 2020, the first year of the pandemic, there were many blunt measures taken, like taking kids out of school, for example, being the clearest example. What I think we have realized is that, yes, those did have significant harms to our kids.

My kids, my two kids, were among the millions of children who were not in school in 2020 as a result of the pandemic restrictions. Let me tell you, it was hard on my kids. It was hard on their family, on my wife and I too. But now that our kids are back in school, as of the fall of 2021—and 95-plus-percent of schools were open for in-person learning starting in the fall of 2021—that has had an enormous benefit to our kids. And I think our responsibility is to keep learning from the data, learning from these experiences, approach these types of public health emergencies with a scalpel rather than with a blunt instrument.

Senator CASSIDY. I agree with you. I have limited time, but let me just assert, should there be another variant which is more—maybe is as infectious but more virulent than Omicron—we need to learn from this and not claim it as an excuse to shut down, but to recognize that the best evidence is that the cost/benefit ratio is too costly for the marginal benefit.

Is that a fair statement?

Dr. MURTHY. Yes. I think we should do everything possible to keep our schools open. Even with Omicron, Senator, even though it was more transmissible, we were advocating for schools to stay open and to use the safety measures—

Senator CASSIDY. So if there is a shortage of testing, as there is currently a shortage of testing, nonetheless would a school feel comfortable, would the best science suggest they should stay open even if they cannot test?

Dr. MURTHY. Well, so if a school does not have access to safety layers of precaution, whether that is tests, masks, you know, if they are worried about the ventilation, if they cannot—if they do not feel that it is safe—

Senator CASSIDY. Ah, but the nonpharmaceutical intervention did not find benefit from those measures. And you are hedging a little bit, Doctor.

Dr. MURTHY. Well, let me tell you, I am giving nuance here, because this is a nuanced thing. It is not black and white. Like to get kids back in school, you need teachers in school too. If teachers are worried about their health, if parents are worried about the health of their children, then you need to have a conversation with—

Senator CASSIDY. I accept that. But doesn't it seem wise that the Federal Government be consistent in their message to those teachers so that they are like a clear bell ringing and the single, single note is, you can safely go back to school, and the cost/benefit ratio favors being in? Because you certainly get mixed messages from the Federal Government, I will say that.

Dr. MURTHY. So, Senator, I would agree.

Senator CASSIDY. Can I jump ahead, because—

Dr. MURTHY. Yes, of course.

Senator CASSIDY. Because we actually—to change topics, Medicaid provides a heck of a lot of mental health services for people. The quality data we get from States, shall we say, is not sterling. It is awful.

I am a gastroenterologist. You can imagine which term comes to mind. So my point being, that is something we have control over, which would be to demand that States comply with something that was originally in Obamacare—I think it was Obamacare, right? Comply with the emphasis in terms of getting good data on longitudinal outcomes for the children they have identified with mental illness receiving Medicaid reimbursement for either that or addiction services, and to see how that State is doing.

Knowing that is beyond your purview in one sense, but is that a policy that you think would be wise?

Dr. MURTHY. Well, Senator, I do think the lack of data is a huge problem. It is like you are flying blind if you do not understand what is actually happening in your community. So I think any steps that we can take to ensure we have accurate and timely data will help us to better sharpen our policies.

Senator CASSIDY. And, Mr. Chair, just because it is to you I am speaking right now, of course, because you are the man with the gavel, I hear anecdotally around the country that psychiatric services for Medicaid patients are extremely poor. Both absence of providers, absence of good follow-up, et cetera. It may not be true, but we won't know it until we see the data. And whatever we can do collectively to demand that States actually put it forward, because we have given them resources, is something we should do.

I am way over. Thank you.

The CHAIRMAN. And, Senator, I just told the Finance staff this will be an area we will follow up with you on, because there is no question that a big part of our work is going to be this debate. My sense is that we will need more revenue at some point for some of our objectives. But the first thing you ought to do is do a better job of spending what is out there. And to do a better job of spending what is out there, you've got to have good data. We will follow up with you.

Okay; Senator Hassan?

Senator HASSAN. Thank you, Mr. Chairman, and thanks to the ranking member for this hearing. And to the Surgeon General, it is really good to see you, and thanks for being here.

I have heard repeatedly, Dr. Murthy, from the parents of children who are struggling with mental health issues who cannot access treatment. Even if the families have private insurance, their provider networks are inadequate, and the workforce cannot meet what is now a crushing need for pediatric mental health services.

Parents recount calling every provider in the region and being told that there are waits of 4 to 6 weeks for remote sessions, and 3 to 4 weeks for inpatient programs.

How do these long wait times affect children's mental health? And what can we do to ensure that children in need can find treatment?

Dr. MURTHY. Well, Senator, it is good to see you again as well. And thank you for that question.

I have heard those stories time and time again myself over the years, and long wait times are troubling for multiple reasons. When a child is not able to see a provider in a timely way, that means more time that that child is struggling, not getting the help they need, and potentially at risk of harm to themselves.

But the other consequence is to their families. For the parents of children who cannot get help—I will tell you this: as a parent myself, there is no feeling worse than knowing that you cannot get your child the help he or she needs. That is the worst feeling for a parent.

And there are millions of parents who are going through that because they see their child suffering and they cannot get them assistance. So that is why we have to close that gap. That is as much about workforce as it is about using technology to provide adequate care, as it is about making sure reimbursement is adequate so that we can support a health system with enough access.

Senator HASSAN. Thank you.

I also want to talk about what is going on in our schools a little bit here. Schools are our first responders to the youth mental health crisis, but they often lack sufficient personnel to help students manage mental health issues.

One New Hampshire counselor shared her experience, explaining, quote, "My students are frustrated and feel as though they are on the back burner of care. It is assumed that now that children are back in school, the issues that they faced when at home will go away, but they are getting worse. We have minimal supports in the schools," close quote.

So look, we know—we just talked about it. We need to increase the number of mental health professionals generally, but we also

need to really focus on increasing the number of mental health professionals in schools. But in the meantime, we have to ensure that teachers have the support that they need to address the crisis occurring in their classrooms today.

How can we give educators the training, resources, and support that they need to continue helping our children during this mental health crisis?

Dr. MURTHY. That is such a good question. Senator, I have always felt that there are a lot of parallels between health-care workers and teachers. They are both in the business of healing. And unfortunately, right now they have both been on the front lines of COVID, and they are burning out in extraordinary numbers.

I think supporting educators is going to be critical to supporting kids. And to do that we, number one, have to make sure that the workload on educators is reasonable. What I have seen, even in my children's school, is that the educators have had to become public health experts. They have to make difficult decisions about everything from whether they have good ventilation, how frequently to do tests, to how to help kids with their masks. This is on top of everything they were doing before.

So, we need more support for educators. Part of the support that we need is more counselors and mental health professionals in our schools. Rather than expecting kids to go miles and miles away to where the care is, they ought to bring the care to kids.

And finally, we have to provide mental health support services for the educators themselves. They are under an extraordinary amount of stress and trauma. They need support. And we have to bring that support to them as well.

Senator HASSAN. Right. And one of the things too, I think, is we have some models, when we are dealing for instance with substance use disorder, some pilot programs that really have worked to help teachers understand what their students are perhaps going through if there is substance misuse at home, or if an older student is experimenting with substances. So I think there are some parallels there too, just to give teachers some basic tools.

Let me turn to a topic that I think is a growing concern. I hear about it from my constituents, but I also hear about it from providers, that the increased use of social media by young people has accelerated the youth mental health crisis.

However, as highlighted in your advisory statement, independent researchers face barriers when they are trying to access data from media companies. As a result, the relationship between digital technologies and mental health is really poorly understood.

So how can we support research to better understand the impact of social media on youth mental health?

Dr. MURTHY. Well, Senator, you are right to point this out. We have a real problem with transparency now. Social media companies and other technology companies have data about how these platforms are impacting our children, about which kids are at greater risk, and our independent researchers do not have access to this data.

We need that data, to be sure, probably, but we also need safety standards. I think that is a very reasonable thing to consider here. We have safety standards for cars and for other consumer sort of

goods. This is a tool, these platforms that millions and millions of children are using. We need to protect our kids, and that is where safety standards, I think, will be essential as well.

There are researchers standing by at the ready who want to do the investigation, who want to look at the data, who want to help parents figure out how to protect their kids. They are handcuffed right now because they do not have access to that data.

Senator HASSAN. Okay. Thank you. I look forward to working with you on moving forward on that.

Thank you, Mr. Chair.

The CHAIRMAN. I thank my colleague.

Senator Warner is next on the web.

Senator WARNER. Thank you, Mr. Chairman.

Dr. Murthy, it is great to see you again, at least remotely. Let me pick up on where my colleague, Senator Hassan, left off about some of these online challenges. I think Senator Thune mentioned this as well.

I would say to my colleagues, we have broadly bipartisan legislation called the DETOUR Act that would prohibit the use of dark patterns, not only for kids but also for adults, and the ability of these platforms to kind of lure you in, with no way to opt out.

We have all seen, you know, click here and no other exit vehicle. Our legislation as well specifically prohibits companies from using some of these manipulative features for children under 13.

I know, Dr. Murthy, you have already kind of addressed this, but this kind of legislation—I do not want to be hitting you cold; you may not have seen it—but the idea of trying to look at manipulative tools and dark patterns has got to be part of this effort going forward.

Dr. MURTHY. Senator, it is good to see you again, virtually, as well. And I do think that there are potentially harmful tools and algorithms like on some of these platforms which can lure young people further and further down harmful paths, and which can have adverse impacts on their mental health and well-being.

We need to limit kids' exposure to harmful content. And the algorithms, I think, are an important part of that. So I do think that this requires investigation. I do think that this is an area where safety standards would be very helpful as well.

Senator WARNER. Well, I appreciate that. And again, I commend my colleagues, Senator Fischer and Senator Thune on the Republican side, who have joined with me and Senator Klobuchar on this DETOUR Act. And as we make some movement here, looking at these dark patterns, looking at this kind of manipulative behavior, at least for our kids, I would argue it ought to extend to adults as well.

I turn again to the topic that I think Senator Lankford raised, one of the huge outgrowths of COVID-19, unfortunately, as we passed 900,000 deaths just recently from COVID. As of November 2021, there are 167,000 children who have lost a parent or a caregiver from COVID-19. And the truth is—there has been a group put together called The Hidden Pain, and I would again urge my colleagues to go after these kids who are going to have special needs because they have lost a parent or a caregiver, and obviously there are huge mental health implications.

Dr. Murthy, do you want to comment on that specific issue around kids who have lost their parent or caregiver?

Dr. MURTHY. Senator, this is one of the most heartbreaking consequences of this pandemic. The trauma of losing a caregiver is hard to put into words. It is one of the greatest traumas a child can go through. And the consequences of that loss will be there not just for months, but for years.

I think it is so important, not just as a government but as a society, that we are there for those kids, whatever may come. I know that there are Federal funds that are currently going towards supporting foster services and other services to support those youth that local and State governments may incur. But I think this goes beyond government as well, to our thinking about how we ensure that health-care providers and educators understand how to provide a trauma-informed approach to education and care. Because trauma is what these kids have gone through.

I think it is also going to be essential that community organizations—from churches, to synagogues, to YMCAs, and others—are able to step up and support these children, as many of them are doing already. But we are going to need that in the years going forward, because they have experienced a tremendous loss.

Senator WARNER. I agree, and I think we need an organized structure to support those efforts at the local level.

My last question I want to raise with you—and this is not something that just came around with COVID. It is frankly a challenge that has touched my family, and probably many of my colleagues indirectly with friends or neighbors, and that is the enormous upsurge in challenges around eating disorders. I have dealt with this for the last 12 to 14 years, on a family basis, and I have seen the enormous growth of treatment centers. I have seen the enormous growth of boys, not just girls, but boys dealing with eating disorders.

Obviously, this problem could be exacerbated by COVID and is something I think we need to address, and I think a disproportionate number—my child is a type 1 diabetic, and having an eating disorder is huge.

We have seen increased numbers in children of color, with LGBTQ kids. Can you, in your last 10 seconds or so, at least touch on that issue, which is something I think we all are going to have to continually visit?

Dr. MURTHY. Absolutely, Senator. This is a place where we not only need good care for kids struggling with eating disorders, but this is where actually school counselors and mental health professionals in schools become so important. Because you want to catch the signs early. You do not want to wait years, or until severe health consequences develop and come to the attention of a health-care professional.

Finally, I will just say, this is a place also where it is so important for us to understand the impact of social media on our kids. We know that some children, when they have encountered content that has made them more conscious of their body image in an unhealthy way, that may contribute to eating disorders. Again, this is a place where the data matters, transparency matters, and we

have to make sure the companies are providing that data so we best know how to protect our children.

The CHAIRMAN. What Senator Warner is talking about is extraordinarily important, and I am only moving on because we are going to try and see if we can get Senator Menendez, Senator Brown, and Senator Cortez Masto in before the vote.

Senator WARNER. Thank you, Mr. Chairman.

The CHAIRMAN. Actually, it goes Menendez, Brown, Bennet, and Cortez Masto. We are going to see what we can do to get these things held.

Senator Menendez?

Senator MENENDEZ. Thank you, Mr. Chairman. Dr. Murthy, welcome.

The Maternal, Infant, and Early Childhood Home Visiting program is an evidence-based program that supports pregnant women and young families. This multiyear support is critical to having young people start off their lives healthier and better prepared for early childhood learning. It also helps parents, including through mental health screenings and connecting to community-based resources.

So my question is, how can we further support this program so that more young people are starting off on a strong footing, and young parents, including pregnant women and those parenting foster youth, have an additional means of support?

Dr. MURTHY. Well, Senator, I appreciate the question. And I do agree that these early intervention programs, especially for poorer families, are absolutely essential. We have more and more evidence that these kinds of programs make a big difference, not just in the immediate setting, but for years down the line. And anything that I can do to work with you to support these kinds of efforts, I would be happy to do.

I find that one of the challenges, Senator, is that even when the programs are funded, many communities know about them and they do not avail themselves of the funds, or they do not know what technical assistance is available to them to actually implement those programs. But these are incredibly important programs that help to reduce the risk of mental health challenges.

Senator MENENDEZ. Well, I welcome your support in the effort. And today the program is very successful and evidence-based, and so we need to have advocates within the administration to expand its opportunities.

I want to take advantage of my colleague Senator Cortez Masto being here. I introduced the Pursuing Equity in Mental Health Act, along with Senator Cortez Masto and Senator Booker, because communities of color continue to disproportionately lack—or suffer, I should say, from the lack of access to mental health services and supports.

Do you support the need for targeted investments into minority communities that support access to culturally competent care?

Dr. MURTHY. Senator, thank you for raising that. Mental health equity is and continues to be a profound challenge for our country. I do think we need to take a targeted approach here, in the sense of surging resources to communities that have been hard-hit.

The challenge that many of our communities of color have had is, number one, from a workforce perspective, we do not have adequate representation of racial and ethnic minorities in our workforce. And that makes it more challenging when it comes to trust, which is such an important component of getting good mental health care. But we also know that access has been a profound challenge for many of these communities. And we have to make sure that we are doing more than we are now to make sure that both virtual care and in-person care are available.

Finally, Senator, as a member of a racial and ethnic minority community, I will tell you that many of our communities struggle with the stigma around mental illness. It may come in different shapes and flavors, but that stigma is there in many of our communities and prevents us from coming forward, which is, again, why role models are so incredibly helpful.

Senator MENENDEZ. I strongly agree. I want to highlight that the pandemic's impact on children in minority communities has been particularly harsh.

I want to take a look at the impact on Latino communities in particular for a few moments. One survey found that 29 percent of Hispanic households with children have experienced three or more hardships during the pandemic, compared to around half of that for non-Hispanic White households with children. At the same time, Latino children were far more likely to experience the death of a primary caregiver during the pandemic, and more likely to contract the virus and be hospitalized themselves. These experiences were compounded by other preexisting disparities among Latino children, including higher uninsured rates, and lower access to mental health services and supports.

So I look forward to working with you as to specific policies necessary to help advance mental health equity and begin to close some of the racial disparities that preceded and have been exacerbated by COVID-19. And can I get your commitment to work with us on that?

Dr. MURTHY. Senator, I would be happy to work with you on this issue.

Senator MENENDEZ. And then finally, you talked about representation. You know, the Minority Fellowship Program, I think is a critical component of this legislation. What else can we do to support the development of minority mental health providers in the pipeline?

Dr. MURTHY. Well, Senator, I think we can work with training institutions to be more proactive and aggressive in their recruitment of candidates from minority communities. I also think we have to invest upstream, even before we are talking about admission to a medical school or a nursing school. How are we getting young people in minority communities interested in the health-care profession at an early age when they are in grade school, when they are in college?

These are places where I think we have to focus and plant that seed early, and then make sure opportunity is available when they get to the stage of entering a training program.

Senator MENENDEZ. Thank you. I look forward to working with you on all these different aspects.

Thank you, Mr. Chairman.

The CHAIRMAN. I look forward to working with my colleague.

Senator Brown, I think, is next on the web.

Senator BROWN. Thank you, Mr. Chairman. Dr. Murthy, it is good to see you again remotely, and thanks for your exemplary public service for so many years.

The advisory that you issued last year cites research about the suicide rate among Black children below age 13 and how it has been increasing in recent years. Black children have almost twice the far-too-high rate of suicide by White children. I did a round-table discussion in Columbus with Ohioans not too long ago, several months ago. Dr. Arielle Sheftall, a principal investigator at Jones Hospital in Columbus, shared her research on the increase in Black youth suicides. Dr. Sheftall made the point that despite the fact that Black youth suicide and suicidal behaviors have been increasing over the last decade, our understanding of the risks and protective factors associated with these behaviors in Black youth is extremely limited. She argues we need more research on risk factors to implement more effective suicide prevention.

How should research and policy come together to decrease the likelihood of youth suicide, especially in African American kids?

Dr. MURTHY. Well, Senator, it is good to see you again as well. And thank you for that question, and for particularly, attention to what is happening in racial and ethnic minority communities.

It has been very disturbing to see the increase in mental health challenges, particularly suicide, in communities of color when it comes to young people. And yes, I do agree that there is more that we need to do to understand what factors are driving this, whether it is violence in communities, or some element of technology, or other elements that exist in the environment in which our kids are being raised.

But I also think we cannot wait to act when it comes to making sure that these communities have help. One of the things I think about often—as a doctor who cared for patients over the years and saw so many who were not able to make appointments, and could not get their routine care—is we have to get care to kids where they are. Which means that if kids are in schools, as the majority of them are, we've got to get care to school environments.

We have to provide counselors, mental health therapists, and others who can help identify and start to address problems. We have to use technology more effectively to get access to care to those children and their families.

So yes, I agree we have more questions that we need to answer about risk factors. I also think we know a lot that we can act on right now to improve access to care.

Senator BROWN. Thank you.

You brought up schools, and I wanted to ask—I planned to ask about full-service community schools that I have worked on. My eyes were opened—I know Senator Casey mentioned this too, and I think he is going to be one of the next questioners. It was brought to my attention several years ago in Cincinnati at a community school's building they have in their community school where they have done all kinds of interesting things. But our bill would help to connect schools with community partners to provide the inte-

grated student support I think you are suggesting—physical health services, and obviously mental health services—not just to students but to community members there.

We have seen how integrating education and health care can benefit students and communities, whether it is Medicaid-supported school-based mental health and behavioral health services through full-service community schools, or in the form of school-based health centers. How should CMS work with the Department of Education to provide guidance and best practices for States on how to better integrate mental health services into our public schools using Medicaid supports and building on the full-service community schools model? What is the path to do that right?

Dr. MURTHY. Well, Senator, thanks for that question. I love the model you are talking about, because it immediately comes to my mind that what you are speaking of is wrapping our children in supportive and protective services, including services and supports in the community. And I think that is exactly what we need, because schools cannot do this alone. They cannot do it by themselves. Educators are already tasked at a very high level.

I know that this is certainly an area that CMS has been interested in when it comes specifically to Medicaid and how Medicaid can be used to better support mental health services in schools.

I think the challenge that we have—despite some of the measures that CMS has supported to use Medicaid funding to support services in schools—is that we still, in some cases, need States to amend their Medicaid program to free up the use of Medicaid funds for those breadth of services in schools, and to apply those services to all kids, not just kids in IEPs.

The other piece of this is that many States may need technical assistance in figuring out how to set up the types of school-based mental health-care initiatives that require thinking through billing, thinking through other logistics. And I think those too have been barriers to the States implementing this. But I know that CMS has certainly been supportive of the use of Medicaid funding to support mental health services in schools.

Senator BROWN. Thank you.

Mr. Chairman, thank you very much.

The CHAIRMAN. I thank my colleague.

Are any of my colleagues still out there? Senator Bennet, have you spoken?

Senator BENNET. No, sir.

The CHAIRMAN. Senator Bennet.

Senator BENNET. Thank you, Mr. Chairman. And I am out here, that is for sure. You need a telescope to see the chairman. But—

Dr. MURTHY. I can see you pretty well.

Senator BENNET. Thank you, Dr. Murthy. That is why I came over here. But, Mr. Chairman and Ranking Member Crapo, I really appreciate you holding this hearing on youth mental health. I think it is incredibly timely, because our children and their parents and our schools are looking for ways to support themselves and to avoid a worse crisis, actually, that might unfold. And it is really important for us to support them.

And, Dr. Murthy, it is wonderful to see you, and thank you for being here today and for your focus on this issue. I enjoyed spending time with you last month discussing the advisory, and I am grateful for your experience and your commitment to address youth mental and behavioral health. I am very pleased that the Surgeon General comes to this as a parent, because I think that is the perspective that is needed right now, maybe more than anything else.

I also want to take this opportunity to say that I think we need to do our best—whatever we can to try to keep schools open for our kids' sake, and for their mental health. I was a Superintendent of the Denver Public Schools before I came here. I have a sense of the toll this has taken on our kids, and the interrupted schooling that especially our kids living in poverty have confronted as a result of the pandemic.

So I hope, for their sake, that we are able to come together to support them in their schools and keep them open. You might remember, Dr. Murthy, that I said to you when we talked before that if somebody asked me before the pandemic what the biggest difference was between when I was a Superintendent and today when it comes to schools, before the pandemic my answer was mental health, mental health, mental health. And that is more true now because of the pandemic.

So, with that preface, Dr. Murthy, I have two questions I would like to ask you. A few weeks ago, I spent time with some leaders from Summit County in Colorado to listen to them discuss local mental and behavioral health needs and potential solutions. One striking theme was the pitiful reimbursement rates for mental and behavioral services, plus wraparound services and casework, from both public and private insurance. One organization, called Building Hope, which provides scholarships to receive care, said that over 50 percent of their clients have private health insurance.

The Sheriff of the county was also on, and he mentioned that establishing a mobile crisis unit, which pairs a clinician and a non-uniformed deputy to respond to crises, cost \$1.5 million for the community but saved the county \$17 million. There was not a person on this call who disputed this. I am particularly grateful to Senator Cortez Masto, who has led on the issue of mobile crisis reimbursement on this committee. And what I heard in Summit County demonstrates that reimbursement reform should be a cornerstone to our mental and behavioral health work here in the Finance Committee.

So, Dr. Murthy, could you speak to the importance of higher reimbursement in private insurance, and also in Medicaid and Medicare?

Dr. MURTHY. Well, thank you, Senator, for that. I always—when we chatted, I certainly appreciated your perspective as an educator yourself when it comes to our kids.

But look, I think, as you know, we have profound issues with mental health-care access, and I think reimbursement is one piece of that puzzle. I think for too long we have had low and inconsistent reimbursement for mental health-care services.

I think we have also not seen sort of the kind of implementation of the parity law that we need. And so, we still have private insurers that are providing less reimbursement for mental health versus

for traditional medical services. So I think this is an important part of the pie. If we are going to train more and more providers of mental health care, we have to make sure that the systems and supports are there for them to be able to sustainably provide care, and a reimbursement is an important part of that.

Senator BENNET. I have one other question that is actually related. I want to speak specifically about schools and Medicaid.

In 2014, CMS reversed the free care policy, which now allows States more flexibilities in school-based Medicaid programs. Now Medicaid can bill for health services delivered in schools to all Medicaid-enrolled children, not just those with a special education plan.

Colorado is one of the handful of States that received approval of their State plan amendment, which went into effect in October 2020. Now Colorado recognizes applied behavior analysts, speech, language, pathologist assistants, and school psychologists as Medicaid providers. And while there remain workforce challenges, Colorado schools are going to have the financing infrastructure necessary to support students where they spend most of their days.

Dr. Murthy, do you think that CMS can work more proactively to help encourage Medicaid reimbursement in schools? Can CMS provide guidance on how to expand those services? What can you do to work with leaders at HHS, the Department of Education, the White House, and our school districts throughout the country, to make some progress on this matter?

Dr. MURTHY. Well, Senator, thanks for raising that. I would be certainly happy to work with my colleagues at CMS on this issue. I do think that the free care policy reversal to allow for all students, not just students on IEPs, to be able to benefit from Medicaid-funded mental health care in schools is very important.

One of my worries is that there has not been enough uptake in States, I think partly because of the State amendments that have to be passed to do this, and partly, I think technical assistance is needed in more States to set up the billing and other procedures to make this a reality.

But I think it is very powerful, and it is consistent with the principle we talked about early on, which is, we have to bring care to where our kids are. We cannot expect them to drive many, many miles with their families to see providers. We have to make it easier for them to get care. This is one way to do that.

Senator BENNET. I know—I do not want to impose on my colleagues. Thank you, Dr. Murthy. Let me just associate myself also with comments that were made about the effect of social media on our kids in this country. And there is literally nothing preventing the social media companies, for the benefit of our society, from sharing data about the effect of social media and the algorithms that they have, with families and with parents in this country, and I hope they will consider it.

Senator CRAPO [presiding]. Thank you very much, Senator. And before we go to Senator Cortez Masto, who will be next, I have been informed that Dr. Murthy has a hard stop at 12:30. And the only way we are going to do that is if everybody sticks very strictly to your 5 minutes.

Senator Cortez Masto?

Senator CORTEZ MASTO. Thank you. Dr. Murthy, thank you so much for being here. I want to thank the committee for holding this. I want to associate my position with some of the comments made by my colleagues around the telehealth, how important it is, and with Senator Bennet's comments earlier.

Let me just say this. I think it is so important in this day and age that there is mental health parity with physical health. There is too much of a stigma around mental health, but nobody has a stigma about their physical health and getting the health care they need. And there are resources. There are sources for funding. There is some professional care that is there. But we do not have that for mental health.

And so, Dr. Murthy, I want to talk to you about this, because I see it in my State of Nevada. We knew we were having mental health challenges even before the pandemic, particularly for our kids and young adults. The pandemic has exacerbated that, and we have to do more to provide essential services to them—the continuum of care, of services, the funding sources to get those services accessed, and then to build up professional capacity that is needed to provide those services.

But let me ask you this. I so appreciate you putting out your Surgeon General's advisory. I think it is—thank you so much. It is a great educational piece for so many communities to really tackle. But here is my question for you: how do you plan to get the word out? How do you plan on getting the advisory out in the hands of the people who need it so that we can start incorporating some of the recommendations that are in it?

Dr. MURTHY. Well, Senator, it is good to see you again, and I am glad that you asked that question, because one of the things that I decided early on when I was Surgeon General, during my first tour of duty, was that we cannot just produce reports that sit on a shelf. We have to make sure that they are brought to life. And the people who bring them to life are community members who take the information, take the tools, and then create change in their communities; legislators as well.

There are several approaches we are taking. We have been working already, with the launch of our advisory, with community partners, with parent groups, with other community organizations, faith organizations, and others to make sure—and educators are a key part of this as well—that people know about this advisory, they know about what the recommendations are in this advisory, and that we can help support them, whether that is connecting them to resources in the Federal Government, or whether it is connecting them to other community resources. But that is what we are trying to do.

I am also aware, and I say this with humility, that none of us can do this job alone. And I know, as much as our office is going to try to do, we need the help of legislators like you and others to help get the word out, to help people recognize that, you know what, these recommendations can be acted upon. There are laws that can be passed to strengthen access to care. There are measures that communities can take to make sure that kids are supported who need it. There are things educators can do to make sure

that we are including a greater focus on behavioral health and emotional learning in schools.

So we are going to keep working at this, Senator, because the job is not done when the report comes out. We have a long way to go.

Senator CORTEZ MASTO. I cannot agree more. So let me add another area of coordination that is important.

In your testimony, you urge coordination across all levels of government. And I strongly agree with that. I think there is a partnership at the Federal level that needs to occur. Too often there are silos, particularly in this space, and that is why I sent a letter to both the Secretaries of Education and HHS. This is such an important issue.

So, can you talk a little bit about that? And I hope that that coordination that you just talked about in getting your advisory out there, includes the coordination with our Federal agencies.

Dr. MURTHY. Absolutely. And this is so important. You know, Secretary Becerra from HHS has asked for the Behavioral Health Coordinating Council to be formed. It has now formed and is bringing together parts of the Federal Government to work on a unified approach to behavioral health.

You know, I will say that I myself personally have worked with and have been working with Secretary Cardona from the Department of Education. We have a shared passion and interest in mental health. The Department of Ed, as you know, has put out resources for students and for schools to focus on social and emotional well-being in our mental health, and that is a partnership that we are going to continue as well.

But you are absolutely right. This has to be a collaborative effort. We cannot afford to be splintered and uncoordinated.

Senator CORTEZ MASTO. And then very quickly, I have seen the benefit of and the value of peer support services. Can you talk about the importance of peer support services?

Dr. MURTHY. These are really vital. You know, one of the programs that I came to learn about some years ago is the Beyond Differences program. It is not a government program. It is a program that was started by two parents who lost their child, and they were devastated by the struggles she had with loneliness, and with her own mental health. And this is essentially a peer program, a peer support program, where young people help other young people to build community and connection, and to build their self-esteem.

When we think about the health-care workforce, I actually think we have to think broadly. This includes psychiatrists and psychologists and school counselors, but it also involves people who can be sources of support: educators, peer support programs. Everyone has a role they can play in helping to support the mental health and well-being of others, and this is where we also, I think, have to empower families to also see this.

When they even begin conversations with their children on mental health and well-being, that is also a very important part of the puzzle. That tells kids that it is okay to talk about these subjects and to ask for help.

Senator CORTEZ MASTO. Thank you, Doctor.

Senator CRAPO. Thank you.

Senator Warren?

Senator WARREN. Thank you, Mr. Chairman. So we are here today to discuss the recent advisory that the U.S. Surgeon General has issued on protecting the mental health of young people. And there are a lot of important recommendations in this report, such as how to treat mental health as an essential part of overall health. But I want to talk for just a few minutes about a recommendation for improving children's mental health that is powerfully necessary but often goes under-appreciated, and that is, access to quality child care. The child-care system in America is broken. It is hard to find. It is massively expensive. It is totally out of reach for most families. And wages for child-care workers are way too low.

And then the pandemic hit, forcing thousands of child-care providers to close their doors, raising costs for the rest. Parents, women in particular, have borne the brunt of these policy failures.

Dr. Murthy, helping families afford quality child care is important for a lot of reasons, like improving children's overall outcomes, and letting parents go to work, but you say in your report that it goes beyond that. So, can you just explain, why did your advisory recommendations include increasing access to affordable child care as a way to improve children's mental health?

Dr. MURTHY. Well, Senator, I thank you for that question. I appreciate it. And you're lifting up something that I absolutely agree needs more attention. Here is why we included that recommendation. I know this as a parent myself that child care is one of the greatest sources of stress for a parent when it is not adequately available. And when a parent is struggling with the high degree of stress and anxiety, that impacts children. We all know that. And we see that happening every day. That is one of the key reasons why affordable child care is essential.

Senator WARREN. So, when parents are struggling to find child care, the financial and the emotional stress directly harms children. But let's say a family somehow manages to find decent child care. They scrape together the money to be able to pay for it. And while that fee is a lot for the family, it is barely enough for the child-care provider to make ends meet. So the provider is struggling to provide enough staff and cannot pay the workers as much as they would make if they were working the checkout line at McDonald's.

Dr. Murthy, your advisory also talked about the importance of investing in the child-care workforce. What impact does it have on children when child-care workers looking after them are understaffed and underpaid?

Dr. MURTHY. Well, Senator, children do best when the people caring for them are also doing well. And when you are not being paid a living wage, when you are unable to do the basic things you need to support you and your family, that is extraordinarily stressful. That is anxiety-provoking. That is difficult, and it is harder, I think, for caregivers to do the job they want to do—which is to provide good quality care to their children—when they do not have an income that can support them and their families. So we have to take care of the people who are taking care of us and our children. That is what this is about.

Senator WARREN. Yep. You know, we rely on child-care workers to take care of our babies, to help them grow while their mommies

and daddies are at work, and yet child-care workers on average are only making about \$12 an hour.

We need to invest in child care so that we can hire people, so we can retain them, make decent pay and benefits, and build expertise over time and improve the care that they give to our children. And right now, we have our toes on the line to get that done.

A transformative investment in child care and pre-kindergarten is in Build Back Better, which would cut the cost of child care for families and raise wages for providers.

So, Dr. Murthy, in our remaining time, this is the last question I am going to ask you. What kind of payoff will this investment in child care yield for children, for parents, and for child-care providers?

Dr. MURTHY. Senator, I do not know that I can count that high, because—

Senator WARREN. That is a great answer.

Dr. MURTHY [continuing]. It is a big payoff. I will say that I cannot think of a more important responsibility than caring for our children. And it makes sense that we invest in that area. But when we take care of kids early in life, they become young adults and older adults who also have a greater shot at good mental health and physical health.

If we have learned one lesson from this pandemic, it is that early investments in health and well-being are important, and child care is an important part of that.

Senator WARREN. And these investments cannot wait. We need to get this done. Thank you, Dr. Murthy.

Dr. MURTHY. Thank you, Senator Warren.

Senator CRAPO. Senator Daines?

Senator DAINES. Thank you, Senator Crapo.

Cindy and I are parents of four children. We have three grandchildren. And supporting the mental health needs of our children is a major concern of mine, especially at this time in our Nation's history.

The COVID-19 pandemic has certainly challenged our children in so many ways, and oftentimes profoundly upended how they attend school. It has changed how they interact with their friends. It has had a profound effect on mental health. From universal masking to stay-at-home orders, we are seeing how these Draconian policies are affecting our children. After 2 years of virtual learning and forced physical distancing, many schools across the country still have not returned to normal, and children are falling behind.

More children and teenagers are struggling with mental health issues, and suicide attempts are on the rise. There is a wise old proverb that says, "A parent is only as happy as their unhappiest child." That is so true. You can have four children, three are doing well, but the one who is struggling is right where we parents are emotionally and what consumes how we think about our kids.

The New York Times published an article in the beginning of January, and I think the title said, "No Way to Grow Up." It highlights how many pandemic policies have failed our children. I think that title really does sum it up: no way to grow up.

What I am hearing is that lockdowns and closures have been questionable public health measures, and at the end of the day have been harmful to our children. When I talk to people across Montana, I hear stories about the mental health struggles that come from lockdowns, from isolation. According to one study, lockdowns have reduced schooling, increased unemployment, reduced economic activity, and contributed to political unrest and domestic violence.

Dr. Murthy, do you agree that lockdowns and social isolation have helped contribute to some of the mental health challenges we are seeing today?

Dr. MURTHY. Senator, I appreciate that question from a fellow parent, and a grandparent, as I understand it. Look, I have spent years focused on the issue of isolation and loneliness. It has harmful effects on the mental and physical well-being of our children. And the severe disruption that we saw at the beginning of the pandemic, particularly with school closures, but with the uncertainty that kids had about their future with 160,000-plus children who have lost a caregiver, with kids seeing their friends and family members who have been impacted by this pandemic, that has taken a huge toll on our children.

What we have an obligation to do is to use the power of our science, our knowledge, our experience to tackle this pandemic with a scalpel instead of a blunt axe, to put in place measures that can help protect people but recognize that the cost of major disruptions to our kids' lives is significant. And that is why we have to use layers of precaution that could allow them to stay in school. That is why I am glad that 95 percent of schools are now open for in-person learning; that 95-plus were open in the fall of 2021. Those included my kids, who were finally able to go back to school, and I was grateful for it.

Senator DAINES. Thank you for that thoughtful answer, Doctor. Last year the Biden administration issued a rule to require universal masking for toddlers attending Head Start. This heavy-handed mandate targeted Montana's most disadvantaged children, which is why I urged HHS to actually rescind that.

I am also concerned how this kind of pandemic policy will impact a child's development. A study from Brown University found that face masks and other social-distancing measures in school or day care may be associated with delayed language development among children. Additionally, referrals of children to speech therapy have been on the rise since the pandemic began.

Dr. Murthy, how do we undo the damage caused by pandemic policies to address the health challenges facing our children?

Dr. MURTHY. Well, Senator, I share your concern about the well-being of our kids, and I think getting back as close as possible to a sense of normalcy is going to be important for our children. They need to be able to play with their friends. They need to be able to see the people they love. They need to be able to be in school and learn in school.

And part of how I think we do that is recognizing, number one, we have more tools to do that than ever before. We now, thank goodness, have medications and vaccines and boosters that can re-

duce the likelihood that people will lose their life or end up in the hospital, and that includes our children.

We now have more tests and other mitigation measures—ventilation, masks, et cetera—that we know can be used in targeted ways to reduce spread. As cases come down, Senator, as our hospitals begin to see their caseloads drop, I think we will be in a place where we can consider pulling back on some of the measures that exist now, in terms of mitigation.

And so, I am hopeful that we will get there. But we have already made a lot of progress compared to last year. A year ago today, less than half of our schools were open. Less than half of our kids were learning in-person. Now that number is at over 95 percent. We need to get it as close to 100 percent—

Senator DAINES. And that is progress, but I am concerned that, as we look at the health care we have faced with the pandemic, we have not been looking at the big picture.

The CHAIRMAN. And I will just say to my friend, these are important issues. We still have Senator Casey, and we will follow up with our colleague. I thank my colleague for being willing to be part of the task force as well, which is very important.

Senator Casey is next.

Senator CASEY. Mr. Chairman, thank you very much. And, Dr. Murthy, we are grateful to be with you again and to commend your exemplary public service at this difficult time for the Nation.

I just probably will get one question in, because I know you have to go. I wanted to start with something that I proposed in early 2020, just weeks before the pandemic. I call it the five freedoms for America's children: the freedom to be healthy, the freedom to be economically secure, the freedom to learn, the freedom to be safe from harm, and the freedom from hunger.

And then I put that into a piece of legislation that we introduced not too long ago. But I was thinking about those five freedoms for America's children when I was considering the advisory, and that children's mental health does not exist in a vacuum. It is largely impacted by their families, their communities, and their societal circumstances. We know that poor socioeconomic conditions can create unhealthy stress, both for a child and their parents, and can lead to adverse childhood experiences that are known to put children at risk for harms later in their childhood, or much later in life.

You said on page 4 of your testimony, quote, "Systemic economic and social barriers like safety, housing, food, and economic insecurity, contribute to and create the conditions for poor mental health for young children."

I wanted to ask you, just in terms of proposals going forward, as we discuss a broader, more holistic response to youth mental health aides, what broader policies to improve the well-being of children and families should we consider?

Dr. MURTHY. Well, Senator, thank you for that thoughtful question. I like how you framed these five freedoms for American children. It reflects, I think, a really powerful reality, which is that there are many factors that impact the mental health of our kids. And food insecurity is one of them; economic insecurity, homelessness. These are all important issues we have to address. Because

I think, for a child to be well, they need to have secure attachments, good strong relationships in their life. They need to have safety. They also need to know that the future has a place for them. They need to know that they belong. They need to know that the future is bright.

And many children look around them and they see the violence in their communities. They see the threat of climate change. They see the specter of racism and discrimination. And they wonder whether that is really true, whether the future truly is brighter for them, whether there really is a place for them.

I think it is our obligation to address these issues, to create a healthier, more hospitable society and home for our children. We know these broader existential threats, in addition to the more immediate economic threats that families face, are really influential when it comes to the mental health of our children.

So I think this is so much bigger than making sure our children have access to care—and they need that. This is more than ensuring we are investing in prevention programs in schools. It is about recognizing that the broader environment in which our kids are growing up has a profound impact on their mental health, their relationships, their economic security, and their safety as well. Our ability to address these broader challenges like racism, climate change, and violence, this is what will help our children have a foundation for good mental health going forward.

Senator CASEY. Well, Doctor, thank you. And I will submit a question for the record on Medicaid, and in particular integrating physical and behavioral health for children, but I will do that for the record.

[The question appears in the appendix.]

Senator CASEY. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Casey. And thank you for your passion for kids especially.

Doctor, you are right on the clock. It is the hour to let you go, and I am going to do that with just one additional question. First, let me just say “thank you” again for being here with us. You have once again shown over the last 2½ hours, going on 3 hours, you always give public service a good name, and it just really means so much to have you.

I want to just ask one quick question and then get you out the door. Two and a half hours ago I talked about my concern about the prospect of losing much of a generation of young people if there is just mental health business as usual. And you said something that my staff and I flagged on over the course of the morning, and we would just like to make sure we understand.

You said a couple of times there is an 11-year gap between the onset of mental health challenges and treatment. And as I was just walking over, I said, “Holy Toledo, that is a huge number of people.”

Can you tell us a little bit more, as we let you go, what you mean by that and what we ought to be doing about it? We will have to talk more about it when you have more time.

Dr. MURTHY. Absolutely. I would be happy to. And, Senator, this is an incredibly painful data point. It takes years for our kids to get help. That is what this data point is about. When we have

chest pain, we know we can go to an emergency room and get care, usually within minutes or hours. If we have pneumonia, we know that we can quickly get care, at least in much of the country.

The thought of having to wait 11 years after you have the onset of symptoms to actually get the care you need would be unacceptable when it came to our physical health and well-being. Yet somehow we find ourselves in a position where we have tolerated that for our mental health, and in particular for our kids.

This is why, not only are our kids struggling, but their parents are. The toll on families watching children suffer like that, I do not even know how to describe it. As a parent, the worst feeling that I can think of is seeing my child suffering and not being able to do something about it. And that is the situation that so many parents are in today.

Kids who do not receive help early become adults who often end up struggling with their mental health. Like with all things, prevention and early action, early intervention, are better than waiting too long. And that is why I am so glad that we are doing the work we are doing together today. I want us to close that gap. I want us to get kids the care they need.

The CHAIRMAN. America is better than this. We are going to work with you to make sure that we deliver on this key question. Waiting 11 years cannot possibly continue.

Thank you. Thank you again for being with us. The committee is adjourned.

Dr. MURTHY. Thank you, Senator.

[Whereupon, at 12:33 p.m., the hearing was concluded.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

SUBMITTED BY HON. BILL CASSIDY,
A U.S. SENATOR FROM LOUISIANA

SAE./NO. 200/January 2022

Studies in Applied Economics

A LITERATURE REVIEW AND META-ANALYSIS OF THE EFFECTS OF LOCKDOWNS ON COVID-19 MORTALITY

By Jonas Herby, Lars Jonung, and Steve H. Hanke

Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise

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The *Studies in Applied Economics* series is under the general direction of Prof. Steve H. Hanke, Founder and Co-Director of The Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise (hanke@jhu.edu). The views expressed in each working paper are those of the authors and not necessarily those of the institutions that the authors are affiliated with.

About the Authors

Jonas Herby (herby@cepos.dk) is special advisor at Center for Political Studies in Copenhagen, Denmark. His research focuses on law and economics. He holds a master's degree in economics from University of Copenhagen.

Lars Jonung (lars.jonung@nek.lu.se) is professor emeritus in economics at Lund University, Sweden. He served as chairperson of the Swedish Fiscal Policy Council 2012–13, as research advisor at the European Commission 2000–2010, and as chief economic adviser to Prime Minister Carl Bildt in 1992–94. He holds a PhD in Economics from the University of California, Los Angeles.

Steve H. Hanke is a Professor of Applied Economics and Founder and Co-Director of The Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise. He is a Senior Fellow and Director of the Troubled Currencies Project at the Cato Institute, a contributor at National Review, a well-known currency reformer, and a currency and commodity trader. Prof. Hanke served on President Reagan's Council of Economic Advisers, has been an adviser to five foreign heads of state and five foreign cabinet ministers, and held a cabinet-level rank in both Lithuania and Montenegro. He has been awarded seven honorary doctorate degrees and is an Honorary Professor at four foreign institutions. He was President of Toronto Trust Argentina in Buenos Aires in 1995, when it was the world's best-performing mutual fund. Currently, he serves as Chairman of the Supervisory Board of Advanced Metallurgical Group N.V. in Amsterdam. In 1998, he was named

one of the twenty-five most influential people in the world by World Trade Magazine. In 2020, Prof. Hanke was named a Knight of the Order of the Flag.

Abstract

This systematic review and meta-analysis are designed to determine whether there is empirical evidence to support the belief that “lockdowns” reduce COVID–19 mortality. Lockdowns are defined as the imposition of at least one compulsory, non-pharmaceutical intervention (NPI). NPIs are any government mandate that directly restrict peoples’ possibilities, such as policies that limit internal movement, close schools and businesses, and ban international travel. This study employed a systematic search and screening procedure in which 18,590 studies are identified that could potentially address the belief posed. After three levels of screening, 34 studies ultimately qualified. Of those 34 eligible studies, 24 qualified for inclusion in the meta-analysis. They were separated into three groups: lockdown stringency index studies, shelter-in-place-order (SIPO) studies, and specific NPI studies. An analysis of each of these three groups support the conclusion that lockdowns have had little to no effect on COVID–19 mortality. More specifically, stringency index studies find that lockdowns in Europe and the United States only reduced COVID–19 mortality by 0.2% on average. SIPOs were also ineffective, only reducing COVID–19 mortality by 2.9% on average. Specific NPI studies also find no broad-based evidence of noticeable effects on COVID–19 mortality.

While this meta-analysis concludes that lockdowns have had little to no public health effects, they have imposed enormous economic and social costs where they have been adopted. In consequence, lockdown policies are ill-founded and should be rejected as a pandemic policy instrument.

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Key Words: COVID–19, lockdown, non-pharmaceutical interventions, mortality, systematic review, meta-analysis

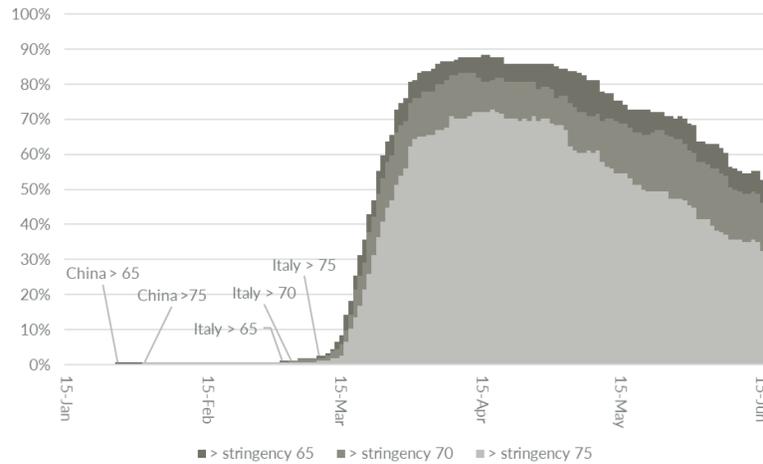
JEL Classification: I18; I38; D19

1 Introduction

The global policy reaction to the COVID–19 pandemic is evident. Compulsory non-pharmaceutical interventions (NPIs), commonly known as “lockdowns”—policies that restrict internal movement, close schools and businesses, and ban international travel—have been mandated in one form or another in almost every country.

The first NPIs were implemented in China. From there, the pandemic and NPIs spread first to Italy and later to virtually all other countries, see Figure 1. Of the 186 countries covered by the Oxford COVID–19 Government Response Tracker (OxCGRT), only Comoros, an island country in the Indian Ocean, did not impose at least one NPI before the end of March 2020.

Figure 1: Share of countries with OxCGRT stringency index above thresholds, January - June 2020



Comment: The figure shows the share of countries, where the OxCGRT stringency index on a given date surpassed index 65, 70 and 75 respectively. Only countries with more than one million citizens are included (153 countries in total). The OxCGRT stringency index records the strictness of NPI policies that restrict people's behavior. It is calculated using all ordinal containment and closure policy indicators (i.e., the degree of school and business closures, etc.), plus an indicator recording public information campaigns.

Source: Our World in Data.

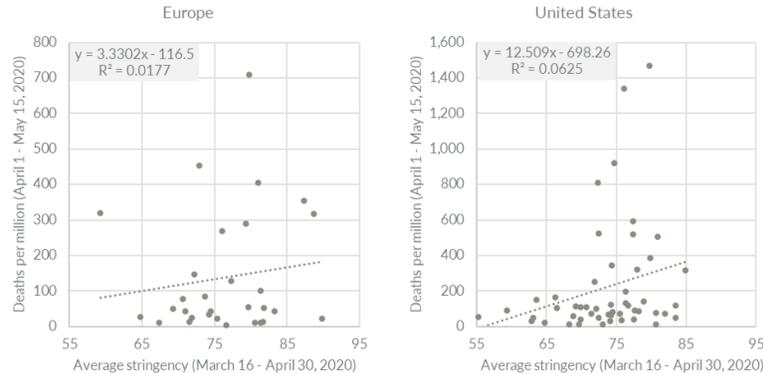
Early epidemiological studies predicted large effects of NPIs. An often cited model simulation study by researchers at the Imperial College London (Ferguson et al. (2020)) predicted that a suppression strategy based on a lockdown would reduce COVID-19 mortality by up to 98%.¹ These predictions were questioned by many scholars. Our early interest in the subject was spurred by two studies. First, Atkeson et al. (2020) showed that “across all countries and U.S. states that we study, the growth rates of daily deaths from COVID-19 fell from a wide range of initially high levels to levels close to zero within 20–30 days after each region experienced 25 cumulative deaths.” Second, Sebhatu et al. (2020) showed that “government policies are strongly driven by the policies initiated in other countries,” and less by the specific COVID-19-situation of the country.

A third factor that motivated our research was the fact that there was no clear negative correlation between the degree of lockdown and fatalities in the spring of 2020 (see Figure 2). Given the large effects predicted by simulation studies such as Ferguson et al. (2020), we would have expected to at least observe a simple negative correlation between COVID-19 mortality and the degree to which lockdowns were imposed.²

¹With $R_0 = 2.4$ and trigger on 60, the number of COVID-19-deaths in Great Britain could be reduced to 8,700 deaths from 510,000 deaths (–98%) with a policy consisting of case isolation + home quarantine + social distancing + school/university closure, cf. Table 4 in Ferguson et al. (2020). R_0 (the basic reproduction rate) is the expected number of cases directly generated by one case in a population where all individuals are susceptible to infection.

²In addition, the interest in this issue was sparked by the work Jonung did on the expected economic effects of the SARS pandemic in Europe in 2006 (Jonung and Röger, 2006). In this model-based study calibrated from Spanish flu data, Jonung and Röger concluded that the economic effects of a severe pandemic would be rather limited—a sharp contrast to the huge economic effects associated with lockdowns during the COVID-19 pandemic.

Figure 2: Correlation between stringency index and COVID-19 mortality in European countries and U.S. states during the first wave in 2020



Source: *Our World in Data*

Today, it remains an open question as to whether lockdowns have had a large, significant effect on COVID-19 mortality. We address this question by evaluating the current academic literature on the relationship between lockdowns and COVID-19 mortality rates.³ We use “NPI” to describe *any government mandate which directly restrict peoples’ possibilities*. Our definition does *not* include governmental recommendations, governmental information campaigns, access to mass testing, voluntary social distancing, etc., but *do* include mandated interventions such as closing schools or businesses, mandated face masks etc. We define *lockdown* as any policy consisting of at least one NPI as described above.⁴

Compared to other reviews such as Herby (2021) and Allen (2021), the main difference in this meta-analysis is that we carry out a systematic and comprehensive search strategy to identify all papers potentially relevant to answer the question we pose. We identify 34 eligible empirical studies that estimate the effect of mandatory lockdowns on COVID-19 mortality using a counterfactual difference-in-difference approach. We present our results in such a way that they can be systematically assessed, replicated, and used to derive overall meta-conclusions.⁵

2 Identification Process: Search Strategy and Eligibility Criteria

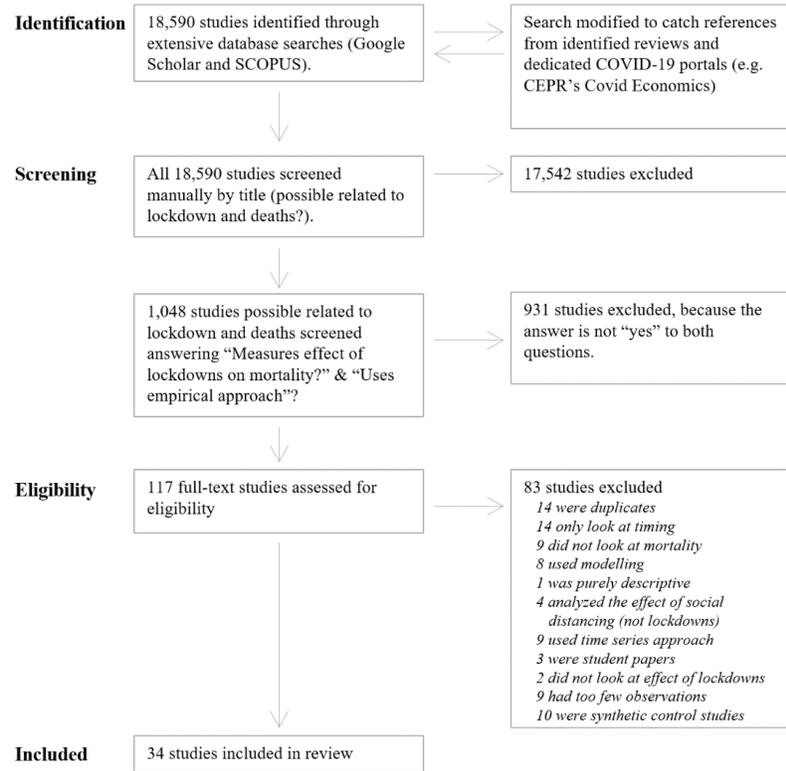
Figure 3 shows an overview of our identification process using a flow diagram designed according to PRISMA guidelines (Moher et al. (2009)). Of 18,590 studies identified during our database searches, 1,048 remained after a title-based screening. Then, 931 studies were excluded, because they either did not measure the effect of lockdowns on mortality or did not use an empirical approach. This left 117 studies that were read and inspected. After a more thorough assessment, 83 of the 117 were excluded, leaving 34 studies eligible for our meta-analysis. A table with all 83 studies excluded in the final step can be found in Appendix B, Table 8.

³We use “mortality” and “mortality rates” interchangeably to mean COVID-19 deaths per population.

⁴For example, we will say that Country A introduced the *non-pharmaceutical interventions* school closures and shelter-in-place-orders as part of the country’s *lockdown*.

⁵An interesting question is, “What damage lockdowns do to the economy, personal freedom and rights, and public health in general?” Although this question is important, it requires a full cost-benefit study, which is beyond the scope of this study.

Figure 3: PRISMA flow diagram for the selection of studies.



Below we present our search strategy and eligibility criteria, which follow the PRISMA guidelines and are specified in detail in our protocol Herby et al. (2021).

2.1 Search Strategy

The studies we reviewed were identified by scanning *Google Scholar* and *SCOPUS* for English-language studies. We used a wide range of search terms which are combinations of three search strings: a disease search string ("COVID," "corona," "coronavirus," "sars-cov-2"), a government response search string,⁶ and a methodology search string.⁷ We identified papers based on 1,360 search terms. We also required mentions of "deaths," "death," and/or "mortality." The search terms were continuously updated (by adding relevant terms) to fit this criterion.⁸

⁶The government response search string used was: "non-pharmaceutical," "nonpharmaceutical," "NPI," "NPIs," "lockdown," "social distancing orders," "statewide interventions," "distancing interventions," "circuit breaker," "containment measures," "contact restrictions," "social distancing measures," "public health policies," "mobility restrictions," "COVID-19 policies," "corona policies," "policy measures."

⁷The methodology search string used was: ("fixed effects," "panel data," "difference-in-difference," "diff-in-diff," "synthetic control," "counterfactual," "counterfactual," "cross country," "cross state," "cross county," "cross region," "cross regional," "cross municipality," "country level," "state level," "county level," "region level," "regional level," "municipality level," "event study."

⁸If a potentially relevant paper from one of the 13 reviews (*see* eligibility criteria) did not show up in our search, we added relevant words to our search strings and ran the search again. The 13 reviews were: Allen (2021); Brodeur et al. (2021); Gupta et al. (2020); Herby (2021); Johanna et al. (2020); Nussbaumer-Streit et al. (2020); Patel et al. (2020); Perra (2020); Poeschl and Larsen (2021); Pozo-Martin et al. (2020); Rezapour et al. (2021); Robinson(2021); Zhang et al. (2021).

We also included all papers published in *Covid Economics*. Our search was performed between July 1 and July 5, 2021 and resulted in 18,590 unique studies.⁹ All studies identified using SCOPUS and COVID Economics were also found using Google Scholar. This made us comfortable that including other sources such as VOXeu and SSRN would not change the result. Indeed, many papers found using Google Scholar were from these sources.

All 18,590 studies were first screened based on the title. Studies clearly not related to our research question were deemed irrelevant.¹⁰

After screening based on the title, 1,048 papers remained. These papers were manually screened by answering two questions:

1. Does the study measure the effect of lockdowns on mortality?
2. Does the study use an empirical *ex post* difference-in-difference approach (see eligibility criteria below)?

Studies to which we could not answer “yes” to both questions were excluded. When in doubt, we made the assessment based on reading the full paper, and in some cases, we consulted with colleagues.¹¹

After the manual screening, 117 studies were retrieved for a full, detailed review. These studies were carefully examined, and metadata and empirical results were stored in an Excel spreadsheet. All studies were assessed by at least two researchers. During this process, another 64 papers were excluded because they did not meet our eligibility criteria. Furthermore, nine studies with too little jurisdictional variance (< 10 observations) were excluded,¹² and 10 synthetic control studies were excluded.¹³ A table with all 83 studies excluded in the final step can be found in Appendix B, Table 8. Below we explain why these studies are excluded.

2.2 Eligibility Criteria

Focus on Mortality and Lockdowns

We only include studies that attempt to establish a relationship (or lack thereof) between lockdown policies and COVID–19 mortality or excess mortality. We exclude studies that use cases, hospitalizations, or other measures.¹⁴

Counterfactual Difference-in-Difference Approach

We distinguish between two methods used to establish a relationship (or lack thereof) between mortality rates and lockdown policies. The first uses registered cross-

⁹SCOPUS was continuously monitored between July 5th and publication using a search agent. Although the search agent returned several hits during this period, only one of them, An et al. (2021), was eligible according to our eligibility criteria. The study is not included in our review, but the conclusions are in line with our conclusions, as An et al. (2021) conclude that “The analysis shows that the mask mandate is consistently associated with lower infection rates in the short term, and its early adoption boosts the long-term efficacy. By contrast, the other five policy instruments—domestic lockdowns, international travel bans, mass gathering bans, and restaurant and school closures—show weaker efficacy.”

¹⁰This included studies with titles such as “COVID–19 outbreak and air pollution in Iran: A panel VAR analysis” and “Dynamic Structural Impact of the COVID–19 Outbreak on the Stock Market and the Exchange Rate: A Cross-country Analysis Among BRICS Nations.”

¹¹Professor Christian Bjørnskov of University of Aarhus was particularly helpful in this process.

¹²The excluded studies with too few observations were: Alemán et al. (2020), Berardi et al. (2020), Conyon et al. (2020a), Coccia (2021), Gordon et al. (2020), Juránek and Zoutman (2021), Kapoor and Ravi (2020), Umer and Khan (2020), and Wu and Wu (2020).

¹³The excluded synthetic control studies were: Conyon and Thomsen (2021), Dave et al. (2020), Ghosh et al. (2020), Born et al. (2021), Reinbold (2021), Cho (2020), Friedson et al. (2021), Neidhöfer and Neidhöfer (2020), Cerqueti et al. (2021), and Mader and Rüttenauer (2021).

¹⁴Analyses based on cases may pose major problems, as testing strategies for COVID–19 infections vary enormously across countries (and even over time within a given country). In consequence, cross-country comparisons of cases are, at best, problematic. Although these problems exist with death tolls as well, they are far more limited. Also, while cases and death tolls are correlated, there may be adverse effects of lockdowns that are not captured by the number of cases. For example, an infected person who is isolated at home with family under a SIPO may infect family members with a higher viral load causing more severe illness. So even if a SIPO reduces the number of cases, it may theoretically increase the number of COVID–19-deaths. Adverse effects like this may explain why studies like Chernozhukov et al. (2021) finds that SIPO reduces the number of cases but have no significant effect on the number of COVID–19-deaths. Finally, mortality is hierarchically the most important outcome, *cf.* GRADEpro (2013).

sectional mortality data. These are *ex post* studies. The second method uses simulated data on mortality and infection rates.¹⁵ These are *ex ante* studies.

We include all studies using a counterfactual difference-in-difference approach from the former group but disregard all *ex ante* studies, as the results from these studies are determined by model assumptions and calibrations.

Our limitation to studies using a “counterfactual difference-in-difference approach” means that we exclude all studies where the counterfactual is based on forecasting (such as a SIR-model) rather than derived from a difference-in-difference approach. This excludes studies like Duchemin et al. (2020) and Matzinger and Skinner (2020). We also exclude all studies based on interrupted time series designs that simply compare the situation before and after lockdown, as the effect of lockdowns in these studies might contain time-dependent shifts, such as seasonality. This excludes studies like Bakolis et al. (2021) and Siedner et al. (2020).

Given our criteria, we exclude the much-cited paper by Flaxman et al. (2020), which claimed that lockdowns saved three million lives in Europe. Flaxman et al. assume that the pandemic would follow an epidemiological curve unless countries locked down. However, this assumption means that the only interpretation possible for the empirical results is that lockdowns are the only thing that matters, even if other factors like season, behavior etc. caused the observed change in the reproduction rate, R_t . Flaxman et al. are aware of this and state that “our parametric form of R_t assumes that changes in R_t are an immediate response to interventions rather than gradual changes in behavior.” Flaxman et al. illustrate how problematic it is to force data to fit a certain model if you want to infer the effect of lockdowns on COVID-19 mortality.¹⁶

The counterfactual difference-in-difference studies in this review generally exploit variation across countries, U.S. states, or other geographical jurisdictions to infer the effect of lockdowns on COVID-19 fatalities. Preferably, the effect of lockdowns should be tested using randomized control trials, natural experiments, or the like. However, there are very few studies of this type.¹⁷

Synthetic Control Studies

The synthetic control method is a statistical method used to evaluate the effect of an intervention in comparative case studies. It involves the construction of a synthetic control which functions as the counterfactual and is constructed as an (optimal) weighted combination of a pool of donors. For example, Born et al. (2021) create a synthetic control for Sweden which consists of 30.0% Denmark, 25.3% Finland, 25.8% Netherlands, 15.0% Norway, and 3.9% Sweden. The effect of the intervention is derived by comparing the actual developments to those contained in the synthetic control.

We exclude synthetic control studies because of their inherent empirical problems as discussed by Bjørnskov (2021b). He finds that the synthetic control version of Sweden in Born et al. (2021) deviates substantially from “actual Sweden,” when looking at the period before mid-March 2020, when Sweden decided not to lock down. Bjørnskov estimates that *actual Sweden* experienced approximately 500 fewer deaths the first 11 weeks of 2020 and 4,500 fewer deaths in 2019 compared to *synthetic Sweden*.

¹⁵These simulations are often made in variants of the SIR-model, which can simulate the progress of a pandemic in a population consisting of people in different states (Susceptible, Infectious, or Recovered) with equations describing the process between these states.

¹⁶Several scholars have criticized Flaxman et al. (2020), e.g., see Homburg and Kuhbandner (2020), Lewis (2020), and Lemoine (2020).

¹⁷Kepp and Bjørnskov (2021) is one such study. They use evidence from a quasi-natural experiment in the Danish region of Northern Jutland. After the discovery of mutations of Sars-CoV-2 in mink—a major Danish export—seven of the 11 municipalities of the region went into extreme lockdown in early November, while the four other municipalities retained the moderate restrictions of the remaining country. Their analysis shows that while infection levels decreased, they did so before lockdown was in effect, and infection numbers also decreased in neighbor municipalities without mandates. They conclude that efficient infection surveillance and voluntary compliance make full lockdowns unnecessary, at least in some circumstances. Kepp and Bjørnskov (2021) is not included in our review, because they focus on cases and not COVID-19 mortality. Dave et al. (2020) is another such study. They see the Wisconsin Supreme Court abolishment of Wisconsin’s “Safer at Home” order (a SIPO) as a natural experiment and find that “the repeal of the state SIPO impacted social distancing, COVID-19 cases, or COVID-19-related mortality during the fortnight following enactment.” Dave et al. (2020) is not included in our review, because they use a synthetic control method.

This problem is inherent in all synthetic control studies of COVID-19, Bjørnskov argues, because the synthetic control should be fitted based on a long period of time before the intervention or the event one is studying the consequences of—*i.e.*, the lockdown Abadie (2021). However, this is not possible for the coronavirus pandemic, as there clearly *is* no long period with coronavirus before the lockdown. Hence, the synthetic control study approach is *by design* not appropriate for studying the effect of lockdowns.

Jurisdictional Variance—Few Observations

We exclude all interrupted time series studies which simply compare mortality rates before and after lockdowns. Simply comparing data from before and after the imposition of lockdowns could be the result of time-dependent variations, such as seasonal effects. For the same reason, we also exclude studies with little jurisdictional variance.¹⁸ For example, we exclude Conyon et al. (2020b) who “exploit policy variation between Denmark and Norway on the one hand and Sweden on the other” and, thus, only have one jurisdictional area in the control group. Although this *is* a difference-in-difference approach, there is a non-negligible risk that differences are caused by much more than just differences in lockdowns. Another example is Wu and Wu (2020), who use all U.S. states, but pool groups of states so they end with basically three observations. None of the excluded studies cover more than 10 jurisdictional areas.¹⁹ One study is a special case of the jurisdictional variance criteria (Auger et al. (2020)). Those researchers analyze the effect of school closures in U.S. states and find that those closures reduce mortality by 35%. However, all 50 states closed schools between March 13, 2020, and March 23, 2020, which means that all difference-in-difference is based on maximum 10 days. Given the long lag between infection and death, there is a risk that Auger et al.’s approach is an interrupted time series analysis where they compare United States before and after school closures, rather than a true difference-in-difference approach. However, we choose to include this study, as it is eligible under our protocol Herby et al. (2021).

Publication Status and Date

We include all *ex post* studies regardless of publication status and date. That is, we cover both working papers and papers published in journals. We include the early papers because the knowledge of the COVID-19-pandemic grew rapidly in the beginning, making later papers able to stand on the shoulders of previous work. Also, in the early days of COVID-19, speed was crucial which may have affected the quality of the papers. Including them makes it possible to compare the results of early studies to studies carried out at a later stage.²⁰

The Role of Optimal Timing

We exclude papers which analyze the effect of early lockdowns in contrast to later lockdowns. There’s no doubt that being prepared for a pandemic and knowing when it arrives at your doorstep is vital. However, at least two problems arise with respect to evaluating the effect of well-timed lockdowns.

First, when COVID-19 hit Europe and the United States, it was virtually impossible to determine the right timing. The World Health Organization declared the outbreak a pandemic on March 11, 2020, but at that date, Italy had already registered 13.7 COVID-19 deaths per million. On March 29, 2020, 18 days after the WHO declared the outbreak a pandemic and the earliest a lockdown response to the WHO’s announcement could potentially have an effect, the mortality rate in Italy was a staggering 178 COVID-19 deaths per million with an additional 13 per million dying each day.²¹

Secondly, it is extremely difficult to differentiate between the effect of public awareness and the effect of lockdowns when looking at timing because people and politicians are likely to react to the same information. As Figure 4 illustrates, all European countries and U.S. states that were hit hard and early by COVID-19 experienced high mortality rates, whereas all countries hit relatively late experienced low mortality rates. Björk et al. (2021) illustrate the difficulties in analyzing the effect of timing. They find that a 10-stringency-points-stricter lockdown would reduce

¹⁸A jurisdictional area can be countries, U.S. states, or counties. With “jurisdictional variance” we refer to variation in mandates across jurisdictional areas.

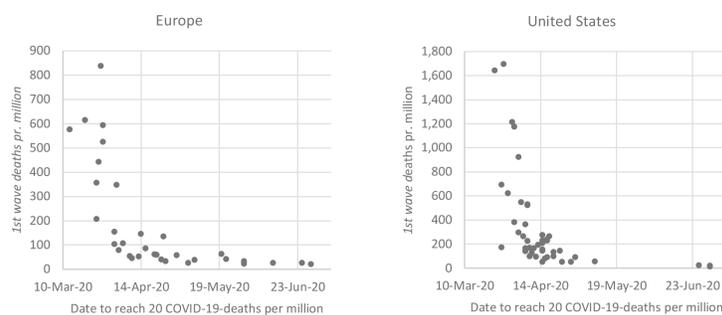
¹⁹All studies excluded on this criterion are listed in footnote 12.

²⁰We also intended to exclude studies which were primarily based on data from 2021 (as these studies would be heavily affected by vaccines) and studies that did not cover at least one EU-country, the United States, one U.S. state or Latin America, and where at least one country/state was not an island. However, we did not find any such studies.

²¹There’s approximately a 2- to 4-week gap between infection and deaths. See footnote 29.

COVID-19 mortality by a total of 200 deaths per million²² if done in week 11, 2020, but would only have approximately $\frac{1}{3}$ of the effect if implemented one week earlier or later and no effect if implemented three weeks earlier or later. One interpretation of this result is that lockdowns do not work if people either find them unnecessary and fail to obey the mandates or if people voluntarily lock themselves down. This is the argument Allen (2021) uses for the ineffectiveness of the lockdowns he identifies. If this interpretation is true, what Björk et al. (2021) find is that information and signaling is far more important than the strictness of the lockdown. There may be other interpretations, but the point is that studies focusing on timing cannot differentiate between these interpretations. However, if lockdowns have a notable effect, we should see this effect regardless of the timing, and we should identify this effect more correctly by excluding studies that exclusively analyze timing.

Figure 4: Taken by surprise. The importance of having time to prepare



Comment: The figure shows the relationship between early pandemic strength and total 1st wave of COVID-19 death toll. On the X-axis is “Days to reach 20 COVID-19-deaths per million (measured from February 15, 2020).” The Y-axis shows mortality (deaths per million) by June 30, 2020.

Source: Reported COVID-19 deaths and OxCGRT stringency for European countries and U.S. states with more than one million citizens. Data from Our World in Data.

We are aware of one meta-analysis by Stephens et al. (2020), which looks into the importance of timing. The authors find 22 studies that look at policy and timing with respect to mortality rates, however, only four were multi-country, multi-policy studies, which could possibly account for the problems described above. Stephens et al. conclude that “the timing of policy interventions across countries relative to the first Wuhan case, first national disease case, or first national death, is not found to be correlated with mortality.” (See Appendix A for further discussion of the role of timing.)

3 The Empirical Evidence

In this section we present the empirical evidence found through our identification process. We describe the studies and their results, but also comment on the methodology and possible identification problems or biases.

3.1 Preliminary Considerations

Before we turn to the eligible studies, we present some considerations that we adopted when interpreting the empirical evidence.

Empirical Interpretation

While the policy conclusions contained in some studies are based on statistically significant results, many of these conclusions are ill-founded due to the tiny impact associated with said statistically significant results. For example, Ashraf (2020) states that “social distancing measures has proved effective in controlling the spread of [a] highly contagious virus.” However, their estimates show that the average lockdown in Europe and the U.S. only reduced COVID-19 mortality by 2.4%.²³ Another example is Chisadza et al. (2021). The authors argue that “less stringent interventions increase the number of deaths, whereas more severe responses to the pandemic can lower fatalities.” Their conclusion is based on a negative estimate for the squared

²²They estimate that 10-point higher stringency will reduce excess mortality by 20 “per week and million” in the 10 weeks from week 14 to week 23.

²³We describe how we arrive at the 2.4% in Section 4.

term of *stringency* which results in a total negative effect on mortality rates (*i.e.*, fewer deaths) for stringency values larger than 124. However, the stringency index is limited to values between 0 and 100 by design, so the conclusion is clearly incorrect. To avoid any such biases, we base our interpretations solely on the empirical estimates and not on the authors’ own interpretation of their results.

Handling Multiple Models, Specifications, and Uncertainties

Several studies adopt a number of models to understand the effect of lockdowns. For example, Bjørnskov (2021a) estimates the effect after one, two, three, and four weeks of lockdowns. For these studies, we select the longest time horizon analyzed to obtain the estimate closest to the long-term effect of lockdowns.

Several studies also use multiple specifications including and excluding potentially relevant variables. For these studies, we choose the model which the authors regard as their main specification. Finally, some studies have multiple models which the authors regard as equally important. One interesting example is Chernozhukov et al. (2021), who estimate two models with and without national case numbers as a variable. They show that including this variable in their model alters the results substantially. The explanation could be that people responded to national conditions. For these studies, we present both estimates in Table 1, but—following Doucouliagos and Paldam (2008)—we use an average of the estimates in our meta-analysis in order to not give more weight to a study with multiple models relative to studies with just one principal model.

For studies looking at different classes of countries (*e.g.*, rich and poor), we report both estimates in Table 1 but use the estimate for rich Western countries in our meta-analysis, where we derive common estimates for Europe and the United States.

Effects are Measured “Relative to Sweden in the Spring of 2020”

Virtually all countries in the world implemented mandated NPIs in response to the COVID-19 pandemic. Hence, most estimates are relative to “doing the least,” which in many Western countries means relative to doing as Sweden has done, especially during the first wave, when Sweden, do to constitutional constraints, implemented very few restrictions compared to other western countries (Jonung and Hanke 2020). However, some studies *do* compare the effect of doing something to the effect of doing absolutely nothing (*e.g.*, Bonardi et al. (2020)).

The consequence is that some estimates are relative to “doing the least” while others are relative to “doing nothing.” This may lead to biases if “doing the least” works as a signal (or warning) which alters the behavior of the public. For example, Gupta et al. (2020) find a large effect of emergency declarations, which they argue “are best viewed as an information instrument that signals to the population that the public health situation is serious and they act accordingly,” on social distancing but not of other policies such as SIPOs (shelter-in-place orders). Thus, if we compare a country issuing a SIPO to a country doing nothing, we may overestimate the effect of a SIPO, because it is the sum of the signal *and* the SIPO. Instead, we should compare the country issuing the SIPO to a country “doing the least” to estimate the *marginal* effect of the SIPO.

To take an example, Bonardi et al. (2020) find relatively large effects of doing *something* but no effect of doing *more*. They find no extra effect of stricter lockdowns relative to less strict lockdowns and state that “our results point to the fact that people might adjust their behaviors quite significantly as partial measures are implemented, which might be enough to stop the spread of the virus.” Hence, whether the baseline is Sweden, which implemented a ban on large gatherings early in the pandemic, or the baseline is “doing nothing” can affect the magnitude of the estimated impacts. There is no obvious right way to resolve this issue, but since estimates in most studies are relative to doing less, we report results as compared to “doing less” when available. Hence, for Bonardi et al. we state that the effect of lockdowns is zero (compared to Sweden’s “doing the least”).

3.2 Overview of the Findings of Eligible Studies

Table 1 covers the 34 studies eligible for our review.²⁴ Out of these 34 studies, 22 were peer-reviewed and 12 were working papers. The studies analyze lockdowns during the first wave. Most of the studies (29) use data collected before September 1, 2020 and 10 use data collected before May 1, 2020. Only one study uses data from 2021. All studies are cross-sectional, ranging across jurisdictions. Geographically, 14

²⁴The following information can be found for each study in Table 2.

studies cover countries worldwide, four cover European countries, 13 cover the United States, two cover Europe and the United States, and one covers regions in Italy. Seven studies analyze the effect of SIPOs, 10 analyze the effect of stricter lockdowns (measured by the OxCGRT stringency index), 16 studies analyze specific NIPs independently, and one study analyzes other measures (length of lockdown).

Several studies find no statistically significant effect of lockdowns on mortality. For example, this includes Bjørnskov (2021a) and Stockenhuber (2020) who find no significant effect of stricter lockdowns (higher OxCGRT stringency index), Sears et al. (2020) and Dave et al. (2021), who find no significant effect of SIPOs, and Chaudhry et al. (2020), Aparicio and Grossbard (2021) and Guo et al. (2021) who find no significant effect of any of the analyzed NIPs, including business closures, school closures and border closures.

Other studies find a significant negative relationship between lockdowns and mortality. Fowler et al. (2021) find that SIPOs reduce COVID-19 mortality by 35%, while Chernozhukov et al. (2021) find that employee mask mandates reduces mortality by 34% and closing businesses and bars reduces mortality by 29%.

Some studies find a significant positive relationship between lockdowns and mortality. This includes Chisadza et al. (2021), who find that stricter lockdowns (higher OxCGRT stringency index) increases COVID-19 mortality by 0.01 deaths/million per stringency point and Berry et al. (2021), who find that SIPOs increase COVID-19 mortality by 1% after 14 days.

Most studies use the number of official COVID-19 deaths as the dependent variable. Only one study, Bjørnskov (2021a), looks at total excess mortality which—although is not perfect—we perceive to be the best measure, as it overcomes the measurement problems related to properly reporting COVID-19 deaths.

Several studies explicitly claim that they estimate the actual causal relationship between lockdowns and COVID-19 mortality. Some studies use instrumental variables to justify the causality associated with their analysis, while others make causality probable using anecdotal evidence.²⁵ But, Sebhatu et al. (2020) show that government policies are strongly driven by the policies initiated in neighboring countries rather than by the severity of the pandemic in their own countries. In short, it is not the severity of the pandemic that drives the adoption of lockdowns, but rather the propensity to copy policies initiated by neighboring countries. The Sebhatu et al. conclusion throws into doubt the notion of a causal relationship between lockdowns and COVID-19 mortality.

²⁵*E.g.*, Dave et al. (2021) states that “estimated case reductions accelerate over time, becoming largest after 20 days following enactment of a SIPO. These findings are consistent with a causal interpretation.”

Table 1: Summary of Eligible Studies

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Alderman and Harjoto (2020); "COVID-19: U.S. shelter-in-place orders and demographic characteristics linked to cases, mortality, and recovery rates."	COVID-19 mortality	Use State-level data from the COVID-19 Tracking Project data all U.S. states, and a multivariate regression analysis to empirically investigate the impacts of the duration of shelter-in-place orders on mortality.	Find that shelter-in-place orders are—for the average duration—associated with 1% (insignificant) fewer deaths per capita.	
Aparicio and Grossbard (2021); "Are COVID Fatalities in the U.S. Higher than in the EU, and If so, Why?."	COVID-19 mortality	Their main focus is to explain the gap in COVID-19-fatalities between Europe and the United States based on COVID-deaths and other data from 85 nations/states. They include status for "social events" (ban on public gatherings, cancellation of major events and conferences), school closures, shop closures "partial lockdowns" (e.g., night curfew) and "lockdowns" (all-day curfew) 100 days after the pandemic onset.	In the abstract the authors states that "various types of social distance measures such as school closings and lockdowns, and how soon they were implemented, help explain the U.S./EUROPE gap in cumulative deaths measured 100 days after the pandemic's onset in a state or country" although their estimates are insignificant.	

<p>Ashraf (2020): “Socioeconomic conditions, government interventions and health outcomes during COVID-19”</p>	<p>COVID-19 mortality</p>	<p>Their main focus is on the effectiveness of policies targeted to diminish the effect of socioeconomic inequalities (economic support) on COVID-19-deaths. They use data from 80 countries worldwide and include the OxCGRT stringency as a control variable in their models. The paper finds a significant negative (fewer deaths) effect of stricter lockdowns. The effect of lockdowns is insignificant, when they include an interaction term between the socioeconomic conditions index and the economic support index in their model.</p>	<p>For each 1-unit increase in OxCGRT stringency index, the cumulative mortality changes by -0.326 deaths per million (fewer deaths). The estimate is -0.073 deaths per million but insignificant, when including an interaction term between the socioeconomic conditions index and the economic support index.</p>
<p>Auger et al. (2020): “Association between statewide school closure and COVID-19 incidence and mortality in the U.S.”</p>	<p>COVID-19 mortality</p>	<p>U.S. population-based observational study which uses interrupted time series analyses incorporating a lag period to allow for potential policy-associated changes to occur. To isolate the association of school closure with outcomes, state-level nonpharmaceutical interventions and attributes were included in negative binomial regression models. Models were used to derive the estimated absolute differences between schools that closed and schools that remained open. The main outcome of the study is COVID-19 daily incidence and mortality per 100,000 residents.</p>	<p>All 50 states closed schools between March 13, 2020, and March 23, 2020. Hence, all difference-in-difference is based on maximum 10 days, and given the long lag between infection and death, there is a risk that their approach is more an interrupted time series analysis, where they compare United States before and after school closures, rather than a true difference-in-difference approach. However, we choose to include the study in our review as it—objectively speaking—lives up to the eligibility criteria specified in our protocol.</p>

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Berry et al. (2021); "Evaluating the effects of shelter-in-place policies during the COVID-19 pandemic"	COVID-19 mortality	The authors use U.S. county data on COVID-19 deaths from Johns Hopkins and SIPO data from the University of Washington to estimate the effect of SIPO's. They find no detectable effects of SIPO on deaths. The authors stress that their findings should not be interpreted as evidence that social distancing behaviors are not effective. Many people had already changed their behaviors before the introduction of shelter-in-place orders, and shelter-in-place orders appear to have been ineffective precisely because they did not meaningfully alter social distancing behavior.	SIPO increases the number of deaths by 0.654 per million after 14 days (see Fig. 2)	The authors conclude that "We do not find detectable effects of these policies [SIPO] on disease spread or deaths." However, this statement does not correspond to their results. In figure 2 they show that the effect on deaths is significant after 14 days. Looks at the effect 14 days after SIPO's are implemented which is a short lag given that the time between infection and deaths is at least 2–3 weeks.
Biørnskov (2021a); "Did Lockdown Work? An Economist's Cross-Country Comparison"	Excess mortality	Uses excess mortality and OxCGRt stringency from 24 European countries to estimate the effect of lockdown on the number of deaths one, two, three and four weeks later. Finds no effect (negative but insignificant) of (stricter) lockdowns. The author's specification using instrument variables yields similar results.	A stricter lockdown (OxCGRt stringency) does not have a significant effect on excess mortality.	Finds a positive (more deaths) effect after one and two weeks, which could indicate that other factors (omitted variables) affect the results.

Blanco et al. (2020); "Do Coronavirus Containment Measures Work? Worldwide Evidence"	COVID-19 mortality	Use data for deaths and NPIs from Hale et al. (2020) covering 158 countries between January and August 2020 to evaluate the effect of eight different NPIs (stay at home, bans on gatherings, bans on public events, closing schools, lockdowns of workplaces, interruption of public transportation services, and international border closures). They address the possible endogeneity of the NPIs by using instrumental variables.	When using the naive dummy variable approach, all parameters are statistically insignificant. On the contrary, estimates using the instrumental variable approach indicate that NPIs are effective in reducing the growth rate in the daily number of deaths 14 days later.	Run the same model four times for each of the different NPIs (stay at home-orders, ban on meetings, ban on public events and mobility restrictions). These NPIs were often introduced almost simultaneously so there is a high risk of multicollinearity with each run capturing the same underlying effect. Indeed, the size and standard errors of the estimates are worryingly similar. Looks at the effect 14 days after NPIs are implemented which is a fairly short lag given the time between infection and deaths is 2-3 weeks, cf. e.g., Flaxman et al. (2020), which according to Bjørnskov (2020) appears to be the minimum typical time from infection to death).
Bonardi et al. (2020); "Fast and local: How did lockdown policies affect the spread and severity of the COVID-19?"	Growth rates	Use NPI data scraped from news headlines from LexisNexis and death data from Johns Hopkins University up to April 1, 2020 in a panel structure with 184 countries. Controls for country fixed effects, day fixed effects and within-country evolution of the disease.	Find that certain interventions (SPO, regional lockdown and partial lockdown) work (in developed countries), but that stricter interventions (SPO) do not have a larger effect than less strict interventions (e.g., restrictions on gatherings). Find no effect of border closures.	Find a positive (more deaths) effect on day 1 after lockdown which may indicate that their results are driven by other factors (omitted variables). We rely on their publicly available version submitted to CEPR COVID Economics, but estimates on the effect of deaths can be found in Supplementary material, which is available in an updated version hosted on the Danish Broadcasting Corporation's webpage: https://www.dr.dk/static/documents/2021/03/04/managing_pandemics_e3911c11.pdf

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Bongaerts et al. (2021): “Closed for business: The mortality impact of business closures during the COVID–19 pandemic.”	COVID–19 mortality	Uses variation in exposure to closed sectors (e.g., tourism) in municipalities within Italy to estimate the effect of business closures. Assuming that municipalities with different exposures to closed sectors are not inherently different, they find that municipalities with higher exposure to closed sectors experienced subsequently lower mortality rates.	Business shutdown saved 9,439 Italian lives by April 13, 2020. This corresponds to a reduction of deaths by 32%, as there were 20,465 COVID–19-deaths in Italy by mid April 2020.	They (implicitly) assume that municipalities with different exposures to closed sectors are not inherently different. This assumption could be problematic, as more touristed municipalities can be very different from e.g., more industrialized municipalities.
Chaudhry et al. (2020): “A country level analysis measuring the impact of government actions, country preparedness and socioeconomic factors on COVID–19 mortality and related health outcomes”	COVID–19 mortality	Uses information on COVID–19 related national policies and health outcomes from the top 50 countries ranked by number of cases. Finds no significant effect of any NPI on the number of COVID–19-deaths.	Finds no significant effect on mortality of any of the analyzed interventions (partial border closure, complete border closure, partial lockdown (physical distancing measures only), complete lockdown (enhanced containment measures including suspension of all non-essential services), and curfews).	
Chernozhukov et al. (2021): “Causal impact of masks, policies, behavior on early COVID–19 pandemic in the U.S.”	Growth rates	Uses COVID-deaths from <i>The New York Times</i> and Johns Hopkins and data for U.S. States from Raifman et al. (2020) to estimate the effect of SPO, closed non-essential businesses, closed K–12 schools, closed restaurants except takeout, closed movie theaters, and face mask mandates for employees in public facing businesses.	Finds that mandatory masks for employees and closing K–12 schools reduces deaths. SPO and closing business (average of closed businesses, restaurants and movie theaters) has no statistically significant effect. The effect of school closures is highly sensitive to the inclusion of national case and death data.	States that “our regression specification for case and death growths is explicitly guided by a SIR model although our causal approach does not hinge on the validity of a SIR model.” We are uncertain if this means that data are managed to fit an SIR-model (and thus should fail our eligibility criteria).

<p>Chisadz et al. (2021); "Government Effectiveness and the COVID-19 Pandemic"</p>	<p>Uses COVID-19-deaths and OCGRT stringency from 144 countries to estimate the effect of lockdown on the number of COVID-19-deaths. Find a significant positive (more deaths) non-linear association between government response indices and the number of deaths.</p>	<p>An increase by 1 on "stringency index" increases the number of deaths by 0.0130 per million. The sign of the squared term is negative, but the combined non-linear estimate is positive (increases deaths) and larger than the linear estimate for all values of the OCGRT stringency index.</p>	<p>The author states that "less stringent interventions increase the number of deaths, whereas more severe responses to the pandemic can lower fatalities." However, according to their estimates this is not correct, as the combined non-linear estimate cannot be negative for relevant values of the OCGRT stringency index (0 to 100).</p>
<p>Dave et al. (2021); "When Do Shelter-in-Place Orders Fight COVID-19 Best? Policy Heterogeneity Across States and Adoption Time"</p>	<p>Uses smartphone location tracking and state data on COVID-19 deaths and SPO data (supplemented by their own searches) collected by <i>The New York Times</i> to estimate the effect of SPOs. Finds that SPO was associated with a 9%–10% increase in the rate at which state residents remained in their homes full-time, but overall they do not find a significant effect on mortality after 20+ days (see Figure 4). Indicate that the lacking significance may be due to longterm estimates being identified of a few early adopting states.</p>	<p>Finds no overall significant effect of SPO on deaths but does find a negative effect (fewer deaths) in early adopting states.</p>	<p>Find large effects of SPO on deaths after 6–14 days in early adopting states (see Table 8), which is before an SPO-related effect would be seen. This could indicate that other factors rather than SPOs drive the results.</p>
<p>Dergades et al. (2020); "Effectiveness of government policies in response to the COVID-19 outbreak"</p>	<p>Uses daily deaths from the European Centre for Disease Prevention and Control and OCGRT stringency from 32 countries worldwide (including U.S.) to estimate the effect of lockdown on the number of deaths.</p>	<p>Finds that the greater the strength of government interventions at an early stage, the more effective these are in slowing down or reversing the growth rate of deaths.</p>	<p>Focus is on the effect of early stage NPIs and thus does not absolutely live up to our eligibility criteria. However, we include the study as it differentiates between lockdown strength at an early stage.</p>

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Fakir and Bharati (2021); “Pandemic catch-22: The role of mobility restrictions and institutional inequalities in halting the spread of COVID-19”	COVID-19 mortality	Uses data from 127 countries, combining high-frequency measures of mobility data from Google’s daily mobility reports, country-date-level information on the stringency of restrictions in response to the pandemic from Oxford’s Coronavirus Government Response Tracker (OxCGRT), and daily data on deaths attributed to COVID-19 from Our World In Data and the Johns Hopkins University. Instrument stringency using day-to-day changes in the stringency of the restrictions in the rest of the world.	Finds large causal effects of stricter restrictions on the weekly growth rate of recorded deaths attributed to COVID-19. Shows that more stringent interventions help more in richer, more educated, more democratic, and less corrupt countries with older, healthier populations and more effective governments.	Finds a larger effect on deaths after 0 days than after 14 and 21 days (Table 3). This is surprising given that it takes 2–3 weeks from infection to death, and it may indicate that their results are driven by other factors.
Fowler et al. (2021); “Stay-at-home orders associate with subsequent decreases in COVID-19 cases and fatalities in the United States”	COVID-19 mortality	Uses U.S. county data on COVID-19 deaths and SIPO data collected by <i>The New York Times</i> to estimate the effect of SIPOs using a two-way fixed-effects difference-in-differences model. Finds a large and early (after few days) effect of SIPO on COVID-19 related deaths.	Stay-at-home orders are also associated with a 59.8 percent (18.3 to 80.2) average reduction in weekly fatalities after 3 weeks. These results suggest that stay-at-home orders might have reduced confirmed cases by 390,000 (170,000 to 680,000) and fatalities by 41,000 (27,000 to 59,000) within the first 3 weeks in localities that implemented stay-at-home orders.	Finds the largest effect of SIPO on deaths after 10 days (see Figure 4), before a SIPO-related effect could possibly be seen as it takes 2–3 weeks from infection to death. This could indicate that other factors drive their results.
Fuller et al. (2021); “Mitigation Policies and COVID-19-Associated Mortality—37 European Countries, January 23–June 30, 2020”	COVID-19 mortality	Uses COVID-19-deaths and OxCGRT stringency in 37 European countries to estimate the effect of lockdown on the number of COVID-19-deaths. Finds a significant negative (fewer deaths) effect of stricter lockdowns after mortality threshold is reached (the threshold is a daily rate of 0.02 new COVID-19 deaths per 100,000 population (based on a 7-day moving average))	For each 1-unit increase in OxCGRT stringency index, the cumulative mortality decreases by 0.55 deaths per 100,000.	

<p>Gibson (2020); "Government mandated lockdowns do not reduce COVID-19 deaths: implications for evaluating the stringent New Zealand response"</p>	<p>COVID-19 mortality</p>	<p>Uses data for every county in the United States from March through June 1, 2020, to estimate the effect of SPO (called "lockdown") on COVID-19 mortality. Policy data are acquired from American Red Cross reporting on emergency regulations. His control variables include county population and density, the elder share, the share in nursing homes, nine other demographic and economic characteristics and a set of regional fixed effects. Handles causality problems using instrument variables (IV).</p>	<p>Find no statistically significant effect of SPO.</p>	<p>Gibson use the word "lockdown" as synonym for SPO (writes "technically, government-ordered community quarantine")</p>
<p>Goldstein et al. (2021); "Lockdown Fatigue: The Diminishing Effects of Quarantines on the Spread of COVID-19"</p>	<p>COVID-19 mortality</p>	<p>Uses panel data from 152 countries with data from the onset of the pandemic until December 31, 2020. Finds that lockdowns tend to reduce the number of COVID-19 related deaths, but also that this benign impact declines over time: after 4 months of strict lockdown, NPIs have a significantly weaker contribution in terms of their effect in reducing COVID-19 related fatalities.</p>	<p>Stricter lockdowns reduce deaths for the first 60 days, whereafter the cumulative effect begins to decrease. If reintroduced after 120, the effect of lockdowns is smaller in the short run, but after 90 days the effect is almost the same as during first lockdown (only app. 10% lower).</p>	<p>There is little documentation in the study (e.g., no tables with estimates).</p>

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Guo et al. (2021): "Mitigation Interventions in the United States: An Exploratory Investigation of Determinants and Impacts"	COVID-19 mortality	Uses policy data from 1,470 executive orders from the state/government websites for all 50 states and Washington, DC and COVID-19-deaths from Johns Hopkins University in a random-effect spatial error panel model to estimate the effect of nine NPIs (SPO, strengthened SPO, public school closure, all school closure, large-gathering ban of more than 10 people, any gathering ban, restaurant/bar limit to dining out only, nonessential business closure, and mandatory self-quarantine of travelers) on COVID-19 deaths.	Two mitigation strategies (all school closure and mandatory self-quarantine of travelers) showed positive (more deaths) impact on COVID-19-deaths per 10,000. Six mitigation strategies (SPO, public school closure, large gathering bans (>10), any gathering ban, restaurant/bar limit to dining out only, and nonessential business closure) did not show any impact (Table 3, "Proportion of Cumulative Deaths Over the Population").	Only conclude on NPIs which reduce mortality. However, the conclusion is based on one-tailed tests, which means that all positive estimates (more deaths) are deemed insignificant. Thus, in their mortality-specification (Table 3, Proportion of Cumulative Deaths Over the Population), the estimate of all school closures (204) and mandatory self-quarantine of travelers (0.363) is deemed insignificant based on schools CI [.029, .379] and quarantine CI [.193, .532]. We believe, these results should be interpreted as a significant increase in mortality, and that these results should have been part of their conclusion.
Hale et al. (2020): "Global assessment of the relationship between government response measures and COVID-19 deaths"	COVID-19 mortality	Uses the OxCERT stringency and COVID-19-deaths from the European Centre for Disease Prevention and Control for 170 countries. Estimates both cross-sectional models in which countries are the unit of analysis, as well as longitudinal models on time-series panel data with country-day as the unit of analysis (including models that use both time and country fixed effects).	Finds that higher stringency in the past leads to a lower growth rate in the present, with each additional point of stringency corresponding to a 0.039%-point reduction in daily deaths growth rates six weeks later.	

<p>Hunter et al. (2021); "Impact of non-pharmaceutical interventions against COVID-19 in Europe: A quasi-experimental non-equivalent group and time-series".</p>	<p>COVID-19 mortality</p>	<p>Uses death data from the European Centre for Disease Prevention and Control (ECDC) and NPI-data from the Institute of Health Metrics and Evaluation. Argues that they use a quasi-experimental approach to identify the effect of NPIs because no analyzed intervention was imposed by all European countries and interventions were put in place at different points in the development of the epidemics.</p>	<p>Finds that mass gathering restrictions and initial business closures (businesses such as entertainment venues, bars and restaurants) reduces the number of deaths, whereas closing educational facilities and issuing SIPO increases the number of deaths. Finds no effect of closing non-essential services and mandating/recommending masks (Table 3).</p>	<p>Finds an effect of closing educational facilities and non-essential services after 1–7 days before lockdown could possibly have an effect on the number of deaths. This may indicate that other factors are driving their results.</p>
<p>Langeland et al. (2021); "The Effect of State Level COVID-19 Stay-at-Home Orders on Death Rates".</p>	<p>COVID-19 mortality</p>	<p>Estimates the effect of state-level lockdowns on COVID-19 deaths using multiple quasi-Poisson regressions with lockdown time length as the explanatory variable. Does not specify how lockdown is defined and what their data sources are.</p>	<p>Finds no significant effect of SIPO on the number of deaths after 2–4, 4–6 and 6+ weeks.</p>	<p>They write that "6+ weeks of lockdown is the only setting where the odds of dying are statistically higher than in the no lockdown case." However, all estimates are insignificant in Table C. Looks as if lockdown duration may cause a causality problem, because politicians may be less likely to ease restrictions when there are many cases/deaths.</p>
<p>Leffler et al. (2020); "Association of country-wide coronavirus mortality with demographics, testing, lockdowns, and public wearing of masks".</p>	<p>COVID-19 mortality</p>	<p>Use COVID-19 deaths from Worldometer and info about NPIs (mask/mask recommendations, international travel restrictions and lockdowns (defined as any closure of schools or workplaces, limits on public gatherings or internal movement, or stay-at-home orders) from Hale et al. (2020) for 200 countries to estimate the effect of the duration of NPIs on the number of deaths.</p>	<p>Finds that masking (mask recommendations) reduces mortality. For each week that masks were recommended the increase in per-capita mortality was 8.1% (compared to 55.7% increase when masks were not recommended). Finds no significant effect of the number of weeks with internal lockdowns and international travel restrictions (Table 2).</p>	<p>Their "mask recommendation" category includes some countries, where masks were mandated (see Supplemental Table A1) and may (partially) capture the effect of mask mandates. Looks at duration which may cause a causality problem, because politicians may be less likely to ease restrictions when there are many cases/deaths.</p>
<p>Mccafferty and Ashley (2021); "COVID-19 Social Distancing Interventions by Statutory Mandate and Their Observational Correlation to Mortality in the United States and Europe".</p>	<p>Other</p>	<p>Use data from 27 U.S. states and 12 European countries to analyze the effect of NPIs on peak mortality rate using general linear mixed effects modelling.</p>	<p>Finds that no mandate (school closures, prohibition on mass gatherings, business closures, stay at home orders, severe travel restrictions, and closure of non-essential businesses) was effective in reducing the peak COVID-19 mortality rate.</p>	

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Pan et al. (2020): “COVID-19: Effectiveness of non-pharmaceutical interventions in the united states before phased removal of social distancing protections varies by region”	COVID-19 mortality	<p>Uses county-level data for all U.S. states; Mortality is obtained from Johns Hopkins, while policy data are obtained from official governmental websites. Categorizes 12 policies into 4 levels of disease control; Level 1 (low)—State of Emergency; Level 2 (moderate)—school closures, restricting access (visits) to nursing homes, or closing restaurants and bars; Level 3 (high)—non-essential business closures, suspending non-violent arrests, suspending elective medical procedures, suspending evictions, or restricting mass gatherings of at least 10 people; and Level 4 (aggressive)—sheltering in place/stay-at-home, public mask requirements, or travel restrictions. Use stepped-wedge cluster randomized trial (SW-CRT) for clustering and negative binomial mixed model regression.</p>	<p>Concludes that only (duration of, see comment in next column) level 4 restrictions are associated with reduced risk of death, with an average 15% decline in the COVID-19 death rate per day. Implementation of level 3 and level 2 restrictions increased death rates in 6 of 6 regions, while longer duration increased death rates in 5 of 6 regions.</p>	<p>They focus on the negative estimate of duration of Level 4. However, their implementation estimate is large and positive, and the combined effect of implementation and duration is unclear.</p>
Pincombe et al. (2021): “The effectiveness of national-level containment and closure policies across income levels during the COVID-19 pandemic: an analysis of 113 countries.”	COVID-19 mortality	<p>Uses daily data for 113 countries on cumulative COVID-19 death counts over 130 days between February 15, 2020, and June 23, 2020, to examine changes in mortality growth rates across the World Bank’s income group classifications following shelter-in-place recommendations or orders (they use one variable covering both recommendations and orders).</p>	<p>Finds that shelter-in-place recommendations/orders reduces mortality growth rates in high income countries (although insignificant) but increases growth rates in countries in other income groups.</p>	

<p>Sears et al. (2020); "Are we #stayinghome to Flatten the Curve?"</p>	<p>COVID-19 mortality</p>	<p>Uses cellular location data from all 50 states and the District of Columbia to investigate mobility patterns during the pandemic across states and time. Adding COVID-19 death tolls and the timing of SIFO for each state they estimate the effect of stay-at-home policies on COVID-19 mortality.</p>	<p>Find that SIFOs lower deaths by 0.13–0.17 per 100,000 residents, equivalent to death rates 29–35% lower than in the absence of policies. However, these estimates are insignificant at a 95% confidence interval (see Table 4). The study also finds reductions in activity levels prior to mandates. Human encounter rate fell by 63 percentage points and nonessential visits by 39 percentage points relative to pre-COVID-19 levels, prior to any state implementing a statewide mandate.</p>	<p>In the abstract the authors state that death rates would be 42–54% lower than in the absence of policies. However, this includes averted deaths due to pre-mandate social distancing behavior (p. 6). The effect of SIFO is a reduction in deaths by 29%–35% compared to a situation without SIFO but with pre-mandate social distancing. These estimates are insignificant at a 95% confidence interval.</p>
<p>Shiva and Molana (2021); "The Luxury of Lockdown"</p>	<p>COVID-19 mortality</p>	<p>Uses COVID-19-deaths and OxCGRT stringency from 169 countries to estimate the effect of lockdown on the number of deaths 1–8 weeks later. Finds that stricter lockdowns reduce COVID-19-deaths 4 weeks later (but insignificant 8 weeks later) and have the greatest effect in high income countries. Finds no effect of workplace closures in low-income countries.</p>	<p>A stricter lockdown (1 stringency point) reduces deaths by 0.1% after 4 weeks. After 8 weeks the effect is insignificant.</p>	
<p>Spiegel and Tooles (2021); "Business restrictions and COVID-19 fatalities"</p>	<p>COVID-19 mortality</p>	<p>Use data for every county in the United States from March through December 2020 to estimate the effect of various NPIs on the COVID-19-deaths growth rate. Derives causality by (1) assuming that state regulators primarily focus on the state's most populous counties, so state regulation in smaller counties can be viewed as a quasi randomized experiment, and (2) conducting county pair analysis, where similar counties in different states (and subject to different state policies) are compared.</p>	<p>Finds that some interventions (e.g., mask mandates, restaurant and bar closures, gym closures, and high-risk business closures) reduces mortality growth, while other interventions (closures of low- to medium-risk businesses and personal care/spa services) did not have an effect and may even have increased the number of deaths.</p>	<p>In total they analyze the lockdown effect of 21 variables. 14 of 21 estimates are significant, and of these 6 are negative (reduces deaths) while 8 are positive (increases deaths). Some results are far from intuitive. E.g. mask recommendations increases deaths by 48% while mask mandates reduces deaths by 12%, and closing restaurants and bars reduces deaths by 50%, while closing bars but not restaurants only reduces deaths by 5%.</p>

Table 1: Summary of Eligible Studies—Continued

1. Study (Author & Title)	2. Measure	3. Description	4. Results	5. Comments
Stockenhuber (2020): "Did We Respond Quickly Enough? How Policy-Implementation Speed in Response to COVID-19 Affects the Number of Fatal Cases in Europe."	COVID-19 mortality	Uses data for the number of COVID-19 infections and deaths and policy information for 24 countries from OxCGRT to estimate the effect of stricter lockdowns on the number of deaths using principal component analysis and a generalized linear mixed model.	Finds no significant effect of stricter lockdowns on the number of fatalities (Table 4).	Groups data on lockdown strictness into four groups and lose significant information and variation.
Stokes et al. (2020): "The relative effects of non-pharmaceutical interventions on early COVID-19 mortality: natural experiment in 130 countries"	COVID-19 mortality	Uses daily COVID-19 deaths for 130 countries from the European Centre for Disease Prevention and Control (ECDC) and daily policy data from the Oxford COVID-19 Government Response Tracker (OxCGRT). Looks at all levels of restrictions for each of the nine sub-categories of the OxCGRT stringency index (school, work, events, gatherings, transport, SIPO, internal movement, travel).	Of the nine sub-categories in the OxCGRT stringency index, only travel restrictions are consistently significant (with level 2 "Quarantine arrivals from high-risk regions" having the largest effect, and the strictest level 4 "Total border closure" having the smallest effect). Restrictions on very large gatherings (>1,000) has a large significant negative (fewer deaths) effect, while the effect of stricter restrictions on gatherings are insignificant. Authors recommend that the closing of schools (level 1) has a very large (in absolute terms it's twice the effect of border quarantines) positive effect (more deaths) while stricter interventions on schools have no significant effect. Required cancelling of public events also has a significant positive (more deaths) effect. We focus on their 14–38 days results, as they catch the longest time frame (their 0–24 day model returns mostly insignificant results).	Their results are counter intuitive and somewhat inconclusive. Why does limiting very large gatherings (>1,000) work, while stricter limits do not? Why do recommending school closures cause more deaths? Why is the effect of border closures before 1st death insignificant, while the effect of closing borders after 1st death is significant (and large)? And why does quarantining arrivals from high-risk regions work better than total border closures? With 23 estimated parameters in total these counter intuitive and inconclusive results could be caused by multiple test bias (we correct for this in the meta-analysis), but may also be caused by other factors such as omitted variable bias.

<p>Toya and Skidmore (2020); "A Cross-Country Analysis of the Determinants of COVID-19 Fatalities"</p>	<p>COVID-19 mortality</p>	<p>Uses COVID-19-deaths and lockdown info from various sources from 159 countries in a cross-country event study. Controls for country specifics by including socio-economic, political, geographic, and policy information. Finds little evidence for the efficacy of NPIs.</p>	<p>Complete travel restrictions prior to April 2020 reduced deaths by -0.226 per 100,000 by April 1st 2021, while mandatory national lockdown prior to April 2020 increased deaths by 0.166 by April 1, 2021. Recommended local lockdowns reduced deaths but results are based on one observation. Partial travel restrictions, mandatory local lockdowns and recommended national lockdowns did not have a significant effect on deaths.</p>
<p>Tsai et al. (2021); "Coronavirus Disease 2019 (COVID-19) Transmission in the United States Before Versus After Relaxation of Statewide Social Distancing Measures"</p>	<p>Reproduction rate, Rt</p>	<p>Uses data for NPIs that were implemented and/or relaxed in U.S. states between 10 March and 15 July 2020. Using segmented linear regression, they estimate the extent to which relaxation of social distancing affected epidemic control, as indicated by the time-varying, state-specific effective reproduction number (Rt). Rt is based on death tolls.</p>	<p>Finds that in the 8 weeks prior to relaxing NPIs, Rt was declining, while after relaxation Rt started to increase.</p>

Note: All comments on the significance of estimates are based on a 5% significance level unless otherwise stated.

Their Figure 1 shows that Rt on average increases app. 10 days before relaxation, which could indicate that other factors (omitted variables) affect the results.

It is difficult to make a conclusion based on the overview in Table 1. Is -0.073 to -0.326 deaths/million per stringency point, as estimated by Ashraf (2020), a large or a small effect relative to the 98% reduction in mortality predicted by the study published by the Imperial College London (Ferguson et al. (2020)). This is the subject for our meta-analysis in the next section. Here, it turns out that -0.073 to -0.326 deaths/million per stringency point is a relatively modest effect and only corresponds to a 2.4% reduction in COVID-19 mortality on average in the U.S. and Europe.

4 Meta-Analysis: The Impact of Lockdowns on COVID-19 Mortality

We now turn to the meta-analysis, where we focus on the impact of lockdowns on COVID-19 mortality.

In the meta-analysis, we include 24 studies in which we can derive the relative effect of lockdowns on COVID-19 mortality, where mortality is measured as COVID-19-related deaths per million. In practice, this means that the studies we included estimate the effect of lockdowns on mortality or the effect of lockdowns on mortality growth rates, while using a counterfactual estimate.²⁶

Our focus is on the effect of compulsory non-pharmaceutical interventions (NPI), policies that restrict internal movement, close schools and businesses, and ban international travel, among others. We do not look at the effect of voluntary behavioral changes (*e.g.*, voluntary mask wearing), the effect of recommendations (*e.g.*, recommended mask wearing), or governmental services (voluntary mass testing and public information campaigns), but only on mandated NPIs.

The studies we examine are placed in three categories. Seven studies analyze the effect of stricter lockdowns based on the OxCGRT stringency indices, 13 studies analyze the effect of SIPOs (6 studies only analyze SIPOs, while seven analyze SIPOs among other interventions), and 11 studies analyze the effect of specific NPIs independently (lockdown vs. no lockdown).²⁷ Each of these categories is handled so that comparable estimates can be made across categories. Below, we present the results for each category and show the overall results, as well as those based on various quality dimensions.

Quality Dimensions

We include quality dimensions because there are reasons to believe that can affect a study's conclusion. Below we describe the dimensions, as well as our reasons to believe that they are necessary to fully understand the empirical evidence.

- *Peer-reviewed vs. working papers:* We distinguish between peer-reviewed studies and working papers as we consider peer-reviewed studies generally being of higher quality than working papers.²⁸
- *Long vs. short time period:* We distinguish between studies based on long time periods (with data series ending after May 31, 2020) and short time periods (data series ending at or before May 31, 2020), because the first wave did not fully end before late June in the U.S. and Europe. Thus, studies relying on short data periods lack the last part of the first wave and may yield biased results if lockdowns only “flatten the curve” and do not prevent deaths.
- *No early effect on mortality:* On average, it takes approximately 3 weeks from infection to death.²⁹ However, several studies find effects of lockdown on mortality almost immediately. Fowler et al. (2021) find a significant effect of SIPOs on mortality after just 4 days and the largest effect after 10 days. An early effect may indicate that other factors (omitted variables) drive the results, and, thus, we distinguish between studies which find an effect on mortality sooner than 14 days after lockdown and those that do not.³⁰ Note that many studies do not look at the short term and thus fall into the latter category by default.

²⁶As a minimum requirement, one needs to know the effect on the top of the curve.

²⁷The total is larger than 21 because the 11 SIPO studies include seven studies which look at multiple measures.

²⁸Vetted papers from CEPR COVID Economics are considered as working papers in this regard.

²⁹Leffler et al. (2020) writes, “On average, the time from infection with the coronavirus to onset of symptoms is 5.1 days, and the time from symptom onset to death is on average 17.8 days. Therefore, the time from infection to death is expected to be 23 days.” Meanwhile, Stokes et al. (2020) writes that “evidence suggests a mean lag between virus transmission and symptom onset of 6 days, and a further mean lag of 18 days between onset of symptoms and death.”

³⁰Some of the authors are aware of this problem. *E.g.*, Bjørnskov (2021a) writes “when the lag length extends to 3 or 4 weeks, that is, the length that is reasonable from the perspective

- *Social sciences vs. other sciences*: While it is true that epidemiologists and researchers in natural sciences should, in principle, know much more about COVID-19 and how it spreads than social scientists, social scientists are, in principle, experts in evaluating the effect of various policy interventions. Thus, we distinguish between studies published by scholars in social sciences and by scholars from other fields of research. We perceive the former as being better suited for examining the effects of lockdowns on mortality. For each study, we have registered the research field for the corresponding author’s associated institute (*e.g.*, for a scholar from “Institute of economics” research field is registered as “Economics”). Where no corresponding author was available, the first author has been used. Afterwards, all research fields have been classified as either from the “Social Science” or “Other.”³¹

We also considered including a quality dimension to distinguish between studies based on excess mortality and studies based on COVID-19 mortality, as we believe that excess mortality is potentially a better measure for two reasons. First, data on total deaths in a country is far more precise than data on COVID-19 related deaths, which may be both underreported (due to lack of tests) or overreported (because some people die *with*—but not *because of*—COVID-19). Secondly, a major purpose of lockdowns is to save lives. To the extent lockdowns shift deaths *from* COVID-19 *to* other causes (*e.g.*, suicide), estimates based on COVID-19 mortality will overestimate the effect of lockdowns. Likewise, if lockdowns save lives in other ways (*e.g.*, fewer traffic accidents) lockdowns’ effect on mortality will be underestimated. However, as only one of the 34 studies (Bjørnskov (2021a)) is based on excess mortality, we are unfortunately forced to disregard this quality dimension.

Meta-data used for our quality dimensions as well as other relevant information are shown in Table 2.

of the virology of Sars-CoV-2, the estimates become very small and insignificant” and “these results confirm the overall pattern by being negative and significant when lagged 1 or 2 weeks (the period when they cannot have worked) but turning positive and insignificant when lagged 4 weeks.”

³¹Research fields classified as social sciences were economics, public health, management, political science, government, international development, and public policy, while research fields not classified as social sciences were ophthalmology, environment, medicine, evolutionary biology and environment, human toxicology, epidemiology, and anesthesiology.

Table 2: Metadata for the Studies Included in the Meta-Analysis

1. Study (Author and Title)	2. Included in Meta-Analysis	3. Publication Status	4. End of Data Period	5. Earliest Effect	6. Field of Research	7. Lockdown Measure	8. Geographical Coverage
Alderman and Harjoto (2020); "COVID-19: U.S. shelter-in-place orders and demographic characteristics linked to cases, mortality, and recovery rates"	Yes	Peer-review	11-Jun-20	n/a	Economics (Social science)	SIPO	United States
Aparicio and Grossbard (2021); "Are COVID Fatalities in the U.S. Higher than in the EU, and If so, Why?"	Yes	Peer-review	22-Jul-20	n/a	Economics (Social science)	Specific NPIs	Europe and United States
Ashraf (2020); "Socioeconomic conditions, government interventions and health outcomes during COVID-19"	Yes	WP	20-May-20	n/a	Economics (Social science)	Stringency	World
Auger et al. (2020); "Association between statewide school closure and COVID-19 incidence and mortality in the U.S."	Yes	Peer-review	07-May-20	>21 days	Medicine (Other)	Specific NPIs	United States
Berry et al. (2021); "Evaluating the effects of shelter-in-place policies during the COVID-19 pandemic"	Yes	Peer-review	30-May-20	8-14 days	Public policy (Social science)	SIPO	United States
Bjørnskov (2021a); "Did Lockdown Work? An Economist's Cross-Country Comparison"	Yes	Peer-review	30-Jun-20	<8 days	Economics (Social science)	Stringency	Europe
Blanco et al. (2020); "Do Coronavirus Containment Measures Work? Worldwide Evidence"	No	WP	31-Aug-20	8-14 days	Economics (Social science)	Specific NPIs	World

Bonardi et al. (2020); "Fast and local: How did lockdown policies affect the spread and severity of the COVID-19"	Yes	WP	13-Apr-20	<8 days	Economics (Social science)	Specific NPIs	World
Bongaerts et al. (2021); "Closed for business: The mortality impact of business closures during the COVID-19 pandemic"	Yes	Peer-review	13-Apr-20	8-14 days	Management (Social science)	Specific NPIs	One country
Chaudhry et al. (2020); "A country level analysis measuring the impact of government actions, country preparedness and socio-economic factors on COVID-19 mortality and related health outcomes"	Yes	Peer-review	01-Apr-20	n/a	Anesthesiology (Other)	Specific NPIs	World
Chernozhukov et al. (2021); "Causal impact of masks, policies, behavior on early COVID-19 pandemic in the U.S."	Yes	Peer-review	03-Jun-20	n/a	Economics (Social science)	Specific NPIs	United States
Chisadza et al. (2021); "Government Effectiveness and the COVID-19 Pandemic"	Yes	Peer-review	01-Sep-20	n/a	Economics (Social science)	Stringency	World
Dave et al. (2021); "When Do Shelter-in-Place Orders Fight COVID-19 Best? Policy Heterogeneity Across States and Adoption Time"	Yes	Peer-review	20-Apr-20	Finds no effect	Economics (Social science)	SIPO	United States
Dergades et al. (2020); "Effectiveness of government policies in response to the COVID-19 outbreak"	No	WP	30-Apr-20	n/a	Management (Social science)	Stringency	World

Table 2: Metadata for the Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Included in Meta-Analysis	3. Publication Status	4. End of Data Period	5. Earliest Effect	6. Field of Research	7. Lockdown Measure	8. Geographical Coverage
Fakir and Bharati (2021); "Pandemic catch-22: The role of mobility restrictions and institutional inequalities in halting the spread of COVID-19"	No	Peer-review	30-Jul-20	<8 days	Economics (Social science)	Stringency	World
Fowler et al. (2021); "Stay-at-home orders associate with subsequent decreases in COVID-19 cases and fatalities in the United States"	Yes	Peer-review	07-May-20	<8 days	Public Health (Social science)	SIPO	United States
Fuller et al. (2021); "Mitigation Policies and COVID-19 Associated Mortality—37 European Countries, January 23–June 30, 2020"	Yes	WP	30-Jun-20	n/a	Epidemiology (Other)	Stringency	Europe
Gibson (2020); "Government mandated lockdowns do not reduce COVID-19 deaths: implications for evaluating the stringent New Zealand response"	Yes	Peer-review	01-Jun-20	Finds no effect	Economics (Social science)	SIPO	United States
Goldstein et al. (2021); "Lockdown Fatigue: The Diminishing Effects of Quarantines on the Spread of COVID-19"	Yes	WP	31-Dec-20	<8 days	International Development (Social science)	Stringency	World
Guo et al. (2021); "Mitigation Interventions in the United States: An Exploratory Investigation of Determinants and Impacts"	Yes	Peer-review	07-Apr-20	n/a	Social work (Social science)	Specific NPIs	United States

	No	WP	27-May-20	n/a	Government (Social science)	Stringency	World
Hale et al. (2020); "Global assessment of the relationship between government response measures and COVID-19 deaths"	No	WP	27-May-20	n/a	Government (Social science)	Stringency	World
Hunter et al. (2021); "Impact of non-pharmaceutical interventions against COVID-19 in Europe: A quasi-experimental non-equivalent group and time-series"	No	Peer-review	24-Apr-20	<8 days	Medicine (Other)	Specific NPIs	Europe
Langeland et al. (2021); "The Effect of State Level COVID-19 Stay-at-Home Orders on Death Rates"	No	WP	Not specified	Finds no effect	Political Science (Social science)	Other	United States
Leffler et al. (2020); "Association of country-wide coronavirus mortality with demographics, testing, lockdowns, and public wearing of masks"	Yes	Peer-review	09-May-20	n/a	Ophthalmology (Other)	Specific NPIs	World
McCafferty and Ashley (2021); "COVID-19 Social Distancing Interventions by Statutory Mandate and Their Observational Correlation to Mortality in the United States and Europe"	No	Peer-review	12-Apr-20	Finds no effect	Ophthalmology (Other)	Specific NPIs	Europe and United States
Pan et al. (2020); "COVID-19: Effectiveness of non-pharmaceutical interventions in the united states before phased removal of social distancing protections varies by region"	No	WP	29-May-20	n/a	Environment (Other)	Specific NPIs	United States

Table 2: Metadata for the Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Included in Meta-Analysis	3. Publication Status	4. End of Data Period	5. Earliest Effect	6. Field of Research	7. Lockdown Measure	8. Geographical Coverage
Pincombe et al. (2021); “The effectiveness of national-level containment and closure policies across income levels during the COVID-19 pandemic: an analysis of 113 countries”	No	Peer-review	23-Jun-20	n/a	Health Science (Social science)	SIPO	World
Sears et al. (2020); “Are we #stayinghome to Flatten the Curve?”	Yes	WP	29-Apr-20	Finds no effect	Economics (Social science)	SIPO	United States
Shiva and Molana (2021); “The Luxury of Lockdown”	Yes	Peer-review	08-Jun-20	15–21 days	Government (Social science)	Stringency	World
Spiegel and Tookes (2021); “Business restrictions and COVID-19 fatalities”	Yes	Peer-review	31-Dec-20	<8 days	Management (Social science)	Specific NPIs	United States
Stoekenhuber (2020); “Did We Respond Quickly Enough? How Policy-Implementation Speed in Response to COVID-19 Affects the Number of Fatal Cases in Europe”	Yes	Peer-review	12-Jul-20	n/a	Evolutionary Biology and Environment (Other)	Stringency	Europe
Stokes et al. (2020); “The relative effects of non-pharmaceutical interventions on early COVID-19 mortality: natural experiment in 130 countries”	Yes	WP	01-Jun-20	n/a	Economics (Social science)	Specific NPIs	World

	Yes	WP	01-Apr-21	n/a	Economics (Social science)	Specific NPIs	World
Toya and Skidmore (2020); "A Cross-Country Analysis of the Determinants of COVID-19 Fatalities"	Yes	WP	01-Apr-21	n/a	Economics (Social science)	Specific NPIs	World
Tsai et al. (2021); "Coronavirus Disease 2019 (COVID-19) Transmission in the United States Before Versus After Relaxation of Statewide Social Distancing Measures"	No	Peer-review	15-Jul-20	<8 days	Psychiatry (Social science)	Specific NPIs	United States

Note. Research fields classified as social sciences were economics, public health, health science, management, political science, government, international development, and public policy, while research fields not classified as social sciences were ophthalmology, environment, medicine, evolutionary biology and environment, human toxicology, epidemiology and anesthesiology.

Interpreting and Weighting Estimates

The estimates used in the meta-analysis are not always readily available in the studies shown in Table 2. In Appendix B Table 9, we describe for each paper how we interpret the estimates and how they are converted to a common estimate (the relative effect of lockdowns on COVID-19 mortality) which is comparable across all studies.

Following Paldam (2015) and Stanley and Doucouliagos (2010), we also convert standard errors³² and use the precision of each estimate (defined as $1/SE$) to calculate the precision-weighted average of all estimates and present funnel plots. The precision-weighted average is our primary indicator of the efficacy of lockdowns, but we also report arithmetic averages and medians in the meta-analysis.

In the following sections, we present the meta-analysis for each of the three groups of studies (stringency index-studies, SIPO-studies, and studies analyzing specific NPIs).

4.1 Stringency Index Studies

Seven eligible studies examine the link between lockdown stringency and COVID-19 mortality. The results from these studies, converted to common estimates, are presented in Table 3 below. All studies are based on the COVID-19 Government Response Tracker’s (OxCGRT) stringency index of Oxford University’s Blavatnik School of Government (Hale et al. (2020)).

The OxCGRT stringency index neither measures the expected effectiveness of the lockdowns nor the expected costs. Instead, it describes the stringency based on nine equally weighted parameters.³³ Many countries followed similar patterns and almost all countries closed schools, while only a few countries issued SIPOs without closing businesses. Hence, it is reasonable to perceive the stringency index as continuous, although not necessarily linear. The index includes recommendations (*e.g.*, “workplace closing” is 1 if the government recommends closing (or work from home), *cf.* Hale et al. (2021)), but the effect of including recommendations in the index is primarily to shift the index parallelly upward and should not alter the results relative to our focus on mandated NPIs. It is important to note that the index is not perfect. As pointed out by Book (2020), it is certainly possible to identify errors and omissions in the index. However, the index is objective and unbiased and as such, useful for cross-sectional analysis with several observations, even if not suitable for comparing the overall strictness of lockdowns in two countries.

Since the studies examined use different units of estimates, we have created common estimates for Europe and United States to make them comparable. The common estimates show the effect of the average lockdown in Europe and United States (with average stringencies of 76 and 74, respectively, between March 16, and April 15, 2020, compared to a policy based solely on recommendations (stringency 44)). For example, Ashraf (2020) estimates that the effect of stricter lockdowns is -0.073 to -0.326 deaths/million per stringency point. We use the average of these two estimates (-0.200) in the meta-analysis (see Table 9 in Appendix B for a description for all studies). The average lockdown in Europe between March 16, and April 15, 2020, was 32 points stricter than a policy solely based on recommendations (76 vs. 44). In United States, it was 30 points. Hence, the total effect of the lockdowns compared to the recommendation policy was -6.37 deaths/million in Europe (32×-0.200) and -5.91 deaths/million in United States. With populations of 748 million and 333 million, respectively the total effect as estimated by Ashraf (2020) is 4,766 averted COVID-19 deaths in Europe and 1,969 averted COVID-19 deaths in United States. By the end of the study period in Ashraf (2020), which is May 20, 2020, 164,600 people in Europe and 97,081 people in the United States had died of COVID-19. Hence, the 4,766 averted COVID-19 deaths in Europe and the 1,969

³² Standard errors are converted such that the t-value, calculated based on common estimates and standard errors, is unchanged. When confidence intervals are reported rather than standard errors, we calculate standard errors using t-distribution with ∞ degrees of freedom (*i.e.*, 1.96 for 95% confidence interval).

³³ The nine parameters are “C1 School closing,” “C2 Workplace closing,” “C3 Cancel public events,” “C4 Restrictions on gatherings,” “C5 Close public transport,” “C6 Stay at home requirements,” “C7 Restrictions on internal movement,” “C8 International travel controls” and “H1 Public information campaigns.” The latter, “H1 Public information campaigns,” is not an intervention following our definition, as it is not a mandatory requirement. However, of 97 European countries and U.S. States in the OxCGRT database, only Andorra, Belarus, Bosnia and Herzegovina, Faeroe Islands, and Moldova—less than 1.6% of the population—did not get the maximum score by March 20, 2020, so the parameter simply shifts the index parallelly upward and should not have notable impact on the analyses.

averted COVID-19 deaths in the United States corresponds to 2.8% and 2.0% of all COVID-19 deaths, respectively, with an arithmetic average of 2.4%. Our common estimate is thus $-2.4%$, *cf.* Table 3. So, this means that Ashraf (2020) estimates that without lockdowns, COVID-19 deaths in Europe would have been 169,366 and COVID-19 deaths in the U.S. would have been 99,050. Our approach is not unproblematic. First of all, the level of stringency varies over time for all countries. We use the stringency between March 16, and April 15, 2020 because this period covers the main part of the first wave which most of the studies analyze. Secondly, OxCGRT has changed the index over time and a 10-point difference today may not be exactly the same as a 10-point difference when the studies were finalized. However, we believe these problems are unlikely to significantly alter our results.

Table 3 demonstrates that the studies find that lockdowns, on average, have reduced COVID-19 mortality rates by 0.2% (precision-weighted). The results yield a median of $-2.4%$ and an arithmetic average of $-7.3%$. Only one of the seven studies, Fuller et al. (2021), finds a significant *and* (relative to the effect predicted in studies like Ferguson et al. (2020)) substantial effect of lockdowns ($-35%$). The other six studies find much smaller effects. Hence, based on the stringency index studies, we find little to no evidence that mandated lockdowns in Europe and the United States had a noticeable effect on COVID-19 mortality rates. And, as will be discussed in the next paragraph, the fifth column of Table 3 displays the number of quality dimensions (out of 4) met by each study.

Table 3: Overview of Common Estimates From Studies Based on Stringency Indexes

<i>Effect on COVID-19 Mortality</i>	Estimate (Estimated Averted Deaths/Total Deaths)	Standard Error	Weight (1/SE)	Quality Dimensions
Bjørnskov (2021)	$-0.3%$	0.8%	119	3
Shiva and Molana (2021)	$-4.1%$	0.4%	248	4
Stockenhuber (2020)*	0.0%	n/a	n/a	3
Chisadza et al. (2021)	0.1%	0.0%	7,390	4
Goldstein et al. (2021)	$-9.0%$	3.8%	26	2
Fuller et al. (2021)	$-35.3%$	9.1%	11	2
Ashraf (2020)	$-2.4%$	0.4%	256	2
Precision-weighted average (arithmetic average/median)	$-0.2%$ ($-7.3%/ -2.4%$)			

Note: The table shows the estimates for each study converted to a common estimate, i.e., the implied effect on COVID-19 mortality in Europe and United States. A negative number corresponds to fewer deaths, so $-5%$ means 5% lower COVID-19 mortality. For studies which report estimates in deaths per million, the common estimate is calculated as: $(\text{COVID-19 mortality with "common area's" policy}) / (\text{COVID-19 mortality with recommendation policy}) - 1$, where $(\text{COVID-19 mortality with recommendation policy})$ is calculated as $(\text{COVID-19 mortality with "common area's" policy}) - \text{Estimate} \times \text{Difference in stringency} \times \text{population}$. Stringencies in Europe and United States are equal to the average stringency from March 16th, to April 15, 2020 (76 and 74 respectively) and the stringency for the policy based solely on recommendations is 44 following Hale et al. (2020). For the conversion of other studies see Table 9 in appendix B.

*It is not possible to calculate a common estimate for Stockenhuber (2020). When calculating arithmetic average/median, the study is included as 0%, because estimates are insignificant and signs of estimates are mixed (higher strictness can cause both lower and higher COVID-19 mortality).

We now turn to the quality dimensions. Table 4 presents the results differentiated by the four quality dimensions. Two studies, Shiva and Molana (2021) and Chisadza et al. (2021), meet all quality dimensions. The precision-weighted average for these studies is 0.0%, meaning that lockdowns had no effect on COVID-19 mortality. Two studies live up to 3 of 4 quality dimensions (Bjørnskov (2021a) and Stockenhuber (2020)). The precision-weighted average for these studies is $-0.3%$, meaning that lockdowns reduced COVID-19 mortality by 0.3%. Three studies lack at least two

quality dimensions.³⁴ These studies find that lockdowns reduce COVID–19 mortality by 4.2%. To sum up, we find that the studies that meet at least 3 of 4 quality measures find that lockdowns have little to no effect on COVID–19 mortality, while studies that meet 2 of 4 quality measures find a small effect on COVID–19 mortality. These results are far from those estimated with the use of epidemiological models, such as the Imperial College London (Ferguson et al. (2020)).

Table 4: Overview of Common Estimates Split on Quality Dimensions for Studies Based on Stringency Indexes

<i>Values Show Effect on COVID–19 Mortality</i>	Precision-Weighted Average*	Arithmetic Average	Median
Peer-reviewed vs. working papers			
Peer-reviewed [4]	0.0%	–1.1%	–0.2%
Working paper [3]	–4.2%	–5.6%	–9.0%
Long vs. short time period			
Data series ends after 31 May 2020 [6]	–0.1%	–8.1%	–0.2%
Data series ends before 31 May 2020 [1]	–2.4%	–2.4%	–9.0%
No early effect on mortality			
Does not find an effect within the first 14 days (including n/a) [5]	–0.2%	–8.3%	–2.4%
Finds effect within the first 14 days [2]	–1.9%	–4.7%	–4.7%
Social sciences vs. other sciences			
Social sciences [5]	–0.1%	–3.1%	–2.4%
Other sciences [2]	–35.3%	–17.7%	–17.7%
4 of 4 quality dimensions [2]	0.0%	–2.0%	–2.0%
3 of 4 quality dimensions [2]	–0.3%	–0.2%	–0.2%
2 of 4 quality dimensions or fewer [3]	–4.2%	–15.6%	–9.0%

Note: The table shows the common estimate as described in Table 3 for each quality dimension. The number of studies in each category is in square brackets.

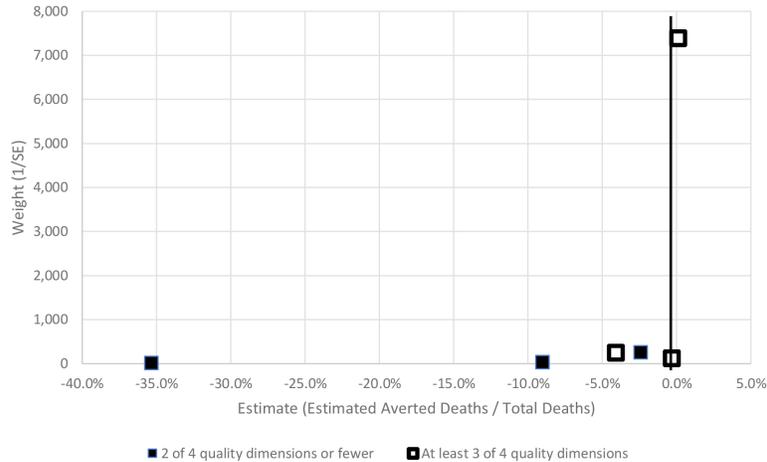
**The precision-weighted average does not include studies where no common standard error is available, cf. Table 3.*

Figure 5 shows a funnel plot for the studies in Table 3, except Stockenhuber (2020), where common estimate standard errors cannot be derived. Chisadza et al. (2021) has a far higher precision than the other studies (1/SE is 7,398 and the estimate is 0.1%),³⁵ and there are indications that the estimate from Fuller et al. (2021) (the bottom left) is an imprecise outlier.³⁶ Figure 5 The plot also shows that the studies with at least 3 of 4 quality dimensions are centered around zero and generally have higher precision than other studies.

³⁴In fact, the working papers by P. Goldstein et al. (2021), Fuller et al. (2021), and Ashraf (2020) all lack exactly two quality parameters.

³⁵Excluding Chisadza et al. (2021) from the precision-weighted average changes the average to –3.5%.

³⁶Excluding Fuller et al. (2021) from the precision-weighted average only marginally changes the average because the precision is very low.

Figure 5: Funnel plot for estimates from studies based on stringency indexes

Note: The figure displays all estimates and the precision of the estimate defined as one over the standard error. Studies where standard errors are not available are not included. Studies which live up to at least 3 of 4 quality dimensions are marked with white, while studies which live up to 2 of 3 quality dimensions or less are marked with black. The vertical line illustrates the precision-weighted average.

Overall Conclusion on Stringency Index Studies

Compared to a policy based solely on recommendations, we find little evidence that lockdowns had a noticeable impact on COVID-19 mortality. Only one study, Fuller et al. (2021), finds a substantial effect, while the rest of the studies find little to no effect. Indeed, according to stringency index studies, lockdowns in Europe and the United States reduced only COVID-19 mortality by 0.2% on average.

In the following section we will look at the effect of SIPOs. The section follows the same structure as this section.

4.2 Shelter-in-Place Order (SIPO) Studies

We have identified 13 eligible studies which estimate the effect of Shelter-In-Place Orders (SIPOs) on COVID-19 mortality, cf. Table 5. Seven of these studies look at multiple NPIs of which a SIPO is just one, while six studies estimate the effect of a SIPO vs. no SIPO in the United States. According to the containment and closure policy indicators from OxCGRT, 41 states in the U.S. issued SIPOs in the spring of 2020. But usually, these were introduced after implementing other NPIs such as school closures or workplace closures. On average, SIPOs were issued 7½ days after both schools and workplaces closed, and 12 days after the first of the two closed. Only one state, Tennessee, issued a SIPO before schools and workplaces closed. The 10 states that did not issue SIPOs all closed schools. Moreover, of those 10 states, three closed some non-essential businesses, while the remaining 7 closed all non-essential businesses. Because of this, we perceive estimates for SIPOs based on U.S.-data as the marginal effect of SIPOs on top of other restrictions, although we acknowledge that the estimates may capture the effects of other NPI measures as well.

The results of eligible studies based on SIPOs are presented in Table 5. The table demonstrates that the studies generally find that SIPOs have reduced COVID-19 mortality by 2.9% (on a precision-weighted average). There is an apparent difference between studies in which a SIPO is one of multiple NPIs, and studies in which a SIPO is the only examined intervention. The former group generally finds that SIPOs *increase* COVID-19 mortality *marginally*, whereas the latter finds that SIPOs *decrease* COVID-19 mortality. As we will see below, this difference could be explained by differences in the quality dimensions, and especially the time period covered by each study.

Table 5: Overview of Estimates From Studies Based on SIPOs

<i>Values Show Effect on COVID-19 Mortality</i>	Estimate (Estimated Averted Deaths/Total Deaths)	Standard Error	Weight (1/SE)	Quality Dimensions
Studies where SIPO is one of several examined interventions and not (as) likely to capture the effect of other interventions				
Chernozhukov et al. (2021)	-17.7%	14.3%	7	4
Chaudhry et al. (2020)*	0.0%	n/a	n/a	2
Aparicio and Grossbard (2021)	2.6%	2.8%	35	4
Stokes et al. (2020)	0.8%	11.1%	9	3
Spiegel and Tookes (2021)	13.1%	6.6%	15	3
Bonardi et al. (2020)	0.0%	n/a	n/a	1
Guo et al. (2021)	4.6%	14.8%	4	3
Average (median) where SIPO is one of several variables	2.8% (0.5%/0.8%)			
Studies where SIPO is the only examined intervention and may capture the effect of other interventions				
Sears et al. (2020)	-32.2%	17.6%	6	2
Alderman and Harjoto (2020)	-1.0%	0.6%	169	4
Berry et al. (2020)	1.1%	n/a	n/a	2
Fowler et al. (2021)	-35.0%	7.0%	14	2
Gibson (2020)	-6.0%	24.3%	4	4
Dave et al. (2020)	-40.8%	36.1%	3	3
Average (median) where SIPO is the only variable	-5.1% (-19.0%/-19.1%)			
Precision-Weighted Average (Arithmetic Average/Median) for all Studies				
	-2.9% (-8.5%/0.0%)			

*Chaudhry et al. (2020) does not provide an estimate but states that SIPO is insignificant. We use 0% when calculating the arithmetic average and median. Chaudhry et al. (2020) and Berry et al. (2021) do not affect the precision-weighted average, as we do not know the standard errors.

Table 6 presents the results differentiated by quality dimensions. Four studies (Chernozhukov et al. (2021), Aparicio and Grossbard (2021), Alderman and Harjoto (2020) and Gibson (2020)) meet all quality dimensions but find vastly different effects of SIPOs on COVID-19 mortality. The precision weighted average of the four studies is -1.0%. Four studies meet 3 of 4 quality dimensions. They overall find that SIPOs *increase* COVID-19 mortality, as the precision-weighted average is positive (3.7%). The five studies that meet 2 of 4 quality dimensions or fewer³⁷ find a substantial reduction in COVID-19-mortality (-34.2%). This substantial reduction seems to be driven by relatively short data series. The latest data point for the three studies which find large effects of lockdowns (Sears et al. (2020), Fowler et al. (2021), and Dave et al. (2021)) are April 29th, May 7th, and April 20th, respectively. This may indicate that SIPOs can delay deaths but not eliminate them completely. Disregarding these studies with short data series, the precision-weighted average is -0.1%.

Table 6: Quality Dimensions for Studies Based on SIPOs

<i>Values Show Effect on COVID-19 Mortality</i>	Precision-Weighted Average*	Arithmetic Average	Median
Peer-reviewed vs. working papers			
Peer-review [10]	-2.4%	-7.9%	-0.5%
Working paper [3]	-12.0%	-10.5%	0.0%

³⁷Bonardi et al. (2020) only meet one quality dimension (social science).

Table 6: Quality Dimensions for Studies Based on SIPOs—Continued

<i>Values Show Effect on COVID-19 Mortality</i>	Precision-Weighted Average*	Arithmetic Average	Median
Long vs. short time period			
Data series ends after 31 May 2020 [6]	−0.1%	−1.4%	−0.1%
Data series ends before 31 May 2020 [7]	−25.9%	−14.6%	0.0%
No early effect on mortality			
Finds effect within the first 14 days [9]	−2.0%	−10.0%	−1.0%
Does not find an effect within the first 14 days (including n/a) [4]	−10.3%	−5.2%	0.0%
Social sciences vs. other sciences			
Social sciences [12]	−2.9%	−9.2%	−0.5%
Other sciences [1]	n/a	0.0%	0.0%
4 of 4 quality dimensions [4]	−1.0%	−5.5%	−3.5%
3 of 4 quality dimensions [4]	3.7%	−5.6%	2.7%
2 of 4 quality dimensions or fewer [5]	−34.2%	−13.2%	0.0%

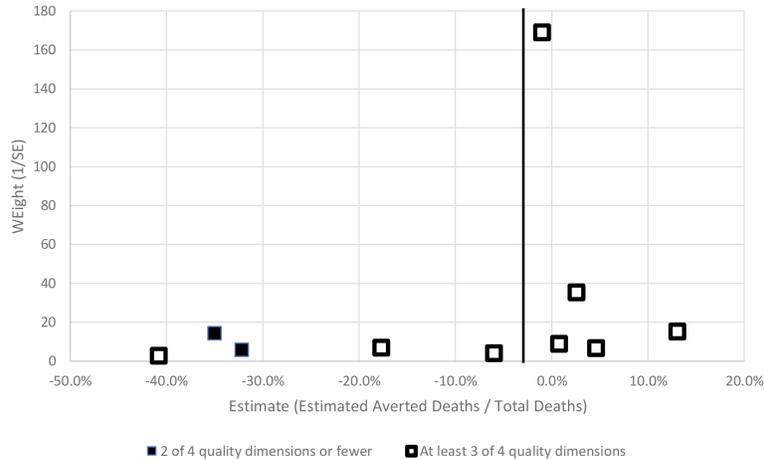
Note: The table shows the common estimate as described in Table 5 for each quality dimension. The number of studies in each category is in square brackets.

**The precision-weighted average does not include studies where no common standard error is available, cf. Table 5.*

Figure 6 shows a funnel plot for the studies in Table 5, except Chaudhry et al. (2020) and Berry et al. (2021), where common standard errors cannot be derived. Sears et al. (2020) stands out with a precision far higher than those of the other studies. But generally, the precisions of the studies are low and the estimates are placed on both sides of the zero-line with some “tail” to the left.³⁸ Figure 5 also shows that four of eight studies with at least 3 of 4 quality dimensions find that SIPOs *increase* COVID-19 mortality by 0.8% to 13.1%.

³⁸This could indicate some publication bias, but the evidence is weak and with only 13 estimates, this cannot be formally tested.

Figure 6: Funnel plot for estimates from SIPO studies



Note: The figure displays all estimates and the precision of the estimate defined as one over the standard error. Studies where standard errors are not available are not included. Studies which live up to at least 3 of 4 quality dimensions are marked with white, while studies which live up to 2 of 4 quality dimensions or less are marked with black. The vertical line illustrates the precision-weighted average.

Overall Conclusion on SIPO Studies

We find no clear evidence that SIPOs had a noticeable impact on COVID-19 mortality. Some studies find a large negative relationship between lockdowns and COVID-19 mortality, but this seems to be caused by short data series which does not cover a full COVID-19 “wave.” Several studies find a small positive relationship between lockdowns and COVID-19 mortality. Although this appears to be counter-intuitive, it could be the result of an (asymptomatic) infected person being isolated at home under a SIPO can infect family members with a higher viral load causing more severe illness.³⁹ The overall effect measured by the precision-weighted average is -2.9% . The result is in line with Nuzzo et al. (2019), who state that “In the context of a high-impact respiratory pathogen, quarantine may be the least likely NPI to be effective in controlling the spread due to high transmissibility” and World Health Organization Writing Group (2006), who conclude that “forced isolation and quarantine are ineffective and impractical.”⁴⁰

In the following section, we will look at the effect found in studies analyzing specific NPIs.

4.3 Studies of Specific NPIs

A total of 11 eligible studies look at (multiple) specific NPIs independently or simply lockdown vs. no lockdown.⁴¹ The definition of the specific NPIs varies from study to study and are somewhat difficult to compare. The variety in the definitions can be seen in the analysis of non-essential business closures and bar/restaurant closures. Chernozhukov et al. (2021) focus on a combined parameter (the average of business closure and bar/restaurant closure in each state), Aparicio and Grossbard (2021) look at business closure but not bar/restaurant closure, Spiegel and Tookes

³⁹E.g., see Guallar et al. (2020), who concludes, “Our data support that a greater viral inoculum at the time of SARS-CoV-2 exposure might determine a higher risk of severe COVID-19.”

⁴⁰Both Nuzzo et al. (2019) and World Health Organization Writing Group (2006) focus on quarantining infected persons. However, if quarantining infected persons is not effective, it should be no surprise that quarantining uninfected persons could be ineffective too.

⁴¹Note that we—according to our search strategy—did not search on specific measures such as “school closures” but on words describing the overall political approach to the COVID-19 pandemic such as “non-pharmaceutical,” “NPIs,” “lockdown” etc.

(2021) examine bar/restaurant closure but not business closure, and Guo et al. (2021) look at both business closures and bar/restaurant closures independently.

Some studies include several NPIs (*e.g.*, Stokes et al. (2020) and Spiegel and Tookes (2021)), while others cover very few. Bongaerts et al. (2021) only study business closures, and Leffler et al. (2020) look at internal lockdown and international travel restrictions). Few NPIs in a model are potentially a problem because they can capture the effect of excluded NPIs. On the other hand, several NPIs in a model increase the risk of multiple test bias.

The differences in the choice of NPIs and in the number of NPIs make it challenging to create an overview of the results. In Table 7, we have merged the results in six overall categories but note that the estimates may not be fully comparable across studies. In particular, the lockdown-measure varies from study to study and in some cases is poorly defined by the authors. Also, there are only a few estimates within some of the categories. For instance, the estimate of the effect of facemasks is based on only two studies.

Table 7 illustrates that generally there is no evidence of a noticeable relationship between the most-used NPIs and COVID-19. Overall, lockdowns and limiting gatherings seem to increase COVID-19 mortality, although the effect is modest (0.6% and 1.6%, respectively) and border closures has little to no effect on COVID-19 mortality, with a precision-weighted average of -0.1% (removing the imprecise outlier from Guo et al. (2021)) changes the precision-weighted average to -0.2% . We find a small effect of school closure (-4.4%), but this estimate is mainly driven by Auger et al. (2020), who—as noted earlier—use an “interrupted time series study” approach and may capture other effects such as seasonal and behavioral effects. The absence of a notable effect of school closures is in line with Irfan et al. (2021), who—based on a systematic review and meta-analysis of 90 published or preprint studies of transmission in children—concluded that “risks of infection among children in educational settings was lower than in communities. Evidence from school-based studies demonstrate it is largely safe for young children (<10 years of age) to be at schools; however, older children (between 10 and 19 years of age) might facilitate transmission.” UNICEF (2021) and ECDC (2020) reach similar conclusions.⁴²

Mandating facemasks—an intervention that was not widely used in the spring of 2020, and in many countries was even discouraged—seems to have a large effect (-21.2%), but this conclusion is based on only two studies.⁴³ Again, our categorization may play a role, as the larger mask-estimate from Chernozhukov et al. (2021) is in fact “employee facemasks,” not a general mask mandate. Our findings are somewhat in contrast to the result found in a review by Liu et al. (2021), who conclude that “14 of 16 identified randomized controlled trials comparing face masks to no mask controls failed to find statistically significant benefit in the intent-to-treat populations.” Similarly, a pre-COVID Cochrane review concludes, “There is low certainty evidence from nine trials (3507 participants) that wearing a mask may make little or no difference to the outcome of influenza-like illness (ILI) compared to not wearing a mask (risk ratio (RR) 0.99, 95% confidence interval (CI) 0.82 to 1.18). There is moderate certainty evidence that wearing a mask probably makes little or no difference to the outcome of laboratory-confirmed influenza compared to not wearing a mask (RR 0.91, 95% CI 0.66 to 1.26; 6 trials; 3005 participants)” (Jefferson et al. (2020)).⁴⁴ However, it should be noted that even if no effect is found

⁴² UNICEF (2021) concludes, “The preliminary findings thus far suggest that in-person schooling—especially when coupled with preventive and control measures—had lower secondary COVID-19 transmission rates compared to other settings and do not seem to have significantly contributed to the overall community transmission risks.” Whereas, ECDC (2020) conclude, “School closures can contribute to a reduction in SARS-CoV-2 transmission, but by themselves are insufficient to prevent community transmission of COVID-19 in the absence of other non-pharmaceutical interventions (NPIs) such as restrictions on mass gathering,” and states, “There is a general consensus that the decision to close schools to control the COVID-19 pandemic should be used as a last resort. The negative physical, mental health and educational impact of proactive school closures on children, as well as the economic impact on society more broadly, would likely outweigh the benefits.”

⁴³ Note again, that we—according to our search strategy—did not search on the specific measures such as “masks,” “face masks,” “surgical masks” but on words describing the overall political approach to the COVID-19 pandemic such as “non-pharmaceutical,” “NPIs,” “lockdown” etc. Thus, we do not include most of the studies in mask reviews such as Liu et al. (2021) and Jefferson et al. (2020).

⁴⁴ Lipp and Edwards (2014) also find no evidence of an effect and—looking at disposable surgical face masks for preventing surgical wound infection in clean surgery—conclude, “Three trials were included, involving a total of 2113 participants. There was no statistically significant

Continued

in controlled settings, this does not necessarily imply that mandated face masks do not reduce mortality, as other factors may play a role (*e.g.*, wearing a mask may function as a tax on socializing if people are bothered by wearing face masks when they are socializing).

Only business closure consistently shows evidence of a negative relationship with COVID-19 mortality, but the variation in the estimated effect is large. Three studies find little to no effect, and three find large effects. Two of the larger effects are related to closing bars and restaurants. The “close business” category in Chernozhukov et al. (2021) is an average of closed businesses, restaurants, and movie theaters, while that same category is “closing restaurants and bars” in Spiegel and Tookes (2021). The last study finding a large effect is Bongaerts et al. (2021), the only eligible single-country study.⁴⁵

As a final observation on Table 7, studies with fewer quality dimensions seem to find larger effects, but the pattern is not systematic.⁴⁶

difference in infection rates between the masked and unmasked group in any of the trials.” Meanwhile, Li et al. (2021)—based on six case-control studies—conclude, “In general, wearing a mask was associated with a significantly reduced risk of COVID-19 infection (OR = 0.38, 95% CI: 0.21 – 0.69, $I^2 = 54.1\%$).

⁴⁵Bongaerts et al. (2021) (implicitly) assume that municipalities with different exposures to closed sectors are not inherently different, which may be a relatively strong assumption and could potentially drive their results.

⁴⁶We saw with SIPOs that studies based on short data series tended to find larger effects than studies based on short data series. This is also somewhat true for studies examining multiple specific measures. If we focus on studies with long data series (>May 31, 2020), the precision-weighted estimates are as follows (average for all studies in parentheses for easy comparison): Lockdown (complete/partial): 0.5% (0.6%), Facemasks/Employee face masks: -21.2% (-21.2%), Business closures (/bars & restaurants): -8.1% (-10.6%), Border closures (/quarantine): -0.1% (-0.1%), School closures: 0.5% (-4.4%), Limiting gatherings: 1.4% (1.6%).

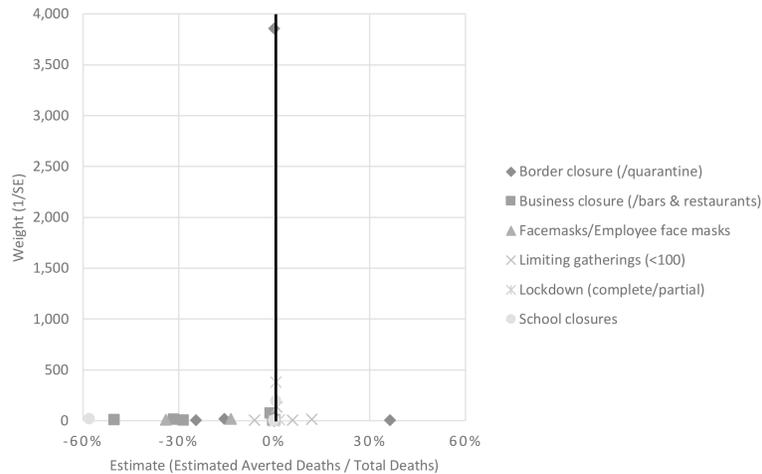
Table 7: Overview of Estimates From Studies of Specific NPIs

	Lockdown (Complete/ Partial)	Facemasks/ Employee Face Masks	Business Closure (/Bars And Restaurants)	Border Closure (Quarantine)	School Closures	Limiting Gatherings	Quality Dimensions
Chernozhukov et al. (2021)		-34.0%	-28.6%				4
Bongaerts et al. (2021)			-31.6%				2
Chaudhry et al. (2020)*	0.0%			0.0%			2
Toya and Skidmore (2021)	0.5%			-0.1%			3
Aparicio and Grossbard (2021)			-1.3%		0.5%	0.8%	4
Auger et al. (2020)					-58.0%		2
Leffler et al. (2020)	1.7%			-15.6%			2
Stokes et al. (2020)			0.3%	-24.6%	-0.1%	-6.3%	3
Spiegel and Tookes (2021)		-13.5%	-50.2%			11.8%	3
Bonardi et al. (2020)*	0.0%			0.0%			1
Guo et al. (2021)			-0.4%	36.3%	-0.2%	5.7%	3
Precision-weighted average	0.6%	-21.2%	-10.6%	-0.1%	-4.4%	1.6%	
Arithmetic average	0.6%	-23.8%	-18.6%	-0.7%	-14.4%	3.0%	
Median	0.3%	-23.8%	-14.9%	0.0%	-0.1%	3.2%	
4 of 4 quality dimensions	n/a [0]	-34.0% [1]	-2.9% [2]	n/a [0]	0.5% [1]	0.8% [1]	
3 of 4 quality dimensions	0.5% [1]	-13.5% [1]	-21.5% [3]	0.0% [3]	-0.1% [2]	5.6% [3]	
2 of 4 quality dimensions or fewer	1.7% [2]	n/a [1]	-31.6% [2]	-15.6% [2]	-58.0% [1]	n/a [1]	

* It is not possible to derive common estimates and standard errors from Chaudhry et al. (2020) and Bonardi et al. (2020). Chaudhry et al. (2020) states that the effect of the various NPIs is insignificant without listing the estimates and standard errors. Bonardi et al. (2020) states that partial or regional lockdowns are as effective as stricter NPIs but does not provide information to calculate common estimates. Instead, we assume the estimate is 0% when calculating arithmetic average and median, while the estimates are excluded from the calculation of precision-weighted averages because there are no standard errors.

Figure 7 shows a funnel plot for all estimates in Table 7, except Chaudhry et al. (2020) and Bonardi et al. (2020), where common standard errors cannot be derived. Two estimates from Toya and Skidmore (2020) stands out with a precision far higher than those of other studies, and estimates are placed with some ‘tail’ to the left, which could indicate some publication bias, *i.e.*, reluctance to publish results that show large positive (more deaths) effects of lockdowns. The most precise estimates are gathered around 0%, while less precise studies are spread out between $-58%$ and $36%$. The precision-weighted average of all estimates across all NPIs is $-0.6%$.

Figure 7: Funnel plot for estimates from studies of specific NPIs



Note: The figure displays all estimates except two (see text in figure) of specific NPIs and the precision of the estimate defined as one over the standard error. Studies where standard errors are not available are not included.

Overall Conclusion on Specific NPIs

Because of the heterogeneity in NPIs across studies, it is difficult to draw strong conclusions based on the studies of multiple specific measures. We find no evidence that lockdowns, school closures, border closures, and limiting gatherings have had a noticeable effect on COVID-19 mortality. There is some evidence that business closures reduce COVID-19 mortality, but the variation in estimates is large and the effect seems related to closing bars. There may be an effect of mask mandates, but just two studies look at this, one of which one only looks at the effect of employee mask mandates.

5 Concluding Observations

Public health experts and politicians have—based on forecasts in epidemiological studies such as that of Imperial College London (Ferguson et al. (2020)—embraced compulsory lockdowns as an effective method for arresting the pandemic. But have these lockdown policies been effective in curbing COVID-19 mortality? This is the main question answered by our meta-analysis.

Adopting a systematic search and title-based screening, we identified 1,048 studies published by July 1, 2020, which potentially look at the effect of lockdowns on mortality rates. To answer our question, we focused on studies that examine the actual impact of lockdowns on COVID-19 mortality rates based on registered cross-sectional mortality data and a counterfactual difference-in-difference approach. Out of the 1,048 studies, 34 met our eligibility criteria.

Conclusions

Overall, our meta-analysis fails to confirm that lockdowns have had a large, significant effect on mortality rates. Studies examining the relationship between lockdown strictness (based on the OxCGRT stringency index) find that the average lockdown in Europe and the United States only reduced COVID-19 mortality by 0.2% compared to a COVID-19 policy based solely on recommendations. Shelter-in-place orders (SIPOs) were also ineffective. They only reduced COVID-19 mortality by 2.9%.

Studies looking at specific NPIs (lockdown vs. no lockdown, facemasks, closing non-essential businesses, border closures, school closures, and limiting gatherings) also find no broad-based evidence of noticeable effects on COVID-19 mortality. However, closing non-essential businesses seems to have had some effect (reducing COVID-19 mortality by 10.6%), which is likely to be related to the closure of bars. Also, masks may reduce COVID-19 mortality, but there is only one study that examines universal mask mandates. The effect of border closures, school closures and limiting gatherings on COVID-19 mortality yields precision-weighted estimates of $-0.1%$, $-4.4%$, and $1.6%$, respectively. Lockdowns (compared to no lockdowns) also do not reduce COVID-19 mortality.

Discussion

Overall, we conclude that lockdowns are not an effective way of reducing mortality rates during a pandemic, at least not during the first wave of the COVID-19 pandemic. Our results are in line with the World Health Organization Writing Group (2006), who state, “Reports from the 1918 influenza pandemic indicate that social-distancing measures did not stop or appear to dramatically reduce transmission [. . .] In Edmonton, Canada, isolation and quarantine were instituted; public meetings were banned; schools, churches, colleges, theaters, and other public gathering places were closed; and business hours were restricted without obvious impact on the epidemic.” Our findings are also in line with Allen’s (2021) conclusion: “The most recent research has shown that lockdowns have had, at best, a marginal effect on the number of COVID-19 deaths.” Poeschl and Larsen (2021) conclude that “interventions are generally effective in mitigating COVID-19 spread.” But 9 of the 43 (21%) results they review find “no or uncertain association” between lockdowns and the spread of COVID-19, suggesting that evidence from that own study contradicts their conclusion.

The findings contained in Johanna et al. (2020) are in contrast to our own. They conclude that “for lockdown, ten studies consistently showed that it successfully reduced the incidence, onward transmission, and mortality rate of COVID-19.” The driver of the difference is three-fold. First, Johanna et al. include modelling studies (10 out of a total of 14 studies), which we have explicitly excluded. Second, they included interrupted time series studies (3 of 14 studies), which we also exclude. Third, the only study using a difference-in-difference approach (as we have done) is based on data collected before May 1, 2020. We should mention that our results indicate that early studies find relatively larger effects compared to later studies.

Our main conclusion invites a discussion of some issues. Our review does not point out why lockdowns did not have the effect promised by the epidemiological models of Imperial College London (Ferguson et al. (2020)). We propose four factors that might explain the difference between our conclusion and the view embraced by some epidemiologists.

First, people respond to dangers outside their door. When a pandemic rages, people believe in social distancing regardless of what the government mandates. So, we believe that Allen (2021) is right, when he concludes, “The ineffectiveness [of lockdowns] stemmed from individual changes in behavior: either non-compliance or behavior that mimicked lockdowns.” In economic terms, you can say that the demand for costly disease prevention efforts like social distancing and increased focus on hygiene is high when infection rates are high. Contrary, when infection rates are low, the demand is low and it may even be morally and economically rational not to comply with mandates like SIPOs, which are difficult to enforce. Herby (2021) reviews studies which distinguish between mandatory and voluntary behavioral changes. He finds that—on average—voluntary behavioral changes are 10 times as important as mandatory behavioral changes in combating COVID-19. If people voluntarily adjust their behavior to the risk of the pandemic, closing down non-essential businesses may simply reallocate consumer visits away from “non-essential” to “essential” businesses, as shown by Goolsbee and Syverson (2021), with limited impact on the total number of contacts.⁴⁷ This may also explain why epidemiological model simulations such as Ferguson et al. (2020)—which do not model behavior endogenously—fail to forecast the effect of lockdowns.

Second, mandates only regulate a fraction of our potential contagious contacts and can hardly regulate nor enforce handwashing, coughing etiquette, distancing in supermarkets, etc. Countries like Denmark, Finland, and Norway that realized success in keeping COVID-19 mortality rates relatively low allowed people to go to

⁴⁷In economic terms, lockdowns are substitutes for—not complements to—voluntary behavioral changes.

work, use public transport, and meet privately at home during the first lockdown. In these countries, there were ample opportunities to legally meet with others.

Third, even if lockdowns are successful in initially reducing the spread of COVID-19, the behavioral response may counteract the effect completely, as people respond to the lower risk by changing behavior. As Atkeson (2021) points out, the economic intuition is straightforward. If closing bars and restaurants causes the prevalence of the disease to fall toward zero, the demand for costly disease prevention efforts like social distancing and increased focus on hygiene also falls towards zero, and the disease will return.⁴⁸

Fourth, unintended consequences may play a larger role than recognized. We already pointed to the possible unintended consequence of SIFOs, which may isolate an infected person at home with his/her family where he/she risks infecting family members with a higher viral load, causing more severe illness. But often, lockdowns have limited peoples' access to safe (outdoor) places such as beaches, parks, and zoos, or included outdoor mask mandates or strict outdoor gathering restrictions, pushing people to meet at less safe (indoor) places. Indeed, we do find some evidence that limiting gatherings was counterproductive and increased COVID-19 mortality.

One objection to our conclusions may be that we do not look at the role of timing. If timing is very important, differences in timing may empirically overrule any differences in lockdowns. We note that this objection is not necessarily in contrast to our results. If timing is very important relative to strictness, this suggests that well-timed, but very mild, lockdowns should work as well as, or better than, less well-timed but strict lockdowns. This is not in contrast to our conclusion, as the studies we reviewed analyze the effect of lockdowns compared but to doing very little (see Section 3.1 for further discussion). However, there is little solid evidence supporting the timing thesis, because it is inherently difficult to analyze (see Section 2.2 for further discussion). Also, even if it can be empirically stated that a well-timed lockdown is effective in combating a pandemic, it is doubtful that this information will ever be useful from a policy perspective.

But, what explains the differences between countries, if not differences in lockdown policies? Differences in population age and health, quality of the health sector, and the like are obvious factors. But several studies point at less obvious factors, such as culture, communication, and coincidences. For example, Frey et al. (2020) show that for the same policy stringency, countries with more obedient and collectivist cultural traits experienced larger declines in geographic mobility relative to their more individualistic counterpart. Data from Germany Laliotis and Minos (2020) shows that the spread of COVID-19 and the resulting deaths in predominantly Catholic regions with stronger social and family ties were much higher compared to non-Catholic ones at the local NUTS 3 level.⁴⁹

Government communication may also have played a large role. Compared to its Scandinavian neighbors, the communication from Swedish health authorities was far more subdued and embraced the idea of public health vs. economic trade-offs. This may explain why Helsing et al. (2020), found, based on questionnaire data collected from mid-March to mid-April, 2020, that even though the daily COVID-19 mortality rate was more than four times higher in Sweden than in Norway, Swedes were less likely than Norwegians to not meet with friends (55% vs. 87%), avoid public transportation (72% vs. 82%), and stay home during spare time (71% vs. 87%). That is, despite a more severe pandemic, Swedes were less affected in their daily activities (legal in both countries) than Norwegians.

Many other factors may be relevant, and we should not underestimate the importance of coincidences. An interesting example illustrating this point is found in Arnarson (2021) and Björk et al. (2021), who show that areas where the winter holiday was relatively late (in week 9 or 10 rather than week 6, 7 or 8) were hit especially hard by COVID-19 during the first wave because the virus outbreak in the Alps could spread to those areas with ski tourists. Arnarson (2021) shows that the effect persists in later waves. Had the winter holiday in Sweden been in week 7 or

⁴⁸This kind of behavior response may also explain why Subramanian and Kumar (2021) find that increases in COVID-19 cases are unrelated to levels of vaccination across 68 countries and 2947 counties in the United States. When people are vaccinated and protected against severe disease, they have less reason to be careful.

⁴⁹The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU and the UK. There are 1,215 regions at the NUTS 3-level.

week 8 as in Denmark, the Swedish COVID-19 situation could have turned out very differently.⁵⁰

Policy Implications

In the early stages of a pandemic, before the arrival of vaccines and new treatments, a society can respond in two ways: mandated behavioral changes or voluntary behavioral changes. Our study fails to demonstrate significant positive effects of mandated behavioral changes (lockdowns). This should draw our focus to the role of voluntary behavioral changes. Here, more research is needed to determine how voluntary behavioral changes can be supported. But it should be clear that one important role for government authorities is to provide information so that citizens can voluntarily respond to the pandemic in a way that mitigates their exposure.

Finally, allow us to broaden our perspective after presenting our meta-analysis that focuses on the following question: “What does the evidence tell us about the effects of lockdowns on mortality?” We provide a firm answer to this question: The evidence fails to confirm that lockdowns have a significant effect in reducing COVID-19 mortality. The effect is little to none.

The use of lockdowns is a unique feature of the COVID-19 pandemic. Lockdowns have not been used to such a large extent during any of the pandemics of the past century. However, lockdowns during the initial phase of the COVID-19 pandemic have had devastating effects. They have contributed to reducing economic activity, raising unemployment, reducing schooling, causing political unrest, contributing to domestic violence, and undermining liberal democracy. These costs to society must be compared to the benefits of lockdowns, which our meta-analysis has shown are marginal at best. Such a standard benefit-cost calculation leads to a strong conclusion: lockdowns should be rejected out of hand as a pandemic policy instrument.

6 Appendix A. The Role of Timing

Some of the included papers study the importance of the timing of lockdowns, while several other papers only looking at timing of (but not on the inherent effect of) lockdowns have been excluded from the literature list in this review. There’s no doubt that being prepared for a pandemic and knowing when it arrives at your doorstep is vital. However, two problems arise with respect to imposing early lockdowns.

First of all, it was virtually impossible to determine the right timing when COVID-19 hit Europe and the United States. The World Health Organization declared the outbreak of a pandemic on March 11, 2020, but at that date Italy had already registered 13.7 COVID-19-deaths per million (all infected before approximately February 22nd, because of the roughly 18-day gap between infection and death, *c.f. e.g.*, Bjørnskov (2021a)). On March 29, 2020, 18 days after WHO declared the outbreak a pandemic and the earliest a lockdown response to WHO’s announcement could have an effect, the death toll in Italy was a staggering 178 COVID-19-deaths per million with an additionally 13 per million dying each day.

There are reasons to believe that many countries and regions were hit particularly hard during the first wave of COVID, because they had no clue about how bad it really was. This point is illustrated in Figure 8 (and Figure 9), which show that countries (and states), which were hit hard and early, experienced large death tolls compared to countries where the pandemic had a slower start. Björk et al. (2021) and Arnarson (2021) show that areas with a winter holiday in week 10 and—especially—week 9 were hit hard, because they imported cases from the Alps *before* they knew the pandemic was widespread at the ski resorts. Hence, while acting early by warning citizens and closing business may be an effective strategy; this was not a feasible strategy for most countries in the spring of 2020.

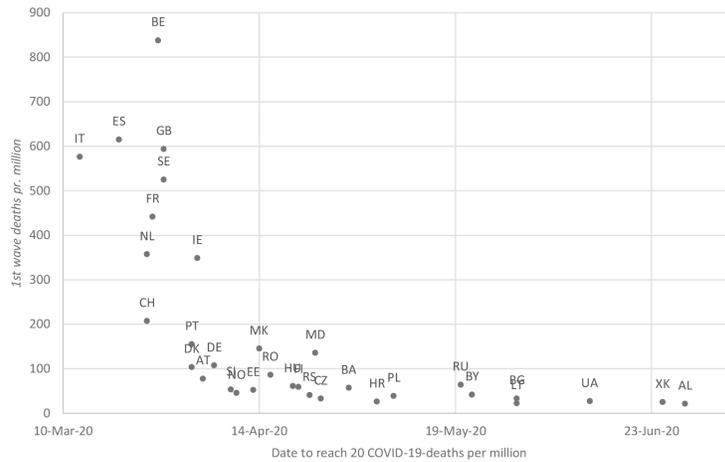
The second problem is that it is extremely difficult to differentiate between the effect of public awareness and the effect of lockdowns. If people and politicians react to the same information, for example deaths in geographical neighboring countries (many EU-countries reacted to deaths in Italy) or in another part of the same country, the effect of lockdowns cannot easily be separated from the effect of voluntary social distancing or, use of hand sanitizers. Hence, we find it problematic to use national lockdowns and differences in the progress of the pandemic in different regions to say anything about the effect of early lockdowns on the pandemic, as the estimated effect might just as well come from voluntary behavior changes, when people in Southern Italy react to the situation in Northern Italy.

⁵⁰ Another case of coincidence is illustrated by Shenoy et al. (2022), who find that areas that experienced rainfall early in the pandemic realized fewer deaths because the rainfall induced social distancing.

We have seen no studies which we believe credibly separate the effect of early lockdown from the effect of early voluntary behavior changes. Instead, the estimates in these studies capture the effects of lockdowns *and* voluntary behavior changes. As Herby (2021) illustrates, voluntary behavior changes are essential to a society's response to a pandemic and can account for up to 90% of societies' total response to the pandemic.

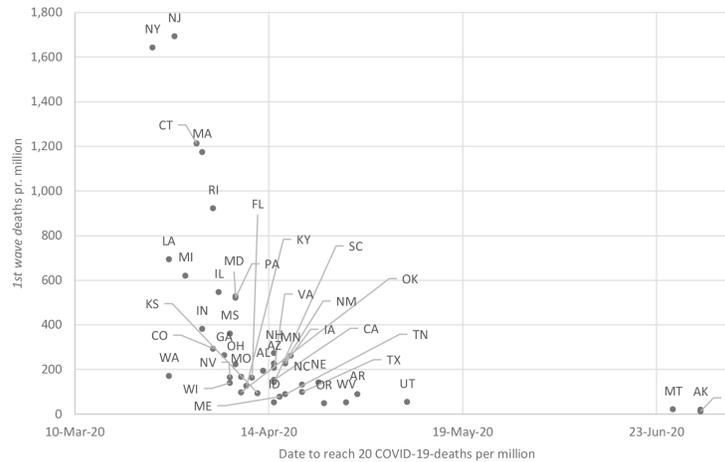
Including these studies will greatly overestimate the effect of lockdowns, and, hence, we chose not to include studies focusing on timing of lockdowns in our review.

Figure 8: Taken by surprise. The importance of having time to prepare in Europe



Description: European countries with more than one million citizens.
Source: Our World in Data

Figure 9: Taken by surprise. The importance of having time to prepare in U.S. states



Description: U.S. states with more than one million citizens.
Source: Our World in Data

7 Appendix B. Supplementary Information**7.1 Excluded Studies**

Below is a list will the studies excluded during the eligibility phase of our identification process and a short description of our basis for excluding the study.

Table 8: Studies Excluded During the Eligibility Phase of Our Identification Process

1. Study (Author and Title)	2. Reason for Exclusion
Alemán et al. (2020); "Evaluating the effectiveness of policies against a pandemic"	Too few observations
Alshammari et al. (2021); "Are countries' precautionary actions against COVID-19 effective? An assessment study of 175 countries worldwide"	Is purely descriptive
Amuedo-Dorantes et al. (2020); "Timing is Everything when Fighting a Pandemic: COVID-19 Mortality in Spain"	Duplicate
Amuedo-Dorantes et al. (2021); "Early adoption of non-pharmaceutical interventions and COVID-19 mortality"	Only looks at timing
Amuedo-Dorantes, Kaushal and Muchow (2020); "Is the Cure Worse than the Disease? County-Level Evidence from the COVID-19 Pandemic in the United States"	Duplicate
Amuedo-Dorantes, Kaushal and Muchow (2021); "Timing of social distancing policies and COVID-19 mortality: county-level evidence from the U.S."	Only looks at timing
Arruda et al. (2021); "Assessing the Impact of Social Distancing on COVID-19 Cases and Deaths in Brazil: An Instrumented Difference-in-Differences"	Social distancing (not lockdowns)
Bakolis et al. (2021); "Changes in daily mental health service use and mortality at the commencement and lifting of COVID-19 'lockdown' policy in 10 UK sites: A regression discontinuity in time design"	Uses a time series approach
Bardey, Fernández and Gravel (2021); "Coronavirus and social distancing: do non-pharmaceutical-interventions work (at least) in the short run?"	Only looks at timing
Berardi et al. (2020); "The COVID-19 pandemic in Italy: Policy and technology impact on health and non-health outcomes"	Too few observations
Bhalla (2020); "Lockdowns and Closures vs COVID-19: COVID Wins"	Uses modelling
Björk et al. (2021); "Impact of winter holiday and government responses on mortality in Europe during the first wave of the COVID-19 pandemic"	Only looks at timing
Bongaerts, Mazzola and Wagner (2020); "Closed for business"	Duplicate
Born, Dietrich and Müller (2021); "The lockdown effect: A counterfactual for Sweden"	Synthetic control study

Born, Dietrich and Müller (2021); “The lockdown effect: A counterfactual for Sweden”	Duplicate
Bushman et al. (2020); “Effectiveness and compliance to social distancing during COVID-19”	Social distancing (not lockdowns)
Castaneda and Saygili (2020); “The effect of shelter-in-place orders on social distancing and the spread of the COVID-19 pandemic: A study of Texas”	Uses a time series approach
Cerqueti et al. (2021); “The sooner the better: Lives saved by the lockdown during the COVID-19 outbreak. The case of Italy”	Synthetic control study
Chernozhukov, Kasahara and Schrimpf (2021); “Mask mandates and other lockdown policies reduced the spread of COVID-19 in the U.S.”	Duplicate
Chin et al. (2020); “Effects of non-pharmaceutical interventions on COVID-19: A Tale of Three Models”	Uses modelling
Cho (2020); “Quantifying the impact of nonpharmaceutical interventions during the COVID-19 outbreak: The case of Sweden”	Synthetic control study
Coccia (2020); “The Effect of Lockdown on Public Health and Economic System: Findings from First Wave of the COVID-19 Pandemic for Designing Effective Strategies to Cope with Future Waves”	Only looks at timing
Coccia (2021); “Different effects of lockdown on public health and economy of countries: Results from first wave of the COVID-19 pandemic”	Too few observations
Conyon and Thomsen (2021); “COVID-19 in Scandinavia”	Synthetic control study
Conyon et al. (2020); “Lockdowns and COVID-19 deaths in Scandinavia”	Too few observations
Dave et al. (2020); “Did the Wisconsin Supreme Court restart a COVID-19 epidemic? Evidence from a natural experiment”	Synthetic control study
Delis, Iosifidi and Tasiou (2021); “Efficiency of government policy during the COVID-19 pandemic”	Does not look at mortality
Dreher et al. (2021); “Policy interventions, social distancing, and SARS-CoV-2 transmission in the United States: A retrospective state-level analysis”	Does not look at mortality
Duchemin, Veber and Boussau (2020); “Bayesian investigation of SARS-CoV-2-related mortality in France”	Uses modelling
Fair et al. (2021); “Estimating COVID-19 cases and deaths prevented by non-pharmaceutical interventions in 2020-2021, and the impact of individual actions: A retrospective model-based analysis”	Uses modelling

Table 8: Studies Excluded During the Eligibility Phase of Our Identification Process—Continued

1. Study (Author and Title)	2. Reason for Exclusion
Filius (2020); “The impact of government policies effectiveness on the officially reported deaths attributed to COVID–19”	Student paper
Fowler et al. (2021); “Stay-at-home orders associate with subsequent decreases in COVID–19 cases and fatalities in the United States”	Duplicate
Friedson et al. (2020); “Did California’s shelter-in-place order work? Early coronavirus-related public health effects”	Duplicate
Friedson et al. (2020); “Shelter-in-place orders and public health: Evidence from California during the COVID–19 pandemic”	Synthetic control study
Fuss, Weizman and Tan (2020); “COVID19 Pandemic: How Effective Are Interventive Control Measures and Is a Complete Lockdown Justified? A Comparison of Countries and States”	Does not look at mortality
Ghosh, Ghosh and Narymanchi (2020); “A Study on the Effectiveness of Lock-down Measures to Control the Spread of COVID–19”	Synthetic control study
Glogowsky et al. (2021); “How Effective Are Social Distancing Policies? Evidence on the Fight Against COVID–19”	Only looks at timing
Glogowsky, Hansen and Schächtele (2020); “How effective are social distancing policies? Evidence on the fight against COVID–19 from Germany”	Duplicate
Glogowsky, Hansen and Schächtele (2020); “How Effective Are Social Distancing Policies? Evidence on the Fight Against COVID–19 from Germany”	Duplicate
Gordon, Grafton and Steinshamm (2021); “Cross-country effects and policy responses to COVID–19 in 2020: The Nordic countries”	Does not look at mortality
Gordon, Grafton and Steinshamm (2021); “Statistical Analyses of the Public Health and Economic Performance of Nordic Countries in Response to the COVID–19 Pandemic”	Too few observations
Guo et al. (2020); “Social distancing interventions in the United States: An exploratory investigation of determinants and impacts”	Duplicate
Huber and Langen (2020); “The impact of response measures on COVID–19-related hospitalization and death rates in Germany and Switzerland”	Duplicate
Huber and Langen (2020); “Timing matters: The impact of response measures on COVID–19-related hospitalization and death rates in Germany and Switzerland”	Only looks at timing

Jain et al. (2020); "A comparative analysis of COVID-19 mortality rate across the globe: An extensive analysis of the associated factors"	Does not look at mortality
Juranek and Zoutman (2021); "The effect of non-pharmaceutical interventions on the demand for health care and mortality: Evidence on COVID-19 in Scandinavia"	Too few observations
Kakpo and Nuhu (2020); "Effects of Social Distancing on COVID-19 Infections and Mortality in the U.S."	Social distancing (not lockdowns)
Kapoor and Ravi (2020); "Impact of national lockdown on COVID-19 deaths in select European countries and the U.S. using a Changes-in-Changes model"	Too few observations
Khataiwada and Chalise (2020); "Evaluating the efficiency of the Swedish government policies to control the spread of COVID-19"	Student paper
Korevaar et al. (2020); "Quantifying the impact of U.S. state non-pharmaceutical interventions on COVID-19 transmission"	Does not look at mortality
Kumar et. Al. (2020); "Prevention-Versus Promotion-Focus Regulatory Efforts on the Disease Incidence and Mortality of COVID-19: A Multinational Diffusion Study Using Functional Data Analysis"	Does not look at mortality
Le et al. (2020); "Impact of government-imposed social distancing measures on COVID-19 morbidity and mortality around the world"	Uses a time series approach
Liang et al. (2020); "COVID-19 mortality is negatively associated with test number and government effectiveness"	Not effect of lockdowns
Mader and Rüttemauer (2021); "The effects of non-pharmaceutical interventions on COVID-19-related mortality: A generalized synthetic control approach across 169 countries"	Synthetic control study
Matzinger and Skinner (2020); "Strong impact of closing schools, closing bars and wearing masks during the COVID-19 pandemic: results from a simple and revealing analysis"	Uses modelling
Mccafferty and Ashley (2020); "COVID-19 Social Distancing Interventions by State Mandate and Their Correlation to Mortality in the United States"	Duplicate
Medline et al. (2020); "Evaluating the impact of stay-at-home orders on the time to reach the peak burden of COVID-19 cases and deaths: Does timing matter?"	Only looks at timing
Mu et al. (2020); "Effect of social distancing interventions on the spread of COVID-19 in the state of Vermont"	Uses modelling
Nakamura (2020); "The Impact of Rapid State Policy Response on Cumulative Deaths Caused by COVID-19"	Student paper

Table 8: Studies Excluded During the Eligibility Phase of Our Identification Process—Continued

1. Study (Author and Title)	2. Reason for Exclusion
Neidhöfer and Neidhöfer (2020); “The effectiveness of school closures and other pre-lockdown COVID-19 mitigation strategies in Argentina, Italy, and South Korea”	Synthetic control study
Oliveira (2020); “Does ‘Staying at Home’ Save Lives? An Estimation of the Impacts of Social Isolation in the Registered Cases and Deaths by COVID-19 in Brazil”	Social distancing (not lockdowns)
Palladina et al. (2020); “Effect of Implementation of the Lockdown on the Number of COVID-19 Deaths in Four European Countries”	Uses a time series approach
Palladina et al. (2020); “Effect of timing of implementation of the lockdown on the number of deaths for COVID-19 in four European countries”	Duplicate
Palladino et al. (2020); “Excess deaths and hospital admissions for COVID-19 due to a late implementation of the lockdown in Italy”	Uses a time series approach
Peixoto et al. (2020); “Rapid assessment of the impact of lockdown on the COVID-19 epidemic in Portugal”	Uses modelling
Provani et al. (2021); “Effect of early application of social distancing interventions on COVID-19 mortality over the first pandemic wave: An analysis of longitudinal data from 37 countries”	Only looks at timing
Reinbold (2021); “Effect of fall 2020 K-12 instruction types on COVID-19 cases, hospital admissions, and deaths in Illinois counties”	Synthetic control study
Renne, Roussellet and Schwenkler (2020); “Preventing COVID-19 Fatalities: State versus Federal Policies”	Uses modelling
Siedner et al. (2020); “Social distancing to slow the U.S. COVID-19 epidemic: Longitudinal pretest-posttest comparison group study”	Duplicate
Siedner et al. (2020); “Social distancing to slow the U.S. COVID-19 epidemic: Longitudinal pretest-posttest comparison group study”	Uses a time series approach
Silva, Filho and Fernandes (2020); “The effect of lockdown on the COVID-19 epidemic in Brazil: Evidence from an interrupted time series design”	Uses a time series approach
Stamam et al. (2020); “Impact of Lockdown Measure on COVID-19 Incidence and Mortality in the Top 31 Countries of the World”	Uses a time series approach
Steinegger et al. (2021); “Retrospective study of the first wave of COVID-19 in Spain: Analysis of counterfactual scenarios”	Only looks at timing
Stephens et al. (2020); “Does the timing of government COVID-19 policy interventions matter? Policy analysis of an original data-base”	Only looks at timing

Supino et al. (2020); “The effects of containment measures in the Italian outbreak of COVID–19”	Uses a time series approach
Timelli and Girardi (2021); “Effect of timing of implementation of containment measures on COVID–19 epidemic. The case of the first wave in Italy”	Only looks at timing
Trivedi and Das (2020); “Effect of the timing of stay-at-home orders on COVID–19 infections in the United States of America”	Only looks at timing
Umer and Khan (2020); “Evaluating the Effectiveness of Regional Lockdown Policies in the Containment of COVID–19: Evidence from Pakistan”	Too few observations
VoPham et al. (2020); “Effect of social distancing on COVID–19 incidence and mortality in the U.S.”	Does not look at mortality
Wu and Wu (2020); “Stay-at-home and face mask policies intentions inconsistent with incidence and fatality during U.S. COVID–19 pandemic”	Too few observations
Xu et al. (2020); “Associations of Stay-at-Home Order and Face-Masking Recommendation with Trends in Daily New Cases and Deaths of Laboratory–Confirmed COVID–19 in the United States”	Does not look at mortality
Yehya, Venkataramani and Harhay (2020); “Statewide Interventions and Coronavirus Disease 2019 Mortality in the United States: An Observational Study”	Only looks at timing
Yili et al. (2020); “The lower COVID–19 related mortality and incidence rates in Eastern European countries are associated with delayed start of community circulation”	Not effect of lockdowns

7.2 Interpretation of Estimates and Conversion to Common Estimates

In Table 9, we describe for each study used in the meta-analysis how we interpret their results and convert the estimates to our common estimate. Standard errors are converted such that the t-value, calculated based on common estimates and standard errors, is unchanged. When confidence intervals are reported rather than standard errors, we calculate standard errors using t-distribution with ∞ degrees of freedom (*i.e.*, 1.96 for 95% confidence interval).

Table 9: Notes on Studies Included in the Meta-Analysis

1. Study (Author and Title)	2. Date Published	3. Journal	4. Comments Regarding Meta-Analysis
Alderman and Harjoto (2020); "COVID-19: U.S. shelter-in-place orders and demographic characteristics linked to cases, mortality, and recovery rates"	26-Nov-20	Transforming Government: People, Process and Policy	We use the 1% effect noted by the authors in "We find that the natural log of the duration (in days) that the state instituted shelter-in-place reduces percentages of mortality by 0.0001%, or approximately 1% of the means of percentages of deaths per capita in our sample." The standard error is calculated on basis of the t-value in Table 3.
Aparicio and Grossbard (2021); "Are COVID Fatalities in the U.S. Higher than in the EU, and If So, Why?"	16-Jan-21	Review of Economics of the Household	We use estimates from Table 3, model 5. For each estimate the common estimate is calculated as (difference in COVID-19 mortality with NPI)/(difference in COVID-19 mortality without NPI) - 1, where (difference in COVID-19 mortality with NPI) is 237,89 (Table 2 states that deaths per million is 406,99 in U.S. and 169,10 in Europe) and (difference in COVID-19 mortality without NPI) is estimated as $\exp(\ln(\text{difference in COVID-19 mortality with NPI}) - \text{estimate})$.
Ashraf (2020); "Socioeconomic conditions, government interventions and health outcomes during COVID-19"	1-Jul-20 ...	ResearchGate	It is unclear whether they prefer the model with or without the interaction term. In the meta-analysis, we use an average of -0.326 (Table 3, without) and -0.073 (Table 6, with) deaths per million per stringency point (<i>i.e.</i> , -0.200). The common estimate is the average effect in Europe and United States respectively calculated as (Actual COVID-19 mortality)/(COVID-19 mortality with recommendation policy) - 1, where (COVID-19 mortality with recommendation policy) is calculated as ((Actual COVID-19 mortality) - Estimate \times Difference in stringency \times population). Stringencies in Europe and United States are equal to the average stringency from March 16, to April 15, 2020 (76 and 74 respectively) and the stringency for the policy based solely on recommendations is 44 following Hale et al. (2020).
Auger et al. (2020); "Association between statewide school closure and COVID-19 incidence and mortality in the U.S."	1-Sep-20 ..	JAMA	Estimate that school closure was associated with a 58% decline in COVID-19 mortality and that the effect was largest in states with low cumulative incidence of COVID-19 at the time of school closure. States with the lowest incidence of COVID-19 had a -72% relative change in incidence compared with -49% for those states with the highest cumulative incidence.

Table 9: Notes on Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Date Published	3. Journal	4. Comments Regarding Meta-Analysis
Berry et al. (2021): "Evaluating the effects of shelter-in-place policies during the COVID-19 pandemic"	24-Feb-21	PNAS	The estimated effect of SIPOs, an increase in deaths by 0.654 per million after 14 days (significant, cf. Fig. 2), is converted to a relative effect on a state basis based on data from OurWorldInData. For states which did implement SIPO, we calculate the number of deaths without SIPO as the number of official COVID-19 deaths 14 days after SIPO was implemented minus 0.654 extra deaths per million. For states which did not implement SIPO, we calculate the number of deaths with SIPO as the number of official COVID-19 deaths 14 days after March 31 2020 plus 0.654 extra deaths per million. We use March 31, 2020 as this was the average date on which SIPO was implemented in the 40 states which did implement SIPO. Using this approximation, the effect of SIPOs in the U.S. is 1.1% more deaths after 14 days. Common standard errors are not available.
Bjørnskov (2021a): "Did Lockdown Work? An Economist's Cross-Country Comparison"	29-Mar-21	CESifo Economic Studies	We use estimates from Table 2 (4 weeks). Common estimate is calculated as the average of the effect in Europe and United States, where the effect for each is calculated as $(\ln(\text{policy stringency}) - \ln(\text{recommendation stringency})) \times \text{estimate}$.
Blanco et al. (2020): "Do Coronavirus Containment Measures Work? Worldwide Evidence"	1-Dec-20	World Bank Group	The study is not included in the meta-analysis, as it looks at the effect of NPIs on growth rates and does not include an estimate of the effect on total mortality.
Bonardi et al. (2020): "Fast and local: How did lockdown policies affect the spread and severity of the COVID-19"	8-Jun-20	0	Finds that, worldwide, internal NPIs have prevented about 650,000 deaths (3.11 deaths were prevented for each death that occurred, i.e., 76% effect). However, this effect is for any lockdown including a Swedish lockdown. They do not find an extra effect of stricter lockdowns and state that "our results point to the fact that people might adjust their behaviors quite significantly as partial measures are implemented, which might be enough to stop the spread of the virus." Hence, whether the baseline is Sweden, which implemented a ban on large gatherings early in the pandemic, or the baseline is "doing nothing" can affect the magnitude of the estimated impacts. Since all Western countries did something and estimates in other reviewed studies are relative to doing less—and hence not to doing nothing, we report the result from Bonardi et al. as compared to "doing less." Hence, for Bonardi et al. we use 0% as the common estimate in the meta-analysis for each NPI (SIPO, regional lockdown, partial lockdown, and border closure (stage 1, stage 2 and full)) because all NPIs are insignificant (compared to Sweden's "doing the least" lockdown).

Bongaerts et al. (2021); "Closed for business: The mortality impact of business closures during the COVID-19 pandemic"	14-May-21	PLOS ONE	Business shutdown saved 9,439 Italian lives by 13th 2020. This corresponds to 32%, as there were 20,465 COVID-19-deaths in Italy by mid-April 2020.
Chaudhry et al. (2020); "A country level analysis measuring the impact of government actions, country preparedness and socioeconomic factors on COVID-19 mortality and related health outcomes"	1-Aug-20	ECLinacal-Medicine	Finds no effect of partial border closure, complete border closure, partial lockdown (physical distancing measures only), complete lockdown (enhanced containment measures including suspension of all non-essential services), and curfews. In the meta-analysis we use a common estimate of 0%, as estimates and standard errors are not available.
Chernozhukov et al. (2021); "Causal impact of masks, policies, behavior on early COVID-19 pandemic in the U.S."	1-Jan-21	Journal of Econometrics	The study looks at the effect of NPIs on growth rates but does include an estimate of the effect on total mortality at the end of the study period for employee face masks (-34%), business closure (-29%), and SIPO (-18%), but not for school closures (which we therefore exclude). In reporting the results of their counterfactual, they alter between "fewer deaths with NPI" and "more deaths without NPI." We have converted the latter to the former as estimate/(1+estimate) so "without business closures deaths would be about 40% higher" corresponds to "with business closures deaths would be about 29% lower."
Chisadza et al. (2021); "Government Effectiveness and the COVID-19 Pandemic"	10-Mar-21	MDPI	The common estimate is the average effect in Europe and United States respectively calculated as (Actual COVID-19 mortality)/(COVID-19 mortality with recommendation policy) - 1, where (COVID-19 mortality with recommendation policy) is calculated as ((Actual COVID-19 mortality)-Estimate × Difference in stringency × population). Stringencies in Europe and United States are equal to the average stringency from March 16, to April 15, 2020 (76 and 74 respectively) and the stringency for the policy based solely on recommendations is 44 following Hale et al. (2020). In the meta-analysis we use the non-linear estimate, but the squared estimate yields similar results.
Dave et al. (2021); "When Do Shelter-in-Place Orders Fight COVID-19 Best? Policy Heterogeneity Across States and Adoption Time"	3-Aug-20	Economic Inquiry	The study looks at the effect of SIPOs on growth rates but does include an estimate of the effect on total mortality after 20+ days for model 1 and 2 in Table 7. Since model 3, 4 and 5 have estimates similar to model 2, we use an average of model 1 to 5, where the estimates of model 3 to 5 are calculated as (common estimate model 2)/(estimate model 2) × estimate model 3/4/5.
Dergiades et al. (2020); "Effectiveness of government policies in response to the COVID-19 outbreak"	28-Aug-20	SSRN	The study is not included in the meta-analysis, as it looks at the effect of NPIs on growth rates and does not include an estimate of the effect on total mortality.

Table 9: Notes on Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Date Published	3. Journal	4. Comments Regarding Meta-Analysis
Fakir and Bharati (2021); "Pandemic catch-22: The role of mobility restrictions and institutional inequalities in halting the spread of COVID-19"	28-Jun-21	PLOS ONE	The study is not included in the meta-analysis, as it looks at the effect of NPIs on growth rates and does not include an estimate of the effect on total mortality.
Fowler et al. (2021); "Stay-at-home orders associate with subsequent decreases in COVID-19 cases and fatalities in the United States"	10-Jun-21	PLOS ONE	The study looks at the effect of SPOs on growth rates but does include an estimate of the effect on total mortality after three weeks (35% reduction in deaths) which is used in the meta-analysis.
Fuller et al. (2021); "Mitigation Policies and COVID-19-Associated Mortality—37 European Countries, January 23–June 30, 2020"	15-Jan-21	Morbidity and Mortality Weekly Report	For each 1-unit increase in OxCGRT stringency index, the cumulative mortality decreases by 0.55 deaths per 100,000. The common estimate is the average effect in Europe and United States respectively calculated as (Actual COVID-19 mortality)/(COVID-19 mortality with recommendation policy) - 1, where (COVID-19 mortality with recommendation policy) is calculated as ((Actual COVID-19 mortality) - Estimate × Difference in stringency × population). Stringencies in Europe and United States are equal to the average stringency from March 16, to April 15, 2020 (76 and 74 respectively) and the stringency for the policy based solely on recommendations is 44 following Hale et al. (2020).
Gibson (2020); "Government mandated lockdowns do not reduce COVID-19 deaths: Implications for evaluating the stringent New Zealand response"	18-Aug-20	New Zealand Economic Papers	We use the two graphs to the left in figure 3, where we extract the data from the right-most datapoint (<i>i.e.</i> , % impact of county lockdowns on COVID-19 deaths by 1/06/2020). We then take the average of the estimates found in the two graphs, because it is unclear which estimate the author prefers.

Goldstein et al. (2021); "Lockdown Fa- cture: The Diminishing Effects of Quar- antines on the Spread of COVID-19"	4-Feb-21 .. CID Faculty Working	We convert the effect in Figure 4 after 90 days (log difference - 1.16 of a standard devi- ation change) to deaths per million per stringency following footnote 3 (the footnote says "weekly deaths," but we believe this should be "daily deaths"), so the effect is $e^{-1.16}$ - 1 = -0.69 decline in daily deaths per million per SD. We convert to total effect by multiplying with 90 days and "per point" by dividing with SD = 22.3 (corresponding to the SD for the 147 countries with data before March 19, 2020—using all data yields similar results) yielding -2.77 deaths per million per stringency point. The common es- timate is the average effect in Europe and United States respectively calculated as ((Ac- tual COVID-19 mortality)/(COVID-19 mortality with recommendation policy) - 1, where (COVID-19 mortality with recommendation policy) is calculated as ((Actual COVID-19 mortality) - Estimate \times Difference in stringency \times population). Stringencies in Europe and United States are equal to the average stringency from March 16 to April 15, 2020 (76 and 74 respectively) and the stringency for the policy based solely on recommendations is 44 following Hale et al. (2020).
Guo et al. (2021); "Mitigation Interventions in the United States: An Exploratory Investigation of Determinants and Impacts"	21-Sep-20 Research on So- cial Work Prac- tice	We use estimates for "Proportion of Cumulative Deaths Over the Population" (per 10,000) in Table 3. We interpret this number as the change in cumulative deaths over the population in percent and is therefore the same as our common estimate.
Hale et al. (2020); "Global assessment of the relationship between government re- sponse measures and COVID-19 deaths"	6-Jul-20 ... medRxiv	The study is not included in the meta-analysis, as it looks at the effect of NPIs on growth rates and does not include an estimate of the effect on total mortality. They as- sert that "sustained over three months, this would correspond to a cumulative num- ber of deaths 30% lower," however this is not a counterfactual estimate and three months goes beyond the period they have data for.
Hunter et al. (2021); "Impact of non- pharmaceutical interventions against COVID-19 in Europe: A quasi-experi- mental non-equivalent group and time- series"	15-Jul-21 Eurosurveillance	The study is not included in the meta-analysis, as they report the effect of NPIs in inci- dent risk ratio which are not easily converted to relative effects.
Langeland et al. (2021); "The Effect of State Level COVID-19 Stay-at-Home Orders on Death Rates"	5-Mar-21 Culture and Cri- sis Conference	The study is not included in the meta-analysis, as it looks at the effect of NPIs on odds- ratios and does not include an estimate of the effect on total mortality.

Table 9: Notes on Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Date Published	3. Journal	4. Comments Regarding Meta-Analysis
Leffler et al. (2020); “Association of country-wide coronavirus mortality with demographics, testing, lockdowns, and public wearing of masks.”	26-Oct-20	ASTMH	Their “mask recommendation” includes some countries, where masks were mandated and may (partially) capture the effect of mask mandates. However, the authors’ focus is on recommendation, so we do interpret their result as a voluntary effect—not an effect of mask mandate. Using estimates from Table 2 and assuming NPIs were implemented March 15th (8 weeks in total by end of study period), common estimates are calculated as $8^{\text{est}} - 1$.
Mccafferty and Ashley (2021); “COVID-19 Social Distancing Interventions by Statutory Mandate and Their Observational Correlation to Mortality in the United States and Europe.”	27-Apr-21	Pragmatic and Observational Research	The study is not included in the meta-analysis, as it looks at the effect of NPIs on peak mortality and does not include an estimate of the effect on total mortality.
Pan et al. (2020); “COVID-19: Effectiveness of non-pharmaceutical interventions in the united states before phased removal of social distancing protections varies by region”	20-Aug-20	medRxiv	The study is not included in the meta-analysis, as they cluster the NPIs (e.g., SIPO, mask mandate and travel restrictions are clustered in Level 4).
Pincombe et al. (2021); “The effectiveness of national-level containment and closure policies across income levels during the COVID-19 pandemic: An analysis of 113 countries.”	4-May-21	Health Policy and Planning	Policy implementations were assigned according to the first day that a country received a policy stringency rating above 0 in the OxCGRt stay-at-home measure. As the value 1 is a recommendation “recommend not leaving house,” we cannot distinguish recommendations from mandates and, thus, the study is not included in the meta-analysis.
Sears et al. (2020); “Are we #stayinghome to Flatten the Curve?”	6-Aug-20	medRxiv	Finds that SIPOs lower mortality by 29–35%. We use the average (32%) as our common estimate. Common standard errors are calculated based on estimates and standard errors from (Table 4) assuming they are linearly related to estimates.

Shiva and Molana (2021); "The Luxury of Lockdown"	9-Apr-21	The European Journal of Development Research	The estimate with 8 weeks lag is insignificant, and preferable given our empirical strategy. However, they use the 4-week lag when elaborating the model to differentiate between high- and low-income countries, so the 4-week lag estimate for rich countries is used in our meta-analysis. Common estimate is calculated as the average of the effect in Europe and United States, where the effect for each is calculated as (policy stringency - recommendation stringency) \times estimate.
Spiegel and Tookes (2021); "Business restrictions and COVID-19 fatalities"	18-Jun-21	The Review of Financial Studies	We use weighted average of estimates for Table 4, 6, and 9. Since authors state that they place more weight on the findings in Table 9, Table 9 weights by 50% while Table 4 and 6 weights by 25%. We estimate the effect on total mortality from effect on growth rates based on authors calculation showing that estimates of -0.049 and -0.060 reduces new deaths by 12.5% 15.3% respectively. We use the same relative factor on other estimates.
Stoeknerhuber (2020); "Did We Respond Quickly Enough? How Policy-Implementation Speed in Response to COVID-19 Affects the Number of Fatal Cases in Europe"	10-Nov-20	World Medical and Health Policy	When calculating arithmetic average/median, the study is included as 0%, because estimates in Table 6 are insignificant and signs of estimates are mixed (higher strictness can cause both fewer and more deaths). We don't calculate common standard errors.
Stokes et al. (2020); "The relative effects of non-pharmaceutical interventions on early COVID-19 mortality: Natural experiment in 130 countries"	6-Oct-20	medRxiv	We use estimates from regression on strictness alone (Right panel in Table "Regression results, policy strictness." Baseline is "policy not introduced within policy analysis period" in "Additional file"). We use the average of 24 and 38 days from model 5. There are 23 relevant estimates in total (they analyze all levels within the eight NPI measures in the OxCGRT stringency index). We calculate the effect of each NPI (<i>e.g.</i> , closing schools) as the average effect in all of U.S./Europe. This is done by calculating the effect for each state/country based on the maximum level for each measure between Mar 16th and Apr 15th (<i>e.g.</i> , if all schools in a state/country are required to close (school closing level 3) the relevant estimate for that state/level is -0.031 (average of -0.464 and 0.402). We assume all NPIs are effective for 54 days (from March 15th to June 1st minus 24 days to reach full effect). Standard errors are converted to common standard errors following the same process (this approach is unique for Stokes, as our general approach is not possible).

Table 9: Notes on Studies Included in the Meta-Analysis—Continued

1. Study (Author and Title)	2. Date Published	3. Journal	4. Comments Regarding Meta-Analysis
Toya and Skidmore (2020); "A Cross-Country Analysis of the Determinants of COVID-19 Fatalities"	1-Apr-20	CESifo Working Papers	<p>It is unclear how they define "lockdown." They write that "many countries [...] imposed lockdowns of varying degrees, some imposing mandatory nationwide lockdowns, restricting economic and social activity deemed to be non-essential," and since all European countries and all states in the U.S. imposed restrictions on economic (closing unessential businesses) and/or social (limiting large gatherings) activity, we interpret this as all European countries and all U.S. states had mandatory nationwide lockdowns. The effect of recommended lockdowns is set to zero in the meta-analysis, as only one country was in this lockdown category (<i>i.e.</i>, too few observations, <i>cf.</i> eligibility criteria). The estimate for complete travel closure is -0.226 COVID-deaths per 100,000. Hence, if all of Europe imposed complete travel closure, the total effect would be $-0.266 * 748$ million (population) $* 10$ (100,000/1,000,000) equal to 1,690 averted COVID-19 deaths. However, according to OxCGRT-data European countries only had complete travel bans (Level 4: "Ban on all regions or total border closure") in 11% of the time between March 16 and April 15, 2020. So the total effect is $1,690 * 11\% = 194$ averted deaths. During the first wave 188,000 deaths in Europe was related to COVID-19 (by June 30, 2020), so the total effect is approximated to -0.1% in Europe and, following the same logic, 0% in U.S., where no states closed their borders completely. We use the average, -0.05%, in the meta-analysis. The estimate for mandatory national lockdown is 0.166 (>0) COVID-deaths per 100,000. Since all European countries (and U.S. states) imposed lockdowns, the total effect is 1,241 (553) extra COVID-19 deaths corresponding to 0.7% (0.4%). We use the average of Europe and the U.S., 0.5%, in the meta-analysis. Calculations of the effect of "Mandatory national lockdown" follow the same logic, but we assume 100% of Europe and United States have had "Mandatory national lockdown."</p>
Tsai et al. (2021); "Coronavirus Disease 2019 (COVID-19) Transmission in the United States Before Versus After Relaxation of Statewide Social Distancing Measures"	3-Oct-20	Oxford Academic	<p>The study is not included in the meta-analysis, as they report the effect of NPIs on Rt which are not easily converted to relative effects.</p>

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PREPARED STATEMENT OF HON. MIKE CRAPO,
A U.S. SENATOR FROM IDAHO

Thank you, Mr. Chairman, and thank you, Dr. Murthy, for being here today.

This discussion comes at a crucial time. Our Nation is confronting an unprecedented range of challenges, many of which have serious implications for the mental health of all Americans—especially children. From school closures to lockdowns and other COVID-related restrictions, the pandemic has intensified feelings of social isolation, helplessness, and anxiety. Since the pandemic began, we have witnessed alarming spikes in suicide attempts and suicidal ideation among teenagers, along with a staggering rise in drug overdose deaths.

Dr. Murthy, as you noted in your advisory, rates of psychological distress among young people appear to have increased across the board in the past few years. Unfortunately, even prior to COVID–19, many of these trends pointed in the wrong direction. That said, I share your sense of optimism in tackling the urgent issues at hand. In communities across the country, we have seen families, faith leaders, policymakers, and health-care providers come together to craft creative and sustainable mental health prevention, access, and treatment solutions.

Thanks to the chairman’s leadership, we have the opportunity to bolster these efforts through a bipartisan process to advance targeted, consensus-driven, and fiscally responsible policies that drive better outcomes for all Americans. By focusing on shared priorities and adhering to core guiding principles, this process can culminate in comprehensive legislation that our colleagues across the political spectrum will enthusiastically support. Building consensus will maximize our ability to see the work we conduct here signed into law. We must also uphold fiscal integrity, fully paying for any and all provisions we look to enact.

As working families across the Nation contend with the highest inflation in 40 years, strained finances pose a grave threat to health-care access. Unrestrained government spending risks pushing inflation even higher—further accelerating the decline of Americans’ purchasing power. Moreover, with each passing year, we are steadily moving closer to the Medicare trust fund’s exhaustion date, at which time the program will no longer be able to pay full benefits for our Nation’s seniors. We must be thoughtful and cautious to avoid exacerbating the fiscal challenges we face.

Likewise, we must ensure any pay-fors that we advance do not in any way compromise economic growth, undermine biomedical innovation, or undercut our recovery. Across-the-board bipartisan support will prove essential. By aligning our process with these basic principles and guard rails, we can produce a meaningful bill, carefully tailored to meet the challenges that confront us.

This committee has a strong track record of generating consensus-based bills, from the CHRONIC Care Act to the Retirement Enhancement and Security Act, which ultimately passed as the SECURE Act in 2019. I truly believe we can replicate that success here.

As the committee begins its work, we do so having built a strong foundation of shared interests and objectives. For instance, the pandemic has highlighted the pressing need for expanded access to telehealth, especially for Medicare beneficiaries. Our committee took an essential first step toward addressing these barriers by codifying permanent Medicare coverage for mental health services, regardless of geographic location, including services provided in the home. However, gaps remain, and we will work to bridge them here.

Strengthening the mental and behavioral health workforce will also prove vital, especially in the face of widespread provider stress, fatigue, and burnout, which the pandemic has escalated. I hear every day from doctors, nurses, and other health-care professionals across Idaho who are looking to reduce hours or leave their practices entirely in the months to come, confronted with an unprecedented range of demands.

Too often, sadly, policymakers have inadvertently added to these challenges, imposing bureaucratic requirements and tasks that divert attention from patient care and hinder providers' workplace wellness. As we navigate potential policy options, we should look to avenues for enhancing flexibilities, both for providers and for States, as they seek to improve and innovate across the continuum of care.

These and other focal points, from encouraging service integration to promoting modernization, present opportunities for bipartisan discussions that will enable our health-care system to serve all Americans more effectively.

In that spirit, I look forward to your testimony, Dr. Murthy, and to a timely discussion of mental and behavioral health solutions.

PREPARED STATEMENT OF HON. VIVEK H. MURTHY, M.D., MBA, SURGEON GENERAL,
OFFICE OF THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Chairman Wyden, Ranking Member Crapo, members of the committee, I'm Dr. Vivek Murthy. I have the privilege of speaking to you today as Surgeon General of the United States; as Vice Admiral in the United States Public Health Service Commissioned Corps; and as the father of two young children, who are four and five. They're the reason I'm grateful for this opportunity to speak with you today.

Over the next few years, both of my children will enter an important stage of their education and development, where they'll learn how to build friendships, deal with problems, and lay the foundation of a personal values system. They and millions of their peers will start down the path to adulthood. Each path will be different. All will be filled with challenges along the way.

It's these challenges that I want to talk about today. I'm deeply concerned, as a parent and as a doctor, that the obstacles this generation of young people face are unprecedented, and uniquely hard to navigate. And the impact that's having on their mental health—their emotional, psychological, and social well-being—is devastating.

There are a number of longstanding, preventable factors driving this crisis of loneliness and hopelessness.

The recent ubiquity of technology platforms, especially social media platforms, has had harmful effects on many children. Though undoubtedly a benefit to our lives in important ways, these platforms have also exacerbated feelings of isolation and futility for some youth. They've reduced time for positive in-person activities, pitted kids against each other, reinforced negative behaviors like bullying and exclusion, impeded healthy habits, and undermined the safe and supportive environments kids need to thrive.

This increase in social media use has also contributed to a bombardment of messages that undermine this generation's sense of self-worth—messages that tell our kids with greater frequency and volume than ever before that they're not good looking enough, not popular enough, not smart enough, not rich enough.

Meanwhile, progress on the issues that will determine the world they'll inherit, like economic inequality, climate change, racial injustice, LGBTQ rights, the opioid epidemic, and gun violence, feels too slow. It's undermining their sense of long-term safety, security, and opportunity. It's undercutting the fundamental American promise—their hope in the possibility of a better future.

All of these factors affecting youth mental health were true before the COVID-19 pandemic. The pandemic has further exacerbated the stresses young people already faced, and at worst has pushed many to a breaking point. The last 2 years have dramatically changed young peoples' experiences at home, at school, and in their communities. It's not just the unfathomable number of deaths, or the instability caused by increased food insecurity, or the loss of health care, social services, or housing. It's also the pervasive uncertainty and the nagging sense of fear. It's the isolation from loved ones, friends, and communities at a moment when human support systems are irreplaceable.

At the heart of our youth mental health crisis is a pervasive stigma that tells young people they should be embarrassed if they are struggling with depression, anxiety, stress, or loneliness. It makes a human condition feel inhuman. And it's a reflection of a broader societal perspective that mental health is, at best, the absence of disease, and at worst, a source of shame to be hidden and ignored. This stigma prevents vulnerable kids from seeking help and receiving the long-term recovery supports they need.

I felt that stigma myself, 35 years ago, growing up in Miami as a kid who didn't look the same as the other kids, whose immigrant parents didn't eat the same food or dress the same way other parents did, who didn't live in the biggest house or get picked up after school in a fancy car. And when that led me to feel persistently lonely, isolated, and anxious—when it led me to get bullied and called racial slurs by classmates who constantly told me that I didn't belong, I felt a deep sense of shame. Like it was somehow my fault that I was alone and hurting. Like I had nowhere to go and no one, even my unconditionally loving and supportive family, to turn to for help.

A world of shame and stigma, where children can't get the help they need, is not the world I want for my kids, your kids, and kids across our country. But, Senators, we are on the verge of beating back one public health crisis in COVID-19, only to see another grow in its place.

In 2019, the year before the pandemic, one in three high school students reported persistent feelings of sadness or hopelessness, up 40 percent from a decade prior; one in six made a suicide plan, a 44-percent increase over the same 10-year period. From 2011 to 2015, youth psychiatric visits to emergency departments for depression, anxiety, and behavioral challenges increased by 28 percent. And between 2007 and 2018, suicide rates among youth ages 10-24 increased by 57 percent—a total of 65,026 young people lost.

As devastating as these numbers are, the real tragedy is that we are failing to adequately respond to them. Even before the pandemic, we were not doing enough to provide adequate care and treatment options in every community—and COVID has only made this disparity worse. We are not doing enough as a country to build and maintain a sufficient and diverse mental health-care workforce. We are not doing enough to integrate the mental health-care system with the rest of the health-care system, to say nothing of the millions who still lack adequate and affordable insurance coverage. We are not doing enough to provide sufficient access to remote counseling.

And we are not doing enough to prevent, and not just treat, this crisis. Many mental health challenges first emerge early in life—half of all lifetime mental health issues begin by age 14, and 75 percent begin by age 24. We are not doing enough to give young people the tools to prevent these challenges during a critical period of development, and the long-term impact is incalculable.

As a result, the average delay between the onset of mental health symptoms and treatment is 11 years—11 long, isolating, confusing, and painful years.

We have the opportunity and the responsibility to make change happen now. Late last year, I released my Surgeon General's Advisory, which outlines the policy, institutional, and individual changes it will take to reframe how we view, prioritize, treat, and prevent mental health challenges.

Out of the many recommendations in the advisory, I'd like to highlight four today.

First, ensuring that every child has access to high-quality, affordable, and culturally competent mental health care. To do this, we must make sure that children are enrolled in health coverage—far too many children in our country are eligible for coverage under Medicaid and the Children's Health Insurance Program, but aren't enrolled. We need to do better here. We also need to expand our mental health workforce, from clinical psychologists, school counselors, and psychiatrists, to

recovery coaches and peer specialists. We have too few providers to meet the growing demand. And we need to make sure care is delivered at the right place and time, whether that's in health-care settings like primary care practices, or community-based settings like schools, and whether it's in-person or through telehealth. We know States and school districts are already using funds from the American Rescue Plan Elementary and Secondary Education Emergency Relief Fund to provide more counselors, other mental health providers, and nurses in schools. Those funds are available now to help meet our young peoples' critical mental health needs.

Second, focusing on prevention, by investing in school and community-based programs that have been shown to improve the mental health and emotional well-being of children at low cost and high benefit. Every dollar we spend on prevention is a dollar we won't have to spend on treatment—in fact, one study estimated that investment in early prevention offered a fourfold return down the line. These programs give kids tools to manage their emotions in healthy ways, build supportive relationships, and get help when they need it. They support families, teaching parents how to recognize challenges as they emerge, find available resources, and offer support and care.

We've seen the extraordinary potential of certain strategies and programs—Project AWARE, Beyond Differences, and Family Check-Up, for example. We need to invest in scaling these programs across the country. And that must go hand in hand with continuing to address the systemic economic and social barriers, like safety, housing, food and economic insecurity, that contribute to and create the conditions for poor mental health for young people, families, and caregivers.

Third, we need to better understand the impact that technology and social media has on mental health. At a minimum, if technology companies are going to continue to conduct a massive, national experiment on our kids, then public health experts and the public at large must be the ones to analyze the data, to draw the conclusions, and draft the recommendations—not the companies alone. That's how we give parents and caregivers the ability to make informed choices about their kids' use of technology. We should also act to ensure that these platforms are built to help and not harm the mental health of our youth, and are designed in an age appropriate way, with the health and well-being of all users, especially younger users, coming before profit and scale. Other countries, like the UK and Australia, are already taking innovative steps to protect their children, and so should the United States.

The final recommendation concerns individual and community engagement—the role we each have to play in overcoming the stigma associated with seeking help. No child should feel ashamed of their hurt, confusion, or isolation, and no one should feel too ashamed to ask for help.

If we don't keep working towards a culture that normalizes and promotes mental health care, that celebrates and finds hope in stories of people seeking help, getting treatment, and successfully recovering, then the consequences of our inattention and neglect will continue to ripple across generation, class, and geography. It's something we each, as parents, siblings, teachers, friends, and leaders, have the power to start changing today, by choosing to reach out to the kids in our lives, by letting them know that they are not alone in their struggles, and by sharing our own stories.

I look forward to discussing these recommendations and possibilities with you today. Mitigating this crisis is possible, but it will take a bipartisan, all-of-society coalition of young people and their families, schools and health-care systems, technology and media companies, employers, community organizations, and governments alike. I thank you for recognizing this, and for your shared commitment to action.

Our obligation to act is not just medical—it's moral. It's not only about saving lives. It's about listening to our kids, who are concerned about the state of the world they're set to inherit, and it's about our opportunity to rebuild the world we want to give them—a world that fundamentally refocuses our priorities on people and community, and builds a culture of kindness, inclusion, and respect.

My job as Surgeon General is to help lay the foundation for a healthier Nation. That foundation isn't just built by putting warning labels on cigarette packs. It's built by focusing our attention on our Nation's most pressing public health concerns, and by fostering connection, community, and resilience. A house where people are isolated; where they feel left behind economically, socially, and professionally; where

they feel unsafe; and where they feel like they don't matter, is a house that cannot stand.

But I believe that, if we seize this moment, and step up for children and families in their moment of need, we can lay that foundation now. Throughout our history, progress has been born in the wake of tragedy. I'm eager to partner with you to make it happen again.

Thank you for having me, and for giving this critical issue the attention it needs and deserves.

QUESTIONS SUBMITTED FOR THE RECORD TO HON. VIVEK H. MURTHY, M.D., MBA

QUESTIONS SUBMITTED BY HON. THOMAS R. CARPER

PREVENTATIVE SERVICES AND SCHOOLS

Question. I want to thank you so much for your testimony today. I'd also like to thank Chairman Wyden for the opportunity to serve as a co-chair of this bipartisan working group on mental health. I'm thrilled to be chairing the Pediatrics and Young People portion of this effort with my friend and colleague, Senator Cassidy.

The pediatric mental health crisis is not a challenge that this committee can meet alone. But those of us in this room, working with others who share our vision, like you, Dr. Murthy, can forge the way. And I believe we will.

In one of my first acts as Governor, I established a Family Services Cabinet Council devoted to strengthening families. The goal of the council was to focus on prevention, so that rather than spending our resources treating the symptoms of our problems, we attack the root causes of those problems.

Surgeon General Murthy, in your opening testimony, you mention that investing in school and community-based programs that have been shown to improve mental health and emotional well-being of children at low cost and high benefit.

How can Congress further build on these preventative and effective services?

Answer. It's essential to invest in prevention and early intervention—75 percent of the time, mental health symptoms emerge before age 24. To effectively support the mental health and emotional well-being of young people, we must act early and meet young people where they are. School- and community-based programs can and should play a critical role here. In the recent Surgeon General's advisory and in previous statements, I've highlighted programs such as Family Check-Up as an example of a promising and evidence-based intervention that has been shown to improve the mental health and emotional well-being of children at low cost and high benefit, as well as Project AWARE, an HHS grant program for State and tribal education agencies to advance wellness and resiliency for children and youth in school-based settings. We also should be thinking about reducing silos between schools and health-care organizations, for example by bringing mental health services to school campuses and providing sufficient funding so that these services can be sustained over time. Undergirding all of these efforts, we must continue to address the systemic economic and social barriers that contribute to poor mental health for young people, their families, and caregivers, including poverty.

Primary prevention, which can address the root causes of mental health in children, is key. Toxic stress and other effects that result from exposure to Adverse Childhood Experiences (ACEs) can change brain development and affect how the body responds to stress. ACEs are strongly linked to mental illness, substance use, and chronic health conditions in adulthood. Research shows that preventing ACEs could have substantial positive impacts on public health and health outcomes and can enhance our public safety. For example, preventing ACEs could reduce the number of adults with depression by as much as 44 percent. CDC funds 6 recipients for Preventing Adverse Childhood Experiences: Data to Action¹ to implement two or more prevention strategies from CDC's ACEs prevention resource, Preventing Adverse Childhood Experiences (ACEs): Leveraging the Best Available Evidence.²

Secondary prevention, which includes screening to identify health concerns in their earlier stages, is also important. HRSA's Bright Futures Program develops

¹ <https://www.cdc.gov/violenceprevention/aces/preventingace-datatoaction.html>.

² <https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf>.

evidence-driven guidelines for preventive care screenings and routine primary care visits for newborns through adolescents up to age 21. The Guidelines were recently updated to add universal screening for suicide risk to the current Depression Screening category for individuals ages 12 to 21, and new guidance for behavioral, social, and emotional screening.

In addition, schools play an essential role in the health and well-being of children and youth. Primary prevention in schools that focuses on improving emotional well-being for all students is very much in line with CDC's public health approach. Creating healthy and supportive school environments—from how teachers manage classrooms, to programs that promote social and emotional learning, to policies and practices that support LGBTQ youth—have a strong and lifelong impact on mental health. CDC's unique role is to lead the Nation's prevention efforts to protect and improve the health of adolescents. CDC collects data that drive action and partners with schools to implement a comprehensive public health approach that helps protect against negative outcomes among youth. For example, CDC's "What Works in Schools" approach to primary prevention in local school districts improves health education, connects youth to the services they need, and creates safer and more supportive school environments for students and educators alike. This approach has demonstrated positive impacts on substance use, sexual risk, exposure to violence, public safety, and mental health among students in schools that implement the approach. It represents an important tool to address the current mental health crisis among our young people. In addition, CDC's Whole School, Whole Community, Whole Child (WSCC) model, is a comprehensive, student-centered, school health approach that emphasizes the role of the community in supporting the school, the connections between health and academic achievement and the importance of evidence-based school policies and practices.

Research demonstrates that healthy and supportive school environments, school connectedness, and parent engagement positively affect health behaviors, and improve emotional well-being for students and enhance the safety of school communities for educators and students alike.

Congress can fund programs through legislation that supports a public health model which would include all three levels of intervention. This model provides both preventive and effective services for children who are in need across setting (*i.e.*, schools, communities, or health care), risk factors (*i.e.*, poverty or substance misuse) or concern (*i.e.*, suicide or depression). This public health model would enhance public safety outcomes as well.

The first level is universal, providing education on mental health literacy and suicide prevention to children (as age appropriate) and school personnel. These tools assist school personnel in recognizing those children who need additional help. The second level identifies children at risk and assessing, in conjunction with their families, if they need clinical assistance. The third level is referring children who need more intensive mental health treatment to qualified providers in their community.

It is critical that we acknowledge the grief and loss that children and youth have faced and help both students and adults engage in meaningful activities of resilience in the face of the pandemic and its effects of social isolation as well as the loss of caring adults in their lives. Therefore, ensuring that the school climate, for all children, is nurturing and supportive to address their needs.

Some children have additional risk factors (*e.g.*, death of a care giver, loss of parental employment, etc.) that need additional attention. It is important to support educators' efficacy in identifying the mental health needs of their students by providing ongoing opportunities and incentives for training in mental health literacy and referral strategies. Providing Youth Mental Health First Aid has been a successful strategy for SAMHSA's Project Advancing Wellness and Resiliency in Education (AWARE) grantees.

Finally, Congress can work to ensure that children that need intensive specialty mental health services quickly gain access to services with providers specialized to provide care. Our educators play an important role in the health and well-being of all our children. These educators are critical in fostering a supportive classroom climate, supporting all children at risk for behavioral health conditions and who need good working knowledge of treatment resources.

PUBLIC-PRIVATE PARTNERSHIPS

Question. Thank you for your Surgeon General's advisory on the youth mental health crisis. We are seeing this crisis play out in Delaware. At Nemours Children's

Hospital, Delaware, from 2020 to 2021, there was an 80-percent increase in patients in the ED with chief concerns of suicidality or intentional harm. And this trend can be seen across the country.

What are some specific areas where you think philanthropy, private business, and health systems leaders can partner with the Federal Government to make short-term and long-term impact in addressing the youth mental health crisis? What do you see as low-hanging fruit and more challenging issues that could be addressed through a public-private partnership, and what might some early action steps be?

Answer. I see at least four opportunities for public-private partnerships to support youth mental health.

First, we should think creatively about how to sustainably finance new mental health care delivery models, such as school-based programs that enroll children in health coverage and make services more accessible and convenient for young people and their families. Multiple funding sources could be used to support these models, including Federal Medicaid funding, State funding, private insurance, and private and philanthropic funding.

Second, public-private partnerships can improve our understanding of how technology and social media affect mental health. For example, technology companies could partner with academic researchers, governments, and community organizations to foster and enable more research, develop best practices around and encourage healthy online behavior, and help parents and caregivers make informed choices about their children's use of technology.

Third, public-private partnerships can create sustained investments in addressing the social and economic barriers, such as poverty, discrimination, food insecurity, and adverse childhood experiences, that affect children's healthy development and mental health. The scale and complexity of mental health challenges among young people require collaborative approaches across stakeholders.

And fourth, public-private partnerships can educate others about mental health through education, information sharing, and story-telling campaigns to help overcome the stigmatization associated with seeking help. For example, members of the sports and entertainment industry could partner with governments, community organizations, and schools to share stories about mental health challenges, raise awareness, and reduce negative biases and beliefs about mental health care. The President's Council on Sports, Fitness and Nutrition could be involved to foster partnerships, as they have a focus under this administration on mental health and physical activity and good nutrition. In addition, private businesses and employers could partner with health systems to provide support for employees and families who are affected by mental health challenges.

For additional recommendations for funders and foundations, please see the Surgeon General's Advisory on Protecting Youth Mental Health.

NATIONAL RESPONSE TO GRIEF

Question. My staff and I have heard from behavioral health providers in Delaware that dealing with grief from the loss of family members due to COVID-19 has been particularly challenging for the pediatric population.

What strategies do you see as most effective in helping to support our Nation's children and youth cope with grief, and is there additional support needed from Congress to bolster our response?

Answer. It's critical to support young people coping with grief and trauma, including those who tragically lost a parent or caregiver to COVID-19. These young people may be at risk for long-term mental health consequences as a result of these experiences. SAMHSA's National Child Traumatic Stress Initiative (NCTSI) works to improve treatment and services for young people and families experiencing traumatic events. The initiative has a national network of grantees that work collaboratively to promote effective community practices for those exposed to trauma. In addition, the initiative includes education materials for families and other stakeholders, as well as technical assistance for professionals.

Additionally, title IV-E of the Social Security Act provides Federal reimbursement to States for a part of the cost of providing foster care, adoption assistance, and kinship guardianship assistance on behalf of each child who meets Federal eligibility criteria. Reimbursements provide foster care maintenance payments, adoption assistance, and, at the agency's option, a guardianship assistance program. While

some children are entitled to receive Social Security survivors' benefits that provide access to financial support, not all children who are eligible receive these benefits.

In addition to providing Federal funding to support youth who have lost family members due to COVID-19, we should continue building partnerships across health-care providers, educators, community organizations, and others to provide trauma-informed support to these young people. Moreover, additional funding and partnerships are needed to address disparities in maternal mortality and support youth and families affected by these losses.

It may also be useful to frame mental health as wellness, and proactively identify students or staff in need of extra support. Additionally, an effective strategy is to support educators' efficacy in identifying the mental health needs of their students by providing ongoing opportunities and incentives for training in mental health literacy and referral strategies. As stated above, providing Youth Mental Health First Aid has been a successful strategy for our Project AWARE grantees. It is also helpful to connect youth to individuals with lived experience. One way to do this is to engage with trainers who have lived experience with mental illness and dedicate classroom and/or staff time to hearing their stories.

There are several ways to ensure that children receive mental health services for grief, for anxiety, and for depression. One is to provide them in age-appropriate settings. Another is to meet them where they are, thereby creating a no-wrong door approach to accessing services by integrating mental health screening, robust referral pathways, and culturally responsive and developmentally appropriate approaches into all settings in which children, youth, and their families spend the most time. Strategies that are implemented should strive to serve young people and caregivers where they are, in a language that they speak, with a provider that understands their lived experience. Additional strategies include those that teach and model mental health as wellness from an early age and integrate positive mental health stories into curricula across subjects.

Additional actions that are effective include providing professional development to classroom educators on the academic impact of mental health literacy and trauma, teaching them that student performance is linked to mental health and wellness as a strategy to increase their commitment to promoting trauma-informed, and grief-sensitive frameworks. Key clinical practices that have a strong evidence-base or are promising practices to address child traumatic grief include interventions such as Child Parent Psychotherapy (CPP), Parent-Child Interaction Therapy (PCIT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Combined Parent-Child Cognitive Behavioral Therapy (CPC-CBT).

Finally, strategies should ensure that postvention initiatives that help children and youth recover from pandemic-related grief and create resilience for facing future grief and loss are provided to children, teachers, and families.

QUESTIONS SUBMITTED BY HON. SHERROD BROWN

CONTINUOUS ELIGIBILITY

Question. Together, Medicaid and the Children's Health Insurance Program (CHIP) provide health-care coverage to nearly 40 million³ children. Unfortunately, eligible Medicaid and CHIP beneficiaries—including many kids—periodically “churn” or lose coverage only to regain it again just weeks or months later. These children do not lose coverage because they become long-term ineligible for the program—instead, they are often disenrolled from the program due to administrative burdens, bureaucratic snafus, or when their parents experience short-term changes in income. This leads to a vicious cycle where kids get kicked off the program, interrupting their treatment programs, severing their continuity of care, and undermining quality monitoring efforts. These disruptions to care can be particularly challenging for children with behavioral health needs.

Despite being eligible for the program, on average, kids enrolled in Medicaid are only covered for less than 10 months out of the year. Churning in and out of health coverage has a direct, negative effect on beneficiaries as well as the ability of doctors, hospitals, and health plans to provide effective, continuous care—not just for kids' physical health, but for their mental health as well.

³ <https://www.kff.org/medicaid/state-indicator/total-medicaid-and-chip-child-enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.

Under current law, States have the option to provide 12-months of continuous coverage for children. States that elect this option have helped eliminate coverage gaps caused by slight fluctuations in income over the course of the year.

In your opinion, would requiring States to extend 12-month continuous coverage—as proposed in my Stabilize Medicaid and CHIP Coverage Act (S. 646) for children who rely on Medicaid and CHIP for their health insurance coverage help increase stability in coverage and improve access to essential mental health services for those children in need?

Are there other advantages to requiring continuous coverage for children in Medicaid and CHIP?

Answer. Medicaid and CHIP are incredibly important lifelines for almost 87 million individuals who are enrolled in these programs, including over 40 million children as of January 2022. The Biden-Harris administration is committed to ensuring that every eligible person can access the coverage and care to which they are entitled.

According to a report released by the Assistant Secretary for Planning and Evaluation (ASPE) in April 2021, individuals who experience coverage disruptions are more likely to delay care, receive less preventive care, refill prescriptions less often, and have more emergency department visits. Children with interruptions in coverage also are more likely to have delayed care, unmet medical needs, and unfilled prescriptions. Continuous coverage or allowing beneficiaries to maintain Medicaid coverage for a set period of time irrespective of changes in their circumstances, helps prevent disruptions in health care for beneficiaries and provides States more predictable and efficient spending.

Federal law provides States with the option to implement a variety of strategies to promote continuity of coverage, including continuous eligibility for children. States have the option to provide children with 12 months of continuous coverage under CHIP and Medicaid, even if the family experiences a change in income during the year. Continuous eligibility is a valuable tool that helps States ensure that children stay enrolled in the health coverage for which they are eligible and have consistent access to needed health-care services.

In addition to this flexibility, CMS is using every available tool to expand access to coverage and care. In January, supporting President Biden's 2021 Executive Order 14009⁴ on Strengthening Medicaid and the Affordable Care Act, CMS committed \$49.4 million to fund organizations that can connect more eligible children, parents, and pregnant individuals to health-care coverage through Medicaid and CHIP. Awardees—including State/local governments, tribal organizations, Federal health safety net organizations, non-profits, schools, and others—will receive up to \$1.5 million each for a 3-year period to reduce the number of uninsured children by advancing Medicaid and CHIP enrollment and retention. Funded organizations will provide enrollment and renewal assistance to children and their families, as well as pregnant people.

In November 2021, through its Medicaid and CHIP Coverage Learning Collaborative, CMS published an issue brief, *Connecting Kids to Coverage: State Outreach, Enrollment, and Retention Strategies*, highlighting effective and practical strategies that States, providers and health plans can use to ensure eligible individuals are able to enroll in and retain Medicaid and CHIP coverage, including adopting continuous eligibility for children.

In February 2022, CMS also issued a Request for Information (RFI)⁵ on access to care and coverage for people enrolled in Medicaid and CHIP. Feedback obtained from the RFI will aid in CMS's understanding of enrollees' barriers to enrolling in and maintaining coverage and accessing needed health-care services and support through Medicaid and CHIP. This information will help inform future policies, monitoring, and regulatory actions, helping ensure beneficiaries have equitable access to high-quality and appropriate care across all Medicaid and CHIP payment and delivery systems, including fee-for-service, managed care, and alternative payment models. The RFI submissions will also inform CMS's work to ensure timely access to critical services, such as behavioral health care and home and community-based services.

⁴ <https://www.govinfo.gov/content/pkg/FR-2021-02-02/pdf/2021-02252.pdf>.

⁵ https://cmsmedicaidaccessrfi.gov1.qualtrics.com/jfe/form/SV_6EYj9eLS9b74Npk.

I look forward to working with Congress and partners across the Federal Government to expand on this important work and connect eligible children, parents, and pregnant individuals to health-care coverage through Medicaid and CHIP.

SENATE FINANCE COMMITTEE MENTAL HEALTH INITIATIVE

Question. As part of the Senate Finance Committee (SFC)'s work on mental health, the committee has identified five focus areas for improving the mental health-care system. Two of these focus areas are: (1) strengthening the workforce, and (2) increasing integration. I have a couple questions specific to each focus area.

Our country is experiencing a shortage of mental and behavioral health providers. It is clear we need to do more to strengthen this essential health-care workforce.

What steps should the SFC working group/Congress take to strengthen and address the gaps in our behavioral health workforce pipeline?

Answer. The SFC working group/Congress may consider some of the Health Resources and Services Administration's (HRSA's) most successful programs for sustaining the workforce pipeline across various medical disciplines that are listed below. Many of them help health-care professionals continue their training and education or assist in placing providers in areas of greatest need by providing financial incentives through scholarship and loan repayment programs.

- The Nurse Corps SP offers scholarships to nursing students in exchange for an agreement to work in a Critical Shortage Facility (CSF) for at least 2 years upon graduation from an accredited school of nursing. CSFs are located in Health Professional Shortage Areas (HPSAs), which include rural communities and other identified geographic areas with populations that lack access to both primary care and behavioral health services.
- The National Health Service Corps (NHSC) SP provides financial support through scholarships, including tuition, other reasonable education expenses, and a monthly living stipend to health professions students committed to providing primary care in underserved communities of greatest need. Awards are targeted to individuals who demonstrate characteristics that are indicative of success in a career in primary care in underserved communities
- The NHSC Students to Service LRP provides loan repayment assistance of up to \$120,000 to students in their last year of allopathic or osteopathic medical, dental, physician assistant, or nursing school in return for a commitment to provide primary health care in rural and urban HPSAs of greatest need for 3 years. This program was established to increase the number of physicians and dentists in the NHSC pipeline.

HRSA has several other programs which work to place students into the primary and behavioral health pipeline, including the Area Health Education Centers (AHEC), the Centers of Excellence (COE) Program, and the Health Careers Opportunity Program (HCOP). All of these programs focus on developing a primary care and behavioral health workforce that is equipped to provide quality services to underserved and rural areas and enhancing cultural competency in the provision of services.

Question. Are there ways that Medicare and/or Medicaid can better support the training of mental health professionals—including, but not limited to—psychiatrists, clinical psychologists, nurses, licensed professional counselors, licensed marriage and family therapists, licensed counselors, social workers, and certified peer specialists, across settings of care, including community settings such as certified community behavioral health clinics, community health centers, and schools?

Answer. The training and retention of physicians and other health-care professionals is critical to ensuring access to health care in underserved communities that have historically experienced workforce challenges, including with delivering culturally competent care. In December, CMS issued a final rule that will enhance the health-care workforce and fund additional medical residency positions in hospitals serving rural and underserved communities, including areas with a shortage of mental health-care providers. The Fiscal Year (FY) 2022 Inpatient Prospective Payment System (IPPS) final rule with comment period establishes policies to distribute 1,000 new Medicare-funded physician residency slots to qualifying hospitals, phasing in 200 slots per year over 5 years. CMS estimates that funding for the additional residency slots, once fully phased in, will total approximately \$1.8 billion over the next 10 years. In implementing a section of the Consolidated Appropriations Act (CAA), 2021, this is the largest increase in Medicare-funded residency slots in over 25 years. In allocating these new residency slots, CMS will prioritize hospitals with

training programs in areas demonstrating the greatest need for providers, as determined by Health Professional Shortage Areas (HPSA). The first round of 200 residency slots will be announced by January 31, 2023 and will become effective July 1, 2023. In addition, under the HPSA Physician Bonus Program, CMS pays a 10-percent bonus to psychiatrists who deliver services to Medicare patients in the areas that have a geographic mental health HPSA designation.

In September 2019, CMS awarded \$50 million in planning grants to 15 States to increase the capacity of Medicaid providers to deliver substance use disorder (SUD) treatment or recovery services, including through recruitment, training, and technical assistance for such providers. In September 2021, CMS selected five States (of those that received planning grants) to participate in 36-month demonstrations that provide enhanced Federal reimbursement for increases in Medicaid expenditures for SUD treatment and recovery services.

Question. What impact does integrating primary and behavioral health care have on improving children's mental health and development?

Answer. Research has shown that the integration of mental health and primary care makes a difference for infants, children, and adolescents by expanding access to mental health care, improving health and functional outcomes, increased satisfaction with care, cost savings, and improved coordination among primary care clinicians and behavioral providers in clinics and school-based and community settings. Integration further destigmatizes help-seeking and creates the opportunity for whole-child, whole-family care. When treatment is delivered in the school setting, youth are far more likely to be identified early, and to initiate and complete care.

Co-location of services in schools reduces health-care disparities and ensures that all children, regardless of socioeconomic circumstances, have more equitable access to behavioral health care. When students are provided with mental health promotion education and accessible mental health interventions in schools, the result is positive steps toward remedying student inequities in both education and health care.

Additionally, the integration of primary care and behavioral health services allows for the provision of whole-patient care in a timely and accessible manner. A recent report from the Milbank Memorial Fund revealed:

Nearly one in seven children aged 2 to 8 years in the United States has a mental, behavioral, or developmental disorder. Among children and adolescents aged 9 to 17 years, as many as one in five may have a diagnosable psychiatric disorder. Yet no State in the country has an adequate supply of child psychiatrists, and 43 States are considered to have a severe shortage.⁶

For many, primary care is the first point of entry into the health-care system and children routinely access primary care for well child examinations, vaccinations and routine care. Therefore, primary care providers are well-situated to identify and address substance misuse among their patients. In this way, the integration of primary and behavioral health-care facilitates timely access to services that directly impact mental health and development. Primary care providers are skilled in the identification and triage of childhood mental health developmental issues. Integration of primary and behavioral health care allows for the rapid provision of comprehensive services that positively impact the child's development. Additionally, addressing behavioral health routinely within primary care settings is likely to reduce stigmatization of families with children who need these services.

Integrating behavioral health into primary care helps improve behavioral and physical health outcomes, as it increases access to care, reduces stigmatization, and allows patients to receive comprehensive care. The American Academy of Child and Adolescent Psychiatry (AACAP) drafted a policy on the importance of collaborating with pediatric medical professions. The data shows that approximately half of all pediatric primary care office visits involve behavioral, psychosocial, and/or educational concerns. In a joint paper, AACAP and The American Academy of Pediatrics (AAP) notes integrated behavioral health in pediatric primary care has the potential to reduce health disparities and improve service utilization. HRSA includes the integrated behavioral health into primary care model in several workforce development, service, and technical assistance programs.

⁶Tobin Tyler, Elizabeth, Hulkower, Rachel, and Kaminski, Jennifer. (2017). "Behavioral Health Integration in Pediatric Primary Care: Considerations and Opportunities for Policymakers, Planners, and Providers." Milbank Memorial Fund.

Additionally, this approach enables pediatric primary care providers to support early identification, diagnosis, treatment and referral for children and adolescents with behavioral health conditions. Providing services such as tele-consultation, training, technical assistance, and care coordination to pediatric primary care providers can help providers make behavioral health support a routine part of children's health-care services. For example, HRSA's Pediatric Mental Health Care Access (PMHCA) Program supports behavioral health integration in pediatric primary care through new or expanded State or regional pediatric mental health-care access telehealth programs. The PMHCA program addresses nationwide shortages of psychiatrists, developmental-behavioral pediatricians, and other behavioral health clinicians who can identify behavioral concerns in children and adolescents by enhancing the capacity of pediatric primary care in addressing the behavioral health needs of their patients.

Question. What steps should the SFC working group/Congress take to ensure more families have access to pediatric integrated primary and behavioral health care?

Answer. The SFC working group and Congress should consider mechanisms to increase training in behavioral health care among professional schools, medical schools and specialist/residency programs. This will expand the workforce, while also augmenting the training that medical specialists and primary care providers undertake in the provision of behavioral health care.

Additionally, traditional fee-for-service billing practices have created barriers to innovations in behavioral health integration by limiting or prohibiting reimbursement for behavioral health specialist consultation, care coordination, or physical and mental health services provided on the same day. Another obstacle to integration has been mental health carve-outs, in which an insurer or managed care organization contracts separately for behavioral and physical health services and will only pay for behavioral health services provided by a specified behavioral health organization.⁷

Although changes to fee-for-service payment structures could facilitate pediatric behavioral health integration, the most promising opportunities for behavioral health integration initiatives might occur through health-care system and payment reform. A striking example can be found in the Affordable Care Act's adoption of mental health and substance use disorder services, including behavioral health treatment, as an essential health benefit. This has reduced the stigmatization and isolation of behavioral health services. Also, Medicaid expansion in some States has helped drive behavioral health integration by increasing the funding available to Medicaid managed care programs and community health centers to broaden and better integrate services.⁸

We need to provide a full spectrum of primary care wellness including both physical and mental health care in schools. The Hopeful Futures Campaign⁹ produces report cards that provide data on the provision of mental health care in all 50 States and in the District of Columbia.

Ensuring that our rural and frontier communities have the trained and supported work force that they need to meet the needs of their children is critically important. We need to provide care, relief, and support to those already in the field and expand the pipeline of new providers through workforce development activities such as training grants, fellowship programs, scholarships, and loan forgiveness. Building a distributive workforce is key to ensuring that we provide the services and supports at all levels of the public health model.

It is also critical to promote and support programs that integrate behavioral health-care services into primary and preventative health care. COVID-19 has highlighted the critical need for expanded access to mental health services, particularly for children whose lives and educations were acutely impacted by COVID-19. One lever we can pull to affect change in this space is HRSA's Health Center Program. HRSA funds nearly 1,400 health center organizations that serve as the primary care medical home for nearly 8 million children nationwide, providing access to com-

⁷O'Donnell, A.N., Williams, M., and Kilbourne, A.M. "Overcoming roadblocks: Current and emerging reimbursement strategies for integrated mental health services in primary care." *J Gen Intern Med.* 2013;28(12):1667-1672.

⁸Searing, A., Hoadley, J. "Medicaid expansion: driving innovation in behavioral health integration." Health Affairs Blog. <http://healthaffairs.org/blog/2016/07/05/medicaid-expansion-driving-innovation-in-behavioral-health-integration/>. Published July 5, 2016.

⁹<https://hopefulfutures.us/>.

prehensive and preventive primary health care—including mental health services—critical to the overall health of America’s youth.

The following are examples of programs that have a direct focus on increasing integrated care in community-based settings: the Children’s Hospital Graduate Medical Education (CHGME) payment program, the Teaching Health Center Graduate Medical Education (THCGME) program, and the Preventive Medicine Residency (PMR) program.

The Children’s Hospitals Graduate Medical Education (CHGME) payment program provides funds to freestanding children’s teaching hospitals. This program supports the education and training of resident physicians and helps to increase access to quality care.

The Teaching Health Center Graduate Medical Education (THCGME) program supports the training of primary care physician and dental residents, increasing the overall number of these primary care providers.

The Preventive Medicine Residency (PMR) program provides support for residents in medical training in preventive medicine, including stipends for residents to defray the costs associated with living expenses, tuition, and fees.

Continued support from Congress to increase the reach of programs such as the Pediatric Mental Health Care Access (PMHCA) program and further expand resources such as the Bright Futures guidelines will help ensure more families have access to integrated pediatric primary and behavioral health care. The PMHCA program works to address the shortages of psychiatrists, developmental-behavioral pediatricians, and other behavioral health clinicians who can identify behavioral concerns in children and adolescents using telehealth technologies. HRSA’s Bright Futures program develops evidence-driven guidelines for preventive care screenings and routine primary care visits for newborns through adolescents up to age 21.

Question. How can we help to increase access to integrated care within community-based settings, including schools?

Answer. Addressing the mental health needs of students requires reaching them where they are most likely to gather and spend the majority of their time. Schools, community centers, and other venues offer important touchpoints for those who may need services, but often the availability of resources can be uneven. Enhancing mental health training for school health officials may be helpful. Additionally, implementing policies for more widespread Screening, Brief Intervention and Referral to Treatment (SBIRT) can be helpful in identifying those at risk for substance use disorders. Staff should also receive mental health training to identify those at risk so that they may mitigate adverse outcomes.

Additionally, we need to reframe mental health as wellness to acknowledge and invest in child wellness promotion strategies that recognize that wellness exists on a continuum and is impacted by factors both within and outside of the individual—underscoring the need for engagement by educators, family, and the greater community. Comprehensive school mental health systems that consist of partnerships between the education and behavioral health sectors that support a full continuum of mental health services, are needed to ensure that children receive the level of care that they need—from promotion, prevention, early identification, to treatment. Using a three-tiered model ensures that children receive the individualized and comprehensive help that they need. The first level is universal, providing education, mental health literacy, and suicide prevention to children (as age-appropriate) and trained school personnel to provide support. These services assist school personnel in recognizing those children who need additional help. The second level identifies children at risk and assesses, in conjunction with their families, if they need clinical assistance. The third level is referring children who need more intensive mental health treatment to accessible qualified providers in their community.

We can educate school and other child-serving leaders on the connection between mental health and academic, social, and economic success and ensure that school personnel are trained in mental health literacy and suicide prevention strategies so that we build the capacity of the broad child-serving workforce to identify needs and refer children to behavioral health care. Having school-based behavioral health professionals and adequate and accessible treatment resources in the community is key to ensuring that children receive the kind of supports and services that they need.

We need to ensure that we have robust school-community partnerships. We can incentivize schools to establish formal partnerships (such as memoranda of understanding) with community behavioral health providers to offer on-site school mental

health services and supports and to facilitate referrals, access, and coordination of community-based mental health services. As wellness partners with community-based providers, school-based staff have greater knowledge and confidence that students will receive high-quality and culturally competent care, making them more likely to refer to community-based programs. Co-location in schools makes it easier to connect caregivers with needed services and builds trust between providers and children and their families.

For example, HRSA continues to address the comprehensive health-care needs of communities across the Nation through the Health Center Program. These 1,400 health centers operate more than 14,000 service sites that serve nearly 29 million people nationwide, including one in three people living in poverty, one in five people living in rural communities, and one in eight children. These community-based and patient-directed organizations ensure access to affordable, high-quality, and cost-effective primary health care regardless of the patients' ability to pay.

HRSA funds more than 3,200 school-based health centers and section 330 school-based service sites in 52 States and territories. In 2020, despite the temporary closures of many schools due to COVID-19, such sites served more than 650,000 pediatric patients. Both kinds of service sites are access points for comprehensive primary health-care services that extend well beyond the band-aid or ice pack of the traditional school nurse. Across the country, HRSA is funding a full range of age-appropriate health-care services, typically including primary medical care, mental/behavioral health care, dental/oral health care, health education and promotion, substance abuse counseling, case management, and nutrition education. The specific services provided at a site vary based on community needs and resources; the services also consider collaborations between the community, the health center, and school districts.

HRSA, in collaboration with CDC, leads the National Coordinating Committee on School Health and Safety (NCCSHS), which supports student well-being and ensures that school facilities are healthy and safe environments.

In addition, HRSA's Collaborative Improvement and Innovation Network (CoIIN) on School-Based Health Services (SBHS) improves children and adolescents' access to high-quality, comprehensive health care by expanding use of evidence-based models of school-based health (SBH) services, including SBH centers and comprehensive school mental health systems (CSMHSs). The CoIIN-SBHS provides trauma-informed, behavioral health technical assistance to State partners (such as title V Maternal and Child Health programs, State Medicaid programs, child mental health agencies, education agencies, State-level non-profit organizations), school districts, CSMHSs, and SBH centers.

Furthermore, investments in programs that have a direct focus on integrated care can help increase access to care in community-based settings. Examples of HRSA programs in this area include the Children's Hospital Graduate Medical Education (CHGME) payment program, the Teaching Health Center Graduate Medical Education (THCGME) program, and the Preventive Medicine Residency (PMR) program.

QUESTION SUBMITTED BY HON. ROBERT P. CASEY, JR.

Question. Because Medicaid is the single largest health insurer for children in the U.S., improvements to the program can have a significant impact on children's mental health. It's important to align payment and delivery models with our aims of increasing children's access to mental health support. In the advisory, you mentioned the "Integrated Care for Kids" (InCK) model demonstration, which aims to reduce spending and improve care for children covered by Medicaid through prevention, early identification, and treatment of behavioral and physical health needs. I look forward to learning the effects of that model on mental health outcomes for children. But, today, that model is only in seven States.

How can we scale successful models of integrated care, and do you have any other recommendations for how Medicaid can better integrate physical and behavioral health for children?

Answer. The Biden-Harris administration is committed to partnering with States to improve and strengthen Medicaid and CHIP, including by encouraging States to increase efforts that integrate physical and behavioral health services for children. In addition to the Integrated Care for Kids (InCK) model, CMS administered the Medicaid Innovation Accelerator Program (IAP) from July 2014 through September

2020. The goal of IAP was to improve the health and health care of Medicaid beneficiaries and to reduce costs by supporting States' ongoing payment and delivery system reforms. Medicaid IAP supported Medicaid agencies with building capacity in key program and functional areas by offering targeted technical assistance, tool development, and cross-State learning opportunities. Among other efforts, the IAP provided nine State Medicaid agencies with technical support and resources to assist them in expanding or enhancing physical and mental health integration efforts in their States. Based on this work, CMS developed and released several tools and resources States can use to align State policies to support physical and mental health integration and promote provider capacity for physical and mental health integration.

The partnership between States and the Federal Government is central to Medicaid, and the Biden-Harris administration is committed to supporting State innovation and States' ability to test different models that meet the unique needs of their residents. I look forward to working with Congress and partners across the Federal Government to continue to expand efforts to integrate physical and mental health services.

QUESTIONS SUBMITTED BY HON. SHELDON WHITEHOUSE

Question. One of my constituents, Mara, living in Bristol, RI, shared with me that she nearly lost her 14-year-old daughter to anorexia. Her daughter was hospitalized for weeks at Hasbro Children's Hospital. Her doctors and parents believe that social media content contributed to her illness. Your advisory calls on the Federal Government to ensure safe online experiences for kids.

What do we know about social media's role in mental illness among children? What are possible guard rails that could prevent social media algorithms from feeding kids harmful content?

Answer. In recent years, there has been growing concern about the impact of digital technologies, particularly social media, on the mental health and well-being of children and young people. Since technology and social media involve such a vast range of devices, platforms, products, and activities, it's difficult to generalize. These platforms have too often exacerbated feelings of loneliness, futility, and low self-esteem for some youth. They have also contributed to a bombardment of messages by both traditional and social media that undermine this generation's sense of self-worth—messages that tell our kids with greater frequency and volume than ever before that they're not good looking enough, not popular enough, not smart enough, not rich enough. These platforms are often designed to be addictive. Using algorithms, they can manipulate what people see online in order to keep them addicted to "liking" and scrolling through nonstop ads and content. The problem with manipulative algorithms and addictive design is that they can not only direct harmful and extreme content to those uniquely vulnerable such as children, adolescents, and teens, but that they also can adversely affect young people's habits of sleep and social interaction, for example, and paradoxically lead to more social isolation and mental health challenges.

We need far more transparency from technology companies on their data and algorithmic processes to better understand the effects of social media on youth mental health. As a doctor, I can't diagnose a problem if I can't talk to my patient and understand what their lab tests and X-rays show. Data helps us understand what's really going on. With social media, companies aren't providing the data that would let us understand the real impact their products are having on our children and on all of us. Companies know an enormous amount about their users and their platforms and aren't sharing much of that information with the public or with researchers. In fact, right now the technology platforms know a lot more about us than we know about them. To get a clearer picture of what specific guardrails are needed, companies have to provide researchers with useful data to inform their research, with user consent. At a minimum, if technology companies are going to continue to conduct a massive, national experiment on our kids, then public health experts and the public at large must be the ones to analyze the data, to draw the conclusions and draft the recommendations—not the companies alone. President Biden has called for a range of measures to address the impact of social media on young people, including investing in research, strengthening children's privacy online, and requiring companies to prioritize and ensure the health, safety and well-being of children and young people above profit and revenue in the design of their products and services.

Companies can choose to minimize negative impacts, including on children. One example of a measure taken to address the effects of social media, is that CDC has conducted research related to the impact of how suicide is reported in the media. For example, CDC has conducted research related to the impact of how suicide is reported in the media. Media's reporting of a suicide can have either positive or negative effects. For example, when a suicide death is sensationalized, there can be an increased risk of suicide contagion. On the other hand, when media outlets adhere to the standards on how to report a suicide, it raises the importance of suicide prevention, without an increased risk of additional suicide deaths. To promote responsible reporting of suicide by the media, CDC provides guidance to media around the safest ways to cover deaths from suicide.

Question. How can we effectively recruit and retain pediatric mental health professionals?

Answer. As the committee is aware, there is a shortage of pediatric mental health providers, particularly in rural and underserved areas who can offer culturally competent, evidence-based mental health care. HRSA has several workforce initiatives that are designed to help prepare, train and build pediatric mental health workforce capacity to help recruit and retain pediatric mental health professionals. Expanding existing HRSA workforce programs could help to recruit and retain pediatric mental health professionals.

In order to effectively recruit and retain pediatric mental and behavioral health professionals, HRSA recommends the following strategies:

- Recruiting and retaining providers to choose careers in rural and underserved areas, including training students in rural and underserved communities and enhancing access to culturally competent, evidence-based mental health care;
- Leveraging loan repayment and scholarship programs;
- Recruiting a workforce that reflects the communities HRSA serves;
- Training interprofessional and collaborative teams;
- Integrating behavioral health into primary care; and
- Establishing community-based partnerships and training to ensure participation in institutional programs.

For example, HRSA's Pediatric Mental Health Care Access (PMHCA) program promotes behavioral health integration in pediatric primary care by providing teleconsultation, training, technical assistance, and care coordination to enable pediatric primary care providers to provide early identification, diagnosis, treatment and referral for children and adolescents with behavioral health conditions. HRSA's Developmental-Behavioral Pediatrics (DBP) training program trains leaders in developmental-behavioral pediatrics and builds capacity to address the broad range of child and adolescent behavioral, psychosocial and developmental issues. Additionally, HRSA's Leadership Education in Adolescent Health Program prepares health professionals in adolescent and young adult health by building workforce capacity to address the unique health needs of adolescent and young adults, including mental health. If expanded, programs could help to fill the gap in the shortage of pediatric mental health providers.

HRSA's Behavioral Health Workforce Development (BHWD) programs, including the Behavioral Health Workforce and Education and Training (BHWET) program, work to develop and expand the behavioral health workforce serving populations across the lifespan, including in rural and medically underserved areas. The BHWD programs support a number of activities to expand the behavioral workforce as well as enhance the training of the pipeline and current workforce, including offering education and training to ensure professionals are ready to enter and remain in the workforce and providing financial support through loan repayment or scholarships to remove financial barriers to furthering education to enter the workforce.

Additionally, HRSA's Nurse Corps Loan Repayment Program (LRP) and Scholarship Program (SP) are critical to ensuring both children and adults have access to a high-quality, adequate behavioral health nursing care. The nurse corps programs address the current maldistribution of nurses and expand access to behavioral health services by increasing funding for scholarships and loan repayment assistance for behavioral health training and service for Nurse Practitioners (NPs) specializing in psychiatric mental health. Nurse corps members receive scholarship and loan repayment incentives in exchange for an agreement to work in Critical Shortage Facilities (CSFs), which are located in Health Professional Shortage Areas (HPSAs) around the Nation. The nurse corps LRP reserves up to 20 percent of an

nual funding for awarding psychiatric NPs, covering all age groups and settings, including children.

Finally, HRSA's National Health Service Corps (NHSC) programs offer both scholarship and loan repayment opportunities to clinicians, including pediatricians and psychiatrists, in exchange for an agreement to serve in a HPSA. The current NHSC field strength is over 20,000 clinicians, including over 600 pediatricians and over 240 psychiatrists.

Continued congressional support and investment in these strategies moving forward is critical for addressing the various challenges in access, supply, distribution, and quality associated with behavioral health workforce shortages.

Question. Since pediatricians and psychiatrists are among the lowest-compensated physician specialties, how can we encourage medical students to pursue these professions?

Answer. Noting that primary care providers, including pediatricians and psychiatrists, generally earn less than specialists, HRSA offers a number of scholarship and loan repayment programs to primary care providers who commit to serve in underserved areas throughout the country, through the National Health Service Corps (NHSC) programs. HRSA also makes awards through several graduate medical education programs that provide support for training for primary care providers, including pediatricians and psychiatrists.

The NHSC programs offer both scholarship and loan repayment incentives to clinicians in exchange for an agreement to serve in a Health Professional Shortage Area. For example, the NHSC scholarship program provides financial support through scholarships, including tuition, other reasonable education expenses, and a monthly living stipend to health professions students committed to providing primary care in underserved communities of greatest need. Additionally, since FY 2018, funding has been appropriated to the NHSC for the express purpose of expanding and improving access to quality opioid and substance-use disorder treatment in rural and underserved areas nationwide.

The Children's Hospitals Graduate Medical Education (CHGME) payment program provides funds to freestanding children's teaching hospitals. This program supports the education and training of resident physicians and helps to increase access to quality care. These hospitals are regional and national referral centers for very sick children, often serving as the only source of care for many critical pediatric services.

The Teaching Health Center Graduate Medical Education (THCGME) program supports the training of primary care physician and dental residents, increasing the overall number of these primary care providers. THCGME payments support training in community-based ambulatory patient care centers, as opposed to inpatient care settings in hospitals. In addition to increasing the number of primary care residents training in these community-based patient care centers, the THCGME program meets the administration's priority of increasing health-care quality and expanding Americans' overall access to care.

Question. How can we ensure children receive mental health services in age-appropriate settings?

Answer. The key to ensuring that children receive mental health services in age-appropriate settings is to meet them where they are—create a no-wrong-door approach to accessing services by integrating mental health screening, robust referral pathways, and culturally competent and responsive and developmentally appropriate approaches into all settings in which children, youth, and their families spend the most time.

Examples of age-appropriate settings for children include:

- Pediatric and primary care settings.
- Centers of early learning and education.
- K–12 education settings.
- Community settings (such as churches, community centers, and recreational facilities).

To further meet the need for increased services in school settings, this past September HRSA awarded over \$5 million to 27 health centers to expand services at new or existing Health Center Program school-based service delivery sites. These health centers are using this funding to expand the provision of general primary medical care, behavioral health (mental health and substance use) services, oral

health, vision, and enabling services such as transportation, outreach, and translation and interpretation services at school-based service sites, both in-person and through telehealth. By funding health centers that offer these critical services on school grounds, HHS provides convenient access to high quality health care for underserved students, their families, and the larger community.

Schools and primary care settings are two age-appropriate systems with which nearly all children interface and where identification of mental health needs are most likely to occur.¹⁰ To ensure that children receive mental health services in these settings, HRSA promotes integration of behavioral health into primary care and schools to ensure early identification and intervention.

HRSA's Bright Futures program develops evidence-driven guidelines for preventive care screenings and routine primary care visits for newborns through adolescents up to age 21 and recommends routine behavioral/social/emotional screening, depression screening, and suicide risk screening during certain preventive checkups. Pediatricians play a unique role in mental health care as they typically see patients over time, giving them opportunity to develop trusting relationships with patients and their families. HRSA's Collaborative Improvement and Innovation Network (CoIIN) on School-Based Health Services (SBHS) improves children and adolescents' access to high-quality, comprehensive health care by expanding use of evidence-based models of school-based health (SBH) services, including SBH centers and comprehensive school mental health systems (CSMHSs). The CoIIN-SBHS provides trauma-informed, behavioral health technical assistance to State partners (such as title V Maternal and Child Health programs, State Medicaid programs, child mental health agencies, education agencies, State-level non-profit organizations), school districts, CSMHSs, and SBH centers. The program helps States promote the quality, sustainability and growth of SBHs, which increase students' access to behavioral health care and address adverse effects of social determinants of health on students and their families.

Question. Can you speak to the connection between justice involvement and mental health?

Answer. Data indicate that a significant number of individuals who come in contact with law enforcement and the criminal justice system have a mental disorder. According to a survey of prison inmates, about 43 percent of State and 23 percent of Federal prisoners have a history of a mental health problem.¹¹ Approximately 250,000 individuals with serious mental illness (SMI) are incarcerated at any given time—about half arrested for non-violent offenses, such as trespassing or disorderly conduct. In addition, during street encounters, police officers are almost twice as likely to arrest someone who appears to have a mental illness as those who do not. A Chicago study of thousands of police encounters found that 47 percent of people with a mental illness were arrested, while only 28 percent of individuals without a mental illness were arrested for the same behavior.¹² The costs associated with incarceration are high: State corrections budgets alone account for \$39.0 billion in taxpayer costs.^{13, 14} There is a clear and largely unmet need for effective behavioral health services and supports that are accessible before, during, and after incarceration and continue in the community as needed for this high-need, population. Identifying and addressing these needs enhances individual and community public health and public safety outcomes.

Question. How can schools recognize and support the mental health needs of children, especially as kids recover from the effects of COVID-19 on their families and communities?

Answer. Schools have the infrastructure to provide critical support to youth and families, including opportunities to engage in academic, social, mental health, and

¹⁰ Jensen, P.S., E. Goldman, et al. (2011). "Overlooked and Underserved: Action signs for identifying children with unmet mental health needs." *Pediatrics* 128(5): 970-979.

¹¹ U.S. Department of Justice, Office of Justice Programs. (2006). "Mental health problems of prison and jail inmates." Retrieved, March 25, 2011, from <https://bjs.ojp.gov/content/pub/pdf/mhppji.pdf>.

¹² "The Role of Mental Health Courts in System Reform." (2003). The Bazelon Center for Mental Health Law. <http://heinonline.org/HOL/LandingPage?handle=hein.journals/udclr7&div=10&id=&page=>

¹³ Pew Center on the States. (2011). "State of recidivism: The revolving door of America's prisons." Washington, DC: The Pew Charitable Trusts. <http://www.pewtrusts.org/en/research-and-analysis/reports/0001/01/01/state-of-recidivism>.

¹⁴ Henrichson, C., and Delaney, R. (2012). "The price of prisons: What incarceration costs taxpayers." New York: Vera Institute of Justice.

physical health services, and mental health promotion activities, all of which can mediate stress and lessen negative outcomes. Many students and school staff have been adversely impacted by the pandemic. While mental health services are necessary, they alone are not sufficient to promote mental health and well-being. School connectedness is an important approach to promoting mental health. Connectedness can impact many students simultaneously, promoting positive student mental health outcomes and buffering the impact of traumatic experiences. We can build school connectedness through classroom-specific and school-wide programs as well through improved classroom policies, management and disciplinary strategies, and activities within the broader community environment to promote parent and family involvement. Examples include providing adequate seat time for school meals to foster peer connection and increasing opportunities for physical activity in the classroom.

CDC's Whole School, Whole Community, Whole Child (WSCC) model is a comprehensive, student-centered, school health approach that is comprised of the following 10 components: (1) physical education and physical activity; (2) nutrition environment and services; (3) health education; (4) health services; (5) counseling, psychological, and social services; (6) employee wellness; (7) social and emotional school climate; (8) physical environment; (9) family engagement; and (10) community involvement. These components address barriers to learning through a coordinated framework that centers on the whole child.

The CDC "What Works in Schools" approach to primary prevention in local school districts improves health education, connects youth to the services they need, and creates safer and more supportive school environments. This approach has demonstrated positive impacts on substance use, sexual risk, experience of violence, and mental health among students in schools that implement the approach.

Schools can recognize and support the mental health needs of children by employing aspects of the public health model. The first tier of the model is universal efforts that apply to all children within the school climate. The second would be identifying children at particular risk. The third would be referring children in need of mental health treatment to qualified providers.

Some children have additional needs (such as death of a caregiver, or loss of parental employment, etc.) that require additional attention. It is important to support educators' efficacy in identifying the mental health needs of their students by providing ongoing opportunities and incentives for training in mental health literacy and referral strategies. Providing Youth Mental Health First Aid has been a successful strategy for SAMHSA Project AWARE grants. Our educators play an important role in the health and well-being of all of our children. They are critical in fostering a supportive classroom climate, supporting all children at risk for serious emotional disturbances and need good working knowledge of how to get kids into treatment. Finally, it is important to ensure that children who need intensive specialty mental health services quickly gain access to services with providers specialized to provide care.

Schools can play a key role in supporting healthy social and emotional development of children and their families by providing a comprehensive system of supports for children where they learn and play. The school environment offers access to children and youth recovering from the effects of COVID-19 where school personnel can provide consistent support and stability, identify concerns early, and offer additional services when needed.

HRSA administers various school-based initiatives that optimize the role schools play in children's mental health and well-being. The HRSA-funded School-Based Health Alliance maintains and updates resources for the field and the public to learn about school-based health. HRSA's Collaborative Improvement and Innovation Network (CoIIN) on School-Based Health Services (SBHS) increases students' access to behavioral health care by promoting evidence-based models of school-based health services, including Comprehensive School Mental Health Systems (CSMHS). Core features of a CSMHS are training educators, family-school-community collaboration and teaming, resource mapping, multi-tiered system of support, mental health screening, evidence-based practice, data, and funding. Current funding supports the provision of technical assistance to interested local education authorities. Expanding support for CSMHS and other evidence-based models of school-based health services, including implementation support and technical assistance such as that provided by HRSA's SBHS-CoIIN could help promote mental health needs of children in school, including early identification, intervention, and treatment.

HRSA, in collaboration with CDC, leads the National Coordinating Committee on School Health and Safety (NCCSHS). NCCSHS was formed in 1994 by the Secretaries of Education and Health and Human Services and has grown to include several Federal departments and nearly 100 non-governmental organizations (NGOs) that work to improve the health of children and their ability to achieve in school. With increased support, NCCSHS could provide additional resources and coordination of communication strategies to State education authorities regarding their ability to address the mental health needs of their students. NCCSHS members coordinate communication and support implementation at the State/local levels of school-based approaches that protect student's mental health and well-being. This is done through expanding comprehensive, trauma-informed mental health services in schools and the Whole Child and Whole Community Model. Additional investment would expand the reach of the NCCSHS, leveraging the strength of this existing, long serving public/private collaboration.

QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO

Question. How specifically are you making sure the information and recommendations contained in the advisory get to schools? How are you helping to make sure they can put these recommendations into action?

Answer. Our office is actively working with a range of stakeholders to disseminate the advisory. For example, we are working across HHS and the Federal Government to develop and publicize the advisory, including with Federal grantees. Recently, Education Secretary Cardona and I answered questions submitted from people across the country about the importance of vaccinations, kid and school safety, vaccine mandates, misinformation, and youth mental health. In addition, we are engaging with students, educators, and school leaders across the country on a regular basis to share the recommendations in the advisory and help them address youth mental health challenges in local communities. Other stakeholders we have engaged with include the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, members of the entertainment industry, and philanthropists and foundations. We have also participated in events with Nick News, Time for Kids, and Teen Vogue Twitter Spaces to target younger audiences. We would be happy to discuss further opportunities to support schools in implementing the recommendations in the advisory.

CDC works closely with the Department of Education to communicate recommendations with schools by email, by website updates, on calls, and through webinars. CDC also directly funds State education agencies to implement school health programs, and support local school districts and communities. Information about the recommendations contained in the Advisory have been disseminated through these education agencies. Additionally, local health departments are providing support to schools as needed and over 500 school health staff, including mental health services staff, have been hired through the CDC Foundation's School Support Initiative.

CDC's Healthy Schools program has funded partnerships with national non-governmental organizations that provide professional development and technical assistance in support of creating healthy and supportive environments for students and staff. CDC's extensive partner-stakeholder list can support the advisory by distributing the recommendations through their networks. Finally, through the CARES Act, CDC provided supplemental funding to school districts and non-governmental organizations to conduct activities in schools which would help mitigate adverse impacts of the COVID-19 pandemic on student mental health while enhancing mental health support and linkages to services for students. CARES Act funding was also provided to the National Parent Teacher Association to strengthen the engagement and information sharing with schools and communities, and to increase the availability of resources focused on the mental health of students and their families during the COVID-19 pandemic. CDC disseminated the Advisory to funded local educational agencies and non-governmental partners working with schools. Additionally, agencies and partners are conducting webinars in partnership with the Department of Education as part of their Lessons from the Field series that highlights the strategies contained in the Surgeon General's Youth Mental Health Advisory. Finally, CDC expanded the Youth Risk Behavior Surveillance System and launched the Adolescent Behaviors and Experiences Survey to be able to track and monitor youth mental health more effectively.

Question. Some of these recommendations may require some pressure—on stakeholders like social media companies, for example—who may not be quick to imple-

ment your recommendation to consider kids' mental health over profits. What do you envision as next steps to hold these folks to account for keeping the kids healthy?

Answer. We need more transparency from technology companies on their data and algorithmic processes to better understand the effects of social media on youth mental health. As a doctor, I can't diagnose a problem if I can't talk to my patient and understand what their lab tests and X-rays show. Data helps us understand what's really going on. With social media, companies aren't providing the data that would let us understand the full impact their products are having on our children and on all of us. In fact, right now the technology platforms know a lot more about us than we know about them. We have to give people—especially the parents and caregivers of children who use these platforms—the ability to make informed choices about their use of technology. If technology companies are going to conduct a massive, national experiment on our children, then we have to make sure that public health experts and the public at large have at least an equal opportunity to analyze the data, draw conclusions, and respond. We cannot just rely on the companies alone; they simply do not have the right incentives to optimize for mental health over maximizing users' attention and their own profits.

Companies can choose to prevent and minimize negative impacts, including on children. For example, CDC has conducted research related to the impact of how suicide is reported in the media. When a suicide death is sensationalized, there can be an increased risk of suicide contagion. On the other hand, when media outlets adhere to the standards on how to report a suicide, it raises the importance of suicide prevention, without an increased risk of additional suicide deaths. To promote responsible reporting of suicide by the media, CDC provides guidance to media around the safest ways to cover deaths from suicide.

President Biden has called for a range of measures to address the impact of social media on young people, including investing in research, strengthening children's privacy and protections online, and requiring companies to prioritize and ensure the health, safety and well-being of children and young people above profit and revenue in the design of their products and services. The Department of Health and Human Services is also launching a national Center of Excellence on Social Media and Mental Wellness, which will develop and disseminate information, guidance, and training on the full impact of adolescent social media use, especially the risks these services pose to their mental health.

Question. How can we empower parents and even kids themselves to understand the distinction between healthier behaviors like FaceTiming relatives versus consuming stressful content, and make informed choices about the content they're consuming?

Answer. The Surgeon General's Advisory on Protecting Youth Mental Health includes several recommendations for young people and their families around engaging with technology and social media.

Young people should be intentional about use of social media, video games, and other technologies. Here are some questions that can help guide one's technology use: How much time are you spending online? Is it taking away from healthy offline activities, like exercising, seeing friends, reading, and sleeping? What content are you consuming, and how does it make you feel? Are you online because you want to be, or because you feel like you have to be?

Although it's not realistic or fair to put the burden on parents or caregivers to control or supervise everything their children are seeing or doing online, there are ways they can support children and youth in having healthier online experiences. Having open conversations with one's children is a great place to start. On page 18 of the advisory, I provide a list of questions parents and families can consider when it comes to their child's use of technology. And technology companies should make it as easy as possible in their products for kids and their caregiving to protect their privacy, prevent addictive use, and avoid harmful content.

Question. Are there examples of Federal programs serving kids and young people that should have some sort of youth advisory panel but don't currently?

Answer. Elevating the voices of children, young people, and their families should be critical components of any program that serves them. Youth advisory panels or similar structures offer programs, and those working in those programs, an important way to solicit youth insights or feedback on program design, implementation, and evaluation. They can also help define outcomes that are relevant to young peo-

ples' needs; deepen existing youth engagement strategies and understanding on what is and isn't working; and provide young people the opportunity to directly support program processes. I would be happy to further discuss opportunities for the Federal Government to better engage with youth.

Question. Can you speak to the impact of the investments Congress has made over the course of the pandemic and what the landscape may have looked like if we hadn't sought to mitigate mental health challenges?

Answer. Congress has made major investments over the course of the pandemic to mitigate the effects of COVID-19, support the health of youth and families, and promote economic recovery. One of the most significant investments was the American Rescue Plan Act (ARP), which provided critical support and immediate economic relief to children and families. Many provisions included in the ARP helped address the myriad of challenges facing children and families, including the 1-year expansion of the Child Tax Credit; direct cash payments for individuals and their dependents; childcare funding; the expansion of nutrition assistance; funding to ensure schools and higher education institutions can operate safely and support students; and supports to help families avoid housing insecurity, homelessness, or foreclosure.

Other significant investments include the Extending Government Funding and Delivering Emergency Assistance Act and the Families First Coronavirus Response Act, among many others. As a result of Congress and the administration working together, young people and their families have benefited in a number of ways, including avoiding the negative health consequences of COVID-19, receiving food assistance and unemployment benefits, accessing care via telehealth, and receiving additional mental health services and supports through their schools. These and other investments have supported the mental health of young people and families.

Question. The burden of COVID-19 has disproportionately impacted Latino and other children of color. Over the course of the pandemic, children of color were more likely to have experienced the death of a primary caregiver, and more likely to have been infected by COVID themselves. This is on top of the already disproportionate health disparity faced by children of color.

What specific policies are necessary to help advance mental health equity and begin to close some of the racial disparities that preceded or have been exacerbated by COVID-19 on this issue?

Answer. Addressing the disproportionate mental health disparities faced by Latino and other children of color and advancing mental health equity requires a multifaceted approach, including policy actions to mitigate key barriers. In broad terms, barriers to mental health equity are related to the workforce, access to care, including culturally competent care, data disaggregation, education, and stigmatization and discrimination. Recent presidential actions support policy efforts to advance equity—for example, Executive Order 13985 “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government” calls for the Federal Government to pursue a comprehensive approach to address barriers to opportunities and benefits for underserved groups, and Executive Order 13995 “Ensuring an Equitable Pandemic Response and Recovery” directs the Federal Government to prevent and remedy differences in COVID-19 care and outcomes within communities of color and other underserved populations.

Additionally, there are a number of policies that can advance mental health equity and address racial disparities, including:

- Developing increased capacity for behavioral health services in under-resourced communities where racial and ethnic groups facing health disparities are overrepresented.
- Addressing social determinants of health and mental health (*e.g.*, housing, nutrition, exposure to trauma) that have disproportionate negative impact on racial and ethnic groups facing health disparities.
- Building a mental health workforce that includes more representation from racial and ethnic groups facing health disparities, including focused recruitment, training, and professional development efforts.
- Training for the general mental health workforce in the importance of recognizing and responding to the cultures of people being served and how to approach services with cultural humility.
- Using data to identify disparities in access across programs and then engaging in tailored and intentional efforts to provide outreach to racial and ethnic groups facing health disparities.

- Using data to identify disparities in outcomes among racial and ethnic groups and then engaging in quality improvement efforts to address these disparities. Adaptation of programs and models, including evidence-based practices, to address the needs of specific racial and ethnic groups facing health disparities and supporting uptake of these tailored approaches.

Workforce:

Promoting mental health equity requires a diverse workforce in clinical, community, and school settings that can address the specific cultural and linguistic needs of all youth. Currently, the mental health profession is facing workforce shortages, due in part to challenges in recruitment and retention among those who are bilingual and/or bicultural. Policies that can address these workforce challenges include establishing/enhancing scholarships and loan repayment programs for diverse students pursuing mental health careers; establishing/enhancing mental health career pathway programs; financing and sustaining a peer workforce (such as community health workers, peer navigators, recovery support specialists); incentivizing practice in underserved communities; and building cultural and linguistic competency among mental health professionals. Through its Think Cultural Health¹⁵ website, the HHS Office of Minority Health (OMH) offers resources and online educational programs to help build capacity among health professionals to provide culturally and linguistically appropriate care, including a program designed specifically for behavioral health professionals.

Access to care:

There are a number of factors limiting the ability of children of color to access quality and affordable health care, including the lack of availability of culturally and linguistically appropriate services (CLAS) in their communities, as well as lack of health insurance coverage and mental health parity in health-care plans for children that are enrolled in coverage. Policies that can improve access to care could support and finance service models that address access barriers (e.g., co-location of primary and behavioral health services, school-based mental health services, family-centered interventions); enhance broadband infrastructure to allow access to telehealth services; expand interjurisdictional tele-psychological services across State lines to meet mental health needs of underserved communities; improve accountability of health plans to cover behavioral health services at parity with medical services; increase coverage for CLAS in health plans; and improve health insurance enrollment among families of color.

OMH has developed the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care¹⁶ (National CLAS Standards) to provide a blueprint for individuals and organizations to implement CLAS. Adherence to the National CLAS Standards can contribute to improving access to and the quality of care and thus help to improve health outcomes. OMH also includes a requirement for adoption of the National CLAS Standards in its Notices of Funding Opportunity, which aligns with legal and regulatory requirements (e.g., title VI of the Civil Rights Act of 1964) for federally funded entities to provide language assistance for individuals who are limited English proficient.

Data Disaggregation:

Data that are collected or aggregated in broad racial and ethnic categories often mask disparities and differences experienced among subgroups of children of color. Policies that support the collection and use of disaggregated data, using granular racial and ethnic categories, are critical to the ability to identify and effectively address mental health disparities and equitably allocate resources. Such policies align with Executive Orders 13994 and 13995, which calls on Federal agencies to strengthen equity data collection, reporting, and use related to COVID-19 and to assess pandemic response plans and policies to determine whether resources have been or will be allocated equitably.

OMH contributed to the development and promotion of guidelines¹⁷ for implementation of section 4302 of the Affordable Care Act, which included more granular racial and ethnic categories than are in the current OMB government-wide standard.

¹⁵ <https://thinkculturalhealth.hhs.gov/>.

¹⁶ <https://thinkculturalhealth.hhs.gov/clas/standards>.

¹⁷ <https://aspe.hhs.gov/reports/hhs-implementation-guidance-data-collection-standards-race-ethnicity-sex-primary-language-disability-0>.

Education, Stigmatization, and Discrimination:

Limited mental health literacy and discrimination or stigmatization related to mental health issues can prevent youth of color from seeking and receiving help when needed. Policies to increase awareness of mental health and reduce stigmatization can support culturally and linguistically appropriate educational campaigns; delivery of services in non-specialty settings (e.g., primary care, schools, community-based organizations); and engagement and utilization of the peer workforce and community leaders.

 QUESTIONS SUBMITTED BY HON. CHUCK GRASSLEY

Question. In 2019, I passed the bipartisan Advancing Care for Exceptional (ACE) Kids Act. Currently, CMS is working on implementation in coordination with State Medicaid programs for a start-date of October 1, 2022. ACE Kids Act establishes a pediatric health home for children with complex medical conditions providing a designated lead to coordinate care across a team of providers. CMS released guidance to State Medicaid directors in fall 2021 (hyperlink: <https://www.medicaid.gov/federal-policy-guidance/downloads/cib102021.pdf>). It aligns Medicaid rules and payment to incentivize care coordination, including mental health care, for kids with complex medical conditions. The Surgeon General's Advisory, Protecting Youth Mental Health, lists the type of children at higher risk of mental health challenges during the pandemic.

Are children with complex medical conditions part of the higher risk group? If so, please describe how critical it is for children with complex medical needs to have mental health support services as part of a coordinated pediatric medical home.

Answer. Complex medical conditions (CMCs), such as serious congenital heart defects, cerebral palsy, congenital anomalies, and genetic disorders, have many implications for the behavioral health of children and their families, putting them at risk of mental health challenges.^{18,19} Children with CMCs tend to have multiple chronic health conditions and frequently utilize health-care services. When children's behavioral health needs are not met or services are not coordinated with their other medical and social needs, they are at higher risk for poor health and other outcomes. Children and youth with CMCs may require care across multiple systems, including primary care, behavioral health care, schools, community-based organizations, and other social service programs. A coordinated medical home model can optimize services for children, especially if services are collocated, with behavioral health and other services. Using a coordinated, comprehensive, and family-centered network of services and supports that is organized to meet the needs of children and youth with complex medical needs, has been shown to improve outcomes for children and families, ensure continuity and improve quality of care.²⁰ Children with CMCs, especially those who require behavioral health treatment, often have to go outside of their insurance plans' provider networks for care. Almost one in five children with complex, chronic medical conditions such as cystic fibrosis, who also need behavioral health care, are seen by specialists who are out of network.²¹ Limited access to mental health services for children with CMCs, may compromise their chronic health conditions, negatively impact functioning and overall quality of life, or exacerbate their mental health problems. We must recognize that both mental and physical health are critical for children's well-being and optimal functioning and should be available concurrently in one medical home for children with CMCs.

Question. I asked a similar question during our hearing. I was not sure if you were familiar with my bipartisan work on the ACE Kids Act and Accelerating Kids' Access to Care Act (hyperlink: <https://www.grassley.senate.gov/news/news-releases/grassley-bennet-introduce-bipartisan-bicameral-bill-to-increase-health-care-ac>

¹⁸ Mueller, A.E., Georgiopoulos, A.M., Reno, K.L., Roach, C.M., Kvam, C.M., Quittner, A.L., Lomas, P., Smith, B.A., and Filigno, S.S. (2020). "Introduction to Cystic Fibrosis for Mental Health Care Coordinators and Providers: Collaborating to Promote Wellness." *Health and Social Work*, 45(3), 202–210. <https://doi.org/10.1093/hsw/hlaa009>.

¹⁹ Gonzalez, V.J., Kimbro, R.T., Cutitta, K.E., Shabosky, J.C., Bilal, M.F., Penny, D.J., and Lopez, K.N. (2021). "Mental Health Disorders in Children With Congenital Heart Disease." *Pediatrics*, 147(2), e20201693. <https://doi.org/10.1542/peds.2020-1693>.

²⁰ <https://uofuhealth.utah.edu/notes/postings/2022/images/stanford-case-study-neurobehavior-home-program.pdf>.

²¹ Xu, W.Y., Li, Y., Song, C., Bose-Brill, S., and Retchin, S.M. (2022). "Out-of-Network Care in Commercially Insured Pediatric Patients According to Medical Complexity." *Medical Care*, 60(5), 375–380. <https://doi.org/10.1097/MLR.0000000000001705>.

cess-for-children). You discussed the importance of telehealth in your response to my question. My bipartisan work on improving the lives of children with complex medical conditions requires in-person medical visits with specialty providers, sometimes out-of-State. Telehealth certainly is an important tool to improving care especially in a coordinated manner. While I agree with you on the importance of telehealth, as I am strong supporter of telehealth, I wanted to give you the opportunity to respond to my question in writing. I will restate my question. This Congress, I am working with Senator Bennet to pass the Accelerating Kids' Access to Care Act to streamline access to out-of-State providers for these same kids and their families. The Surgeon General advisory discusses the importance of improving access to high-quality health care as well as breaking down economic barriers. The Accelerating Kids' Access to Care Act builds onto ACE Kids Act by cutting red tape for providers and families.

Is access to an out-of-State provider a challenge for families who have children with complex medical needs? How does timeliness of care, or lack thereof, impact a child with complex medical condition's physical and mental health outcome?

Answer. The Biden-Harris administration is committed to making quality mental health services available to all Americans, including children with complex medical conditions. In October 2021, CMS issued guidance aimed at assisting State Medicaid programs as they develop protocols, procedures, and agreements that will help to ensure that children with medically complex conditions receive prompt, high-quality care from out-of-State providers when needed. The *Guidance on Coordinating Care Provided by Out-of-State Providers for Children With Medically Complex Conditions*²² provides a description of best practices and other implementation considerations related to coordination of care from out-of-State providers for children with medically complex conditions. CMS also released guidance to States on implementation of the Medicaid health homes option under the ACE Kids Act (which ultimately became section 1945A of the Social Security Act). Section 1945A(b)(1) of the Social Security Act requires that section 1945A health home providers demonstrate to the State their ability to coordinate prompt care for children with medically complex conditions.²³

Question. The Surgeon General's advisory, "Protecting Youth Mental Health," lists youth in rural areas as higher risk of mental health challenges individuals during the pandemic. The report provides specific resources, but it does not list any rural-focused organizations such as university extension and outreach offices, 4-H, or Future Farmers of America (FFA). These organizations all provide rural-focused mental health awareness and resources. I'm glad during the hearing you agreed we need more mental health resources for rural youth. You specifically cited the development of 988 and Crisis Text Line. I will restate my question, so you can elaborate on your answer.

What efforts should be taken to address unique rural mental health needs? Are there specific organizations you are working with to raise awareness and provide resources? Can you issue rural-focused resource guide?

Answer. It is important that rural residents have the ability to access mental health services. This ability will differ based on the geography and proximity to services for each community. Increasing access to mental health services, either in-person or virtually, is key to addressing unique rural mental health needs. Additionally, once access is established, linkages to services through a provider, health worker, or other resource are essential to making sure that residents know that these services exist.

To that end, HRSA's Federal Office of Rural Health Policy (FORHP) administers a number of rural community-based grant programs that can be leveraged to address rural mental health-care access and workforce needs. For example, FORHP anticipates awarding approximately \$13 million to benefit rural communities later this year under the Rural Communities Opioid Response Program-Behavioral Health Care Support, which aims to improve access to behavioral health care for individuals with substance use disorder and/or co-occurring mental disorders.

HRSA leads the Agricultural Mental Health Coalition, a joint effort between HRSA, USDA, and CDC, that focuses on developing and providing mental health resources for the agricultural community which tend to be in rural areas. HRSA also supports programs that aim to increase access to telehealth for mental health

²² <https://www.medicaid.gov/federal-policy-guidance/downloads/cib102021.pdf>.

²³ <https://www.medicaid.gov/federal-policy-guidance/downloads/smd22004.pdf>.

services in rural and underserved areas, and funds the Rural Health Information Hub (RHIhub), a national clearinghouse on rural health issues. RHIhub provides free access to many resources related to mental health, including funding opportunities, evidence-based and promising practice programs models, toolkits, webinars, and more. Currently, RHIHub maintains a “Mental Health in Rural Communities” toolkit on its website that provides guidance on how to develop, implement, sustain, and evaluate rural mental health programs (<https://www.ruralhealthinfo.org/toolkits/mental-health>). Additionally, over the past 25 years, FORHP has supported over 90 policy briefs, fact sheets, journal articles, and other publications pertaining to mental and behavioral health care in rural America through the Rural Health Research Centers Program. These products are available for reference on the Rural Health Research Gateway (<https://www.ruralhealthresearch.org/topics/mental-and-behavioral-health/publications>).

Question. I helped pass the bipartisan Farmers First Act in the 2018 farm bill and the bipartisan Seeding Rural Resilience Act in the 2020 NDAA. Both bills addressed suicide rates among farmers and the agriculture community. The Farmers First Act made grants available for helplines and support groups. The Seeding Rural Resilience Act created a voluntary stress management program that helps train U.S. Department of Agriculture (USDA) employees to detect stress. USDA is also required to be working with HHS, including the Surgeon General, to raise mental health public awareness among farmers and ranchers, this includes rural youth. You indicated in the hearing that you will work with the USDA to ensure this effort is developing as urgently as possible and report back to me.

I ask again in writing, can you work with your USDA colleagues to ensure this effort is developing as urgently as possible and report back to me? I request you report back timely on this request. It is important the USDA is coordinating across the interagency to appropriately implement the Seeding Rural Resilience Act.

Answer. During the Committees hearing, you requested I work with my colleagues at the U.S. Department of Agriculture (USDA) to ensure that the Seeding Rural Resilience Act is developing. We have reached out to colleagues within USDA and are eager to collaborate with them to support this goal.

Through our discussions, we learned that over 95 percent of the nearly 22,000 employees in USDA’s Farm Production and Conservation Mission Area have completed the training laid out in the Seeding Rural Resiliency Act. From our understanding, public facing employees of the Rural Development Mission Area may also be completing these trainings to better serve their rural customer base that do not have access to mental health services in the same way that people in more populated areas often do. However, the \$3 million authorized in the bill for a public service announcement campaign (PSA)—in consultation with the Department of Health and Human Services—to address the mental health of farmers and ranchers, to date, has not received an appropriation. As a result, it has not yet been implemented. We are continuing to explore opportunities for collaboration with USDA and hope to share more in the coming months.

While this PSA has not been implemented, I have been encouraged by other initiatives and recent investments to address and support mental health in rural America such as the availability of \$13 million in funding to increase access to behavioral health-care services through the Health Resources and Services Administration’s (HRSA) Rural Communities Opioid Response Program—Behavioral Health Care Support;²⁴ nearly \$48 million to expand public health capacity in rural and tribal communities under HRSA’s Rural Public Health Workforce Training Network;²⁵ and the Centers for Medicare and Medicaid Services’ Rural Health Strategy²⁶ which outlines a goal to advance telemedicine and telehealth which is critical

²⁴ U.S. Department of Health and Human Services. HHS Announces Availability of \$13 Million to Increase Behavioral Health Care Access in Rural Communities. Accessed on April 1, 2022. Retrieved from <https://www.hhs.gov/about/news/2022/01/18/hhs-announces-availability-13-million-increase-behavioral-health-care-access-rural-communities.html>.

²⁵ U.S. Department of Health and Human Services. HHS Announces Availability of Nearly \$48 Million to Increase the Public Health Workforce in Rural and Tribal Communities. Accessed on April 1, 2022. Retrieved from <https://www.hhs.gov/about/news/2021/12/23/hhs-announces-availability-nearly-48-million-to-increase-public-health-workforce-rural-tribal-communities.html>.

²⁶ U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services (2018). CMS Rural Health Strategy. Retrieved from <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Rural-Strategy-2018.pdf>.

to improve access to care and help meet the needs of rural areas that lack sufficient mental health-care services.

I hope that all of us—civic leaders, researchers, members of the health-care community, families, and concerned Americans alike—can work together to protect the mental health of our Nation’s youth. I remain confident that through our collective efforts, we can address this youth mental health crisis and support the health of our children, adolescents, and young adults and their families.

Question. In December 2021, *The Wall Street Journal*, documented (hyperlink: <https://www.wsj.com/articles/fentanyl-invades-more-illicit-pills-with-deadly-consequences-11639650605?mod=e2tw>) a growing trend among youth obtaining counterfeit illicit pills believing they are prescription pills (e.g., benzodiazepines) to treat anxiety. The Drug Enforcement Administration (DEA) reported the United States seized 20 million fake pills in 2021. Much of these counterfeit illicit pills turn out to contain fentanyl resulting in accidental overdose deaths, especially among youth. Young people are increasingly obtaining these fake pills through social media platforms like SnapChat and TikTok. According to the CDC, these pill-related overdose deaths are growing increasingly common. In September 2021, DEA issued (hyperlink: <https://www.dea.gov/press-releases/2021/09/27/dea-issues-public-safety-alert>) a public safety alert on the sharp increase in fake prescription pills containing fentanyl and meth. At the same time, a recent study published (hyperlink: <https://www.nih.gov/news-events/news-releases/suicides-drug-overdose-increased-among-young-people-elderly-people-black-women-despite-overall-downward-trend>) in the *American Journal of Psychiatry* and the National Institutes of Health found suicides by drug overdose increased among young people from 2015 to 2019 despite an overall downward trend. In young men, suicides by drug overdose increased by 33 percent and among young women by 66 percent. Whether a young person is dying by suicide or accidental drug overdose, we have a deeply concerning trend driven by mental health challenges.

Question. Do you agree with the DEA that counterfeit illicit pills are a public safety issue? What efforts should be taken by the Federal Government to review e-commerce and social media platform use by drug trafficking organizations in the sale and distribution of counterfeit pills laced with illicit substances, particularly as youth use of social media increases? Should we bring together public- and private-sector leaders to address the alarming trend of youth obtaining counterfeit illicit pills through social media platforms, and resulting in accidental overdose deaths and suicides by drug overdose?

Answer. Counterfeit pills represent an area of particular risk that is difficult to quantify but needs attention. The increase in counterfeit pills containing fentanyl products represents significant overdose risk for individuals who are opioid naive (not yet tolerant). Synthetic opioids, including illicitly manufactured fentanyls (IMFs), were involved in 64 percent of >100,000 estimated U.S. drug overdose deaths during May 2020–April 2021, and the continued proliferation of counterfeit pills is enabling IMF spread into communities across the U.S.²⁷ Almost half of individuals who illicitly use opioids gets them from a friend or family member. In addition to Federal law enforcement’s investigative and enforcement resources, in terms of public health, the Federal Government should support an education campaign that focuses on illicit pills. For example, CDC recently launched four complementary education campaigns intended to reach young adults ages 18–34 years. The campaigns provide information about the prevalence and dangers of fentanyl, the risks and consequences of mixing drugs, the life-saving power of naloxone, and the importance of reducing stigmatization around drug use to support treatment and recovery.

QUESTIONS SUBMITTED BY HON. JOHN CORNYN

MARIJUANA

Question. Your advisory recommends avoidance of substances like alcohol, marijuana, and tobacco among steps youth can take to protect and improve their mental health. Is that correct?

Answer. Young people should take care of body and mind, which includes sticking to a schedule, eating well, staying physically active, getting quality sleep, staying

²⁷ <https://www.cdc.gov/mmwr/volumes/70/wr/mm7050e3.htm>.

hydrated, and spending time outside. This also includes avoiding substances that are addictive and can ultimately make one feel tired, down, or depressed, such as alcohol, marijuana, vaping, and tobacco.

Question. Your predecessor, Dr. Adams, in his advisory on marijuana use noted that, “The risks of physical dependence, addiction, and other negative consequences increase with exposure to high concentrations of THC and the younger the age of initiation. Higher doses of THC are more likely to produce anxiety, agitation, paranoia, and psychosis.”²⁸ Do you agree with that assessment?

Answer. Even though more research is needed, we do know that marijuana use may have a wide range of effects on the brain and the body, including the effects mentioned in the Surgeon General’s Advisory on Marijuana Use and the Developing Brain. We also know that individuals who start using substances during adolescence often experience more chronic and intensive use, and they are at greater risk of developing a substance use disorder compared with those who begin use at an older age. In other words, the earlier the exposure, the greater the risk.

Question. Given these recommendations, it is striking that as a candidate, President Biden supported decriminalization and descheduling of marijuana.

How do you reconcile the President’s position on increasing access to marijuana given the advisories from the Dr. Adams and yourself?

Answer. When it comes to decriminalization, I don’t believe there is value to individuals or society to incarcerate people for non-violent drug use alone. Instead, we should prioritize getting people access to evidence-based treatment and support. In addition, the President has never supported—and no jurisdiction that legalizes marijuana allows—recreational use of marijuana by youth. Rather, in terms of our approach to marijuana, we have to let science guide us. The National Academies of Medicine report on marijuana, published in 2017, offers a rigorous review of scientific research about what is known about the health impacts of both the medical and recreational use of marijuana, ranging from its therapeutic effects to its risks. The Centers for Disease Control and Prevention (CDC) has a website that describes what we know and don’t know about marijuana, and the National Center for Complementary and Integrative Health (NCCIH) at the National Institutes of Health (NIH) has a website on the harms and potential benefits of cannabis and cannabinoids. As surgeon general my role is to provide the American people with the best, science-based information to help them make informed health decisions and work with policymakers to help people understand what science tells us and, where there are gaps, to help fill those gaps with research and honest inquiry.

Given the changing perceptions of risk associated with cannabis use and the continually evolving nature of policies legalizing and decriminalizing medical and non-medical adult cannabis use at the State level, research and evaluation studies are warranted to improve our understanding of outcomes associated with cannabis use among youth. For example, CDC has developed both a Cannabis Strategic Plan and Research Agenda, with particular focus on populations at increased risk for negative outcomes, including youth. The Strategy describes actions that will foster a public health approach, improve messaging, and secure dedicated resources to address the health risks of cannabis. One of the six pillars in the Strategy is focused around partnering with public safety, schools, and community coalitions to offer opportunities for community-based coalitions to learn about evidence-based substance use prevention strategies addressing youth cannabis use.

SOCIAL MEDIA

Question. CDC noted in a *Morbidity and Mortality Weekly Report*²⁹ that from March 2020 to March 2021, emergency department visits related to a suspected attempted suicide were nearly 51 percent higher among girls aged 12–17 years than during the same period in the preceding year.

Among boys of the same age range and during that time frame, suspected suicide emergency department visits increased 3.7 percent. Any increase in suicidal ideation or suicide attempts is tragic and we must understand as to why those rates increased. And as the father of two daughters, I am truly saddened to see this large increase in suicide attempts by young women. And we must help.

²⁸ <https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html>.

²⁹ <https://www.cdc.gov/mmwr/volumes/70/wr/mm7024e1.htm>.

With school closures, increased isolation and anxiety, a lack of focus on enhancing emotional well-being in schools due to limited infrastructure, resources, and other factors like certain social media use influencing young people, it is clear to see why some individuals feel despair and hopelessness.

I agree with your advisory that we need to better understand how social media use can negatively impact mental health, especially that of our youth. It has been noted that specific actions and interactions with users and accounts can illicit negative body-image issues, severe sadness and bouts of depression, and otherwise severely impact a person's mental health.

What are specific functions on social media you believe lawmakers should look at getting a clearer picture of and their effects on mental health?

Answer. To get a clearer picture of social media's effects on mental health, I believe technology companies should provide public interest researchers and the public with information they request and share data in ways that protect user privacy and ensure user consent. This would help us understand questions like:

- Which groups of users are being negatively affected in terms of their mental health? Are there subsets of people who seem to be more susceptible to the negative mental health effects of social media than others, and why?
- What characteristics of social media use affect users' mental health (e.g., length of use, type of use, type of content, device)?
- How often are young people exposed to harmful content, such as content that may increase risk of eating disorders, anxiety, isolation, etc.? How much of this is due to algorithms serving content to users or users seeking out this content on their own?

I have concerns about how social media and other technology and gaming platforms deliberately work to produce addictive user and about how their algorithms can direct young folks to harmful content and deliver harmful content to young people, e.g., self-harm content and eating disorders.

Question. How do you intend to work with social media companies to either curb harmful content or advise parents about harmful social media behaviors?

Answer. Over the last year I have been clear about the essential role technology companies must play in helping us understand harms caused by platforms and how they should act to address those harms upstream. Most recently, I have been in touch with technology companies about a Request for Information³⁰ on the impact of health misinformation during the pandemic. I look forward to partnering with Congress and other stakeholders to find ways to increase transparency and reduce the impact of harmful content and social media behaviors. In addition, our office is regularly meeting with local community organizations, including groups of parents and caregivers, to identify opportunities to support children in engaging online in age-appropriate ways. As new information becomes available, I plan to continue providing the public with accurate scientific information to help them make informed decisions and to policymakers to ensure they can act appropriately.

BIG ACT

Question. Last week our colleagues in the Senate HELP Committee held a similar hearing on youth mental health. One exchange I found particularly compelling was between Chairwoman Murray and Dr. Mitch Prinstein of the American Psychological Association.

Dr. Prinstein's response to Chairwoman Murray's question about best practices for identifying trauma gets to the heart of the issue: how and where we deliver care. As part of his response, Dr. Prinstein said, "We need the opportunity to be able to teach what we know to all those teachers, counselors, and administrators so we can help them to identify kids before they reach a moment of trauma."

Based on your advisory, I take it you agree with Dr. Prinstein's response. In particular, on page 19 of your advisory you recommend that educators should learn to recognize signs of change in mental and physical health among students, including trauma and behavior changes and to take appropriate action when necessary.

I introduced the Behavioral Intervention Guidelines Act or BIG Act to address this exact problem. We must equip our educators with basic tools of recognizing youth who may be experiencing a mental health issue and help them get the care

³⁰ <https://www.hhs.gov/surgeongeneral/health-misinformation-rfi/index.html>.

they need. These guidelines would provide best practices for schools to create and implement behavioral intervention teams, which help identify students who are at-risk and exhibiting signs of physical or mental distress.

These voluntary guidelines developed by SAMHSA would take into account perspectives from the boots on the ground: teachers, parents, law enforcement, school psychologists, and other groups. Behavioral intervention teams and best practices from the BIG Act could serve as another tool for schools to maintain healthy campuses and provide their students with the best learning environment. Every student deserves a safe learning environment and we have an obligation to help provide that opportunity wherever possible.

How do you envision behavioral intervention teams in schools playing a role in addressing the mental health crisis among our youth?

Answer. School districts often have multidisciplinary teams, sometimes within frameworks such as Multi-Tiered Systems of Support (MTSS) or Positive Behavioral Interventions and Supports (PBIS) that work to put into place a system of behavioral supports for students that include universal supports for all students in a given grade or school (Tier 1), or for small groups of students (Tier 2) who need additional support, such as children of parents going through divorce, and Tier 3 supports for those who need individual support. These teams, and their ability to function effectively, is vitally important. State departments of education and school districts can also provide resources and training, but local school teams are vital to implementation and ensuring that the appropriate supports are provided for each student and evidence-based policies and practices are being implemented by school staff.

As a start, schools need to develop partnerships with their community mental health centers, Certified Community Behavioral Health Clinics, and Federally Qualified Health Centers so there are robust referral pathways for students to obtain needed clinical services. In order for behavioral prevention and intervention teams to be effective in schools, they must be more than referral pathways—but be true partners to enable them to come together quickly before a student is in crisis and/or needs intensive intervention.

When students are in crisis, they (and their families) need immediate support from teams that are trauma-informed, culturally competent, person-centered, and work well together. Schools and health-care providers need to work together so their teams are well-functioning before they are needed. In that working together, it is important to adopt destigmatizing language, build the capacity of the team to recognize when a student is in crisis, and ensure that qualified clinical providers are available to help school personnel when needed.

ACCESS

Question. Emerging data is demonstrating that telehealth—particularly telehealth for mental health and substance use care—can maintain and even improve the quality and comprehensiveness of patient care while expanding access to evidence-based care. Many of the changes proved to be a critical lifeline for the rising numbers of very young children experiencing mental and emotional challenges by offering ways to support their mental health needs including acute care, early intervention services, and continued operation of family courts. These supports are essential to families in rural, underserved, and low-income communities who continue to face the most barriers to care. The massive surge in telehealth use during the pandemic demonstrates the significance continued access to telehealth offers for reducing barriers to mental and behavioral health care.

What is the administration's plan to ensure that beyond the pandemic, telehealth, particularly for mental health and substance use treatment for very young and families, will continue to be part of a comprehensive set of care options available to provide the right care in the right place at the right time?

Answer. HHS continues to evaluate telehealth flexibilities and has engaged agency-wide workgroups to assess their impact and possible continuation. Indeed, the telehealth flexibilities have been well received by the treatment community, since they offer: flexibility in service delivery, improved access to care for those living in rural or remote areas, improved provider-client relationships through more trusting relationships, and improvement in care coordination activities. SAMHSA is also working closely with the Centers for Medicare and Medicaid Services to ensure appropriate recognition and remuneration of services.

Telehealth services are an important tool to improve health equity and access to health care for the very young and families including for mental health and substance use treatment. Throughout the pandemic, telehealth services have filled an urgent need to maintain access to care while social distancing was necessary. Beyond the pandemic, HHS will continue to support telehealth services programs and activities for youth and families. For example, HRSA's Office for the Advancement of Telehealth will continue to provide support through resources like the *Telehealth.HHS.gov* website and the Telehealth Resource Centers so patients and providers have access to tele-behavioral technical assistance.

HRSA has observed an increase in telehealth utilization since the start of the COVID-19 pandemic, which has been beneficial in the delivery of care across various medical fields. To the extent allowable by law, HRSA has extended flexibilities allowing programs and awardees to adopt telehealth and incorporate it into everyday delivery of care. To maintain this utilization, it would be necessary to further consider additional flexibilities needed by practitioners to ensure patient access to telehealth services.

- The Medical Student Education (MSE) Program provides grants to public institutions of higher education to expand or support graduate education for medical students preparing to become physicians in the top quintile of States with a projected primary care provider shortage in 2025. Awardees are using telehealth modalities and telemedicine networks to connect clinicians to rural patients and to provide care and education through telemedicine. Seventy percent of MSE trainees received training in telehealth and 46 percent of sites offered telehealth services.
- The Graduate Psychology Education (GPE) Program supports innovative doctoral-level health psychology programs that foster an interprofessional approach to providing behavioral health and substance use prevention and treatment services in high-need and high-demand areas through academic and community partnerships. In AY 2019–2020, grantees partnered with 210 sites (*e.g.*, hospitals, ambulatory practice sites, and academic institutions), of which approximately 77 percent offered substance use treatment services and 83 percent offered telehealth services.
- In response to the COVID-19 pandemic, the National Health Service Corps (NHSC) has enabled the program's clinicians to be increasingly flexible in their use of telemedicine. More than 40 percent of NHSC awardees indicate that their site currently uses telemedicine.
- HRSA's Substance Use Disorder Treatment and Recovery (STAR) Loan Repayment Program (LRP) recruits and retains medical, nursing, behavioral/mental health clinicians and paraprofessionals who provide direct treatment or recovery support of patients with or in recovery from a substance use disorder. The program enables mental health providers serving in mental health Health Professional Shortage Areas (HPSAs) to provide mental health services via telehealth to patients located outside of a HPSA.
- The Pediatric Mental Health Care Access (PMHCA) Program promotes behavioral health integration in pediatric primary care by supporting the development of new, or the improvement of existing, statewide or regional pediatric mental health care telehealth access programs. These programs provide teleconsultation, training, technical assistance, and care coordination for pediatric primary care providers to diagnose, treat and refer children with behavioral health conditions. Telehealth strategies, like the ones supported by the PMHCA Program, connect primary care providers with specialty mental and behavioral health-care providers, and can be an effective means of increasing access to mental and behavioral health services for children and adolescents, especially those living in rural and other underserved areas. PMHCA programs also support resilience strategies among families and clinicians.

INVESTMENT

Question. The COVID-19 pandemic has placed families and children in challenging situations that have caused persistent stress and uncertainty. While this has certainly contributed to the crisis in child and adolescent mental health, we know that this problem and its root causes, such a lack of youth-specific mental health infrastructure and a shortage of pediatric mental health professionals, predate the pandemic.

What upstream investments should we be making now to promote children's healthy social-emotional development and to build a stronger system of care to meet children's needs far into the future?

Answer. Prior to the pandemic, we knew that about half of children with mental health disorders did not receive care. Although trends in pediatric mental health were worrying before the COVID-19 public health emergency, demand over the past 18 months for pediatric inpatient mental health services, partial hospitalization, step-down programs and other levels of crisis care has risen significantly.

Promotion of healthy social and emotional development of children and their families will require investment in upstream, comprehensive system of supports for children where they live, learn, and play, such as schools and other community settings. The school environment offers access to children and youth where school personnel can provide consistent support and stability, identify concerns early, and offer additional services when needed. Additional investments in the community could support community members who engage regularly with mothers and children with the foundational knowledge to integrate support for social and emotional development and identify mental and behavioral health needs.

HRSA's upstream approach includes promoting children's mental health and well-being across the lifespan, and preventing behavioral health conditions from occurring or getting worse. Early engagement in a child's life helps promote optimal health and well-being and decreases the likelihood of mental and behavioral health problems later on in life. Additionally, HRSA integrates behavioral health-care services into primary and preventative health care.

To promote children's healthy social-emotional development and to build a stronger system of care, HRSA's title V Maternal and Child Health (MCH) Services Block Grant (title V) program can play a key role. It is a Federal-State partnership that awards formula grants to 59 States and jurisdictions to address the health needs of mothers, infants, and children, including children with special health-care needs. Title V strategies to promote mental and behavioral health and well-being across the MCH population include workforce training and education, cross-sector collaborations, public health campaigns, and evidence-based approaches to address substance use disorders. For example, the Texas title V program supports ongoing health education for Texas providers on mental and behavioral health. In FY 2020, 16,983 early childhood development and screening modules were completed by providers via Texas Health Steps-Online Provider Education (THS-OPE) modules. The education module topics addressing mental and behavioral health included adverse childhood experiences, attention-deficit/hyperactivity disorder, autism spectrum disorder, behavioral health screening and intervention, depression, anxiety, developmental surveillance and screening, and using developmental screening tools.

In addition, HRSA's Bright Futures program supports State title V Maternal and Child Health (MCH) and clinical health professionals to use evidence-based strategies that increase access to, and the quality of, preventive health-care visits for children, adolescents and young adults. Mental health can be affected at many critical times in development, beginning prenatally with the mental health of the mother, through infancy with the importance of attachments, through early childhood, and beyond. Accordingly, promoting mental health through activities that are aimed at prevention, risk assessment, and diagnosis and offering an array of appropriate interventions is essential.³¹ The Bright Futures Periodicity Schedule recommends *what* screening should occur with *what frequency*, including routine behavioral/social/emotional screening and the Bright Futures Guidelines chapter titled, "Promoting Mental Health," educates pediatricians on *how* to improve children and adolescents' mental development within the well child visit. Each Bright Futures primary care visit addresses the physical and mental health of the child or adolescent. This theme highlights opportunities for *promoting* mental health in every child, including specific suggestions for each age and stage of development.³¹

Additional investments in primary care pediatricians and other pediatric mental health providers should be considered to build a stronger system of care to meet children's socio-emotional development needs. Investments in provider resiliency are also critical to building a stronger system of care and maintaining the broader health-care workforce, including the pediatric care workforce.

The pandemic has also exacerbated risk factors for negative mental health impacts including financial stress and instability, housing and food insecurity, and isolation. Knowing that suicide risk factors, overdoses, and violence have increased throughout the pandemic raises concerns for not only mitigating the impacts of Ad-

³¹Hagan, J.F., Shaw, J.S., and Duncan, P.M., eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017.

verse Childhood Experiences (ACEs) in the immediate and long-term but underscores the importance of scaling up effective prevention efforts to prevent the risk for additional Adverse Childhood Experiences (ACEs). The science is clear, ACEs are strongly linked to mental health and substance use challenges in adolescence and later in life and preventing ACEs could have substantial positive impacts on the social-emotional health of young people. The evidence tells us that ACEs can be prevented by connecting children and families to safe, stable, nurturing relationships and environments with demonstrated broad and sustained benefits. CDC has been a leader in ACEs prevention work. Through the Preventing Adverse Childhood Experiences: Data to Action³² cooperative agreement, CDC supports communities to implement strategies based on the best available evidence including:

- Strengthening economic supports for families, which help increase household incomes for working families while offsetting the costs of child care and have demonstrated impacts on maternal stress, mental health problems, and child behavioral problems.
- Promoting social norms that protect against violence and adversity including norms that prevent violence of all forms against women and girls.
- Ensuring a strong start for children and paving the way for them to reach their full potential including family-friendly leave policies, paid family leave and access to high-quality child care, and preschool enrichment programs which include family engagement.
- Teaching skills to help parents and youth handle stress, manage emotions, and tackle everyday challenges.
- Connecting youth to caring adults and activities which includes connecting to coaches, neighbors, and other community members, as well as extended family members; mentoring; after-school programs; and other opportunities to help children and youth develop and practice leadership, informed decision-making, self-management, and social problem-solving skills.
- Intervening to lessen immediate and long-term harms in instances where ACEs have occurred including referrals to community supports, primary care providers and trauma-informed care.

Investing as early as possible in the life cycle of children is critical. This can be accomplished through promoting mental health literacy, early screening, ensuring that (if needed) parents and children have access to evidence-based interventions for the 0–5 population.

For example, SAMHSA's Mental Health Awareness Training grant program promotes mental health literacy by training school personnel, emergency first responders, law enforcement, veterans, armed services members and their families to recognize the signs and symptoms of mental disorders, particularly serious mental illness (SMI) and/or serious emotional disturbances (SED).

For children of all ages, but especially young children, relationships with primary caregivers have the greatest effect on a child's healthy social-emotional development. CDC's Whole School, Whole Community, Whole Child model emphasizes the role of connectedness among parents and family members, peers, teachers and the community, as well as creating healthy and supportive environments for students to thrive. Investments in programs and policies that support human development in the first 5 years of life is one of the most effective ways to promote social-emotional development and minimize the prevalence of mental and behavioral health issues in adulthood. Along with healthy relationships, a two-generation strategy for promoting health social-emotional development, by creating policies and programs that provide services and supports to young children and their parents (or caregivers) at the same time. Supporting parents' and caregivers' well-being is a critical prevention activity in ensuring children's mental health. Early childhood systems must be focused on the prevention end of the mental health continuum, but not to the exclusion of providing treatment as necessary. Appropriate screening, assessment, and diagnosis so children and families who need more intensive supports receive them.

SAMHSA's Project Linking Actions for Unmet Needs in Children's Health (LAUNCH) program and Children's Mental Health Initiative (Systems of Care) grants are focused on early childhood. The purpose of the Project LAUNCH initiative is to promote the wellness of young children, from birth to 8 years of age, by addressing the physical, social, emotional, cognitive, and behavioral aspects of their development. Project LAUNCH pays particular attention to the social and emotional

³² <https://www.cdc.gov/violenceprevention/aces/preventingace-datatoaction.html>.

development of young children and works to ensure that the systems that serve them (including childcare and education, home visiting, and primary care) are equipped to promote and monitor healthy social and emotional development. The program also ensures that the systems intervene to prevent, recognize early signs of, and address mental, emotional, and behavioral disorders in early childhood and into the early elementary grades. SAMHSA's Children's Mental Health Initiative Systems of Care grants support children and youth with serious emotional disturbances and their families to increase their access to evidence-based treatment and supports. Additionally, SAMHSA's Infant and Early Childhood Mental Health grantees improve outcomes for children through training early childhood providers and clinicians to identify and treat behavioral health disorders of early childhood, including in children with a history of in utero exposure to substances such as opioids, stimulants or other drugs that may impact development, and through the implementation of evidence-based multigenerational treatment approaches that strengthen caregiving relationships.

Question. What steps can we take to ensure we are providing enough resources director to children's mental health during the current crisis and how can we plan for future pandemics?

Answer. Congress can support Federal efforts to develop Emergency Preparedness, Resilience, and Response (EPRR) plans that address the mental health needs of children, their families, and the adults who support them. For example, through greater investments in and scaling up SAMHSA's Infant Early Childhood Mental Health (IECMH) programming, we can prevent long-term challenges resulting from pandemic-related stressors. Increasing our investment in IECMH Consultation, we can "care for the caregiver" through professional, evidence-based support. The FY 2023 budget request is \$37.5 million. This funding will support 30 continuation grants and the National Center of Excellence for Infant and Early Childhood Mental Health Consultation (CoE-IECMHC) to improve health outcomes for young children and support children at high risk for mental illness and their families in order to prevent future disability. This funding request will provide continued screening, prevention, early intervention for behavioral health issues and referrals to high quality treatment for children and families in 30 communities across the U.S.

CDC's Healthy Schools Program is taking several steps to ensure schools and the children, families and communities they serve are equipped and supported in handling the mental health challenges brought on by the COVID-19 pandemic. These include:

- Emphasizing the Whole School, Whole Community, Whole Child³³ framework to implement evidence-based strategies that improve physical and mental health, encompassing healthy in-school and out-of-school time programs and staff wellness. The model is comprised of 10 components that work synergistically, including two related to mental health: Counseling, Psychological and Social Services and Social and Emotional School Climate.
- Supporting 15 geographically diverse State education agencies (SEAs) through the CDC Healthy Schools FY21 COVID-19 Supplemental Funding. This support is designed to address COVID-19 within K-12 settings by supporting the implementation of COVID-19 prevention strategies and additional COVID-19 needs of local education agencies (LEAs) and schools. This includes supporting social, emotional, mental health and well-being of students and teachers and school staff as they returned to in-person learning this school year. The supplement funds this cooperative agreement for the 12-month budget/performance period from June 30, 2021, to June 29, 2022, to allow for the acceleration of activities.
- Developing resources like the social and emotional climate and learning webpage,³⁴ which houses the Toolkit for Schools: Engaging Parents and Families to Support Social and Emotional Climate and Learning³⁵ and Tools³⁶ for school employee wellness.
- A social media campaign and videos to promote school health champions, including Supporting the Well-being of School Employees on the Frontlines to help maintain healthy schools.³⁷

³³ <https://www.cdc.gov/healthyschools/wsc/index.htm>.

³⁴ <https://www.cdc.gov/healthyschools/sec.htm>.

³⁵ https://www.cdc.gov/healthyschools/sec/sec_toolkit.htm.

³⁶ https://www.cdc.gov/healthyschools/employee_wellness.htm.

³⁷ <https://www.youtube.com/watch?v=vfA52EohO8o>.

- Funding 4 non-governmental organizations to support State educational agencies, local school districts, parents, and community partners with return to school after COVID-19 closures. This work involves training to address the social, emotional, and mental health needs of students as well as school faculty and staff related to reopening after long school closures due to COVID-19.
- In FY22 (estimated start of June 1, 2022), CDC's Healthy Schools program will start a new NGO cooperative agreement cycle. The FY22 NOFO includes two new priority areas that specifically aim to improve access to health services and the emotional well-being of students and staff in disproportionately affected communities.
- In response to mounting mental health concerns among students, families and school staff, CDC Healthy Schools is further emphasizing emotional well-being and connectedness in its programs by creating and publishing tools and resources that reflect the needs from the field on our website. These tools are for educators, administrators, and parents.

We can make sure that mental health services are seen similarly to physical health by leveraging campaigns that SAMHSA and CMS host to promote mental health-care access. We can work with the Department of Education to build mental health into the health education curriculum to de-stigmatize the utilization of mental health services and provide psychoeducation. We can require early child-care settings and other educational settings to support the provision of mental health services through access to technical assistance and increasing the behavioral health workforce in these settings. Ensure funding is consistently allocated for tele-behavioral health, tele-consultation, and tele-psychiatry services to assist with improving access to behavioral health care.

Children have unique emergency care needs, especially during serious or life-threatening emergency situations. The majority of the Nation's children are treated in community and rural emergency departments (EDs) close to where they live. Hospital EDs and emergency medical services (EMS) agencies often lack the necessary equipment and resources to treat children adequately. To ensure we are providing enough resources directed to children's mental health during current and future crises, HRSA's Emergency Medical Services for Children (EMSC) program focuses its resources on ensuring that seriously ill or injured children have access to high-quality pediatric emergency care, no matter where they live in the U.S. EMSC agencies are a critical resource in responding to childhood trauma, youth suicide (now the second leading cause of death for people aged 10-34), and the health and social/emotional impact of the COVID-19 pandemic on children. In 2020, HRSA's Pediatric Emergency Care Applied Research Network (PECARN) completed two studies with over 10,000 adolescents and found that a brief, computerized adaptive screening tool accurately predicted risk for attempted suicide. In addition, the EMSC program continued to promote the Critical Crossroads: Pediatric Mental Health Care in the Emergency Department Pathways Toolkit, a clinical decision tool and resource guide. State Partners are also improving emergency care systems for children in mental health crises. For example, the New England Regional EMSC network developed a Behavioral Health Toolkit to assist with the care of pediatric patients who present with a behavioral health complaint and are awaiting placement or further evaluation.

According to workforce projections from the HRSA's National Center for Health Workforce Analysis (NCHWA), by 2030, there is also a projected maldistribution of pediatricians in particular States. For example, Texas is projected to have enough pediatricians in 2030 to meet only 72 percent of projected demand. Texas would need an additional 1,940 pediatricians to meet the projected demand in 2030. In addition, there is projected maldistribution with respect to metro and non-metro settings. While the projected supply of pediatricians in metro areas in the U.S. is sufficient to meet 101 percent of projected demand in 2030, that figure is only 67 percent for non-metro areas. These projections do not take into account the effects of the pandemic particularly those related to changes in demand for mental health services.

HRSA also offers several programs that invest in recruiting and retaining clinicians and nurses in the mental health, primary care and pediatric fields. HRSA also offers resiliency programs, stemming from the COVID-19 pandemic, that support the planning, developing, operating, or participation of health professions and nursing training activities, using evidence-based or evidence-informed strategies, to reduce and address burnout, suicide, mental health conditions, and substance use disorders and to promote resiliency among public safety officers and health-care profes-

sionals, health-care students, residents, trainees, and paraprofessionals in rural and medically underserved communities. These programs include the Health and Public Safety Workforce Resiliency Training Program, as well as the Promoting Resilience and Mental Health Among Health Professional Workforce program.

RETURN TO SCHOOL

Question. For almost 2 years, children have been forced to toggle between virtual and in-person learning. The medical experts at the University of Texas Health Science Center report that social distancing has played a significant role in the rise in mental health issues among adolescents. Consequently, mental-health related visits to hospital emergency rooms have had sharp increases. These experts highlight the strain on relationships amongst family members, but also teachers, school administrators, and peers. This inability to find a sense of belonging and grounding within the community break down the social connections that provide an important source of resiliency.

Now that children are primarily back in the classroom, how can schools play a role in lowering mental health outcomes and identifying children who are struggling with anxiety, depression, or behavioral health issues to ensure they receive the help they need?

Answer. Schools can take the following actions to recognize and support the mental health needs of children:

- Implement proven universal mental health promotion strategies, such as Social Emotional Learning (SEL), to all students grades K–12. The need for mental health support resulting from the collective experience of COVID–19 for many students is so pervasive that services alone are necessary, but not sufficient, to promote recovery and well-being. Universal prevention strategies are a critical complement to more intensive services for those who need them. These prevention strategies include health education and also entail strategies to improve school climate or student sense of connectedness or belonging to school, which is associated with positive mental health and academic outcomes. Students who feel connected to their school are less likely to experience depression, anxiety, suicide ideation or to engage in sexual activity. The effects of school connectedness are long-lasting. Students who feel connected to their school are, as adults, less likely to have emotional distress, suicidal ideation, physical violence victimization or perpetration, multiple sex partners, sexually transmitted diseases, or prescription drug misuse or illicit drug use. School connectedness represents a public health approach to mental health promotion because of its potential to impact many students simultaneously and evidence of its relationship to promoting positive student mental health outcomes and buffering the impact of traumatic experiences. Effective school connectedness strategies include classroom specific and school-wide programs, school climate change or management and disciplinary strategies, and activities within the broader community environment to promote with parent and family involvement.
- Increase the number of school mental health professionals. Schools are one of the leading settings for delivery of mental health services, with 15.4 percent of students receiving mental health services in schools, surpassed only slightly by specialty mental health settings (16.7 percent). However, significant gaps remain between those who need mental health services and those who receive them. In 2019, nearly 57 percent of adolescents ages 12–17 with major depressive impairment did not receive any treatment in the year prior to the survey. On average, U.S. school systems have only 1 counselor per 491 students and 1 psychologist per 1,400 students, far below recommended ratios. Estimates prior to the COVID–19 pandemic project a potential dire shortage of school counselors, with a projected deficiency of more than 10,000 personnel, relative to projected need by 2025.
- Facilitate partnerships between schools and community providers. Increasing mental health staff may help schools implement more comprehensive approaches to mental health screening.
- Support the mental health of school staff members. School staff are hampered in their ability to provide mental health support to students in they are experiencing mental health challenges. As noted in the U.S. Department of Education Handbook,³⁸ schools can consider eliminating or reducing administra-

³⁸ <https://www2.ed.gov/documents/students/supporting-child-student-social-emotional-behavioral-mental-health.pdf>.

tive duties and non-critical meetings for school mental health staff or teachers. Integrate wellness into professional development approaches by providing adequate planning time for staff that includes opportunities for collaboration, training, peer coaching, and supportive performance feedback.

- Provide tools and resources to parents and caregivers. CDC developed a set of resources, called Parents for Healthy Schools,³⁹ to assist schools, school groups, and school wellness committees with encouraging parent involvement in school health. Parents for Healthy Schools uses evidence-based strategies for parent engagement.
- Implement equitable, trauma-informed disciplinary policies.

While schools play an important role in addressing the behavioral health needs of children and youth, it is equally important to also integrate efforts outside of schools as part of a holistic and comprehensive approach to addressing the well-being and resilience of children and youth. Doing so enhances public health and public safety outcomes for individuals and communities. CDC's Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence⁴⁰ guide recommends universal preschool with an emphasis on social emotional learning as a form of prevention intervention. Programs such as child parent centers are also associated with lower rates of substantiated reports of child abuse and neglect and out-of-home placements; youth depression and substance use; and arrests for violent and nonviolent offenses, convictions, and incarceration well into adulthood and systematic reviews of the evidence for social emotional learning approaches finds that they significantly reduce peer violence across grade levels, school environments, and demographic groups, and improve other outcomes such as reducing substance use. In addition to impacts on aggression and violent behavior, programs that include these ACEs prevention strategies, such as Life Skills® Training, the Good Behavior Game, and Promoting Alternative Thinking Strategies® (PATHS) have demonstrated other benefits as well, including reductions in youth alcohol, tobacco, and drug use, depression and anxiety, suicidal thoughts and attempts, delinquency, and involvement in crime. CDC's ACEs strategy also promotes connecting youth to caring adults through mentorship opportunities which help them to develop and practice leadership, decision-making, self-management, and social problem-solving skills are important components of after-school programs with documented benefits. One example is the After School Matters program, which offers apprenticeship experiences in technology, science, communication, the arts, and sports to high school students.

Schools can create a shared language around trauma, resilience, wellness, and achievement and create trauma-informed schools. Schools can also generate clear frameworks, assessments, and referral pathways that differentiate between anxiety, depression, grief, trauma, and youth development needs so that children access and receive the help that is responsive to their needs—not just what is available. Additionally, they can increase referral pathways to include culturally and linguistically competent and appropriate services. Schools can also work to ensure everyone understands and promotes the knowledge that mental health is health, and that grief is not a problem to be solved.

QUESTIONS SUBMITTED BY HON. JOHN THUNE

Question. Your advisory references physical activity as an important component of kids' overall health a few times. I think that many would agree that sports and fitness provide an important outlet for kids, both in terms of stress and energy release, and in the development of communication, leadership, and team-building skills. Shutting down sports over the pandemic has been tough on kids and families.

What can the administration and Congress do to ensure that we are getting kids and adults back into sports and physical activity, and to make it more affordable and accessible?

Answer. Physical activity is one of the best things we can do for both physical and mental health, and playing sports is one way for Americans to get the physical activity they need. A 2020 study conducted by CDC and SAMHSA found significant associations between insufficient physical activity, less healthy dietary behaviors and poor mental health-related outcomes, including feeling sad and hopeless, and

³⁹ <https://www.cdc.gov/healthyschools/parentsforhealthyschools/p4hs.htm?msclkid=bc3b367fab11eca77127cce216be93>.

⁴⁰ <https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf>.

seriously considering suicide, among US high school students. CDC's Healthy Schools program funds 16 State education agencies through the Improving Student Health and Academic Achievement Through Nutrition, Physical Activity, and the Management of Chronic Conditions in Schools program. Funded States support local communities in implementing evidence-based, comprehensive school health policies, practices, and programs designed to improve student and staff health and well-being, with a special focus on healthy school nutrition⁴¹ and physical activity⁴² strategies.

The National Youth Sports Strategy (NYSS), released in 2019 by OASH, is a Federal roadmap designed to unify U.S. youth sports culture around a shared vision: that one day all youth will have the opportunity, motivation, and access to play sports. It provides a framework with actionable steps that communities, organizations, decision-makers, and policymakers can use to help improve the U.S. youth sports landscape. At launch, the HHS awarded 18 Youth Engagement in Sports (YES) Grants with the help of our Office of Minority Health and Office on Women's Health, totaling over \$6.7 million to help increase youth participation in sports and reduce barriers to play, especially for youth populations with lower rates of sports participation and communities with limited access to athletic facilities or recreational areas. These grants provided 3 years of funding which ended in FY 2022.

There are many organizations across the United States that are working in alignment with the National Youth Sports Strategy. The NYSS Champions partnership initiative highlights over 190 organizations on *health.gov*.

We have heard from NYSS Champions that they face a range of barriers, including lack of funding sources, limited formal training for coaches and difficulty recruiting and retaining volunteers, limited access to facilities and infrastructure, low awareness of sports programs and offerings among the public, and competition outweighing fun and youth development in many programs. Despite these challenges, organizations have found new and creative ways to engage their communities in physical activity and sports during the pandemic and continue to seek support for their efforts to create safe, fun, inclusive, developmentally appropriate, and accessible sports opportunities for all youth.

QUESTIONS SUBMITTED BY HON. RICHARD BURR

Question. Your advisory on protecting youth mental health includes a number recommendations for State, local, and tribal governments. A few that stuck out to me include: support the mental health needs of youth involved in the child welfare system; ensure all children and youth have comprehensive and affordable coverage for mental health care; and improve coordination across all levels of government to address youth mental health needs.

The advisory also identifies kids in the child welfare system as a group at higher risk of mental health challenges during the pandemic.

Senator Feinstein and I have introduced a bill to directly help vulnerable youth in the child welfare system in a manner supported by all three of these recommendations. Our bill would ensure that children placed in qualified residential treatment programs (QRTPs) with more than sixteen beds would not lose eligibility for Medicaid because of an antiquated law often called the "IMD exclusion."

QRTPs are required by law to have a trauma-informed treatment model designed to address the clinical needs of foster children with serious emotional disturbances or behavioral disorders. In other words, these programs are legally required to provide a clinically appropriate level of care for vulnerable foster children who are in serious need of such care.

Do you believe that children in QRTPs with more than 16 beds should be able to keep their Medicaid coverage?

If not, please be specific as to how losing that coverage would improve the mental health of those children.

If you believe that these foster children—among whom racial and ethnic minorities are overrepresented relative to the population⁴³—should lose their Medicaid

⁴¹ https://www.cdc.gov/healthyschools/nutrition/school_nutrition_sec.htm.

⁴² https://www.cdc.gov/healthyschools/school_based_pa_se_sel.htm.

⁴³ https://www.childwelfare.gov/pubpdfs/racial_disproportionality.pdf.

coverage, please explain in detail how such policy aligns with Executive Order 13985, in which President Biden declares it is “the policy of my administration that the Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.”⁴⁴

Do you support and commit to working with me to pass my legislation, which will ensure that vulnerable foster children across the country have access to the medical and mental health services they need?

Answer. The issues surrounding QRTPs are important and complex. Children in foster care should receive the medical care that they need and to which they are entitled, without disruption, in a safe and nurturing setting that fosters their growth and development. Placement in a QRTP that is an IMD does not impact Medicaid eligibility. The Medicaid statute prohibits States from receiving Federal financial participation for services delivered to most individuals residing in an IMD. However, on October 19, 2021, CMS informed States that they can request to modify the terms of an existing Medicaid section 1115 demonstration, or seek approval of a new demonstration to allow States to receive Federal funding for Medicaid services delivered to title IV–E foster children residing in a QRTP that is an IMD for longer than currently allowed under that demonstration model. States will be required to provide a plan for transitioning children out of QRTPs that are IMDs. Although I was not personally involved in this waiver opportunity, I understand that it was developed to provide much needed relief to States seeking to receive Federal match for Medicaid services provided to foster children residing in QRTPs that are IMDs.

Question. Children have had their worlds upended by responses to the COVID–19 pandemic. Prolonged school closures and virtual learning have starved children of the social interaction necessary for healthy mental and emotional development. The pandemic has had a devastating impact on the mental health of American children and adolescents.

Your advisory on protecting youth mental health talks about the importance of schools in helping children find a sense of purpose and fulfillment, as well as serving as a critical resource in managing mental health challenges.

Your advisory includes eight recommendations for school districts, educators, and other school staff. Not one of them is “stay open.” Why?

Answer. As I have said numerous times publicly, it is critical for schools to stay open. In addition to providing core educational services, schools can also be an essential source of nonacademic supports in the way of health and mental health services, food assistance, and intervention in cases of homelessness and maltreatment. The Federal Government has taken strong action to ensure that schools remain open, including providing more than \$120 billion of American Rescue Plan funding to support safe school reopening and providing guidance and technical assistance to States and local communities. Ninety-nine percent of schools⁴⁵ are open for full-time, in-person learning as of late February 2022.

CDC offers guidance on strategies to support in-person learning. CDC does not recommend school closures as a public health strategy. When schools close, they largely do so due to operational issues—too many people (students/staff) are out because they are sick or quarantining, or because they are providing a break for in-person school due to mental health concerns. The CDC offers important and useful guidance for the school systems and health departments to make informed decisions for their jurisdictions. We strongly encourage education leaders to work closely with their State and local public health partners to assess risks and needs locally and make the best decisions based on our science and guidance. The vast majority of schools are remaining open for in-person learning. Over the past two weeks, more than 99.5 percent of schools were fully open for in-person learning.

Question. For many students coming from underserved families, schools may be their only chance to receive mental health care or other social services. Do you think school closures undermine this administration’s goal of improving health outcomes for underserved populations?

⁴⁴ <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>.

⁴⁵ <https://www.ed.gov/news/press-releases/statement-us-secretary-education-miguel-cardona-cdc-guidance-and-keeping-schools-safely-open>.

Answer. I agree that schools remaining open is critical not only for educational purposes but also so that students can receive mental health care and other social services. The administration is committed to keeping schools open, and 99 percent of schools are open for full-time, in-person learning as of late February 2022.

From a Health Equity Lens, CDC recognizes that local leaders make difficult decisions with community wellness and student mental health in mind. It is a priority to provide in-person learning and alternatives as necessary to reduce the number of lost learning days and provide continuity of mental health and social services that students rely on. Limited health-care options, differential access to testing, low vaccination rates, exposure of high-risk family members and staff have impacted underserved families during this pandemic. Schools can play a role in increasing support for continuing mental health and social services, increasing access to testing, and promoting vaccination.

Question. In June 2021, the CDC released a study that revealed Emergency Department visits for suspected suicide attempts among adolescent girls were about 51 percent higher from February to March in 2021 versus that same time period in 2019. For adolescent boys, visits increased about 4 percent.

How do you square these statistics with your advisory that lacks a specific recommendation to safely open schools and keep them schools?

Answer. As noted above, I believe keeping schools open safely is essential. It is why, on numerous occasions over the last year, I have urged schools and communities to implement evidence-based measures to reduce the risk of COVID and allow children to learn safely. With that said, the mental health challenges that children are facing are related to multiple factors in addition to the disruption of the educational environment. They include the loss of caregivers and other loved ones, the economic hardship that many families endured, difficulty in accessing mental and physical health-care services, increase in food insecurity, and the uncertainty about when the pandemic would end. In the advisory, I outline a series of recommendations where we can make progress in the short and long term. Examples include ensuring that every child has access to high-quality, affordable, and culturally competent mental health care, putting more energy and resources toward prevention, better understanding the impact that technology and social media have on mental health, and recognizing the role each of us can play in eliminating the stigmatization associated with seeking help for mental health challenges.

CDC guidance stresses the importance of in-person learning and does not recommend school closures as a public health strategy. CDC offers guidance on strategies to support in-person learning. When schools close, they largely do so due to operational issues—too many people (students/staff) are out because they are sick or quarantining, or because they are providing a break for in-person school due to mental health concerns.

Question. In response to a question for the record in the HELP Committee in February 2021, you committed to working with HHS and my office to reopen schools safely nationwide.

What have you done as Surgeon General to get our students back in the classroom?

Answer. Since the beginning of my service in March 2021, I've worked in partnership across the Federal Government and with local communities to fight the COVID-19 pandemic and support the safe reopening of schools across the country. I've provided parents, educators, school leaders, and the American public with up-to-date information on the evolving evidence around COVID-19 and measures to enable safe reopening of schools such as vaccinations, testing, masking, and social distancing. I've encouraged schools and communities to make use of funds and technical assistance made available to them through the American Rescue Plan Act and use these resources to strengthen mental health supports. During the fall 2021, I focused efforts on the back-to-school season and how to keep kids, teachers, and other school staff safe and in-person. I actively engaged with national and local media and on social media to promote a safe return to school for kids across the country. Our office has also partnered with other offices within the Department of Health and Human Services, as well as the Department of Education, to discuss the importance of child and family vaccinations, safe reopening, and COVID-19 misinformation. As of late February 2022, 99 percent of schools are open for full-time, in-person learning.

In April 2021, HHS awarded \$10 billion for Reopening Schools, from the American Rescue Plan Act of 2021, through CDC's existing Epidemiology and Laboratory Capacity (ELC) program to 64 State, local, and territorial health departments. The ELC Reopening Schools award⁴⁶ supports COVID-19 screening testing and other mitigation activities in K-12 schools for teachers, staff, and students to reopen and keep schools open safely for in-person instruction. These resources have been critical in ensuring that students and staff may safely continue in-person learning. As of January 31, 2022, over 37.6 million tests have been conducted as a result of ELC Reopening Schools funding. In addition, CDC has developed guidance and resources to support the safe reopening of schools. These include the *Guidance for the Prevention of COVID-19 in K-12 Schools*,⁴⁷ which has been updated as new data become available and the science has evolved. To support the implementation of testing programs in schools, CDC launched a communications toolkit⁴⁸ with resources for school administrators and parents. CDC has provided ongoing technical assistance to State, local, and territorial health departments for testing efforts through regular office hours, webinars and peer to peer learning opportunities. Through partnerships with the Department of Education and the Rockefeller Foundation, CDC has supported a Learning Network⁴⁹ for schools, with resources available at www.openandsafeschools.org. CDC's Healthy Schools Program has supported State and school districts (112 total) in implementing the guidance by providing funds to train school leaders and staff on the recommended prevention strategies, vaccination promotion, and testing initiatives.

On January 12, as Omicron cases were surging and schools were struggling to reopen safely, the administration announced the monthly distribution of 5 million point-of-care antigen tests for schools to support in-person learning. Point-of-care testing uses rapid diagnostic tests performed or interpreted by someone other than the individual being tested or their parent or guardian and can be performed in a variety of settings. These tests have been allocated directly to school districts through a partnership between CDC and ASPR and based on prioritized lists of school districts from ELC recipients (64 State, local, and territorial health departments). Tests are prioritized to schools with a high social vulnerability index and the ability to immediately implement testing. As of March 1, 5.3 million tests have been allocated to more than 1,000 school districts across 50 jurisdictions.

CDC's Operation Expanded Testing⁵⁰ (OpET) program increases access to no-cost laboratory-based testing in child care centers, K-12 schools, Historically Black Colleges and Universities, under-resourced communities, and congregate settings. Four regional hubs primarily provide laboratory-based nucleic acid amplification tests⁵¹ (NAATs) that use nasal swab collection kits. Facilities directly enroll into OpET by contacting their regional hub. These contractor-provided laboratory services include specimen collection supplies, shipping materials, laboratory testing, and results reporting. Sites contribute staff to collect specimens. HHS and FEMA are also working with State leaders to consider placement of community-based testing sites⁵² that can support K-12 school⁵³ testing.

Vaccinations continue to be our best defense to keep students and school staff safe from COVID-19. Everyone eligible for a booster shot should also get one right away—this includes educators and school staff. Boosters provide an improved level of protection against COVID-19. We know that vaccines remain effective in preventing severe illness, hospitalization, and death. School leaders play an important role when it comes to vaccines: according to a Kaiser Family Foundation poll,⁵⁴ parents are approximately twice as likely to get their child vaccinated if their school provides information about the vaccine. Students ages 5 and up are eligible for the

⁴⁶ <https://www.cdc.gov/nceid/dpei/elc/covid-response/index.html>.

⁴⁷ <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>.

⁴⁸ https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/testing.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fschools-childcare%2Fschool-testing.html.

⁴⁹ <https://www.openandsafeschools.org/learning-network>.

⁵⁰ <https://www.cdc.gov/coronavirus/2019-ncov/testing/operation-expanded-testing.html>.

⁵¹ <https://www.cdc.gov/coronavirus/2019-ncov/lab/naats.html>.

⁵² <https://www.hhs.gov/coronavirus/community-based-testing-sites/index.html>.

⁵³ <https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/12/fact-sheet-biden-harris-administration-increases-covid-19-testing-in-schools-to-keep-students-safe-and-schools-open/>.

⁵⁴ <https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-winter-2021-update-on-parents-views-of-vaccines/>.

COVID-19 vaccine. CDC encourages schools to promote vaccination and provide access to COVID-19 vaccines at school clinics.

QUESTIONS SUBMITTED BY HON. TIM SCOTT

A REMEDY WORSE THAN THE DISEASE

Question. Sir Francis Bacon, credited with developing the scientific method, famously remarked about remedies being worse than the disease. That's certainly the case with lockdowns, and I believe that to be the case here with school closures. In fact, CDC published in its March 19, 2021 *Morbidity and Mortality Weekly Report* that "changes in modes of instruction have presented psychosocial stressors to children and parents that can increase risks to mental health and well-being and might exacerbate educational and health disparities." When discussing children's health risk and the omicron case surge on MSNBC, President Biden's Chief Medical Advisor, Dr. Fauci, pointed out that pediatric hospitalizations are much lower on a percentage basis than adults, especially when compared with the elderly. Now compare that with a CDC report which found that mental health-related emergency room visits for kids ages 12-17 increased by 31 percent during 2020. Diving deeper, between February 21st and March 20th of 2021, emergency department visits due to suspected suicide attempts were 3.7 percent higher among boys aged 12-17 and a shocking 50.6 percent higher among girls aged 12-17 than during the same period in 2019.

Can you further discuss the damaging impacts school closures have either created or exacerbated for children's mental health?

Answer. During the pandemic, children, adolescents, and young adults have faced unprecedented challenges. The COVID-19 pandemic dramatically changed how they attended school, interacted with peers and educators, and accessed important services, such as special education services and health care. The broad societal upheaval, including the health impacts of the pandemic, a shift to remote learning, and physical distancing from friends and peers, have impacted the mental health of many children across the country. With that said, the mental health challenges that children are facing are related to multiple factors in addition to the disruption of the educational environment. They include the loss of caregivers and other loved ones, the economic hardship that many families endured, difficulty in accessing mental and physical health-care services, increase in food insecurity, and the uncertainty about when the pandemic would end. That's why it's been so important to ensure that Americans are up to date on their COVID-19 vaccines and have easy access to masks, tests, and other important public health tools to keep them and their loved ones safe, and to ensure that schools are open. As of late February 2022, 99 percent of schools are open for full-time, in-person learning.

Findings from a nationwide study of 1290 parents of children ages 5-12 conducted from October 8-November 13, 2020 and published in a March 19, 2021 MMWR, suggest children not receiving full-time, in-person instruction and their parents might experience increased risk for negative mental/emotional and physical health outcomes. Specifically:

- Parents of children receiving virtual-only or combined instruction more frequently reported that their child's mental/emotional health worsened during the pandemic and that their time outside, time in-person with friends, and physical activity decreased.
- Parents of children receiving virtual-only instruction more frequently reported their own distress, difficulty sleeping, loss of work, concern about job stability, conflict between work and providing childcare, and childcare challenges than did parents whose children were receiving in-person only instruction.
- Children receiving in-person instruction and their parents reported the lowest prevalence of negative indicators of child and parent well-being.
- Parents whose children attended school in-person only were less likely to report challenges with employment and child care. Moreover, findings from a similar nationwide survey of 567 adolescents ages 13-19 conducted October-November 2020 and published in the January 2021 edition of the *Journal of Adolescent Health*, suggested similar results.
- Students attending school virtually reported poorer mental health than students attending in-person.

- Racial/ethnic disparities related to mode of school instruction were noted, with virtual instruction only more prevalent among black (68.2 percent) and Hispanic students (69.0 percent) compared to white students (48.1 percent).
- Adolescents receiving virtual instruction reported more mentally unhealthy days, more persistent symptoms of depression, and a greater likelihood of seriously considering attempting suicide than students in other modes (in-person or hybrid) of instruction. After demographic adjustments, school and family connectedness each reduced the strength of the association between virtual versus in-person instruction for all of the examined mental health indicators.

ACCESS TO IN-PERSON LEARNING

Question. Early in the pandemic, on a June 17, 2020 episode of the U.S. Department of Health and Human Service's *Learning Curve* podcast titled *Science Is Truth*, Dr. Anthony Fauci said: "The fact that we shut down when we did and the rest of the world did, has saved hundreds of millions of infections and millions of lives." On the other hand, recently, researchers at Johns Hopkins University, the same university whose COVID-19 data tracker has been widely considered to be the gold standard, published a study indicating that lockdowns did little to reduce COVID-19 deaths, but instead, caused enormous damage to society.

Considering the wrap-around services and support kids receive, in addition to the careful instruction received in an in-person school setting, if parents are unable to count on their school remaining consistently open, how important is it for them to have options to ensure their child is able to access a healthy, in-person learning environment?

Answer. It is essential to do everything possible to keep youth learning in school, in person, safely. As you state, schools provide such a critical role in providing services to youth and we should do everything we can to ensure that they don't lose access to these services. Over the past year, the Federal Government has taken strong action to ensure that schools remain open, including providing more than \$120 billion of American Rescue Plan funding to support safe school reopening and providing guidance and technical assistance to States and local communities. Ninety-nine percent of schools are open for full-time, in-person learning as of late February 2022.

Students benefit from in-person learning, and safely returning to in-person instruction continues to be a priority. Schools also provide critical services that help to mitigate health disparities, such as school lunch programs, and social, physical, behavioral and mental health services. School closure disrupts these critical services to children and families and the health of communities. The need for in-person instruction is particularly important for students with intellectual, learning, and behavioral needs. Students who rely on essential educational support services, such as Individual Education Plans (IEP), English Language Learner (ELL) services, special education, and learning accommodations are put at greater risk for poor educational outcomes when schools are closed. During periods of school closures, many students had limited access to these critical services. The unique and critical role that schools play in society makes it important to consider schools as a priority setting that is the "first to open, and last to close" within communities. Though COVID-19 outbreaks have occurred in school settings, multiple studies have shown that transmission rates within school settings, when multiple prevention strategies are in place, are typically lower than—or similar to—community transmission levels. CDC guidance stresses the importance of in-person learning and does not recommend school closures as a public health strategy. CDC offers guidance on strategies to support in-person learning.

BOTTOM LINE

Question. Congress recognizes the value of in-person education and, in that vein, has authorized more than \$190 billion to schools to reopen and remain open through the pandemic; yet, schools around the country continue to close due to COVID-19.

Bottom line: given what we now know regarding the damaging impacts of school closures on children's mental health, in addition to exacerbating the very achievement gaps we are all striving to address, should schools be open or closed?

Answer. It's essential we do everything possible to keep children learning in school and in person safely. That's why the Office of the Surgeon General has worked in partnership across the Federal Government and with local communities to provide parents, educators, school leaders, and the American public with up-to-

date information on how to protect themselves and their family, and how to safely reopen schools across the country. I know how stressful uncertainty can be as a parent. My wife and I have two small children who are in school. One is vaccinated; the other is too young to be vaccinated. So, we're always thinking about how to optimize our kids' learning and development and look out for their safety. We should continue to do everything we can to ensure that schools remain open, and, as of late February 2022, 99 percent of schools are open for full-time, in-person learning.

The vast majority of schools are remaining open for in-person learning. Over the past 2 weeks from the date of the hearing, more than 99.5 percent of schools were fully open for in-person learning. CDC guidance stresses the importance of in-person learning and does not recommend school closures as a public health strategy. CDC offers guidance on strategies to support in-person learning. When schools close, they largely do so due to operational issues—too many people (students/staff) are out because they are sick or quarantining, or because they are providing a break for in-person school due to mental health concerns.

STAYING ACTIVE

Question. Throughout your December 2021 report, “Protecting Youth Mental Health,” you emphasize the need for children to keep up with routine, including playing outside as well as participating in sports activities during school and after-school. Similarly, the CDC released a January 2022 report but focused on Americans in all age groups becoming more sedentary.

Knowing both agencies have published alarming data on our Nation's mental health crisis 2 years into the pandemic, how important is physical activity to solving this problem?

Answer. Physical activity is a necessary component to improving mental health. Physical activity researchers have been saying for years that “if there was a drug that improved all the health outcomes that physical activity does, we'd all be taking it and paying millions for it.” And yet, physical activity rates across the United States remain extremely low. A few notes below from the Physical Activity Guidelines for Americans summarize the importance of physical activity.

A single session of moderate-to-vigorous physical activity can reduce blood pressure, improve insulin sensitivity, improve sleep, reduce anxiety symptoms, and improve some aspects of cognition on the day that it is performed. Most of these improvements become even larger with the regular performance of moderate-to-vigorous physical activity.

A 2020 study conducted by CDC and SAMHSA found significant associations between insufficient physical activity, less healthy dietary behaviors and poor mental health-related outcomes, including feeling sad and hopeless, and seriously considering suicide, among US high school students.

Anxiety and anxiety disorders are the most prevalent mental disorders. Participating in moderate-to-vigorous physical activity over longer durations (weeks or months of regular physical activity) reduces symptoms of anxiety in adults and older adults. Major depression is one of the most common mental disorders in the United States and is a leading cause of disability for middle-aged adults in the United States. The prevalence of depressive episodes is higher among females, both adolescents and adults, than among males. Engaging in regular physical activity reduces the risk of developing depression in children and adults and can improve many of the symptoms experienced by people with depression.

President Biden issued Executive Order 14048, renewing the President's Council on Sports, Fitness and Nutrition (PCSFN) under Executive Order 13265 until September 30, 2023. This EO calls for the work of the President's Council to include a focus on expanding national awareness of the importance of mental health as it pertains to physical fitness and nutrition. The 2020–2021 PCSFN Science Board Benefits of Youth Sports Fact Sheet highlights the mental, emotional, and social health benefits of youth sports participation:

- a. Lower rates of anxiety and depression
- b. Lower amounts of stress
- c. Higher self-esteem and confidence
- d. Reduced risk of suicide
- e. Less substance abuse and fewer risky behaviors
- f. Increased cognitive performance
- g. Increased creativity

- h. Greater enjoyment of all forms of physical activity
- i. Improved psychological and emotional well-being for individuals with disabilities
- j. Increased life satisfaction

Despite the multitude of benefits of physical activity, currently less than 25 percent of adults and youth get the physical activity they need to get and stay healthy.

- CDC's Healthy Schools program supports evidence-based school policies, practices, and programs for physical activity, healthy eating, managing chronic conditions, health services, and supportive school environments.
- There is clear evidence that shows healthy students are better learners, and that academic achievement, especially graduating high school, translates into lifelong health benefits. Teaching students how to be physically active, eat healthy, and manage their chronic health conditions will help them develop into healthy adults.
- Physical education and physical activity policies⁵⁵ like keeping recess in schools⁵⁶ and integrating physical activity⁵⁷ in the classroom can help cultivate a supportive school environment by recognizing and promoting the value of physical activity for health, enjoyment, challenge, self-expression, and social interaction. Participation in team sports, being physically active, and attending physical education are associated with higher levels of school connectedness. All opportunities to move and be active in school, including classroom physical activity and recess, can increase school and peer connectedness.
- CDC's School Health Guidelines⁵⁸ to Promote Healthy Eating and Physical Activity can assist districts and schools in identifying evidence-based policies and practices. This resource identifies 9 evidence-based guidelines and 33 strategies to improve healthy eating and physical activity among students.

Question. Is there a coordinated plan to get Americans more physically active?

Answer. When the most recent edition of the Physical Activity Guidelines for Americans was released in November 2018, HHS also released Move Your Way®, the Federal Government's consumer-focused multichannel physical activity communications campaign.

The Move Your Way® campaign plays a crucial role educating the public about physical activity by helping people understand why activity is important and how to get more active. It also encourages Americans to think about physical activity as something that anyone, in any body, can do and enjoy.

The campaign includes over 80 English and Spanish materials—like posters, videos, and interactive tools—for youth, teens, adults, parents, people during and after pregnancy, older adults, and health-care providers.

Individuals, health educators, health-care providers, local health departments, academics, researchers, and other physical activity organizations can use campaign materials to promote physical activity in their community.

Since 2019, ODPHP has supported 15 community pilot implementations that have resulted in 191 community events and activities, 300 partnerships, and 83,000 campaign materials distributed. Evaluation of the pilot communities found that those who reported campaign exposure had 7.2 times the odds of being aware of the Guidelines compared to those who were not exposed. Additionally, they had greater odds of identifying the correct aerobic and muscle-strengthening dosages and had 1.4 times the odds of meeting both the aerobic and muscle-strengthening Guidelines.

To maximize the impact of the campaign, HHS needs to increase audience exposure to its messages and materials. Move Your Way has been funded through evaluation funds through OASH.

The Active People Healthy Nation initiative aims to get 27 million Americans moving by 2027. The President's Council on Sports, Fitness, and Nutrition is chartered to help communicate science-based messages to relevant State, local, and pri-

⁵⁵ https://www.cdc.gov/healthyschools/323219-A_FS_SchoolPE_PA-032621-FINAL_1.pdf.

⁵⁶ https://www.cdc.gov/healthyschools/physicalactivity/pdf/Recess_Data_Brief_CDC_Logo_FINAL_191106.pdf.

⁵⁷ https://www.cdc.gov/healthyschools/physicalactivity/pdf/Classroom_PA_Data_Brief_CDC-Logo_FINAL_191106.pdf.

⁵⁸ <https://www.cdc.gov/healthyschools/npaio/strategies.htm?msclid=3736bb94cfad11ecadaf352feabb42>.

vate entities, and share information about the work of the Council in order to advise the Secretary regarding opportunities to extend and improve physical activity, fitness, sports, and nutrition programs and services at the State, local, and national levels.

Question. As the Nation's Surgeon General, can you commit to getting the message out on the preventative health benefits associated with exercise?

Answer. Physical activity and exercise have been shown to have significant benefits for not only physical health, but also mental health. I am committed to emphasizing the importance of physical activity and relaying the best scientific information available on the health benefits associated with exercise to the American people.

HHS has a strong legacy of promoting evidence-based messages about the importance of physical activity for health promotion and disease prevention. On behalf of HHS, the Office of Disease Prevention and Health Promotion (ODPHP) within OASH leads the development of the Physical Activity Guidelines for Americans along with CDC and NIH. The Move Your Way® Campaign is specifically designed to promote physical activity and encourage more Americans to meet the Physical Activity Guidelines for Americans. The campaign includes over 80 English and Spanish materials—like posters, videos, and interactive tools—for youth, teens, adults, parents, people during and after pregnancy, older adults, and health-care providers. The Active People Healthy Nation initiative led by CDC aims to get 27 million Americans moving by 2027. The President's Council on Sports, Fitness and Nutrition is chartered to help communicate science-based messages to relevant State, local, and private entities, and share information about the work of the Council in order to advise the Secretary regarding opportunities to extend and improve physical activity, fitness, sports, and nutrition programs and services at the State, local, and national levels.

QUESTIONS SUBMITTED BY HON. JAMES LANKFORD

GENDER DYSPHORIA

Question. At the hearing, we discussed the potential adverse impact that medical treatments for gender dysphoria can have on the physical and mental health of children. I appreciate your willingness to engage in such an important conversation on an issue that is impacting more and more children and families.

During our conversation, I mentioned that other countries are seeing the negative effects of medical treatments on children and are reversing course. For example, in May 2021, Sweden ended the use of puberty blockers and cross-sex hormones for most minors. Finland also began prioritizing psychological interventions and support over medical interventions. Similarly, in the UK, litigation, which suspended medical intervention on children under 16 for a time, has sparked a national conversation about the effects of surgical procedures on minors.

Which studies is the United States relying on to determine the long-term health implications that medical treatments for gender dysphoria have on children? Please reply separately for information regarding puberty blockers, cross-sex hormones, and surgical treatments.

What are the known long-term effects of puberty blockers for the purpose of responding to gender dysphoria if such treatment begins at 8 years old? What about 12 years old? What about 16 years old?

What are the known long-term effects of cross-sex hormones for the purpose of responding to gender dysphoria if such treatment begins at 8 years old? What about 12 years old? What about 16 years old?

Based on the medical evidence that exists, do you believe that it is appropriate for children to receive such treatment?

If so, at what age do you think it is medically and ethically appropriate for a child to give consent to receive a treatment with such lasting effects?

Do you agree that at a minimum, parents need to provide consent for their children to engage in any transgender care?

Would you agree that no taxpayer dollars should be used to perform a transition procedure on a child who cannot reasonably provide informed consent?

Answer. HHS would recommend consulting with medical associations regarding standards of care. Generally speaking, care is between a patient, their family and their health-care provider. HHS has released a fact sheet explaining that “puberty blockers” refers to “using certain types of hormones to pause pubertal development.” Research demonstrates that gender-affirming care improves the mental health and overall well-being of gender diverse children and adolescents. Because gender-affirming care encompasses many facets of health-care needs and support, it has been shown to increase positive outcomes for transgender and nonbinary children and adolescents. Gender-affirming care is patient-centered and treats individuals holistically, aligning their outward, physical traits with their gender identity.

BEREAVEMENT

Question. Is the death of a parent a social determinant of health?

Answer. Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. SDOH have a major impact on people’s health, well-being, and quality of life. Examples of SDOH include: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; polluted air and water; and language and literacy skills.⁵⁹ These SDOH are encompassed within the five domains of the Healthy People 2030 SDOH Framework: Economic Security, Education Access and Quality, Health Care Access and Quality, Neighborhood and Built Environment, and Social and Community Context. The death of a parent would be considered a social determinant of health within the Social and Community Context domain.

A large body of research that reflects the impact of SDOH on health show when these conditions are unstable or not met, individuals are at an increased risk for negative health outcomes.⁶⁰ Lack of the sense of security provided by social determinants such as a stable home, consistent nutrition, and supportive relationships can lead to adverse childhood experiences (ACEs). ACEs such as the loss of a parent through divorce, death or abandonment can undermine one’s sense of safety, stability, bonding and well-being.⁶¹ SDOH are closely intertwined with ACEs which can result in prolonged toxic stress and negatively impact an individual’s lifelong health.

HHS is taking a collaborative, multifaceted approach to address SDOH across Federal programs in order to advance health equity and improve health outcomes. Addressing the SDOH is very important for the health and well-being of the Nation, and addressing SDOH requires engagement and coordination across HHS, as well as with other Departments within the Federal Government.

Within HHS, we have adopted a strategic approach to addressing SDOH to advance health and well-being over the life course. ASPE recently posted a series of documents that describe this approach: <https://aspe.hhs.gov/topics/health-health-care/addressing-social-determinants-health-federal-programs>. The approach includes three goals to: advance the data infrastructure needed to support care coordination and evidence-based policymaking; improve access to equitably delivered health-care services and support partnerships between health-care providers, human service providers, and other community-based partners; and adopt a whole-of-government approach that supports public-private partnerships and leverages community engagement to address SDOH.

The death of a parent or loved one is an Adverse Childhood Event (ACE). ACEs, are potentially traumatic events that occur in childhood (0–17 years). Like SDOH, ACEs can have lasting, negative effects on health, well-being, and opportunity. However, creating and sustaining safe, stable, nurturing relationships and environments for all children and families can prevent ACEs and help all children reach their full health and life potential. CDC has produced a resource, Preventing Adverse Childhood Experiences (ACEs): Leveraging the Best Available Evidence, to help States and communities take advantage of the best available evidence to prevent ACEs. It

⁵⁹ Healthy People 2030. <https://health.gov/healthypeople/priority-areas/social-determinants-health>.

⁶⁰ Allen, J., Balfour, R., Bell, R., and Marmot, M. (2014). Social determinants of mental health. *International review of psychiatry*, 26(4), 392–407. <https://pubmed.ncbi.nlm.nih.gov/25137105/>.

⁶¹ Centers for Disease Control and Prevention. (2021 April 6). What are adverse childhood experiences? Retrieved from <https://www.cdc.gov/violenceprevention/aces/fastfact.html>.

features six strategies that focus on changing norms, environments, and behaviors in ways that can prevent ACEs from happening in the first place:

1. Strengthening economic supports for families;
2. Promoting social norms that protect against violence and adversity;
3. Ensuring a strong start for children and paving the way for them to reach their full potential;
4. Teaching skills to help parents and youth handle stress, manage emotions, and tackle everyday challenges;
5. Connecting youth to caring adults and activities; and
6. Intervening to lessen immediate and long-term harms.

IMMIGRATION

Question. Have you or the medical community assessed whether children who have been trafficked across the border are more likely to use drugs or have mental or physical negative effects later in life?

Answer. HHS has not conducted such an assessment because HHS does not have access to health and other personal information for former unaccompanied children once they are no longer in HHS custody.

Question. Cartels often use children as a way to distract border patrol so they can move additional contraband and illicit narcotics across the border. What evidence have you seen that children who have crossed the border suffered trauma while they made the journey to our country? What evidence have you seen that these children have suffered at the hands of the cartels? What impact does this trauma have on them later in life?

Answer. All unaccompanied children are screened for physical abuse, sexual abuse, indicators of trafficking, and for trauma symptoms on entry to HHS care. Unaccompanied children report a wide range of negative experiences in their home countries and/or along the journey to the United States. Some children witness crimes, injuries, deaths, and experience abuse. The impact of these various ACEs depends on the age of the child, the nature of the abuse and the number of cumulative experiences as well as protective factors such as whether the child is alone. The immediate and long-term sequelae of trauma include physical complaints, fear, sadness, intrusive images and thoughts of these events, difficulty with concentration and memory, trouble sleeping, social withdrawal, difficulty forming attachments, inability to modulate emotions, and thoughts and acts of self-harm and suicide. Victimized children often have trouble maintaining and continuing to attain developmental milestones. Childhood trauma is predictive of future health problems, psychiatric illness, academic difficulty, substance use, relationship problems and economic status.

Question. Once these drugs are trafficked across the border, who is the main recipient? How many American teens have died from drugs trafficked into our country?

What percentage of the drugs interdicted in the interior of the U.S. came to the country through the southern border?

Answer. HHS defers to the Department of Homeland Security and the Drug Enforcement Administration.

QUESTIONS SUBMITTED BY HON. BEN SASSE

SOCIAL MEDIA

Question. In your testimony you highlight that children today are facing unprecedented challenges, in part due to the ubiquity of technology platforms. I introduced the Children and Media Research Advancement (CAMRA) Act with Senator Markey and Senator Blunt, which would authorize NIH to lead a research program on technology and media's effects on children, including how social media impacts their cognitive, physical, and socioemotional development.

Are you familiar with this bill and would you support its passage?

Can you speak more about the existing research on how social media impacts children? What gaps in data and knowledge remain?

Should consumption of these platforms be moderated by parents, or does the government need to play a stronger role?

Answer. The National Institutes of Health (NIH) is committed to understanding the impact of technology and digital media use, or TDM, including social media, among infants, children, and teens. There are several institutes at the NIH that support research relevant to this topic. For examples, the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) funds research with regards to how TDM exposure and usage impacts child and adolescent development. As the lead biomedical Federal agency, NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability. Our focus is research; therefore, we do not comment on pending legislation.

The topic of how social media impacts child development from infancy through the transition to young adulthood, as well as family and peer relationships, is a high priority for the NIH and NICHD. First, one of the priorities of the NICHD 2020 Strategic Plan⁶² is to further understand the impact of early and/or prolonged exposure to technology and digital media on typical and atypical development from infancy through adolescence across multiple domains. These domains consist of neurocognitive, behavioral, linguistic, social-emotional, and physical, including those from diverse backgrounds and subpopulations.

Second, research supported by NICHD explores the impact of TDM on social interaction and emotional development, the safe use of social media, and negative social media interaction. For example, researchers found that the age of exposure to and use of social media might increase a child's risk for unsafe social interactions. One study⁶³ supported by NICHD suggests that initiating social media platforms in childhood (10 years or younger) was significantly associated with problematic digital behavior outcomes compared to either tween (11–12) and/or teen (13+) initiation. In another study, researchers found that adolescents assigned to receive few (vs. many) *likes* during a social media interaction felt more strongly rejected and reported more negative affect and more negative thoughts about themselves. Negative responses to receiving fewer *likes* were associated with greater depressive symptoms reported day-to-day and at the end of the school year. NICHD also supported research examining negative comments received via social media, including cyberbullying. One study interviewed 13- to 17-year-olds to understand more about their experiences and thoughts on cyberbullying. Teens identified cyberbullying as part of a continuum of bullying and peer violence experiences. Other ongoing research⁶⁴ will identify strategies parents can use to effectively manage their adolescents' use of social media sites such as using targeted communication, co-use, modeling, limit setting, non-technical monitoring, and technical mediation (*e.g.*, use of parental control software) and examine the effects of these strategies on adolescents' positive or negative social media experiences and well-being. Additionally, ongoing research supported by the National Institute of Mental Health is seeking to identify patterns in social media use that predict risk for suicide,⁶⁵ self-harm, or depressive symptoms⁶⁶ among youth.

Lastly, in 2021, to increase investment in this area of research, NICHD released a funding opportunity announcement,⁶⁷ Impact of Technology and Digital Media (TDM) Exposure/Usage on Child and Adolescent Development, to solicit multi-project research program applications from the field which are intended to be flagships in advancing TDM research in early childhood (ages birth–8) and adolescence (ages 9–17).

WORKFORCE SHORTAGES

Question. Much of the congressional focus on attracting more practitioners to work in the mental health space centers on student loan forgiveness. I worry this approach can create perverse incentives for institutions to continue raising the cost of tuition, and forces all taxpayers to take responsibility for a subset of the population and their choices.

What are some other innovative ways to incentivize individuals to go into the field of mental and behavioral health?

⁶² https://www.nichd.nih.gov/sites/default/files/2019-09/NICHD_Strategic_Plan.pdf.

⁶³ <https://reporter.nih.gov/search/SPeLpEeR0G3mSWpMq5NXw/project-details/9442212>.

⁶⁴ <https://reporter.nih.gov/search/4VV6uDCPGUKGE79ynYIFCw/project-details/10216400>.

⁶⁵ <https://reporter.nih.gov/project-details/10373402>.

⁶⁶ <https://reporter.nih.gov/project-details/10298070>.

⁶⁷ <https://grants.nih.gov/grants/guide/rfa-files/RFA-HD-22-009.html>.

Answer. Some innovative ways to incentivize individuals to enter the behavioral health field include:

- Loan repayment or scholarships for students who commit to work in the field.
- Expanding paid internships to defray student costs and enable students to gain experience.
- Increasing scholarships or offset behavioral health education costs.
- Subsidizing clinical supervision at no cost/reduced cost, during work hours, to individuals in the field that are pursuing licensure where this is a requirement.
- Increasing access to mental health/supportive services for individuals working in the field of behavioral health (trainings, EAP, mental health resources, recovery groups, etc.).
- Outreach in high school and higher education settings to educate people about careers in behavioral health.

Individuals who go into the field of mental and behavioral health most often do so out of a desire to help others and to positively contribute to society. They are ultimately hampered by excessive patient loads, low rates of reimbursement, and difficulty in transferring from State to State. While loan forgiveness helps to offset the costs of education, systemic issues that contribute to burnout and reduced job satisfaction also must be addressed.

Another important issue is the need to harmonize certification and registration requirements across the United States. Currently, States have different rules and regulations around certification. This makes it difficult for mental and substance use specialized health-care providers to transport their skills to new jurisdictions. Encouraging States to harmonize their certification requirements will allow individuals who relocate across State lines to continue to work in substance use or mental health roles with little difficulty.

HRSA offers a variety of incentives for students to enter the mental and behavioral health fields. The National Health Service Corps (NHSC) and Nurse Corps programs offer both scholarships and loan repayment awards to incentivize students to choose careers in mental and behavioral health and incentivize current mental and behavioral health providers to serve in medically underserved communities.

The NHSC currently has a field strength of over 9,300 behavioral health providers serving across the Nation, including providers in the NHSC Loan Repayment Program (LRP), NHSC Scholarship Program (SP), NHSC Rural Community LRP, NHSC Substance Use Disorder Workforce LRP, and the NHSC Students to Service LRP.

HRSA's Nurse Corps LRP and SP are critical to ensuring both children and adults have access to a high-quality, adequate behavioral health nursing care. The Nurse Corps programs address the current maldistribution of nurses and increase access to behavioral health services by increasing funding for scholarships and loan repayment assistance for behavioral health training and service for Nurse Practitioners (NPs) specializing in psychiatric mental health. Nurse Corps members receive scholarship and loan repayment incentives in exchange for an agreement to work in Critical Shortage Facilities (CSFs), which are located in Health Professional Shortage Areas (HPSAs) around the Nation.

Finally, the Substance Use Disorder Treatment and Recovery (STAR) LRP aims to recruit and retain medical, nursing, behavioral/mental health clinicians and para-professionals who provide direct treatment or recovery support of patients with or in recovery from a substance use disorder.

Question. How could Congress potentially use GME slots to try and remedy this problem?

Answer. The training and retention of physicians and other health-care professionals is critical to ensuring access to health care in underserved communities that have historically experienced workforce challenges. In December, CMS issued a final rule that will enhance the health-care workforce and fund additional medical residency positions in hospitals serving rural and underserved communities, including areas with a shortage of mental health-care providers. The Fiscal Year (FY) 2022 Inpatient Prospective Payment System (IPPS) final rule with comment period establishes policies to distribute 1,000 new Medicare-funded physician residency slots to qualifying hospitals, phasing in 200 slots per year over 5 years. CMS estimates that funding for the additional residency slots, once fully phased in, will total approximately \$1.8 billion over the next 10 years. In implementing a section of the Consoli-

dated Appropriations Act (CAA), 2021, this is the largest increase in Medicare-funded residency slots in over 25 years. In allocating these new residency slots, CMS will prioritize hospitals with training programs in areas demonstrating the greatest need for providers, as determined by Health Professional Shortage Areas (HPSA). The first round of 200 residency slots will be announced by January 31, 2023, and will become effective July 1, 2023. In addition, under the HPSA Physician Bonus Program, CMS pays a 10 percent bonus to psychiatrists who deliver services to Medicare patients in the areas that have a geographic mental health HPSA designation.

Unlike most Federal funding for GME, the Health Resources and Services Administration's (HRSA's) Teaching Health Center Graduate Medical Education (THCGME) program's payments support primary care residency training in community-based ambulatory patient care centers, as opposed to in-patient care settings in hospitals. The specialties covered include pediatrics and psychiatry. Adding pediatric psychiatry as an eligible specialty would support training these specialists in community-based settings. Although health centers receive Federal funding to improve access to care, they often have difficulty recruiting and retaining primary care professionals, in part because they are generally smaller organizations with smaller operating margins compared to teaching hospitals. The THCGME program is uniquely positioned to meet these recruitment and retention needs by providing funding to support resident training in underserved communities. Without THCGME funding, these additional residency positions would be challenging to maintain, resulting in a decrease in physicians and dentists available to serve rural and underserved communities.

Moreover, the Children's Hospitals Graduate Medical Education (CHGME) payment program helps eligible hospitals maintain GME programs that train resident physicians. The CHGME payment program supports the training of residents to provide quality care to vulnerable and underserved pediatric populations, and enhances the supply of pediatricians, pediatric sub-specialists, and other non-pediatric residents. Residency training in these hospitals focus on pediatric primary care as well as medical and surgical subspecialties which suffer from shortages

Question. During the pandemic, HHS provided a number of flexibilities to help address workforce shortages and allow psychiatric facilities to fully utilize their staff. Some of these flexibilities allowed hospitals to use nurse practitioners or other providers to practice to the fullest extent of their license, particularly in the areas of behavioral health care.

Do you support extending, or even making permanent, these flexibilities?

Answer. HHS has received overwhelming support for many of the flexibilities enacted during the COVID-19 public health emergency that have been widely supported by patients, payers, and other stakeholders. HHS has determined that the benefits of continuing many of these flexibilities such as telemedicine delivery of care for those with opioid use disorder far outweigh the reported risk. HHS is exploring options on making many of the flexibilities permanent.

During the COVID-19 pandemic, the Health Resources and Services Administration (HRSA) worked with its National Health Service Corps clinicians to extend maximum flexibility for their statutory obligations. HRSA continues to evaluate extending these flexibilities within the parameters of the statute and regulations. The additional flexibilities provided by the Coronavirus Aid, Relief, and Economic Security (CARES) Act to NHSC participants included:

- Giving participants more options as to where they can complete their service by allowing NHSC participants to receive service credit at certain non-traditional sites to address the public health emergency; and
- Allowing participants to adjust their service commitment if their work is impacted by the pandemic.

These flexibilities have served as a very useful additional tool for expanding access to high quality health care to populations of greatest need across the U.S.

Question. What is HHS currently doing to ensure practitioners can work within the full extent of their license and scope of practice?

Answer. Ensuring practitioners can work within the full extent of their license and scope of practice is critical to removing barriers to practice and care. HHS is working across government to address these long-standing barriers to strengthening the health workforce. Although HRSA does not regulate licensing of health-care practitioners, which is primarily done at the State level, HRSA provides funding for

faculty development opportunities, which allows practitioners to continuously improve competencies, provide an awareness of new developments and emerging theories. HRSA also incentivizes independently licensed providers to practice where needed most through loan repayment opportunities.

Question. One major issue in accessing mental health treatment is a lack of providers on insurance networks, with people waiting months on waitlists to get an appointment with a new provider.

How can we update network adequacy standards to get at this problem? What other approaches might work?

How is HHS working to ensure behavioral health providers are well represented in provider networks in all federally regulated health plans, including Medicaid managed care plans and plans offered on the exchanges?

Answer. Protecting and strengthening access to behavioral health providers is a critical priority for the Biden-Harris administration. Through the HHS Notice of Benefit and Payment Parameters for 2023 Proposed Rule, issued in December 2021, CMS proposed policies to strengthen and clarify our network adequacy standards, including standards based on travel time and distance and appointment wait times for numerous provider specialties, including behavioral health providers, for Qualified Health Plans (QHPs) offered on the Federal Marketplace. Under the proposed rule, CMS would conduct network adequacy reviews in all Federally Facilitated Marketplace (FFM) States except for States performing plan management functions that adhere to a standard as stringent as the Federal standard and elect to perform their own reviews. Reviews would occur prospectively during the QHP certification process.

CMS is also working to develop and implement a comprehensive access strategy for Medicaid and CHIP. In June 2021, CMS published the Promoting Access in Medicaid and CHIP Managed Care: Behavioral Health Provider Network Adequacy Toolkit⁶⁸ to help State Medicaid agencies and the managed care plans with which they contract meet network adequacy requirements for adult and pediatric behavioral health-care providers. In addition using regulations and guidance, along with other tools, CMS will set forth a multifaceted approach to help ensure equitable access to health care for Medicaid and CHIP beneficiaries across all care delivery systems. In February 2022, CMS issued a Request for Information (RFI)⁶⁹ on access to care and coverage for people enrolled in Medicaid and CHIP. Feedback obtained from the RFI will aid in CMS's understanding of enrollees' barriers to enrolling in and maintaining coverage, accessing health-care services and supports, and ensuring adequate provider payment rates to encourage provider availability and quality. This information will help inform future policies, monitoring, and regulatory actions, helping ensure beneficiaries have equitable access to high-quality and appropriate care across all Medicaid and CHIP payment and delivery systems, including fee-for-service, managed care, and alternative payment models. The RFI submissions will also inform CMS's work to ensure timely access to critical services, such as behavioral health care and home and community-based services.

Question. More generally, can you point to any data that discusses potential differences in effectiveness based on provider training background? Is there evidence to suggest that counselors can provide effective treatment at the same level as psychologists or psychiatrists?

Answer. There are a variety of roles and practices that comprise mental health treatment and services. These include prescribing and administering medication, assessment and care planning, individual therapy, group therapy, care coordination and case management, peer support, rehabilitative supports like supported employment and supportive housing, and variety of other services and supports.

Different levels of training and credentialing are required for the delivery of these different roles and practices. For example, psychiatrists, medical doctors, nurse practitioners or advance practice nurses, and physician assistants, may prescribe medication depending on the class and schedule of the medications being prescribed, level of supervision needed, and other factors. Psychiatrists have extensive training that makes them uniquely able to prescribe certain medications effectively and safely or determine the best course of treatment, including medication needs, for complex cases. Psychologists may have specialized training in administering and

⁶⁸ <https://www.medicaid.gov/medicaid/downloads/behavior-health-provider-network-adequacy-toolkit.pdf>.

⁶⁹ https://cmsmedicaidaccessrfi.gov1.qualtrics.com/jfe/form/SV_6EYj9eLS9b74Npk.

completing assessments reliably and have extensive training that may assist in treating complex cases. Psychiatrists and psychologists often play an important role by providing clinical supervision to other providers. There are also different individual and group therapeutic models that may be administered by a range of mental health professionals. Most models of individual and group therapy can be effectively delivered by master's-level clinicians, and some models can be effectively delivered by mental health professionals without a master's degree. Some roles, such as case or care managers are often filled by providers that do not have a master's degree.

In short, it is hard to make a blanket statement about whether counselors can fulfill the same roles as psychiatrists or psychologists, because they often have different roles within the service systems and provide different services according to their scopes of practice. There are also a variety of different types of counselors, so it is probably best not to generalize across this group. In general counselors would lack any prescribing authority and medical training.

SCHOOL CLOSURES

Question. I want to turn now to school closures and the effects on the mental health of children over the last year. To point to just one example, a study published in *JAMA*⁷⁰ in April found that just 3.6 percent of kids reported feelings of loneliness before schools were shuttered, yet nearly 32 percent reported feeling so when schools were closed. Only 4.2 percent of children were labeled agitated or angry in previous school years, while this number jumped to nearly a quarter of children while schools were closed. We also know⁷¹ there was an increase in emergency room visits among children for mental health conditions, suicide attempts, and drug overdoses over the last year and a half.

Are you familiar with the data on how school closures impact children's mental health?

Answer. Yes, which is why providing guidance on safely returning to, and maintaining, in-person instruction continues to be a priority for HHS and the Biden-Harris administration. Numerous studies have been published, from both the U.S. and other countries, on the impact of school closures on student mental health and well-being during the first wave of the COVID-19 pandemic. For example, a recently published systematic review article summarized findings from 36 studies (from 11 countries) that assessed the associations between school closures on student mental health, health behavior, and well-being. Twenty-five studies (69 percent) of included studies focused on mental health outcomes and identified associations across emotional, behavioral, and restlessness/inattention problems. CDC guidance stresses the importance of in-person learning and does not recommend school closures as a public health strategy. CDC offers guidance on strategies to support in-person learning.

Question. Are you working with the Department of Education and others in the administration to ensure that schools are able to stay open even with the Omicron surge and any potential variants that may arise down the line?

Answer. CDC has developed guidance and resources to support the safe reopening of schools. These include the Guidance for the Prevention of COVID-19 in K-12 Schools, which has been updated as new data become available and the science has evolved. CDC guidance stresses the importance of in-person learning and does not recommend school closures as a public health strategy. When schools close, they do so due to operational issues—too many people (students/staff) are out because they are sick or quarantining, or because they are providing a break for in-person school due to mental health concerns. CDC and the Department of Education work together closely to develop webinars, listening sessions, and tools to support schools in safely remaining open for in-person learning.

To support the implementation of testing programs in schools, CDC launched a communications toolkit with resources for school administrators and parents. CDC has provided ongoing technical assistance to State, local, and territorial health departments for testing efforts through regular office hours, webinars and peer to peer learning opportunities. Through partnerships with the Department of Education and the Rockefeller Foundation, CDC has supported a Learning Network for schools, with resources available at www.openandsafeschools.org.

⁷⁰ <https://time.com/5964671/school-closing-children-mental-health-pandemic/>.

⁷¹ <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2775991>.

Question. Thus far, are you aware of efforts by schools and providers to use COVID–19 pandemic relief funding to increase access to and availability of behavioral health services?

If not, what are the barriers still in place?

Is the administration formally tracking use of these funds and how often they are being used to address the youth mental health crisis?

Answer. CDC’s Healthy Schools Program has provided support to 15 State education agencies that deliver technical assistance and training to school district and school leaders on how to address youth mental health. States report on a monthly basis the types of technical assistance and training topics on school-based mental health that are delivered. Across these 15 States, in the 2021–2022 school year, over 2,000 school leaders from over 200 school districts have received this technical assistance and training, 655 collaborative partners were engaged, and 1,220 professional development (PD) events related to the prevention of COVID–19 were held by SEAs. Through these PD events, SEAs reached 6,198 district contacts (517 individuals per month on average) and 8,643 school contacts (720 individuals per month on average).

MARIJUANA USE

Question. I appreciated your comments in the hearing about how we need to message that marijuana can cause harm in youth. A 2019 meta-analysis by *JAMA Psychiatry* found that adolescent cannabis use was associated with increased risk of developing depression and suicidal behavior later in life.

As the legalized marijuana market and public support for Federal legislation continue to grow, what needs to be done in terms of research, messaging, and policy to ensure that marijuana use does not contribute to a growing youth mental health crisis?

Answer. Marijuana use among youth and young adults is a major public health concern. Early youth marijuana use is associated with:

- Neuropsychological and neurodevelopmental decline.
- Poor school performance.
- Increased school drop-out rates.
- Increased risk for psychotic disorders in adulthood.
- Increased risk for later depression.
- Suicidal ideation or behavior.

As policy and legalization efforts evolve and the availability of legal marijuana increases, communities and families need guidance to support the prevention of marijuana use among youth.

To assist communities and families, the Federal Government is developing and disseminating practical guidance resources such as SAMHSA’s evidence-based guide, *Preventing Marijuana Use Among Youth*⁷² (2021), which covers programs and policies to prevent marijuana use among youth aged 12 to 17, including:

- Environmental strategies, such as regulating the price of marijuana products, where these products are sold, the products themselves, and their promotion and advertising.
- School- and community-based substance use prevention programs to implement along with environmental interventions as part of a comprehensive prevention strategy.

The guide provides considerations and strategies for key stakeholders (including policy makers, community coalitions, businesses, school administrators, educators, and other community members), States, and the prevention workforce to prevent and reduce marijuana use among youth.

SAMHSA youth marijuana use prevention messaging includes public education messages⁷³ for use by communities, the “Talk. They Hear You.” national media campaign which empowers parents and caregivers to talk with children early about

⁷²<https://store.samhsa.gov/product/preventing-marijuana-use-among-youth/PEP21-06-01-001>.

⁷³<https://www.samhsa.gov/marijuana>.

alcohol and other drug use (e.g., PSAs,⁷⁴ brochures,⁷⁵ mobile app,⁷⁶ community engagement,⁷⁷ podcast⁷⁸), and fact sheets for teens (English/Spanish).^{79,80}

In addition, SAMHSA's national technical assistance and training system for substance use disorder prevention, the Prevention Technology Transfer Centers⁸¹ (PTTCs), has a Cannabis Prevention Working Group which develops cannabis prevention education⁸² training and technical assistance tools, products, and services, to be deployed to communities across the country.

To better understand the epidemiology of cannabis use as well as the harmful and potential therapeutic effects of use, better surveillance data are needed on initiation of use, reason for use, modes of use, product types, and cannabis use disorder. Additionally, given the changing perceptions of risk associated with cannabis use and the continually evolving nature of policies legalizing and decriminalizing medical and nonmedical adult cannabis use at the State level, research and evaluation studies are warranted to improve our understanding of outcomes associated with cannabis use among youth. Specifically, research on risk and protective factors for early cannabis use initiation and escalation of use among youth and young adults is needed to improve messaging to youth.

Additionally, we need to better understand the health and social outcomes associated with cannabis use among youth and how they differ by mode of use, frequency of use, and THC concentration of product. Many of the available studies on the effects of cannabis on the adolescent brain were done prior to the introduction of the high THC concentration products that are now available; in addition, most of the primary literature on the mental health effects of cannabis use is observational in nature. Comorbidity between substance use and mental health disorders directly affects the ability to determine causality and directionality in studies of cannabis use and mental health outcomes and warrants further investigation. In addition, research on the impact of prevention programs, policies, and practices is needed to understand what is effective in preventing youth cannabis use. CDC has developed both a Cannabis Strategic Plan and Research Agenda, with particular focus on populations at increased risk for negative outcomes, including youth. The Strategy describes actions that will foster a public health approach, improve messaging, and secure dedicated resources to address the health risks of cannabis. One of the six pillars in the Strategy is focused around partnering with public safety, schools, and community coalitions to offer opportunities for community-based coalitions to learn about evidence-based substance use prevention strategies addressing youth cannabis use. CDC has also partnered with the National Council on Mental Wellbeing to create a Youth Substance Use Prevention Messaging Guide to address increased substance use among youth during the pandemic. In September 2021, CDC released a health advisory on increased availability of Delta-8 THC products and associated adverse events with recommendations for consumers to safely store their cannabis products away from youth.

Question. Is any use of marijuana in adolescence or pregnancy safe? If not, should we message this to the public more firmly?

Answer. Marijuana has both short- and long-term effects on the brain. Marijuana also affects brain development. When youth begin using marijuana as teenagers, the drug may impair thinking, memory, and learning functions and affect how the brain builds connections between the areas necessary for these functions. There is ongoing research to determine how long marijuana's effects last and whether some changes may be permanent.

Use of marijuana during and after pregnancy may pose risks to both mother and baby. Some research has documented effects of marijuana use during and after pregnancy, but much remains to be learned. Pregnant individuals should be aware of the realities and serious nature of these potential harms. Secondhand marijuana smoke contains delta-9-tetrahydrocannabinol (THC) and many of the toxic chemicals found in cigarette smoke. THC does accumulate in human breast milk, but its effect

⁷⁴ <https://www.samhsa.gov/talk-they-hear-you/partner-resources/psas>.

⁷⁵ <https://www.samhsa.gov/talk-they-hear-you/parent-resources/keep-kids-safe-brochures>.

⁷⁶ <https://www.samhsa.gov/talk-they-hear-you/mobile-application>.

⁷⁷ <https://www.samhsa.gov/talk-they-hear-you/parents-night-out>.

⁷⁸ <https://www.samhsa.gov/talk-they-hear-you/podcast>.

⁷⁹ <https://store.samhsa.gov/product/Tips-for-Teens-The-Truth-About-Marijuana/PEP19-05>.

⁸⁰ <https://store.samhsa.gov/product/Tips-for-Teens-The-Truth-About-Marijuana-Spanish-Language-Version/PEP20-03-03-011>.

⁸¹ <https://pttcnetwork.org/>.

⁸² <https://pttcnetwork.org/centers/global-pttc/cannabis-prevention>.

on infants remains unknown. Because an infant's brain is continuing to develop, consuming THC in breast milk could affect brain development. Research is limited in this area, but it is a growing concern.

SAMHSA's evidence-based guide, *Preventing the Use of Marijuana: Focus on Women and Pregnancy*,⁸³ addresses the established health risks of marijuana use to pregnant women and their children, as well as the expanding evidence base on other potential harms of use during pregnancy. The intent is for prevention practitioners and health-care providers to use the guide to be informed of the adverse health consequences and potential effects of marijuana use, and to promote healthy decision-making among pregnant and postpartum women.

SAMHSA marijuana use prevention and pregnancy messaging includes public education messages⁸⁴ for use by communities. SAMHSA also funds a grant program⁸⁵ to provide comprehensive substance use disorder (SUD) treatment services, recovery support services, and harm reduction interventions to pregnant and postpartum women across a continuum of specialty SUD residential and outpatient levels of care, based on comprehensive, individualized screenings and assessments that inform treatment planning and service delivery in a continuous care model.

QUESTIONS SUBMITTED BY HON. JOHN BARRASSO

WORKFORCE DEVELOPMENT IN RURAL COMMUNITIES

Question. The health-care professionals, along with all front-line workers, deserve our gratitude and appreciation. Their dedication to our communities during this pandemic is something we must recognize and never forget.

A top concern of Wyoming mental health facilities is making sure there are enough staff to care for their patients. It is especially challenging to attract and keep health-care providers in rural communities.

Can you discuss solutions related to workforce development you believe will improve the ability of mental health facilities to attract and maintain staff in rural areas?

Answer. HRSA manages several programs that either focus on workforce development in rural communities or allow communities to propose a unique workforce program to meet the needs of a community. In FY 2021, HRSA funded the Rural Behavioral Health Workforce Centers—Northern Border Region (RBHWCs) as part of the Rural Communities Opioid Response Program (RCORP), a multiyear HRSA initiative with the goal of reducing morbidity and mortality resulting from substance use disorder (SUD). The RBHWCs are advancing RCORP's overall goal by improving behavioral health-care services in rural areas through educating and training health professionals and community members to care for individuals with behavioral health disorders, including SUD. This program supports HRSA's collaboration with the Northern Border Regional Commission (NBRC) to provide career and workforce training activities that assist individuals with behavioral health needs, particularly SUD, within the four-State NBRC region. We also note that the Nurse Corps Loan Repayment Program (LRP) and the National Health Service Corps (NHSC) LRPs, offer loan repayment awards to incentivize current mental and behavioral health providers to serve in medically underserved communities, including rural areas. The NHSC LRPs currently have a field strength of over 9,300 behavioral health providers serving across the Nation, and over 3,400 of these providers are located in rural areas. The Nurse Corps LRP currently has a field strength of 2,307 clinicians, with 325 serving as psychiatric Nurse Practitioners (NPs).

Additionally, several of HRSA's rural community-based programs offer non-categorical funding that allow applicants to propose and build a program in response to an area of need. HRSA has funded many programs that focus on workforce development through the Rural Health Network Development, Rural Health Care Coordination, Rural Health Care Services Outreach, and Delta States Rural Development Network grant programs.

⁸³ <https://www.samhsa.gov/resource/ebp/preventing-use-marijuana-focus-women-pregnancy>.

⁸⁴ <https://www.samhsa.gov/marijuana/marijuana-pregnancy>.

⁸⁵ <https://www.samhsa.gov/grants/grant-announcements/ti-22-003>.

YOUTH SUICIDE

Question. My wife Bobbi and I are committed to helping families who have tragically lost a loved one to suicide. The loss of a loved one is always difficult, but as a father I cannot imagine the pain of losing a child.

Many Wyoming communities host Out of the Darkness walks to help raise awareness about this crisis. I strongly support raising awareness about suicide and making sure we are discussing and addressing this very real public health crisis.

Can you discuss ways Congress can raise awareness about youth suicide and solutions we should consider?

Answer. On July 16, 2022, the U.S. will transition the National Suicide Prevention Lifeline to the 988 Suicide and Crisis Lifeline as a new, easier way to reach the service formally known as the National Suicide Prevention Lifeline. Available 24/7, youth will be able to call or text 988 or chat 988lifeline.org if they are in need of crisis support. They will have quick access to a trained crisis counselor who can help youth experiencing mental health-related distress. SAMHSA put forward investments to strengthen and expand the existing Lifeline network operations and telephone infrastructure, including centralized chat/text response, backup center capacity, and special services.

SAMHSA's main vehicle for supporting youth suicide prevention is the Garrett Lee Smith State and Tribal Youth Suicide Prevention grant program. Since its start in 2005, following the tragic death by suicide of former Senator Gordon Smith's son, this program has been shown to have a demonstrable impact on reducing youth suicide. SAMHSA funded evaluations have shown that counties implementing grant-funded youth suicide prevention activities have lower rates of youth suicide compared to matched counties.⁸⁶ Further, this impact was shown in the evaluation to be directly related to years of continued funding.

Two approaches to improving awareness are:

- Supporting the Garrett Lee Smith State and Tribal Youth Suicide Prevention grant program to support youth suicide awareness and suicide prevention efforts across the country.
- Supporting State capacity to continue youth suicide prevention efforts when the Federal grants end. Many States do not even have a single FTE devoted to youth suicide prevention except for those funded by the Garrett Lee Smith grants.

Developing and disseminating communication messages and resources are critical for advancing awareness and public health action related to suicide prevention. Messaging and resources may focus on topics such as the scope and magnitude of suicide, suicide as a preventable public health problem, the need for a comprehensive approach (and what that means), the range of suicide risk and protective factors, suicide warning signs and what works to prevent suicide. Health departments serve a vital role in tracking and monitoring suicide and suicidal behavior and in connecting and coordinating suicide prevention efforts across State, local, and tribal governments and on the ground in local communities. However, according to a CDC survey of State suicide prevention coordinators, there is limited capacity and resources to carry out suicide-related surveillance and implementation and evaluation of public health prevention activities in States, tribes, and territories. In addition, data are critical to defining the problem of suicide (including its scope and magnitude), determining who is most impacted, tracking trends over time, and informing prevention, program evaluation, and timely response. However, the availability and timeliness of existing data present challenges. New sources of data and enhanced application of data are urgently needed to help identify emerging health threats and impacted populations, earlier than more traditional data and analytic techniques allow. This would include leveraging and expanding novel and timely data from sources such as social media, emergency medical services (EMS), and near real-time hospital records data and using innovative data science methods like data linkage and machine learning to rapidly synthesize these data and disseminate them to key partners and decision-makers. This quality, timely data and the application of emerging data science methods have the potential to strengthen and target data driven suicide prevention strategies tailored to communities. Support for two

⁸⁶ Godoy Garraza L, Kuiper N, Goldston D, McKeon R, Walrath C. Long-term impact of the Garrett Lee Smith Youth Suicide Prevention Program on youth suicide mortality, 2006–2015. *J Child Psychol Psychiatry*. 2019 Oct;60(10):1142–1147. doi: 10.1111/jcpp.13058. Epub 2019 May 8. PMID: 31066462.

programs could help improve State suicide prevention capacity and surveillance, CDC's Comprehensive Suicide Prevention Program and CDC's suicide syndromic surveillance which provides near-real time data and targeted response efforts and new and innovative methods for collecting suicidal behavior data.

MASKING YOUNG CHILDREN

Question. Making sure young people can attend school is vitally important. Previously, the Department of Health and Human Services issued a rule requiring young children to wear a mask to attend a Head Start program.

As a doctor, I am concerned this policy is not supported by the medical evidence. Even the World Health Organization explicitly States that "children aged 5 years and under should not be required to wear masks . . . based on the safety and overall interest of the child."

Do you believe the scientific data supports the masking of young children?

Answer. When the COVID-19 community level is high, CDC recommends individuals wear a well-fitting mask indoors in public, regardless of vaccination status (including in K-12 schools and other indoor community settings). At all COVID-19 community levels, people can wear a mask based on personal preference, informed by personal level of risk.

People with symptoms, a positive test, or exposure to someone with COVID-19 should wear a mask. (See COVID-19 Community Levels at <https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html>.) Experimental and epidemiologic data support community masking to reduce the spread of SARS-CoV-2, including among adults and children 2 years and older. (See Science Brief: Community Use of Masks to Control the Spread of SARS-CoV-2 at <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html>.) Mask use has been found to be safe and is not associated with clinically significant impacts on respiration or gas exchange under most circumstances, except for intense exercise. The limited available data indicate no clear evidence that masking impairs emotional or language development in children.

Question. If you believe the masking of young children is justified, please provide specific medical or scientific studies to support this position.

Answer:

1. Jehn M., McCullough J.M., Dale A.P., Gue M., Eller B., Cullen T., Scott S.E. Association between K-12 school mask policies and school-associated COVID-19 outbreaks—Maricopa and Pima Counties, Arizona, July–August 2021. *MMWR Morb Mortal Wkly Rep.* 2021; 70(39):1372–1373.
2. Budzyn S.E., Panaggio M.J., Parks S.E., Papazian M., Magid J., Eng M., Barrios L.C. Pediatric COVID-19 cases in counties with and without school mask requirements—United States, July 1–September 4, 2021. *MMWR Morb Mortal Wkly Rep.* 2021; 70(39):1377–1378.
3. Donovan C.V., Rose C., Lewis K.N. et al. SARS-CoV-2 Incidence in K-12 School Districts with Mask-Required Versus Mask-Optional Policies—Arkansas, August–October 2021. *MMWR Morb Mortal Wkly Rep.* 2022; 71 (March 8; available online as an early release at https://www.cdc.gov/mmwr/volumes/71/wr/mm7110e1.htm?s_cid=mm7110e1_e&ACSTrackingID=USCDC_921-DM77309&ACSTrackingLabel=MMWR%20Early%20Release%20-%20Vol.%2071%2C%20March%208%2C%202022&deliveryName=USCDC_921-DM77309).
4. Smith J., Culler A., Scanlon K. Impacts of blood gas concentration, heart rate, emotional state, and memory in school-age children with and without the use of facial coverings in school during the COVID-19 pandemic. *FASEB J.* 2021;35(Suppl 1) doi:10.1096/fasebj.2021.35.S1.04955.
5. Lubrano R., Bloise S., Testa A., et al. Assessment of respiratory function in infants and young children wearing face masks during the COVID-19 pandemic. *JAMA Netw Open.* 2021;4(3):e210414.
6. Dost B., Kömürcü Ö., Bilgin S., Dökmeci H., Terzi Ö., Barış S. Investigating the effects of protective face masks on the respiratory parameters of children in the post-anesthesia care unit during the COVID-19 pandemic. *J Perianesth Nurs.* 2021; doi.org/10.1016/j.jopan.2021.02.004.
7. Ammann P., Ulyte A., Haile S.R., Puhan M.A., Kriemler S., Radtke T. Perceptions towards mask use in school children during the SARS-CoV-2 pandemic: The Ciao Corona Study. *medRxiv.* 2021; doi.org/10.1101/2021.09.04.21262907

external icon, <https://www.medrxiv.org/content/10.1101/2021.09.04.21262907v1>.

8. Gori M., Schiatti L., Amadeo M.B. Masking emotions: Face masks impair how we read emotions. *Front Psychol.* 2021;12:669432.
9. Ruba A.L., Pollak S.D. Children's emotion inferences from masked faces: Implications for social interactions during COVID-19. *PLoS One.* 2020;15(12):e0243708.
10. Singh L., Tan A., Quinn P.C. Infants recognize words spoken through opaque masks but not through clear masks. *Dev Sci.* 2021;24(6):e13117.
11. Sivaraman M., Virues-Ortega J., Roeyers H. Telehealth mask wearing training for children with autism during the COVID-19 pandemic. *J Appl Behav Anal.* 2021;54(1):70-86.
12. Halbur M., Kodak T., McKee M., et al. Tolerance of face coverings for children with autism spectrum disorder. *J Appl Behav Anal.* 2021;54(2):600-617.
13. Lillie M.A., Harman M.J., Hurd M., Smalley M.R. Increasing passive compliance to wearing a facemask in children with autism spectrum disorder. *J Appl Behav Anal.* 2021;54(2):582-599.
14. Schneider J., Sandoz V., Equey L., Williams-Smith J., Horsch A., Bickle Graz M. The role of face masks in the recognition of emotions by preschool children. *JAMA Pediatr.* 2021;e214556.

Question. Do you believe the administration should revisit this policy?

Answer. CDC will continue to evaluate emerging evidence on benefits and risks of masking for children and adults and will update recommendations if warranted. In addition, performance of COVID-19 community levels will be reassessed as the pandemic continues to evolve.

TELEHEALTH

Question. Patients in Wyoming are using telehealth to help meet their health-care needs during the pandemic. Members of this committee support making sure telehealth becomes a permanent part of health-care delivery for those patients who want to utilize this service.

Can you discuss the importance of telehealth in terms of the delivery of mental health services for young people?

Answer. Telehealth has become an increasingly important tool in supporting mental health-care services for special populations such as youth. Throughout the pandemic, not only have telehealth services for mental health grown exponentially, helped in large part by a range of new regulatory action taken by States and HHS, but telehealth has also filled an urgent need to maintain access to behavioral health care for youth while social distancing was necessary. However, the benefits of telehealth for mental health services extend beyond the COVID-19 pandemic. Telehealth for mental health services can help with the improvement of behavioral health for youth outcomes, and reduction of health-care costs. Telehealth benefits for youth and their families include improving access to health care by providing care closer to or in the home, reducing travel time, reducing time away from school and work, and easier access to mental health specialists. Telehealth benefits for providers include maintaining the behavioral health provider relationship with the patient and generally high provider satisfaction.

Access to mental health care is challenging for children and families, particularly in rural areas.⁸⁷ Children in rural areas also tend to experience higher rates of depression, anxiety, and behavioral problems (ages 3-17 years).⁸⁸ It is important to promote virtual care services to maximize the ability of existing mental health providers and reach those in rural and remote areas without access to care. HRSA supports several programs that employ telehealth to: improve access to quality health care and specialty services for children with special health-care needs; strengthen the health workforce; and improve access to care and services.

Recognizing the important role of telehealth in ensuring access to care and services during the COVID-19 pandemic, HRSA awarded funding from the Coronavirus Aid, Relief, and Economic Security (CARES) Act in FY 2020 to increase telehealth access and infrastructure for providers and families to help prevent and respond to COVID-19. One of the awards had a focus on behavioral health services in pediatric

⁸⁷ <http://www.rupri.org/wp-content/uploads/Behavioral-Health-in-Rural-America-Challenges-and-Opportunities.pdf>.

⁸⁸ <https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH/rural-urban-differences.pdf>.

care by providing telehealth-care access for infants, children, adolescents and young adults, including those with special health-care needs, and helping community-based pediatric practices, unaccustomed to telehealth, develop capacity to meet the needs of their practices, particularly in rural and underserved areas.

In addition, HRSA's Pediatric Mental Health Care Access (PMHCA) Program supports behavioral health integration in pediatric primary care by supporting state-wide or regional pediatric mental health care telehealth access programs that provide teleconsultation, training, technical assistance, and care coordination for pediatric primary care providers to diagnose, treat and refer children with behavioral health conditions.

Question. Can you discuss policies Congress should consider that will allow more young people to take advantage of telehealth?

Answer. Congress could incentivize States to provide Medicaid coverage for mental health services for youth provided via telehealth through and support training programs for behavioral health providers in the treatment of youth via telehealth as well as improving coordination with primary care providers using technology.

The role of telehealth in ensuring access to care and services during the COVID-19 pandemic is crucial. Telehealth can be a cost-effective alternative to the traditional face-to-face way of providing care. It is important that States implement flexibilities related to Medicaid reimbursement for services provided via telehealth so that young people have easy access to telehealth services.⁸⁹ To support broader access to telehealth, HRSA funded four awards from the Coronavirus Aid, Relief, and Economic Security (CARES) Act to increase health-care access and infrastructure for providers and families to prevent and respond to COVID-19, particularly for vulnerable maternal and child health populations, including young people. Through the support of CARES Act funds, the American Academy of Pediatrics (AAP) initiated numerous activities to support pediatric providers, including virtual office visits, Telehealth 101 trainings, Project ECHOs, and more to advance telehealth.

Congressional support of pediatric mental health care telehealth access programs continues to promote behavioral health integration into pediatric primary care as well as overall health-care access. Investments in programs that focus on retention and recruitment of pediatric providers and nurses and programs that utilize telehealth services have been and continue to be helpful and effective. Moreover, additional support for training on telehealth and telemedicine infrastructure could also improve access and utilization of telehealth for young people.

Opportunities such as those provided for under the Pediatric Mental Health Care Access (PMHCA) new area expansion program support efforts of State or regional networks of pediatric mental health-care teams to provide teleconsultation, training, technical assistance, and care coordination support for pediatric primary care providers (PCPs) to diagnose, treat, and refer children with behavioral health conditions.

PREPARED STATEMENT OF HON. RON WYDEN,
A U.S. SENATOR FROM OREGON

On behalf of Senator Crapo and myself, it's our hope that this morning's hearing on the state of mental health for our youth serves as a wake-up call. Millions of young Americans are struggling under a mental health epidemic. Struggling in school. Struggling with addiction or isolation. Struggling to make it from one day to the next.

Our country is in danger of losing much of a generation if mental health care is business as usual. For families across America, this is the issue that dominates their kitchens and living rooms. With the Children's Health Insurance Program and Medicaid—the largest payer of mental health care for our young—within this committee's jurisdiction, the Finance Committee must step up with solutions.

I hear way too many heartbreaking stories from parents and young people at Oregon town meetings, at the grocery store, and at the schools I've visited all over the State. I'm certain that's the way it is for every member of the committee.

Imagine being a parent scrambling desperately to find help for your kid who's in crisis—who may be a danger to themselves or somebody else. Too many parents are

⁸⁹ <https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html>.

making call after call only to learn that there aren't any beds available, or that the wait list to see a psychiatrist could be weeks or months long. Or they're told that their insurance company won't pay for the care a psychiatrist says their child needs.

The law requires equality between coverage for physical health and coverage for mental health. Too many families are put through bureaucratic torment when they try to use that coverage—coverage they pay for. Your kid is suffering, the insurance company takes thousands of dollars in premiums out of your pocket, and you get little more than jazz in your ear while you sit on hold.

There is new urgency for Congress to step up the fight against this epidemic. Diagnosing an issue and getting the right care for young people was already too difficult before anyone had heard of COVID-19. The crisis is even larger today. Kids are feeling isolated, and depression is up. Suicide attempts are up. An estimated 140,000 children have lost a parent or a caretaker to COVID-19, and that number will continue to rise.

The bottom line is, every loving parent wants what's best for their child, so as a Nation, shouldn't we have that same level of concern for our young, that same level of commitment?

We're fortunate to be joined this morning by Surgeon General Dr. Murthy, who has been a crusader for improving mental health care for our children. He's going to help us attack this challenge from all sides, including how to help families navigate a broken, complicated mental health-care system; how to respond to a young person in crisis without demonizing or criminalizing them; how to build on what's proven to work when it comes to health care for kids, specifically CHIP and Medicaid.

I also want to address the road ahead for the Finance Committee. For several months, we've been working on a bipartisan basis to break down the big policy challenges in mental health care. With today's hearing, the Finance Committee is ramping up our legislative efforts as a group. Several of our members have graciously agreed to partner on specific policy challenges, one Democrat and one Republican. The goal is to produce a bipartisan bill this summer that brings all that work together.

Senators Carper and Cassidy are going to focus on the subject of today's hearing, mental health care for America's children. Senators Stabenow and Daines will work together on building up the mental health-care workforce, which is far too limited to meet our needs today. Senators Cortez Masto and Cornyn will look at how to make mental health care more seamless, because too many people today are falling through the cracks of a fractured system. Senators Bennet and Burr will look at how to ensure that mental health care gets finally treated the same way as physical health care. Senators Cardin and Thune will team up on making it easier to get mental health care via telehealth.

The north star for this effort is achieving what the committee talked about in a hearing last year: everybody in America must be able to get the mental health care they need when they need it. In the coming weeks, the full committee will stay busy with hearings featuring mental health experts and advocates, as well as families who can share with us their own experiences with mental health challenges.

This morning's hearing will be the first of two that put a special focus on our youth. I'm looking forward to our discussion. Again, I want to thank Dr. Murthy for joining us, and I'll turn it over to Senator Crapo for his opening remarks.

FACT SHEET: In One Year of the Biden-Harris Administration, the U.S. Department of Education Has Helped Schools Safely Reopen and Meet Students' Needs

January 20, 2022

On January 20, 2021, less than half of K-12 students were learning in person. Today, 1 year since the start of the Biden-Harris administration, nearly all students are back in school and learning in person with caring teachers and alongside their peers. Across the country, schools are putting in place new programs and supports to address the impact of the pandemic on students' learning and mental health. To achieve this goal, the U.S. Department of Education (Department) distributed unprecedented resources to states, districts, and K-12 schools, including funding, guidance, and technical assistance to help educators meet the needs of all students, especially those disproportionately impacted by the pandemic. The Department also

distributed unprecedented resources to colleges and universities to help ensure students could access a high-quality education as well as the social, emotional, and mental health supports needed to earn their degrees and thrive. The Department also canceled \$15 billion in loan debt for hundreds of thousands of students and borrowers, took action to advance equity in education, and made critical progress in creating educational environments free from discrimination or harm.

The Department’s key 2021 accomplishments include:

Helped reopen over 95% of America’s public schools for in-person learning full-time—up from 46% at the beginning of the Biden administration.

- Due to historic investments in K–12 schools through the American Rescue Plan and using the full force of the administration to get educators, staff, and students vaccinated throughout the year, 95% of public school elementary and middle schools were open, in-person full-time in early January 2022, compared to just 46% in January 2021.
- On top of these unprecedented investments, the Biden-Harris administration made available \$10 billion in American Rescue Plan funds specifically for States and districts to implement testing programs starting in March 2021. Earlier this month, the administration also announced it is increasing the number of COVID–19 tests available for schools by 10 million per month to help schools safely remain open and implement screening testing and test-to-stay programs.

Invested \$122 billion in American Rescue Plan funds to help K–12 schools safely reopen, stay open, and address lost instructional time and students’ needs.

- The Department distributed unprecedented funding¹ from the American Rescue Plan to help schools reopen safely and support students. As part of this work, the Department also developed guidance to help schools use these funds for their most pressing needs, including addressing students’ mental health, learning needs, and addressing staffing shortages that are impacting schools. Schools across the country, from Vermont to Hawaii, are hosting vaccination clinics. Many districts, like DeKalb County, Georgia, have improved ventilation. Washington Local Schools, in Ohio, hosted its first summer camp, for students in grades K–3, which included a focus on academics. Arkansas created the Arkansas Teaching Corps. New York City is hiring hundreds of school social workers. And Gaston County Schools, in North Carolina, used ARP ESSER funds to double nursing staff and secure a nurse for each of their 54 school locations, so that nurses no longer have to split their time between two buildings.

Invested \$40 billion in American Rescue Plan funds to over 5,000 institutions of higher education.

- The Department distributed emergency grants² to over 5,000 colleges and universities to provide emergency financial aid to millions of students and ensure learning continued during the pandemic. Half of the funding awarded went directly to students in the form of financial aid to help them remain enrolled during the pandemic. As part of the American Rescue Plan, the Department also released over \$3 billion in funding to Historically Black Colleges and Universities, Tribally Controlled Colleges and Universities, and Minority Serving Institutions to support students at historic and under-resourced institutions. A recent survey³ of college presidents conducted by the American Council of Education found that a majority strongly agreed that Higher Education Emergency Relief Funds enabled their institution to keep students enrolled who were at risk of dropping out due to pandemic-related factors.

Invested more than \$3 billion in American Rescue Plan funds to support children with disabilities.

¹ <https://www.ed.gov/news/press-releases/us-department-education-announces-distribution-all-american-rescue-plan-esser-funds-and-approval-all-52-state-education-agency-plans>.

² https://www.ed.gov/news/press-releases/us-department-education-makes-available-36-billion-american-rescue-plan-funds-support-students-and-institutions?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

³ <https://www.acenet.edu/Research-Insights/Pages/Senior-Leaders/Presidents-Survey-HERF.aspx>.

- The pandemic and its disruptions to in-person learning had a disproportionate impact on students with disabilities. This funding⁴ within the American Rescue Plan is specifically aimed at helping more than 7.9 million infants, toddlers, and students served under the Individuals with Disabilities Education Act recover from the pandemic and succeed in the classroom.
- Use of the funds include hiring additional special education personnel, upgrading technology in schools, procuring professional development for special educators and new educational materials for classrooms, supporting transportation for students with disabilities, and funding before and after-school programs.

Released the Return to School Roadmap to help our schools return to in-person learning safely and successfully.

- The Department launched a nationwide campaign around returning to school in-person this fall and developed resources as part of the “Return to School Roadmap”⁵ that parents, educators, schools, and communities could use to build confidence and excitement around returning to school in-person. The Department launched a five-state bus tour—the Return to School Road Trip—to celebrate the return to school in fall 2021. And, the Department made available⁶ first-of-its-kind funding to keep school districts whole if they were penalized by their State for implementing proven mitigation strategies, like masking, to keep students and staff safe.

Discharged \$15 billion in Federal student loans to over 675,000 borrowers.

- The Department has provided targeted relief to over 675,000 borrowers through executive action, including providing \$1.5 billion⁷ to borrowers who have been taken advantage of by their institutions, \$7 billion for over 400,000 borrowers who have a total and permanent disability, \$1.26 billion⁸ to over 100,000 borrowers who attended the now-defunct ITT Technical Institute, and close to \$5 billion to 70,000 borrowers through the revamped Public Service Loan Forgiveness program.

Revamped the Public Service Loan Forgiveness program to restore its promise to our nation’s public service workers.

- In October, the Department announced changes⁹ to the Public Service Loan Forgiveness program to allow borrowers to receive credit¹⁰ for past periods of repayment on loans that may not otherwise qualify for Public Service Loan Forgiveness. Prior to making changes to the Public Service Loan Forgiveness program, only 16,000 borrowers had ever received forgiveness through the program, in total. Today, this change has already helped more than 70,000 borrowers qualify for Federal student loan forgiveness, totaling close to \$5 billion in relief. The Department also communicated with hundreds of thousands of public service workers to let them know the minimum number of payments they would gain credit for towards loan forgiveness under these temporary changes.

Issued guidance for supporting students’ mental health.

- As part of the Department’s effort to help schools reopen safely and address the impacts of the COVID pandemic, the Department released comprehensive guidance on how schools and higher education institutions can address students’

⁴https://www.ed.gov/news/press-releases/us-department-education-releases-more-3-billion-american-rescue-plan-funds-support-children-disabilities?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

⁵<https://www.ed.gov/news/press-releases/us-department-education-releases-%E2%80%9Creturn-school-roadmap%E2%80%9D-support-students-schools-educators-and-communities-preparing-2021-2022-school-year>

⁶<https://www.ed.gov/news/press-releases/us-department-education-announces-new-grant-program-provide-funding-school-districts-being-penalized-implementing-covid-safety-measures>

⁷<https://www.ed.gov/news/press-releases/department-education-announces-approval-new-categories-borrower-defense-claims-totaling-500-million-loan-relief-18000-borrowers?amp;camp;camp;camp>

⁸<https://www.ed.gov/news/press-releases/extended-closed-school-discharge-will-provide-115k-borrowers-itt-technical-institute-more-11b-loan-forgiveness>

⁹<https://www.ed.gov/news/press-releases/us-department-education-announces-transformational-changes-public-service-loan-forgiveness-program-will-put-over-550000-public-service-workers-closer-loan-forgiveness>

¹⁰<https://studentaid.gov/announcements-events/pslf-limited-waiver>

mental health needs,¹¹ including through using American Rescue Plan funds. The Department encouraged districts and states to use American Rescue Plan funds to hire more mental health professionals, guidance counselors, and incorporate more social, emotional, and mental health resources into K–12 schools and institutions of higher education.

Started a comprehensive review of title IX and held the first-ever national public hearing on the topic. Issued a notification to the public that the Department interprets title IX to cover sexual orientation and gender identity discrimination.

- The U.S. Department of Education’s Office for Civil Rights issued a Notice of Interpretation¹² explaining that it will fully enforce title IX to prohibit discrimination based on sexual orientation and gender identity. The Department also started a comprehensive review of title IX to implement President Biden’s executive orders guaranteeing educational environments free from discrimination and on preventing and combating discrimination on the basis of gender identity or sexual orientation.

Awarded or released \$6.7 billion in additional pandemic relief and other grant funds to Puerto Rico.

- In June, U.S. Secretary of Education Miguel Cardona announced that the Puerto Rico Department of Education¹³ now has full access to all Federal education pandemic relief funds earmarked for the Commonwealth and other education program grant dollars that were previously withheld.

In partnership with schools, districts, and State leaders, the Department has made great strides in supporting the reopening of our Nation’s schools and colleges, and helping students and teachers return safely to in-person learning. As 2022 begins, the Department remains committed to delivering necessary supports to our schools, students, and teachers, while continuing to advance President Biden’s vision of building our education system back better than before the COVID–19 pandemic.

¹¹<https://www.ed.gov/news/press-releases/us-department-education-releases-new-resource-supporting-child-and-student-social-emotional-behavioral-and-mental-health-during-covid-19-era>.

¹²<https://www2.ed.gov/about/offices/list/ocr/docs/202106-titleix-noi.pdf>.

¹³<https://www.ed.gov/news/press-releases/education-department-provides-nearly-4-billion-pandemic-relief-aid-and-other-grants-puerto-rico-department-education-secretary-cardona-visits-commonwealth>.

COMMUNICATIONS

AMERICAN ACADEMY OF FAMILY PHYSICIANS
1133 Connecticut Ave., NW, Suite 1100
Washington, DC 20036-4305
(800) 794-7481
(202) 232-9033

February 8, 2022

The Honorable Ron Wyden
Chairman
U.S. Senate
Committee on Finance
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance
Washington, DC 20510

Dear Chairman Wyden and Ranking Member Crapo:

On behalf of the American Academy of Family Physicians (AAFP), which represents more than 133,500 family physicians and medical students across the country, I write to share testimony in advance of the hearing “Protecting Youth Mental Health: Part I—An Advisory and Call to Action” on February 8, 2022.

Access to comprehensive primary care is especially important for children and adolescents. Family physicians care for patients at all stages of life, from newborn care to geriatrics. Family physicians are the usual source of care for about 20 percent of U.S. children, and in rural and underserved areas this percentage is even higher.¹ Additionally, family physicians are critically important to addressing the mental health crisis because nearly 40 percent of all visits for depression, anxiety, or cases defined as “any mental illness” were with primary care physicians.² Primary care physicians are also more likely to be the main source of physical and mental health care for patients with lower socioeconomic status and for those with co-morbidities.³

The AAFP applauds the Surgeon General’s recent advisory on Protecting Youth Mental Health (<https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>) and commitment to improving access to behavioral health services. This advisory includes recommendations for families, schools, communities, employers, health-care workers, and more, illustrating the need for coordinated efforts to stymie the increasing mental health concerns for young people. However, to achieve the recommendations outlined, Congress must take action to support primary care physicians and the behavioral health workforce.

To begin, Medicaid is a critical component of the response to the children’s mental health crisis because it provides health insurance to 1 in 5 Americans and covers some of our most vulnerable populations. Specifically, in July 2021 nearly 40 million children were enrolled in Medicaid and CHIP.⁴ This includes low-income children,

¹Jetty, A., Romano, M.J., Jabbarpour, Y., Petterson, S., and Bazemore, A. (2021). “A Cross-Sectional Study of Factors Associated With Pediatric Scope of Care in Family Medicine.” *The Journal of the American Board of Family Medicine*, 34(1), 196–207. <https://doi.org/10.3122/JABFM.2021.01.200300>.

²Jetty, A., Petterson, S., Westfall, J.M., and Jabbarpour, Y. (2021). “Assessing Primary Care Contributions to Behavioral Health: A Cross-sectional Study Using Medical Expenditure Panel Survey,” <https://doi.org/10.1177/21501327211023871>.

³Jetty, A., Petterson, S., Westfall, J.M., and Jabbarpour, Y. (2021). “Assessing Primary Care Contributions to Behavioral Health: A Cross-sectional Study Using Medical Expenditure Panel Survey,” <https://doi.org/10.1177/21501327211023871>.

⁴CMS. July 2021 Medicaid and CHIP Enrollment Trends Snapshot. <https://www.medicare.gov/medicaid/national-medicare-chip-program-information/downloads/july-2021-medicare-chip-enrollment-trend-snapshot.pdf>.

pregnant women, and families, children with special health-care needs, non-elderly adults with disabilities, and other adults. When Congress raised Medicaid primary care payment rates to Medicare levels in 2013 and 2014, patient access improved.⁵ Improving access to primary care through improved payment will in turn improve screening, diagnosis, and treatment of mental health and behavioral health needs for the 40 million children enrolled in Medicaid and CHIP. **The Ensuring Access to Primary Care for Women and Children Act** (<https://www.aafp.org/dam/AAFP/documents/advocacy/payment/medicaid/LT-SenBrownMurray-EnsuringAccessPrimaryCareWomenChildrenAct-052721.pdf>) **would return Medicaid payments for primary care services to Medicare payment levels for two years and expand the number of clinicians eligible for this increase to ensure that all Medicaid enrollees have access to the primary and preventive care they need.** The legislation also raises Medicaid payment rates to those of Medicare for the duration of any future public health emergency and 6 months thereafter. During this time of crisis and once things return to normal, it is critical that the Medicaid program be able to respond to take on any qualified new individuals and ensure physicians have the means to serve these new patients.

To further bolster behavioral health access for Medicaid beneficiaries, **the AAFP strongly recommends Congress pass legislation to establish a Medicaid demonstration program providing infrastructure, technical assistance, and sustainable financing for expanding access to integrated mental health care for children in primary care, schools, or other critical settings, including through telehealth.** Such program should be designed to ensure long-term and sustainable access to integrated mental health care for children, with a special focus on improving access for traditionally marginalized populations. Integrating behavioral health in primary care requires significant upfront investment, which can be a barrier to implementation for physician practices. This demonstration program would provide practices with the support they need to integrate behavioral health into their practices, ultimately improving access to care for beneficiaries.

Existing programs under Medicaid, like the early, periodic, screening, diagnostic, and treatment (EPSDT) benefit, have potential to improve access to early prevention and treatment for children and adolescents presenting with behavioral health concerns. However, state Medicaid programs implement EPSDT and medical necessity determinations differently, especially when contracting with Medicaid managed care plans. This variation has resulted in barriers to accessing mental health services treatment for children in some states. **To this end, the AAFP recommends Congress direct CMS to review EPSDT implementation in states and release an informational bulletin clarifying coverage of EPSDT services to facilitate access to prevention, early intervention, and mental health services.**

Furthermore, accurate data collection is essential to understand areas most in need of behavioral health resources. The AAFP recognizes that integrated behavioral health services exist on a spectrum and can include consistent coordinate of referrals and exchange of information, colocation of services in the primary care setting, or full integration of treatment plans shared between primary care and behavioral health clinicians. **The AAFP recommends Congress pass legislation directing the Director of the Agency for Healthcare Research and Quality (AHRQ) and the Assistant Secretary for Mental Health and Substance Use to create and implement a plan to improve measurement of the extent to which children and adults have access to integrated mental health care in primary care and the effectiveness of the care provided.**

The AAFP also recognizes the school nurses and counselors play an important role in ensuring children and adolescents can access care. However, current coordination between primary care physicians and school-based clinics is limited, and many family physicians do not receive all relevant information to ensure care continuity, especially during school breaks. School-based clinics often do not have information on the child's or family's insurance coverage, making it difficult to receive accurate and affordable referrals. **The AAFP strongly recommends Congress make investments to improve care coordination between school-based health-care providers and primary care physicians.**

Thank you for the opportunity to respond to the committee's request for information. The AAFP is eager to support the committee in finding solutions to address

⁵ Polsky, Daniel; Richards, Michael; Bassey, Simon; Wissoker, Douglas; Kenney, Genevieve; Zukerman, Stephen; Rhodes, Karin: "Appointment Availability After Increases in Medicaid Payments for Primary Care," <https://pubmed.ncbi.nlm.nih.gov/25607243/>.

the growing mental health crisis. For additional questions, please reach out to Erica Cischke, Director, Legislative and Regulatory Affairs at ecischke@aafp.org.

Sincerely,

Ada D. Stewart, M.D., FAAFP
Board Chair, American Academy of Family Physicians

AMERICAN ACADEMY OF PEDIATRICS, AMERICAN ACADEMY OF CHILD AND
ADOLESCENT PSYCHIATRY, AND CHILDREN'S HOSPITAL ASSOCIATION

The American Academy of Pediatrics (AAP), American Academy of Child and Adolescent Psychiatry (AACAP) and Children's Hospital Association (CHA), together representing more than 77,000 pediatric physicians, residents, and medical students and more than 220 children's hospitals, thanks the Senate Finance Committee for holding this hearing, "Protecting Youth Mental Health: Part I—An Advisory and Call to Action," focused on this critical issue for children, families, pediatric health-care workforce and our entire nation.

The challenges facing children's mental, emotional and behavioral health are so dire that our three associations, on behalf of the members we represent, declared a national emergency (<https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>) in child and adolescent mental health last fall. We call on this committee to join us in recognizing the magnitude of the situation and advance meaningful and transformational solutions to address it. We strongly encourage the committee to put forward tailored and dedicated policies and support for children to better address their emotional, mental and behavioral health needs.

We also want to recognize the Surgeon General for raising the youth mental health crisis as a priority public health challenge. As his advisory notes, this is not a problem we will fix overnight, but starting now we can make a difference working together. We hope the advisory will encourage further, bold action by the administration such as a **federal emergency declaration in children's mental health**.

The COVID-19 pandemic continues to take a serious toll on children's mental health as young people face ongoing social isolation, uncertainty, fear and grief. Even before the pandemic, mental health challenges facing children were of great concern, and COVID-19 has only exacerbated them. Despite sizable federal funds allocated to address mental health in multiple COVID-19 relief packages, pediatric providers report that they are unable to access such funds due to very broad funding goals spread across multiple populations and the lack of specific designated funding to improve mental health care for children in their own practices and other health-care settings. As the single largest payer for children, Medicaid investment, through better support for services, integrated care and consistent implementation of the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit, is critical to supporting children's mental health needs across the continuum and before diagnosis to prevent future and more serious problems.

The statistics illustrate an alarming picture for our children. Prior to the pandemic, almost half of children with mental health disorders did not receive care they needed.¹ This is not limited to one state or one community—children in states across the country face the same challenges accessing the necessary mental health care to address their needs.² Children's mental health conditions are common. One in five children and adolescents experience a mental health disorder in a given year,³ and 50% of all mental illness begins before age 14.⁴ For children needing treatment, it takes, on average, 11 years after the first symptoms appear before getting that

¹ Daniel G. Whitney and Mark D. Peterson, "US National and State-Level Prevalence of Mental Health Disorders and Disparities of Mental Health Care Use in Children," *JAMA Pediatrics* 173, no. 4 (2019): 389–391, doi:10.1001/jamapediatrics.2018.5399, <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2724377>.

² *Ibid.*

³ Centers for Disease Control and Prevention (CDC), "Key Findings: Children's Mental Health Report," March 22, 2021, <https://www.cdc.gov/childrensmentalhealth/features/kf-childrens-mental-health-report.html>.

⁴ Substance Abuse and Mental Health Services Administration (SAMHSA), Adolescent Mental Health Service Use and Reasons for Using Services in Specialty, Educational, and General Medicaid Settings, March 5, 2016, https://www.samhsa.gov/data/sites/default/files/report_1973/ShortReport-1973.html.

treatment.⁵ Significant investments are needed now to better support and sustain the full continuum of care needed for children’s mental health. These investments will significantly impact for the better our children and our country as we avoid more serious and costly outcomes later—including suicidal ideation and death by suicide.

Although the trends in pediatric mental health noted above were worrying before the COVID-19 emergency, demand over the past 18 months for pediatric inpatient mental health services, partial hospitalization, step-down programs and other levels of crisis care has risen significantly. Between March and October of 2020, the percentage of emergency department visits for children with mental health emergencies rose by 24% for children ages 5–11 and 31% for children ages 12–17.⁶ In the first three quarters of 2021, children’s hospitals reported emergency room visits for self-injury and suicide attempts or ideation in children ages 5–18 at a 42% higher rate than during the same time period in 2019.⁷ There was also a more than 50% increase in emergency department visits for suspected suicide attempts among girls ages 12–17 in early 2021 as compared to the same period in 2019.⁸

The challenges and limitations of the current mental health-care system are affecting all children, but the pandemic has exacerbated and highlighted existing disparities in mental health outcomes and access to high-quality mental health-care services for children of color. In 2019, the Congressional Black Caucus found that the rate of death by suicide was growing at a faster rate among black children and adolescents, and that black children were more than twice as likely to die by suicide before age 13 than their white peers.⁹ Studies of Latino communities have found higher reported rates of depression symptoms and thoughts of suicide among Latino youth, but comparatively lower rates of mental health-care utilization. As the Senate Finance Committee weighs recommendations to promote children’s mental health and strengthen access to care, the needs of children from racial and ethnic minority communities and the added barriers they frequently face must be addressed.

The pandemic has struck at the well-being and stability of families. As reported in *Pediatrics* in October of 2021, over 140,000 children in the United States lost a primary or secondary caregiver, with youth of color disproportionately impacted. The emotional impact of losing a parent or caregiver, including trauma and grief, is often compounded with loss of material stability and economic hardship, and an increased risk of poor educational and long-term mental health consequences. We are already witnessing this in our pediatric practices, schools and communities where the number of young people with depression, anxiety, trauma, loneliness and suicidality are all increasing. We must identify strategies to meet these challenges through innovation and action, using state, local and national approaches to improve the access to and quality of care across the continuum of mental health promotion, prevention and treatment. We need to ensure these strategies are focused on children and youth and their unique needs, considering their social and community context and resources.

We want to thank committee members for your support of the Health Resources and Services Administration’s (HRSA) Pediatric Mental Health Care Access (PMHCA) Program (42 U.S.C. § 254c–19). As of today, 45 states, Washington, DC, tribal organizations and territories have received (<https://mchb.hrsa.gov/training/projects.asp?program=34>) a grant from HRSA to create or expand their programs. Integrating mental health with primary care has been shown to substantially expand access to subspecialist physicians, such as child and adolescent psychiatrists, while boosting a pediatric provider’s knowledge of mental health care, improving health

⁵National Alliance on Mental Illness, “Mental Health Screening,” accessed on November 10, 2021, <https://www.nami.org/Advocacy/Policy-Priorities/Improving-Health/Mental-Health-Screening>.

⁶Centers for Disease Control and Prevention, Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1–October 17, 2020, November 13, 2020, <https://www.cdc.gov/mmwr/volumes/69/ur/mm6945a3.htm>.

⁷Analysis of Children’s Hospital Association PHIS database, n=38 children’s hospitals.

⁸Centers for Disease Control and Prevention, Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12–25 Years Before and During the COVID-19 Pandemic—United States, January 2019–May 2021, June 18, 2021, <https://www.cdc.gov/mmwr/volumes/70/ur/mm7024e1.htm>.

⁹Congressional Black Caucus, Ring the Alarm: The Crisis of Black Youth Suicide in America, December 17, 2019, <https://youthtoday.org/2019/12/ring-the-alarm-the-crisis-of-black-youth-suicide-in-america/>.

and functional outcomes, increasing satisfaction with care and achieving cost savings. Expanding the capacity of pediatric primary care providers to deliver behavioral health through mental and behavioral health consultation programs is one way to maximize a limited subspecialty workforce and to help ensure more children with emerging or diagnosed mental health disorders receive early interventions and continuous treatment.

A recent RAND study found that 12.3% of children in states with programs such as the ones funded under this HRSA program had received behavioral health services, while only 9.5% of children in states without such programs received these services.¹⁰ The study's authors concluded that federal investments to substantially expand child psychiatric telephone consultation programs could significantly increase the number of children receiving mental health services. This model is one, among others, that Medicaid can and should be paying for.

We appreciate the Senate Finance Committee's recognition of the children's mental health emergency and continuing focus on this specific population and their unique needs. As you work to develop legislative solutions, we ask you to advance the following policy priorities that will result in improved access to mental health services for children, from promotion and prevention through needed treatments:

- **Increase investments to support the recruitment, training, mentorship, retention and professional development of a diverse clinical and non-clinical pediatric workforce, including funding for minority fellowship programs for mental health physician specialists.** Currently, there are dire shortages of minority mental health providers that have only gotten worse due to the pandemic. More dedicated support for a larger and more diverse pediatric workforce is critical to addressing children's mental health needs now and into the future. Stronger Medicaid investments supporting children's mental health services will improve engagement in the program and encourage more people to enter these fields.
- **Address low Medicaid payment rates for pediatric mental health services, ways to better support coordination and integration of care and access to services in schools.** Low payment rates weaken provider engagement and participation in the Medicaid program and directly relate to the mental health workforce shortages and access challenges for children. At the same time, there is a benefit to better coordination and integration of care for children with mental health needs that is not supported consistently under Medicaid. This coordination results in demonstrable improvements in the health and well-being of children and their families. Children need to access services where they are, including in schools. Better assistance and technical guidance for schools to be reimbursed for health services delivered to Medicaid eligible and enrolled students will help address issues more effectively. Close to 40 million children receive their health insurance coverage through Medicaid and would be positively affected by advancement of these policies.
- **Direct CMS to review how EPSDT is implemented in the states to support access to prevention and early intervention services, as well as developmentally appropriate mental health services across the continuum of care and provide guidance to states on Medicaid payment for evidence-based mental health services for children that promotes integrated care.** The EPSDT benefit is tailored to children's unique needs and provides an important opportunity to support early identification even before diagnosis. We can do a better job of implementing this benefit more consistently for children to ensure they receive care as early as possible and at every point along the continuum if needed.
- **Dedicate support for the pediatric mental health system and infrastructure, which is currently woefully underfunded.** Support should focus on building a strong community-based system to address children's mental health needs across a wide array of settings, such as pediatricians' offices, early childhood educational programs, schools, outpatient individual or family therapy, intensive outpatient services, inpatient care when warranted and through telehealth.
- **Facilitate access to mental health services through telehealth.** Throughout the COVID-19 pandemic, greater state and federal regulatory flexibilities have increased the availability and convenience of telehealth services for chil-

¹⁰ RAND Corporation, Child Psychiatry Telephone Consultation Programs Help Increase Mental Health Services for Children, July 15, 2019, <https://www.rand.org/news/press/2019/07/15.html>.

dren and families. Psychiatry continues to rely on telehealth at a far greater rate than any other physician specialty. Congress should extend these flexibilities past the COVID-19 public health emergency, including coverage for audio-only services and lifting originating site restrictions and geographic limitations and encourage state Medicaid programs to continue telehealth coverage and payment.

- **Ensure strong implementation, oversight and proactive enforcement of the mental health parity and addiction equity act.** It is unacceptable that payers and plan administrators are failing to cover needed mental health and substance use disorder care by creating barriers to in-network mental health care, limited provider networks and establishing non-qualitative treatment limits not otherwise seen in medical and surgical benefits. In addition, public and private payers routinely exclude payment for mental health services provided by a primary care provider. Congress should work to remove payment barriers that hinder access to mental health services in the primary care setting.

Our organizations and our pediatricians, child and adolescent psychiatrists and children's hospital members are ready and eager to partner with you to advance policies that can make measurable improvements in children's lives. Please call on us and our members as you develop these important policy improvements to stem the tide of the national emergency for children's mental health. Children need your help now.

CENTER FOR ADOPTION SUPPORT AND EDUCATION

3919 National Drive, Suite 200
 Burtonsville, MD 20866
 301-476-8525 (general inquiries)
 866-217-8534 (schedule an appointment)
www.adoptionsupport.org
caseadopt@adoptionsupport.org

February 8, 2022

U.S. Senate
 Committee on Finance

I appreciate this opportunity to submit written testimony for the hearing on **Protecting Youth Mental Health: Part I—An Advisory and Call to Action** held on February 8, 2022. My name is Debbie Riley, LCMFT, and I am the Chief Executive Officer of the Center for Adoption Support and Education (C.A.S.E.). Since 1998, the Center for Adoption Support and Education (C.A.S.E) has created awareness of the deep need for adoption competency in mental health services and has grown to become the national leader providing mental health and child welfare professionals with training and coaching to become adoption competent. Our programs help professionals gain the skills, insight, and experience necessary to serve the needs of the adoption and foster care communities. We have been at the forefront of efforts to identify foster and adopted children and families as a population most at risk for a mental health crisis and have sought to improve the competency of the workforce through specialized training. Our efforts stem from over a decade experience with specialized adoption-competent mental health services to over 7000 clinical clients and on average over 6800 sessions annually.

With this experience, we are very aware of the children's mental health crisis that is occurring in our country. In December, the U.S. Surgeon General released an advisory on Protecting youth Mental Health that outlined steps to support the mental health needs of youth involved in the child welfare system. This followed pediatricians, child and adolescent psychiatrists and children's hospitals declaring a National State of Emergency in Children's Mental Health. COVID-19 brought a devastating impact on children that came into this pandemic with a history of trauma, loss and grief exacerbated by fear of the pandemic itself, more loss and the reality of isolation from peers, teachers, extended family and other significant supports in their lives. Our caseloads, like others, have exploded with youth and families in crisis. The Surgeon General's report and the emergency declaration must be a call to action for Congress to advance real, tangible solutions for populations most at risk—children in foster, adoptive and guardianship families.

First, please know we strongly support efforts to provide additional resources to ensure a seamless transition to the Families First Prevention Services Act so that all children and families can maximize the law's full potential. However, being on the front lines of this work to create forever families, it is vital to recognize that no pro-

gram can truly be delivered effectively without a competent workforce that understands the unique needs of foster and adopted children and families. At the time of passage of the Families First Act, we were assured that building an adoption-competent workforce would be a priority to ensure that professionals serving children and families in need were appropriately trained. Adoptive parents consistently report that their greatest post-adoption support need is mental health services provided by someone who understands adoption.¹ Some families reported seeking therapy from as many as ten different therapists before finding one who is adoption-competent, if they find such a therapist at all.² Therefore, it is not surprising that studies indicate that most mental health professionals lack the training to meet the diverse, complex clinical needs of adoptive families.³ Without access to adoption-competent mental health services, the risk of failed adoptions increases exponentially. Children may enter state child welfare agencies through “forced relinquishments,” or parents may place their children in residential treatment facilities and/or wilderness programs—choices they make when they lack access to the appropriate resources.

We are frustrated that Families First has not prioritized improving the competency of the child welfare workforce. For programs to be covered under the Act, the Title IV–E Prevention Services Clearinghouse established by the Administration for Children and Families (ACF) must rate programs and services as promising, supported, and well-supported practices, including mental health. After a decades-long push to commit to the mental health needs of children and families adopted and in foster care, Families First was a leap forward to ensure the delivery of much-needed mental health services when children are most at risk. Yet, despite going through the steps required for coverage, the Training for Adoption Competency (TAC) has not had its application reviewed. It was submitted October 30, 2019—over 2 years ago.

Prior to developing TAC, C.A.S.E. convened nationally recognized experts—including adoption practitioners, researchers, advocates, policy makers, and adoptive parents—to identify the core knowledge, skills, and values competencies that mental health practitioners need to serve members of the adoption kinship network. This National Advisory Board helped develop a definition of an adoption-competent mental health professional using an expert-consensus process (see below).

Definition of an Adoption-Competent Mental Health Professional

An adoption-competent mental health professional has:

- The requisite professional education and professional licensure.
- A family-based, strengths-based, and evidence-based approach to working with adoptive families and birth families.
- A developmental and systemic approach to understanding and working with adoptive and birth families.
- Knowledge, clinical skills and experience in treating individuals with a history of abuse, neglect and/or trauma; and
- Knowledge, skills and experience in working with adoptive families and birth families.

An adoption-competent mental health professional understands the nature of adoption as a form of family formation and the different types of adoption; the clinical issues that are associated with separation and loss and attachment; the common developmental challenges in the experience of adoption; and the characteristics and skills that make adoptive families successful.

An adoption-competent mental health professional is culturally competent with respect to the racial and cultural heritage of children and families.

An adoption-competent mental health professional is skilled in using a range of therapies to effectively engage birth, kinship, and adoptive families toward the mutual goal of helping individuals to heal, empowering parents to assume parental entitlement and authority, and assisting adoptive families to strengthen or develop and practice parenting skills that support healthy family relationships.

An adoption-competent mental health professional is skilled in advocating with other service systems on behalf of birth and adoptive families.

C.A.S.E. received accreditation of its TAC curriculum from the Institute for Credentialing Excellence (ICE) for a five-year period through November 20, 2025—mak-

¹ Atkinson and Gonet, 2007; Smith, 2014, Brodzinsky, 2013.

² Casey Center for Effective Child Welfare Practice, 2003.

³ Sass and Henderson 2002, McDaniel and Jennings, 1997.

ing TAC part of an elite group of certificate programs dedicated to public protection and excellence in practice. TAC is now an assessment-based certificate accreditation program and is the only accredited adoption competency training program in the country. It is now on the California Evidenced-Based Clearinghouse for Child Welfare (CEBC), a nationally recognized body that applies rigorous standards of review to identify effective programs. TAC was rated in the Topic Area of Child Welfare Workforce Development and Support Programs with a scientific rating of (3) Promising Research Evidence and with a Child Welfare Relevance rating of High. Of 17 programs in the Child Welfare Workforce Development and Support topic area, TAC is one of only two programs rated (3) Promising Research Evidence and no programs in the Topic Area are rated higher.

TAC is an instructor led, post-master's curriculum that includes clinical case consultation, making it the premiere national program to train mental health practitioners in adoption-competent skills. Research shows that children with traumatic experiences of abuse, neglect, loss, and abandonment are at greater risk of presenting adjustment problems within their adoptive families. Access to adoption-competent mental health services is a critical factor in the well-being of these children and their adoptive families. C.A.S.E. created TAC to strengthen adoption competency in mental health communities across the United States and have grown their TAC network to over 17 national training partners, including universities and child welfare agencies. Over 2,200 clinicians across the country have completed the 72-hour curriculum to date. An outcomes evaluation conducted in 2020 with funding from the Annie E. Casey Foundation with 159 families served by TAC-trained clinicians compared to comparably experienced but not TAC-trained clinicians, also showed that TAC produces more effective clinical practice for adoptive families. The families served by TAC-trained therapists experienced greater satisfaction with treatment, stronger therapeutic alliance, and greater family engagement over a higher number of sessions.

Congress should direct the Title IV-E Prevention Services Clearinghouse to prioritize mental health: The Clearinghouse established by the Administration for Children and Families (ACF) must rate programs and services as promising, supported, and well-supported practices. Training for Adoption Competency should be a priority to ensure that the workforce delivering these programs are competent and have the knowledge needed to appropriately serve foster and adoptive families.

Second, The National Adoption Competency Mental Health Training Initiative should be the Standard of Care for the workforce serving foster, adoptive, and kinship families. The National Adoption Competency Mental Health Training Initiative (NTI), a cooperative agreement between the Children's Bureau, Office of Administration for Children and Families and C.A.S.E., developed two state-of-the-art, standardized, web-based trainings to build the capacity of child welfare and mental health professionals in all states, tribes, and territories to effectively support children, youth, and their foster, adoptive, and guardianship families. The trainings were piloted in eight states and with one tribe, with final versions of the trainings now available for free nationally. During the pilot evaluation over 6,000 child welfare workers enrolled in the 20-hour training with an astounding 72 percent completion rate and 2,900 mental health professionals with a 68 percent completion rate. Outcomes from the child welfare pilot evaluation indicate high ratings of participant satisfaction with the materials and trainings. 85 to 90 percent of supervisors agreed that this training is applicable to their work. Child Welfare workers improved 28 percent on average from pre-test to post-test; supervisors improved 23 percent on average from pre- to post-test. Completion of NTI training indicated a high level of change in the workforce understanding of separation and loss which is a critical foundational piece of learning in the child welfare system. Pretest scores on the loss and grief module for child welfare staff were the lowest and showed the highest gain from pre to post-test. On the mental health side, the modules on attachment and understanding the impact of race and diversity had the lowest pre-test scores and the highest gains from pre to post-test. Imagine the problems that arise from child welfare workers not able to support children in their healing from loss and then referring them to therapists that do not know how to promote attachment or understand the implications of transracial/transcultural adoption. This exemplifies the clinical implications when we are solely reliant on providers being trained in a specific EBP without having the "core" foundational knowledge that is necessary in addressing the mental health needs of the children they are serving. Even for the trauma module where such a focus has been nationally, as well as the utilization

of EBP in trauma treatment, we saw a gain of 15–20 percent between pre- and post-test scores.

Since its pilot, more than 17,000 professionals have enrolled in NTI Trainings and C.A.S.E. has a commitment from 26 state child welfare or mental health service systems across the country to integrate NTI into their training plans. The goal is for NTI Trainings to be the “standard” trainings throughout child welfare systems nationally. NTI’s aligned trainings assure a skilled, competent workforce as required by the FFPSA and provide the skills, strategies, and tools professionals need to:

- Support children to heal from trauma and loss.
- Provide parents with skills to parent more effectively.
- Collaborate effectively with child welfare and mental health professionals.
- Improve outcomes for permanency, child well-being, and family well-being and stability.

The Senate version of the legislation reauthorizing CAPTA includes a new provision within Adoption Opportunities that supports the mission of the National Adoption Competency Mental Health Training Initiative. It states “adoption competency training that supports the mental health needs of adoptive families to promote permanency, including the evaluation and updating of adoption competency training curricula for child welfare and mental health professionals.” We strongly support this new authority to ensure the curriculums developed for child welfare case-workers and mental health professionals are standardized across states and represent best practices and up-to-date knowledge essential for professionals serving foster youth to have the core competencies needed to achieve permanency.

Congress should pass legislation as part of CAPTA reauthorization that explicitly authorizes the Adoption Opportunities program to focus efforts on adoption competency training that supports the mental health needs of adoptive families to promote permanency. This includes the evaluation and updating of adoption competency training curricula for child welfare and mental health professionals. We support the language included in the Managers Amendment to S. 1927 CAPTA Reauthorization Act of 2021.

Additionally, adoptive families often report that outpatient services—and in some cases, inpatient services—are not appropriate for children with foster care and adoption histories. An untrained therapist, for example, may use behavior modification techniques that do not address the underlying trauma and attachment challenges that a child is experiencing and can exacerbate a child’s mental health problems. We see this situation as a direct service provider routinely. Adoptive and foster families often come to us after seeing multiple therapists who are not adoption competent. This makes our job more difficult as we address both the core issues of the underlying trauma and the impact of behavior modification, as well as other techniques utilized by earlier therapists that further exacerbated to the underlying problems.

Adoptive parents consistently report that their greatest post-adoption support need is mental health services provided by someone who knows adoption. The lack of post-adoption mental health services in general, as well as the lack of access to adoption-competent mental health services, are significant barriers to recruiting adoptive families for children from the foster care system. In a national survey of 485 individuals conducted by C.A.S.E., only 25 percent of adoptive families reported that the mental health professional they saw was adoption competent. Most respondents did not know whether assistance in accessing or paying for mental health services was available in their state, and only about 25 percent could confirm the availability of such assistance. Further, only 19 percent reported insurance subsidies adequate to address their children’s mental health needs. Many respondents reported that the number of Medicaid mental health providers is quite limited and the majority of those who are available are not adoption competent. A great majority (81 percent) reported that if they had a choice, they would choose a therapist who has earned a certificate as an adoption-competent therapist.

It is an unfortunate reality that children and youth in foster care—when they are able to receive mental health services—typically receive it from the least qualified professionals due to the low reimbursement rates typical of Medicaid programs. Mental health professionals often begin their careers in publicly funded community mental health centers that accept Medicaid—where most children in foster care and children who are adopted from foster care are seen. There are significant costs associated with the limited access to quality adoption-competent mental health care—both financially and emotionally. Studies suggest that lack of appropriate mental

health services contribute to higher rates of adoption disruption and dissolution for families adopting from foster care, as well as interactions with the juvenile justice system.⁴

We urge consideration of a pilot or demonstration project in a specified number of states/counties to enroll a target number of adoption-competent clinicians (defined as successful graduates of nationally recognized adoption-competent post graduate training programs that include a clinical case consultation component) as EPSDT clinical providers. Using random assignment of children, CMMI could evaluate the mental health outcomes for children in foster care with adoption goals who are served by these adoption-competent clinicians through EPSDT and those who are not. In certain states, C.A.S.E. has built a workforce of adoption-competent clinicians that could form the basis for this type of demonstration.

We also urge the use of identified valid and reliable clinical screening and testing tools for designated conditions present in children in foster care, including those with adoption goals (such as attachment disorders, PTSD, developmental trauma) in conjunction with adoption-competent clinical interventions by adoption-competent clinicians. The primary focus would be on (1) children in foster care being prepared for adoption; and (2) children adopted from foster care receiving adoption assistance and Medicaid coverage.

C.A.S.E. supports work to promote trauma-informed approaches to behavioral health. We recognize that for foster and adopted children and families, there are evidence-based approaches specific to this population that are also trauma-informed, including TAC. As policymakers seek to increase the number of trauma-specific services and trainings, we strongly urge the inclusion of trainings that will build the adoption competency of its programs and workforce.

The impact of limited quality mental health services for children and youth in foster care—whether their permanency plan is reunification with parents, guardianships with relatives, or adoption—extends broadly. Studies confirm that the lack of quality mental health services impacts the outcomes for young people that are dually involved in the foster care and juvenile justice systems. The Brookings Institute Center on Children and Families reported:

Although children in long-term foster care represent only a small fraction of the total child population of the United States, they represent a much bigger portion of the young people who go on to create serious disciplinary problems in schools, drop out of high school, become unemployed and homeless, bear children as unmarried teenagers, abuse drugs and alcohol, and commit crimes. A recent study of a Midwest sample of young adults aged twenty-three or twenty-four who had aged out of foster care found that they had extremely high rates of arrest and incarceration. Eighty-one percent of the long-term foster care males had been arrested at some point, and 59 percent had been convicted of at least one crime. This compares with 17 percent of all young men in the U.S. who had been arrested, and 10 percent who had been convicted of a crime. Likewise, 57 percent of the long-term foster care females had been arrested and 28 percent had been convicted of a crime. The comparative figures for all female young adults in the U.S. are 4 percent and 2 percent, respectively.

Former foster youth are over-represented among inmates of state and federal prisons. In 2004 there were almost 190,000 inmates of state and federal prisons in the U.S. who had a history of foster care during their childhood or adolescence. These foster care alumni represented nearly 15 percent of the inmates of state prisons and almost 8 percent of the inmates of federal prisons. The cost of incarcerating former foster youth was approximately \$5.1 billion per year.⁵

A study in Los Angeles County found that a quarter of youth formerly in foster care and two-thirds of dually involved youth have a jail stay in early adulthood. The average cumulative cost of jail stays over 4 years ranged from \$18,430 for a youth formerly in care to \$33,946 for a dually involved youth. The study also found that dually involved youth were more likely than youth in care with no juvenile justice involvement to experience serious challenges, including mental health problems, more

⁴ See <http://casw.umn.edu/wp-content/uploads/2014/04/AdoptionDissolutionReport.pdf>.

⁵ Zill, N. (2011). *Adoption from foster care: Aiding children while saving money*. Retrieved September 10, 2013, from http://www.brookings.edu/~media/research/files/reports/2011/5/adoption%20foster%20care%20zill/05_adoption_foster_care_zill.pdf.

than double the rates of those who were in foster care only. Washington State found that about one-third of the youth in the state's juvenile justice system either were or had been in the foster care system.

Specific to foster care, the Government Accountability Office (GAO) issued a report in December 2012 on *Children's Mental Health: Concerns Remain About Appropriate Services for Children in Medicaid and Foster Care*. They reported that an annual average of 6.2 percent of noninstitutionalized children in Medicaid nationwide and 4.8 percent of privately insured children took one or more psychotropic medications. They also reported that 18 percent of foster children were taking psychotropic medications at the time they were surveyed, and 30 percent of foster children who may have needed mental health services did not receive them in the previous 12 months. The GAO's letter to Members of Congress stated, "Children in foster care, most of whom are eligible for Medicaid, are an especially vulnerable population because they may suffer from generally required to cover services to screen children for mental health problems and to provide treatment for any identified conditions, we previously reported that it can be difficult for physicians to find mental health specialists to whom they can refer children in Medicaid."

We believe that this report underscores an inherent and fundamental challenge in our Medicaid system around access to adoption-competent mental health services.

We urge Congress to consider developing a pilot or demonstration project in a certain number of states/counties in which selected children in foster care with an adoption goal (experimental group) are assigned a treatment team consisting of a psychiatrist and an adoption-competent clinician who coordinate clinical care for the child. CMMI would then assess the impact on the usage levels of psychotropic medications as compared to children in foster care who do not have this treatment team (comparison group).

As you know, children and youth in foster care and adopted from foster care face several challenges with the Medicaid system:

- Many foster, adoptive, and kinship families do not know what resources exist to help them identify and access quality mental health services in their states.
- When they access affordable mental health services, foster, adoptive, and kinship families have no assurance that these services are adoption competent. They generally are given little or no choice in providers.
- There is currently no process for identifying clinicians with special adoption-competent expertise, such as through a national accreditation/certification or central registry of clinicians who have obtained adoption competency training.
- Medicaid clinical services are an "optional" not mandatory Medicaid service, meaning that States can choose to cover (or not) the services of psychologists, clinical social workers, outpatient mental health services, and substance abuse clinical services. As states are facing budget shortfalls, there is concern that states may opt to eliminate any optional services that they are currently covering.
- EPSDT is unevenly implemented across states, resulting in wide variances in terms of coverage of mental health services for children, particularly with respect to the delivery of treatment services following diagnosis and assessment. As one example, in California, access to EPSDT mental health services is inequitable for eligible youth across the state. Despite the alarming prevalence of treatable mental health problems among youth in foster care, only 60 percent of California children who enter foster care receive the medically necessary mental health services to which they are entitled. Treatment rates range from 6 percent in some counties to 30 percent in others, and from 7 percent to 19 percent among the state's largest counties.⁶
- The least experienced providers are providing services to the most complicated children with diverse clinical needs due to the low reimbursement rates.

One study by the National Institute of Mental Health found that nearly half (47.9 percent) of youth in foster care were determined to have clinically significant emotional or behavioral problems. Researchers at Casey Family Programs estimate that between one-half and three-fourths of children entering foster care exhibit behav-

⁶Alliance for Children's Rights. (2012). *Safeguard children's rights: Require adequate funding and accountability for EPSDT realignment*. Retrieved September 10, 2013, from http://www.youthlaw.org/fileadmin/ncyl/youthlaw/publications/yln/2012/02/EPSTDT-Realalign-RevV21-FINAL_1_.pdf.

ioral or social competency problems that warrant mental health services.⁷ These children often find permanent families through adoption (ranging between 51,000 and 57,000 children each year). According to some reports, the percentage of adopted children in residential treatment centers is reported to be between 30 and 40 percent and is even higher in centers specializing in attachment disorder treatment and developmental trauma treatment. Adoptive families are 2 to 5 times more likely to utilize outpatient mental health services, and 4 to 7 times more likely to seek care for their children in residential treatment centers.⁸

In a most recent report, clinical program directors from 59 residential treatment facilities responded to an online survey addressing the representation of adopted youth currently being served by their organization, the extent to which adoption issues are incorporated into clinical intake and treatment processes, and the training needs of clinical staff related to adoption. Results indicated that adopted youth are disproportionately represented in these programs. Although constituting slightly more than 2 percent of the U.S. child population, 25–30 percent of youth currently enrolled in these programs were adopted. The report concluded that to meet the needs of adopted youth in care, clinical and administrative staff of residential treatment programs need to become adoption clinically competent.⁹

We recommend that higher reimbursement rates through Medicaid and private insurance be provided for mental health providers who complete the 72-hour accreditation program through Training for Adoption Competency. This would create an incentive for clinicians who work with the child welfare/adoption community to be adoption-competent and would create an incentive for highly trained, adoption-competent clinicians to accept Medicaid rates.

In general, C.A.S.E. recommends a stronger research focus on the impact of integrated care models on achieving positive mental health outcomes for children in foster care and children and youth adopted from the foster care system. Studies indicate that continuous mental health treatment is beneficial for children with histories of maltreatment and foster care.¹⁰ Medicaid managed care organizations (MCO's) with adequate networks of adoption-competent mental health professionals, could demonstrate more positive outcomes for foster youth. Therefore, we suggest reforms that will enhance the positive outcomes for children and youth in foster care and those adopted from foster care, the majority of whom are Medicaid eligible.

I look forward to working with Congress on improving access to, and quality of, the mental health services provided to children in foster care and those in adoptive families. Innovative strategies to improve the lives of our most vulnerable children should not be delayed. C.A.S.E. has already begun the process of developing the adoption-competent workforce through its existing TAC program and the continuing cooperative agreement with ACF on the National Adoption Competency Mental Health Training Initiative as well as direct services in Maryland, Virginia, and Washington, D.C. Now is the time to take action to ensure the continued building of an adoption-competent workforce and formalized network of those providers who can be connected to foster and adoptive families. The good news is that we have existing innovative training programs ready to bolster the competency of the child welfare and mental health workforce nationally. Together we can connect this underrepresented population to providers trained to meet their needs.

I appreciate the opportunity to provide this testimony.

Sincerely,

Debbie Riley LCMFT, CEO
Center for Adoption Support and Education

⁷Landsverk, J.A., Burns, B.J., Stambaugh, L.F. and Rolls Reutz, J.A. (2006). "Mental health care for children and adolescents in foster care: Review of research literature." *Casey Family Programs*. 9–30.

⁸Smith, S.L. (2014, March). *Keeping the promise: The case for adoption support and preservation*. Donaldson Adoption Institute. Retrieved February 24, 2016, from <http://adoptioninstitute.org/publications/keeping-the-promise-the-case-for-adoption-support-and-preservation/>.

⁹See <http://dx.doi.org/10.1080/0886571X.2016.1175993>.

¹⁰Child Welfare Information Gateway. (2012). *Mental health*. Retrieved September 10, 2013, from <https://www.childwelfare.gov/systemwide/mentalhealth/>.

CHILD AND ADOLESCENT MENTAL HEALTH COALITION

February 8, 2022

U.S. Senate
Committee on Finance

On behalf of our organizations, which are members of the Child and Adolescent Mental Health Coalition,¹ we commend the Senate Finance Committee for holding a hearing on youth mental health. We seek to underscore the importance of addressing mental health in children across the continuum of mental health care, from promotion and prevention to early identification, intervention and treatment, to children and youth in crisis. This statement follows comments our coalition previously shared with the committee.²

The pandemic has exacerbated the already existing child and adolescent mental health crisis. The inequities that result from structural racism have contributed to the disproportionate impacts on children from communities of color. Rates of childhood mental health concerns and suicide rose steadily between 2010 and 2020, and by 2018 suicide was the second leading cause of death for youth ages 10–24. The pandemic has intensified this crisis: across the country we have witnessed dramatic increases in Emergency Department visits for all mental health emergencies, including suspected suicide attempts.

The challenges facing children’s mental, emotional, and behavioral health are so dire that the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children’s Hospital Association declared a national emergency³ in child and adolescent mental health last fall. We thank and appreciate the Surgeon General for raising the youth mental health crisis as a priority public health challenge. As his advisory notes, this is not a problem we will fix overnight, but starting now, we can make a difference working together. We hope the advisory will encourage further, bold action by the administration such as a **federal emergency declaration in children’s mental health**.

The pandemic has struck at the safety and stability of families. More than 140,000 children in the United States lost a primary or secondary caregiver, with youth of color disproportionately impacted. The emotional impact of losing a caregiver, including trauma and grief, is often compounded with loss of material stability and economic hardship, and with poor educational and long-term mental health consequences.

The experiences and needs of children and adolescents are different from those of adults, and the system must be designed to address their needs across the continuum of care, improving access to and quality of care from mental health promotion and prevention to early identification, intervention and treatment to children and youth in crisis. We offer the following policy solutions that, if enacted, will help to increase access to quality pediatric mental health care:

- *Workforce:* To address the dire shortage of practitioners specializing in mental health care for infants, children, adolescents and young adults, the Committee **should increase investments to support and strengthen the development of a diverse clinical and non-clinical pediatric workforce**. To reduce the barrier that low payment rates presents for workforce development, the Committee should find ways to **increase payment rates to primary care and behavioral health providers for mental and behavioral health care**. Dedicated support for a larger and more diverse pediatric workforce is critical to addressing children’s mental health needs now and into the future. Stronger

¹ CAMH is a coalition of organizations dedicated to promoting the mental health and well-being of infants, children, adolescents, and young adults. Our organizations reflect a diversity of viewpoints and expertise, ranging from clinical providers to school-based services to suicide prevention organizations and others. As a coalition, we seek to advance a robust mental health safety net, inclusive of programs, supportive payment models, and infrastructure, that provide the full continuum of mental health care, in a manner that facilitates easy and prompt access to services. Our coalition has prepared a set of core principles (<https://downloads.aap.org/DOFA/CAMH%20Principles%202021%20Final%2005-04-21.pdf>). Our full coalition consists of over 30 organizations; entities specifically endorsing this statement are specified at the conclusion of this statement.

² <https://downloads.aap.org/DOFA/CAMH%20Comments%20on%20Senate%20Finance%20RFI%20Final.pdf>.

³ <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

Medicaid investments supporting children's mental health services will improve engagement in the program and encourage more people to enter these fields.

- *Integration with Primary Care:* Research supports the **integration of mental health and primary care** for infants, children, adolescents and youth. The Committee should work to develop sustainable funding models that allow for the integration of mental health practitioners and services into pediatric primary care practice, rather than these initiatives relying on patchwork funding. These models should allow providers to bill for time spent coordinating care.
- *Care Coordination:* Family navigators and family support providers are key partners in helping families navigate the difficult landscape of behavioral health care. The Committee should provide **funding for care coordinators or navigators** who help families navigate the mental health system.
- *Early Access to Services:* Children who may lack a diagnosis still have important mental health needs that require intervention, but pediatric providers and behavioral health providers often need to specify an ICD-10 diagnostic code to bill and be paid for their time. The Committee should find ways to allow **providers to bill non-specific codes when a child does not have a diagnosable condition** but has mental health needs that require care.
- *EPSDT Access:* As state Medicaid programs, as well as Medicaid Managed Care Plans, implement Early and Periodic Screening, Diagnostic and Treatment Benefit (EPSDT) and medical necessity determinations, differently, Congress can take action to **direct CMS to review how EPSDT is implemented in states** to support access to prevention and early intervention services, as well as developmentally appropriate mental health and substance use disorder services across a continuum of care. In addition, to address the real and perceived barriers to payment for mental health care for children by Medicaid, CMS should **provide guidance to states on Medicaid payment for evidence-based mental health services for children including those that promote integrated care.**
- *Crisis Response:* There has been an alarming increase in the number of children and adolescents in behavioral health crisis, with emergency departments seeing increases in suicidal ideation and self-harm. A 24/7 crisis response system must be accessible to meet the needs of children and families, schools and providers. The system must be equitable, accessible, trauma-informed and culturally appropriate, **with staff that are trained in child development and family-centered approaches.** The system should be able to connect families with the appropriate next level of care to meet their needs.
- *School-based Services:* **Co-location of mental health services in schools** allows children and adolescents to access the care they need with less disruption. The Committee should work to identify and reduce barriers to payment for services in schools and the ability of schools to recruit and retain mental health providers on-site. Better assistance and technical guidance for schools to be reimbursed for health services delivered to Medicaid eligible and enrolled students would expand access to services in that setting.

American Academy of Pediatrics
 American Association of Child and Adolescent Psychiatry
 American Psychological Association
 Association of Children's Residential and Community Services (ACRC)
 Association of Maternal and Child Health Programs
 Bazelon Center for Mental Health Law
 Children's Hospital Association
 Eating Disorders Coalition for Research, Policy & Action
 National Association for Children's Behavioral Health
 National Association of Pediatric Nurse Practitioners
 Nemours Children's Health
 REDC Consortium
 School-Based Health Alliance
 Society for Adolescent Health and Medicine
 The National Alliance to Advance Adolescent Health
 Youth Villages

CHILDREN AND FAMILY FUTURES

25371 Commercentre Drive, Suite 250
 Lake Forest, CA 92630
 Phone: 714-505-3525
 Toll-Free: 866-493-2758
 Website: <https://www.cffutures.org>
 Email: info@cffutures.org

Children and Family Futures (CFF) is pleased to submit a written statement for the record in response to the Senate Finance Committee's hearing held on February 8, 2022, entitled "Protecting Youth Mental Health: Part I—An Advisory and Call to Action." Our organization has been working at the intersection of child welfare and substance use treatment for over 25 years, in partnership with state and county agencies, tribes, the courts, private providers, and decision makers. We appreciate the Committee's longstanding bipartisan commitment to addressing the needs of families in the child welfare system who are affected by substance use disorders (SUDs) and look forward to working with you to identify approaches that meet the urgency and severity of the current mental health, overdose, and SUD crisis in the United States.

There are approximately 8.7 million children (12.3 percent) under the age of 18 who are living with a parent with a substance use disorder.¹ This equates to about three children in every classroom. Children growing up with parents with SUDs are at higher risk for poor developmental outcomes^{2, 3, 4, 5, 6} experiencing trauma^{7, 8} and developing their own substance use problem later in life.^{9, 10, 11} Troubling data have recently been published on the number of youths who are affected by parental SUDs who are at risk for suicide. A 2019 published study found that adolescents of parents who misused prescription opioids were at twice the risk of a suicide attempt, compared to adolescents of parents who did not misuse prescription opioids.¹²

There is also cause for great concern regarding adolescents who themselves use opioids or have an opioid use disorder, as they are also at high-risk for suicide. In the 2019 U.S. Youth Risk Behavior Survey, 33 percent of adolescents who reported use of a prescription opioid had attempted suicide, compared to 6 percent of adolescents attempting suicide who reported no use of a prescription opioid.¹³ This has far-reaching effects on our health care, social services, and educational systems to support these young people and ensure their health, safety, and education. These effects are even more astounding when long-term impacts of parental SUDs (*e.g.*, increased risk for poor developmental outcomes and the child/youth developing their own substance use disorder) are considered.

Substance use is the number one reason associated with children who are separated from their parents and placed into foster care, and unaddressed mental health challenges are often the root cause of parental substance use. When parents cannot access timely mental health and SUD treatment services, it puts the entire family at risk. Rather than relying on our already-overburdened child welfare system to step in and remove more children from their families, it is our responsibility as a nation to expand mental health and SUD treatment options for parents, children and families—which will change the trajectory for children and youth and, in turn, future generations of Americans.

Recommendations for Changing the Trajectory for Children and Youth Who Are Affected by Substance Use Disorders

As the Committee considers policy changes to address the current mental health crisis among children and adolescents, we urge you to take a family-centered, intergenerational approach to the delivery of services and supports to families affected by SUDs. Family-centered approaches recognize that parental substance use is a chronic disease and affects each member of the family, and that the most effective services are those that recognize the needs of parents, their children, the other members of the family network, and the family's overall functioning.

The recommendations below echo many of the recommendations we shared with Chairman Wyden and Ranking Member Crapo on November 1, 2021 in response to the September 21, 2021 request for comments on Congressional action to improve timely access to quality mental health and SUD treatment services. These recommendations are tailored to meet the unique needs of infants, children and adolescents and their families who are affected by SUDs. These include efforts to strengthen the workforce and increase integration, coordination, and access to care.

1. Strengthening the Workforce: The Power of Peer Recovery Specialists

It is a well-known fact that parents affected by SUDs need assistance to navigate the child welfare, court, and treatment systems; in fact, the fear of having their chil-

dren removed can be a motivator but also a significant barrier to parents seeking and accessing treatment. Peer recovery specialists are an essential treatment support for families with SUDs by helping families navigate confusing and often adversarial public systems. These individuals, which are called different names in different systems (peer recovery specialists, peer advocates, peer navigators, etc.), can more easily gain trust and buy-in from families than those who work for county or state agencies.

Congress can help to expand the effectiveness of peer recovery specialists for families affected by parental substance use and child welfare by:

- Dedicating federal funding to expand access to peer recovery supports for all families affected by substance use and child welfare involvement; and
- Requiring child welfare and substance use treatment systems to align their qualifications for peer specialists to ensure they have in-depth knowledge of both systems, regardless of where they work, and can access and coordinate services for the entire family network—child, parent, and extended family.

2. Increasing Integration, Coordination, and Access to Care: Prevention of Child Welfare Involvement

By the time families come to the attention of the child welfare system, they have often made multiple attempts to access and complete treatment but have not been able to access services and supports for their children. Many substance use treatment systems are focused on improving individual outcomes and do not have mechanisms to help families access the full range of services and supports needed for safety and stability such as early childhood development, childcare, early intervention services, housing, employment, and economic assistance.

To prevent child welfare involvement, Congress can explore ways to support treatment systems so they can take the following steps to help families access the full array of coordinated services for their families:

- In their data systems, tracking children of parents who participate in treatment and creating pathways for accessing services;
- Ensuring states and counties have maximum flexibility to braid funding streams on behalf of children and their parents that go beyond SUD treatment;
- Ensuring that treatment providers can connect families to prevention services across systems and do not have to resort to filing a report of abuse or neglect with the child welfare system to access such services; and
- Wherever possible, ensuring treatment providers have the resources and the competencies to allow children and parents to stay together in whatever type of treatment program is appropriate—community-based, out-patient, or residential.

3. Increasing Integration, Coordination and Access to Care: A Public Health Approach to Substance Use During Pregnancy

A primary barrier to parental access to substance use treatment and mental health services is the number of states with child protection laws that equate prenatal substance exposure with child abuse and neglect. Although identifying children with prenatal substance exposure can connect families to services designed to keep them intact, some states have policies that stipulate that a prenatally exposed child is sufficient evidence to substantiate child maltreatment and remove the child from the home. These policies can prevent parents from accessing treatment and also disproportionately affect families of color.¹⁴

Congress can promote a public health approach over a family punishment approach to prenatal substance exposure by:

- Ensuring that states have access to funding to coordinate services and supports for pregnant people and their infants with prenatal substance exposure outside of the child protective services system. This approach is currently embedded in S. 1927, the CAPTA Reauthorization Act of 2022;
- Ensuring that states take a prevention approach by creating incentives for states to move away from equating substance use and mental health conditions during pregnancy with an automatic determination of child abuse or neglect. This would go a long way toward reducing the number of infants placed in out of home care; and
- Expanding the Regional Partnership Grants (RPGs) through reauthorization of Title IV–B. RPGs allow jurisdictions to implement cross systems collaboration

across multiple child and family serving systems to ensure a more coordinated approach to supporting families with SUDs. An evaluation of RPGs found that this collaboration leads to timelier reunification and improved treatment and recovery outcomes. RPGs have been authorized since 2007, and it is time to take the lessons from these collaborations to a larger scale in state systems.

4. Increasing Integration, Coordination and Access to Care: Improvements to the Family First Prevention Services Act

The Family First Prevention Services Act (Family First) authorized in 2018 takes important steps to prevent removal of children from their parents by allowing states to provide substance use treatment and mental health services to the whole family for children who are candidates for foster care. Two areas of the law need further improvement to enhance the potential to prevent family separation. These include:

Evidence-based requirements: The requirements for evidence-based programs that can be funded through Family First are stringent, and in the three years since enactment, only a handful of programs to improve outcomes for families who are affected by substance use have been identified: four well-supported, two supported, and three promising programs. About half of these programs improve SUD outcomes for adolescents and half for parents. Child welfare agencies need a wider array of programs to choose from, both for implementation of Family First, as well as for prevention and intervention services to prevent child welfare involvement and family separation in the first place.

Family-based residential treatment programs—Only a minority of the Title IV–E prevention plans that states have submitted to the Department of Health and Human Services (HHS) include using prevention dollars on family-based residential treatment programs. States are also not fully using the Title IV–E authority to use foster care maintenance funds to support children placed with a parent in a family-based residential treatment program. State officials point to two barriers to these programs that need to be addressed before they can reach their maximum potential: first, the requirement that children be in the custody of the state in order to be placed with their parents in family-based residential treatment; and second, far greater demand for family-based residential treatment than supply.

Congress can maximize the potential of the Family First Prevention Services Act to prevent family separation by:

- Aligning requirements for what constitutes an evidence-based program with the National Institute for Drug Abuse (NIDA) and the Substance Abuse Mental Health Services Administration (SAMHSA) evidence-based programs and practices;
- Ensuring that child welfare agencies can leverage family-based residential treatment programs without having to take legal custody of the child (*e.g.*, family in-home prevention programming while the child is placed at the residential facility); and
- Ensuring that child welfare agencies and their treatment partners have access to infrastructure dollars to expand facilities that can accommodate parents and their children.

We appreciate the Committee's leadership on these important issues and look forward to continuing to work with you to ensure that children, young people, and their parents can access the services and supports they need to remain together, improve treatment and recovery outcomes, and improve child well-being. Please don't hesitate to contact me at nkyoung@cffutures.org if you are interested in more information on any of the above ideas.

Sincerely,

Nancy K. Young, Ph.D., M.S.W.
Executive Director

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FOUNTAIN HOUSE
425 W. 47th St.
New York, NY 10036

February 21, 2022

U.S. Senate
Committee on Finance
Dirksen Senate Office Bldg.

Washington, DC 20510–6200

Dear Chair Wyden and Ranking Member Crapo,

Thank you for this opportunity to submit this comment to you and other members of the Committee regarding the urgent and unmet needs of the community living with serious mental illness, which currently numbers 14 million in the U.S., many of whom are youth and young adults. Fountain House is pleased to engage with you on policy issues enumerated below that will benefit the unique community we serve. We believe that directing funding to clubhouses that provide evidence-based psychosocial rehabilitation, through programs such as the Community Mental Health Services Block Grant and other funding mechanisms, would prove effective at supporting the rights and recovery of those living with serious mental illness and substance use disorders and reduce Medicaid costs.

About Fountain House

Fountain House is a national mental health nonprofit fighting to improve health, increase opportunity, and end social and economic isolation for people living with serious mental illness. The majority of Fountain House members are BIPOC who are disproportionately affected by racism and systemic/structural barriers. Fountain House leads a national network of regional affiliates in San Antonio, TX, Phoenix, AZ, Sarasota, FL, Seattle, WA, Bellevue, WA, Everett, WA, Concord, CA, Ann Arbor, MI, Cleveland, OH, Queens, NY, Jamaica, NY, Staten Island, NY, New York, NY, and Bronx, NY and draws on more than 200 community-based social rehabilitative programs inspired by Fountain House and known as clubhouses—to reflect an insistence on belonging and acceptance—in nearly 40 states and with more than 60,000 clubhouse members nationwide. We are building a national movement for the dignity and rights of the 14 million people living with serious mental illness in our country while also providing necessary support and resources to the individuals we serve.

Millions of Americans living with serious mental illness (SMI) are denied access to care and support in the community because mental health support systems in the United States were not built to address the wide-ranging needs of people with SMI, especially people who cannot afford care. These individuals then end up cycling through our nation's streets, shelters, emergency rooms, and jails, at great expense to local, state, and federal budgets. In addition, we know that people with SMI face social and economic isolation¹ that has profound mental and physical health consequences.² For far too long our punitive, ineffective, and costly approaches have taken away their capacity and humanity. Fountain House takes a public health approach to serious mental illness. We address both the health and social needs of our members through an integrated model that connects our physical clubhouse—where members are engaged in an innovative, proven therapeutic community called social practice designed to support them to take steps in reclaiming their agency and dignity—with holistic access to clinical support, housing, care management, education, and more. Since the onset of the COVID–19 pandemic, we have also built a virtual version of our clubhouse to provide connection and expand our reach to others who can benefit. We are pleased to report that preliminary data suggests this helps to better engage both younger adults and a more demographically diverse cross-section of people living with SMI.

Simply put: Fountain House's approach works. Our members are hospitalized and experience crises at rates significantly lower than others living with serious mental illness, resulting in 21% lower Medicaid costs for the highest-risk population. Of the 40% of our members experiencing homelessness or unstable housing when they arrive at Fountain House, 99% are housed within a year. Of the 24% of Fountain House members with a history of incarceration and justice involvement, rates of recidivism are less than 5%. Our members complete their education, find paid work, and achieve health and wellness goals at significantly higher rates than people living with serious mental illness who don't have access to our programs. Our country has growing and intersecting crises of homelessness, police involvement, incarceration, and rising mental health needs, which require programs like Fountain House to be accessible and available to all.

¹Fortuna, K.L., Ferron, J., Pratt, S.I., Muralidharan, A., Aschbrenner, K.A., Williams, A.M., . . . and Salzer, M. (2019). Unmet needs of people with serious mental illness: Perspectives from certified peer specialists. *Psychiatric Quarterly*, 90(3), 579–586.

²Holt-Lunstad, J., Smith, T.B., Baker, M., Harris, T., and Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on psychological science*, 10(2), 227–237.

As this Committee recognized during its February 8, 2022 hearing, millions of young Americans are struggling under a mental health epidemic amounting to a national crisis, which will require both coverage of and access to physical and mental health care to solve. As this Committee works to produce a bipartisan bill this summer that can serve as a step forward in solving this nation's mental health crisis, we urge you to recognize that there are 14 million people in the United States living with serious mental illness (SMI). Traditional care delivery models fail to address many of the underlying needs of people with SMI, and these failures result in unnecessary morbidity, mortality, health-care costs, and other social service costs to society. We encourage states to use new Medicaid and behavioral health funding to support comprehensive models of psychosocial rehabilitation that break down social isolation and improve quality of life. Congress and the federal government should support these aims so that trained behavioral health staff can serve as social practitioners and offer the following services to the populations they serve: transitional employment; health and wellness programming; culinary food service and medically managed meals; housing assistance; care management; and supported education.

Based on the needs of our community, we support the following proposed Appropriations Report Language:

The Committee directs the Center for Medicare and Medicaid Services (CMS) to provide a report the Committee within 180 days of enactment that addresses how CMS will encourage the following:

- How the Center for Medicare and Medicaid Innovation intends to develop new payment models that supplant fee-for-service models with more global-oriented payment models that reward value associated with breaking down social isolation for people living with SMI;
- How the Center for Clinical Standards of Quality will develop, specify, test, and integrate into payment models patient-reported outcome measures that address social isolation and loneliness; and
- How the Center for Medicaid and CHIP Services will encourage state Medicaid agencies to contract with payers that offer comprehensive psychosocial rehabilitation services, as described above.

The Committee directs an additional \$40 million to be allocated to the Patient-Centered Outcomes Research Institute (PCORI) to specifically support a funding announcement related to social drivers of health for people living with serious mental illness.

In addition, the Committee directs the Substance Abuse and Mental Health Services Administration (SAMHSA) to provide a report to the Committee within 180 days of enactment that addresses how SAMHSA will clarify expectations that rehabilitation services should comprehensively address rehabilitation, including psychosocial rehabilitation as described above.

Strengthening the Workforce

As Senator Crapo recognized during this Committee's February 8, 2022 hearing, strengthening the mental and behavioral health workforce will prove vital, especially in the face of widespread stress, fatigue, and burnout of providers and workers in the mental health field. And, as the Senate HELP Committee heard during its February 1, 2022 hearing to examine mental health and substance use disorders focusing on responding to the growing crisis, serious workforce gaps in the mental health community have been left unaddressed by broader efforts to strengthen the U.S. workforce. Fountain House encourages Congress to broaden its thinking as it considers policy and structural changes aimed at strengthening the workforce of mental health providers.

Senator Cortez Masto's line of questioning regarding peer support services during this Committee's February 8, 2022 hearing recognized the vital role that peers play in recovery for people with SMI. The role of peers is incredibly important to social practice that works to address the requirements of our members and other individuals with mental health needs. Fostering a community of people with similar lived experiences is critical for promoting health equity. As SAMSHA reports, research shows that peer support provides important recovery benefits. Creating and resourcing additional pathways for peers and other mental health paraprofessionals to enter the field would play a critical role in addressing staffing gaps nationwide, contribute to innovation and more well-evidenced models of care, and create new employment opportunities for people from lower-resourced backgrounds to enter the helping profession and serve people with SMI. After entering the field, we recommend that there be clear pathways for peers to remain and grow in the mental

health workforce to serve people with SMI. One way of ensuring continuity and robust availability of peer supports is to create standardized training programs for peers, which can contain advancement opportunities in and of themselves in addition to promoting a general understanding of the opportunities in the field.

We urge Congress to consider the ways in which health-care payments limit growth of the mental health workforce, especially those who serve people with SMI. Psychosocial rehabilitation through the group setting model requires consistent management and leadership by providers. However, because most payment is derived through 1:1 billable services, management of community supports is not currently eligible for reimbursement by payers under traditional fee-for-service payment models.

We also encourage you to consider policy that ensures that all workforce members are practicing at the top of their licenses. The pandemic has exacerbated an already serious mental health provider shortage in the U.S., which cannot be remedied quickly by relying on highly trained clinicians to fill in the gaps (it would take many years of education and training). The most feasible solution is to deploy people with lived experience from the community to provide critical support as an adjunct to more serious clinical expertise so we are maximizing what each person in the provider system can do.

Combined, these impediments mean that the fee-for-service payment models, current scope of practice limitations, and licensing regulations restrict growth of this community support model that has proven highly effective.

Increasing Integration, Coordination and Access to Care

Fountain House has endorsed the bipartisan Behavioral Health Crisis Services Expansion Act (S. 1902) and we strongly recommend that the Committee consider the provisions of this bill. S. 1902 would address many of the issues enumerated in your communication to behavioral health stakeholders including expanding the availability of services such as 24/7 national hotlines, mobile crisis services, behavioral health urgent care facilities, crisis stabilization beds, and short-term crisis residential options. The bill also calls for data collection and evaluation of the current provision of services and programs offered, and it would help communities build up their behavioral health crisis response systems. These policies are critical to ensuring that people who require behavioral health care can access it in a safe and timely manner.

Crisis intervention models need to focus on what factors drive crises (*e.g.*, mental health, social challenges), enlist a wide range of people (various mental health professionals, peers, etc.), and focus training on de-escalation. Research shows that a public health approach to mental health crises works, and that law enforcement is rarely required.

Most data systems do a poor job of addressing critical aspects of behavioral health, integrating social needs into patient records, and following the patient across settings.

Psychosocial rehabilitation, such as the services that social practitioners provide in clubhouses, is a valuable, evidence-based element of the care continuum. It often serves as a critical bridge between high-acuity care and long-term health and productivity for people living with SMI. Research has shown that participating in the clubhouse model facilitates positive recovery trajectories by promoting a sense of unity and belongingness for members. Randomized controlled trials have indicated that members experience a significantly improved quality of life due to their involvement in the model.^{3,4} The competitive employment aspect of the model specifically has also been linked to improved global quality of life, with the greatest positive influence being on members' levels of self-esteem.⁵ Overall, aspects of the clubhouse

³Chen, Y., Yau, E., Lam, C., Deng, H., Weng, Y., Liu, T., and Mo, X. (2019). A 6-month randomized controlled pilot study on the effects of the clubhouse model of psychosocial rehabilitation with Chinese individuals with schizophrenia. *Administration and Policy in Mental Health and Mental Health Services Research*, <https://doi.org/10.1007/s10488-019-00976-5>.

⁴McKay, C., Nugent, K.L., Johnsen, M., Eaton, W.W., and Lidz, C.W. (2018). A Systematic Review of Evidence for the Clubhouse Model of Psychosocial Rehabilitation. *Administration and Policy in Mental Health and Mental Health Services Research*; New York, 45(1), 28–47, <http://dx.doi.org.proxy.lib.wayne.edu/10.1007/s10488-016-0760-3>.

⁵Gold, P.B., Macias, C., and Rodican, C.F. (2016). Does competitive work improve quality of life for adults with severe mental illness? Evidence from a randomized trial of supported em-

model believed to account for these improvements include the focus on autonomy and personhood instead of patient-hood. Clubhouses have further been proven to reduce severe psychiatric symptoms, improve self-esteem,⁶ and decrease internalized stigma, promoting greater recovery experiences.⁷ Randomized controlled trials of clubhouse programs have shown reduced hospitalizations for clubhouse members.⁸ Additionally, membership in clubhouses shows lower drop-in rates and fewer hospitalizations,⁹ and clubhouse costs are substantially lower than partial hospitalization, thus clubhouse membership reduces overall cost of health care.¹⁰

We urge the Committee to focus on the outcomes that matter the most to people living with mental illness. It is critical that our system moves beyond almost exclusive reliance on administrative data to measure provider performance. Utilizing this data does not capture the complexity of treating serious mental health diagnoses which requires markedly different treatment approaches than diagnoses such as heart disease, diabetes, or other chronic physical ailments. Yet success is measured with a system that does not adequately distinguish between behavioral and physical health. To address this issue, we recommend that the Committee consider policies that would integrate patient-reported measures into performance assessments especially as they relate to social isolation/connection/loneliness; function and quality of life; and self-efficacy, agency, empowerment, and engagement.

Ensuring parity between behavioral and physical health care

As alluded to above, lack of payer parity between behavioral and physical health care continues to challenge the delivery of care to individuals who require mental health care. Statutory advancements in parity have not been supported well enough by regulatory and legal infrastructure in a manner that truly actualizes parity in the real world. Unfortunately, payers frequently fail to apply evidence-based standards to benefit determinations, causing enormous financial hardship for patients and people who have family members living with mental illness or resulting in many people having to forego needed care due to expense of self-paying for it.

The 2019 ERISA *Wit v. United Behavior Health* ruling demonstrates the need for a more comprehensive approach to making mental health parity a reality. We urge the Committee to consider the precedent set by this ruling as you work to ensure real and lasting parity for individuals who require mental health treatment.

There is dramatic supply deficiency in terms of access to effective behavioral health programs at many levels of the system. Despite regulatory changes in the last decade, individuals who are covered by private health plans still face many hurdles when trying to identify an appropriate mental health provider. From workforce shortages to reimbursement challenges to payer coverage shortfalls, patients are often left without a viable path to getting the care they need.

Federal coverage programs also fall short. Medicare is not subject to mental health parity requirements and imposes additional limitations on mental health benefits. The Medicare 190 hospital days lifetime limitation does not serve patients seeking behavioral health care well and is easily exceeded for these chronic conditions; according to NAMI, no other health condition is subject to a similar cap. In addition to denying care to people who have eclipsed the coverage limit, we are also concerned that this limitation may deter individuals from seeking care if they believe that they will exceed their lifetime coverage limit too early when, in fact, it's critical that individuals experiencing a severe mental health episode seek care as soon as possible. We urge the Committee to consider the provisions of the recently introduced, bipartisan Medicare Mental Health Inpatient Equity Act, which would per-

ployment. *The Journal of Behavioral Health Services and Research*, 43(2), 155–171, <https://doi.org/10.1007/s11414-014-9392-0>.

⁶Tsang, A.W.K., Ng, R.M.K., and Yip, K.C. (2010). A 6-month prospective case-controlled study of the effects of the clubhouse rehabilitation model on Chinese patients with chronic schizophrenia. *East Asian Archives of Psychiatry*, 20, 23–30.

⁷Pernice, F.M., Biegel, D.E., Kim, J.-Y., and Conrad-Garrisi, D. (2017). The mediating role of mattering to others in recovery and stigma. *Psychiatric Rehabilitation Journal*, 40(4), 395–404, <https://doi.org/10.1037/prj0000269>.

⁸Solis-Romón, C., and Knickman, J. (2016). Project to evaluate the impact of Fountain House programs on Medicaid utilization and expenditures. Health Evaluation and Analytics Lab: New York University.

⁹Di Masso, J., Avi-Itzhak, T., and Obler, D.R. (2001). The clubhouse model: An outcome study on attendance, work attainment and status, and hospitalization recidivism. *Work: Journal of Prevention, Assessment and Rehabilitation*, 17(1), 23–30.

¹⁰Solis-Romón, C., and Knickman, J. (2016). Project to evaluate the impact of Fountain House programs on Medicaid utilization and expenditures. Health Evaluation and Analytics Lab: New York University.

manently repeal the Medicare 190-day lifetime limit for inpatient psychiatric care. Medicaid also imposes arbitrary limits on treatment for mental health. The program excludes coverage for “institutions for mental disease” (IMDs). This exclusion, which has been in place for the duration of the existence of the Medicaid program, is a direct affront to Congress’s work towards achieving mental health parity. We urge the Committee to work towards policy to eliminate this discriminatory limitation on access to care.

Furthering the Use of Telehealth

The COVID–19 pandemic has made clear the need for telehealth services for treatment of many conditions, including mental health diagnoses. While the flexibility afforded has resulted in easier access to care, we urge the Committee to consider fully the needs of the community we represent when considering policy that would further expand telehealth. More research is required to determine what support is best provided via in-person treatment. We want to ensure that individuals who prefer to access in-person treatment are not unduly forced into virtual treatment via a reimbursement structure that overly incentivizes this method of care delivery.

As previously mentioned, it is critical that people suffering from SMI feel part of a community, whether that community exists in person or virtually. We urge the Committee to consider policies that would enable coverage for virtual community-based psychosocial rehabilitation.

Conclusion

Equitable access and quality care begin by engaging representative people with lived experience in all aspects of research, policymaking, and program design. In addition to the recommendations we have made above, we strongly encourage the Committee to ensure that individuals from the community you are attempting to serve with this effort are engaged in a meaningful way. Defining the best approaches to integrating, coordinating and accessing mental health care requires a thoughtful framework that lays out a national quality strategy for mental health. It is clear that the Committee appreciates this dynamic, and we thank you for this opportunity to respond to this Committee’s discussion draft. If you have any questions or would like more information, please contact Jennifer Wang, Senior Director of National Policy and Advocacy at jennifer.wang@fountainhouse.org.

Sincerely,

Mary Crowley
Interim President and Chief Executive Officer
Fountain House

THE JED FOUNDATION
530 7th Avenue, Suite 801
New York, NY 10018
info@jedfoundation.org
212-647-7544
<https://jedfoundation.org/>

February 8, 2022

The Honorable Ron Wyden
Chair
U.S. Senate
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510–6200

The Honorable Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510–6200

Re: Protecting Youth Mental Health: Part I—An Advisory and Call to Action

Dear Chair Wyden and Ranking Member Crapo:

Thank you for this opportunity to submit this statement for the record. The Jed Foundation (JED) is nation’s leading non-profit dedicated to protecting emotional

health and preventing suicide for our nation's teens and young adults. In our work, our practitioners see firsthand the mental health crisis facing our youth, which, while existing well before the current COVID-19 Pandemic, has been greatly exacerbated by the Pandemic and will have impacts that extend well after the Pandemic is over. That is why we feel the Federal government should be taking an active role in not only addressing the immediate crisis, but in laying a comprehensive and sustainable youth mental health infrastructure.

We are grateful for your leadership and Congress's support to date, but there is still much to be done. We, as a Nation, can work to positively address mental health challenges now, or see them manifest in much more destructive forms well into the future. JED believes strongly in the importance of a comprehensive system of mental health support and suicide prevention planning for all teens and young adults, particularly in the communities of high schools and college campuses. Congress can play a critical role in ensuring that these environments have the necessary expertise, resources, and strategic planning in place through advancing several existing pieces of legislation.

To that end, we believe that all schools and colleges should be encouraged to implement the federal Suicide Prevention Resource Center's developed, and scientifically shown to be effective, Comprehensive Approach to Suicide Prevention.¹

Along with additional funding and other support to schools to help with implementation of comprehensive approaches and suicide prevention, a national policy strategy around mental health should include the passage and implementation of the:

1. Enhancing Mental Health and Suicide Prevention Through Campus Planning Act (H.R. 5407—Representative Susan Wild), which would authorize the U.S. Department of Education to coordinate with the Health and Human Services Secretary to encourage institutions of higher education to implement comprehensive mental health and suicide prevention plans. Note that Sen. Richard Blumenthal is working on a similar bill.
2. Youth Mental Health and Suicide Prevention Act (H.R. 1803—Rep. Tony Cardenas), which would authorize the Secretary of Health and Human Services to establish a grant program to promote comprehensive mental health and suicide prevention efforts in high schools. Note that Senator Jacky Rosen and Senator Lisa Murkowski are set to introduce a Senate companion bill very soon.

We hope these recommendations from JED will be helpful, and we look forward to continuing to work with Congress on the legislation mentioned above and other impactful policies that will strengthen and create comprehensive and sustainable systems to support positive mental health and suicide prevention for teens and young adults.

If we can be of any further assistance on this or any other related matter, please feel free to reach out to our director of government affairs and advocacy, Manuela McDonough, at manuela@jedfoundation.org.

Sincerely,

John MacPhee, CEO

JOURNEY TO SUCCESS

The Journey to Success campaign promotes federal policies that lead to better and more equitable outcomes for youth and young adults who experience foster care. We applaud the Senate Finance Committee for focusing on youth mental health—a hugely important issue for children and youth who have experienced the child welfare system. We look forward to working with you in the weeks and months to come, as well as to connecting you directly with young people who have experienced foster care and can speak directly to the importance of timely, high-quality mental health services in order to heal from trauma and adverse childhood experiences.

Our policy framework is based on extensive review of relevant research and the perspectives of young people with lived expertise in the foster care. These youth and young adults have spoken extensively about their need for healing, health, and well-being, and have described the ways it is not being met under current policy. What

¹<https://www.sprc.org/effective-prevention/comprehensive-approach>.

follows is a summary of the key needs identified through the research and through personal insights from young people, as well as policy recommendations for the Committee's consideration.

Mental Health and Healing: What Young People From Foster Care Need

Children and youth in foster care often face significant difficulties due to health and mental health issues rooted in their history of childhood trauma, as well as in foster care itself. According to the American Academy of Pediatrics, the vast majority of children and adolescents who enter foster care have one or more serious physical or mental health issues stemming from a history of childhood trauma. Entering foster care and being removed from one's family is also emotionally traumatizing.

Once in foster care, young people often do not receive care that is adequate, consistent, age-appropriate, or effective. Due to funding or coverage limitations, they may not have access to peer support services and other treatments that may be effective for their healing. Also, while the vast majority of children, youth, and young adults in foster care are eligible for Medicaid, many states do not cover all Medicaid-eligible services, and federal matching funding levels for Medicaid are also insufficient in many states, leaving providers without incentives to participate in Medicaid or to gain experience with specific populations receiving Medicaid, such as youth in foster care. Psychotropic medications are also often overused in lieu of more appropriate and effective treatment.

As a result of these shortcomings, many youth from foster care enter adulthood without having the opportunity to heal and address issues that are likely to impact their future. This is a significant missed opportunity, because adolescence and young adulthood is a time when interventions can be highly effective in helping young people heal from past trauma. We must prioritize these young people's mental health and healing so that they can build resilience, achieve well-being, and ultimately thrive as youth and young adults.

Policy Recommendations to Help Youth and Young Adults From Foster Care Heal

We urge you to consider the following proposals, which are intended to allow youth in foster care to heal, avoid further harm, and build resilience throughout their adolescence and young adulthood:

1. **Strengthen current law specifically relating to the planning and coordination among child welfare, health, and mental health agencies to improve the availability, quality of, and access to, mental health treatment.** The Health Oversight and Coordination Plans, a requirement of Title IV-B of the Social Security Act, have fallen short of providing the timely access and coordination of services that are critical to meeting the complex mental health needs of youth in foster care. Congress can expand the scope of these plans to more specifically account for the trauma histories of young people in foster care and better address their mental health needs in the following ways:
 - a. Rename these plans to "Health and Mental Health Oversight and Coordination Plans" and specify coordination with Medicaid and behavioral health agencies in the development and implementation of these plans.
 - b. Improve the array of (and access to) mental health services that are available to meet the complex needs of children and youth in foster care by specifying that the plans coordinate clinical and non-clinical services that help build and strengthen family, peer, and community connections.
 - c. Ensure that youth and young adults are involved in the planning and continuous quality improvement of these plans.
 - d. Spur innovation of treatment specific to the needs of youth in foster care through a new grant program, modeled on the Regional Partnership Grant program within Title IV-B, to support effective, varied mental health treatments and supports in the community for children, youth and young adults in foster care—making them more likely to find approaches that meet their needs so they will be able to heal and pursue their goals.
2. **Incentivize the provision of community-based mental health services for youth and young adults in foster care.** We recommend increasing for three years the Federal Match Assistance Percentage (FMAP) to 100% for all mental health and supportive services provided under the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program, and making all children and youth under the age of 21 who are in or have experienced foster care eligible for EPSDT. This will encourage more providers to take Medicaid and

to focus on providing high quality treatment and services for young people with experience in foster care.

3. **Limit the use of psychotropic medications and increase oversight of their use.** Requirements in the Health Oversight and Coordination Plan (Title IV–B) and the State Title IV–E Plan should be updated, and improved coordination and joint oversight with the Centers for Medicaid and Medicare Services should also be required. This will reduce the prescription of psychotropic medications and increase access to other treatments and interventions that help youth heal, address trauma; it will also ensure that youth are treated with medication only when appropriate and truly helpful to the young person.
4. **Require Title IV–E agencies make a core set of supportive services available to all families caring for children and youth in foster care.** Services could include peer support, 24-hour access to crisis planning and support, respite care, tailored in-service training, and access to mental and behavioral health supports.

Thank you for your consideration of these recommendations, and for your leadership in prioritizing mental health for young people in America. As you continue your work on this important topic, we urge you to ensure that youth experiencing foster care receive the services and supports they need to thrive in their transition to adulthood and beyond.

NATIONAL ALLIANCE ON MENTAL ILLNESS
4301 Wilson Boulevard, Suite 300
Arlington, VA 22203
(703) 524-7600
NAMI Helpline 1 (800) 950-NAMI
<https://www.nami.org>

Chairman Wyden, Ranking Member Crapo, and distinguished members of the Committee, the National Alliance on Mental Illness (NAMI) would like to offer this Statement for the Record on your hearing, “Protecting Youth Mental Health: Part I—An Advisory and Call to Action.” NAMI is the nation’s largest grassroots mental health organization dedicated to building better lives for the millions of Americans affected by mental illness. The communities we serve and advocate for are as diverse as our nation. NAMI is a voice for youth and adolescents, veterans and service members, individuals involved with the criminal justice system, those experiencing homelessness, family caregivers and all people who are impacted by mental illness. We are all connected by the shared hope of new and innovative treatments, improved health care coverage and support through recovery.

Youth Mental Health: A Crisis

Childhood and adolescence are critical periods for mental health, and there is strong research that links the mental, social, and emotional health of students to their academic achievement. Undiagnosed, untreated, or inadequately treated mental illnesses can significantly interfere with a student’s ability to learn, grow, and develop.

Yet, our nation’s children and youth are experiencing soaring rates of anxiety, depression, trauma, loneliness, and suicidality. As U.S. Surgeon General Vivek Murthy identified in the 2021 U.S. Surgeon General’s Advisory, “Protecting Youth Mental Health,”¹ our nation’s youth are dealing with a devastating mental health crisis. Even prior to COVID–19, the need for more mental health care for youth and young adults was great, as we faced shortages of mental health professionals across the country. From 2007 to 2018, there was a 60% increase² in the rate of suicide among 10- to 24-year-olds, making it the second leading cause of death for this age group.

The COVID–19 pandemic has worsened the ongoing children’s mental health crisis and increased the fragility of the mental health safety net system for children and adolescents. There is growing evidence that the mental health of children and youth is deteriorating in our current environment. More than half of adults (53%)³ with children in their household say they are concerned about the mental state of their children. Between April and October 2020, hospital emergency departments saw a

¹ <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

² <https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr69-11-508.pdf>.

³ <https://www.psychiatry.org/newsroom/news-releases/new-apa-poll-shows-sustained-anxiety-among-americans-more-than-half-of-parents-are-concerned-about-the-mental-well-being-of-their-children>.

sharp rise⁴ in the share of total visits that were from children with mental health-related emergencies. Additionally, at points during the pandemic, an astounding 25% of 18–24 years old surveyed⁵ reported experiencing suicidal ideation related to the pandemic in the past 30 days. These stressors are particularly evident for Latino, Black, Asian American & Pacific Islander, and American Indian & Alaskan Native youth who experience depression and suicidal ideation at higher rates.

Put bluntly, there is a national emergency in children’s mental health. We greatly appreciate this Committee recognizing this urgent need and working to expand access to mental health care for our nation’s youth and young adults.

Prevention, Early Identification, and Early Intervention

Roughly half⁶ of lifetime cases of mental illness begin by age 14 and nearly three quarters begin by age 24. Early intervention is essential because the earlier people get help, the better the outcomes. Yet, too often, health care professionals, child-care workers, and teachers lack specialized knowledge to identify and treat the early signs of mental health conditions. Equally problematic, there are extensive barriers to accessing mental health care once a need has been identified—particularly in underserved communities. It is critical to focus on promoting greater awareness and early identification of mental health conditions in youth and young adults.

NAMI encourages the Committee to consider these opportunities to increase access to prevention, early identification and early intervention services within the Committee’s jurisdiction:

- Allow states the option to provide Medicaid coverage to young adults experiencing early psychosis, supporting critical access to early treatment through Coordinated Specialty Care, an effective early treatment model that improves outcomes and saves lives.
- Incentivize screening for behavioral health symptoms at well-child visits and other early intervention services necessary to address needs early.
- Provide incentives to ensure more children can access services through Medicaid’s Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit. EPSDT provides children with protections to ensure early identification and medically necessary treatment for those with or at risk of mental health conditions. Of all children eligible for an initial or periodic screening through EPSDT, less than 60 percent⁷ received one, highlighting the need to encourage providers to complete the screenings.

School-Based Mental Health Services

Mental health symptoms can affect success at school, yet too few students get the help they need to thrive. Since children spend much of their time in educational settings, schools offer a unique opportunity for early identification, prevention, and interventions that serve students where they already are. Schools also mitigate barriers to care such as lack of transportation, scheduling conflicts and stigma, as school-based mental health services can help students access needed services during the school day. Children and youth with more serious mental health needs can be referred to school-linked mental health services that connect youth and families to more intensive resources in the community.

To support the increased need for comprehensive mental health services and the availability of school-based mental health professionals and partnerships in the community that support students’ access to care, it is vital to provide robust federal investments. Such investments will help schools recruit and retain well-trained, highly qualified mental health professionals and bolster capacity to provide comprehensive mental, behavioral, and academic interventions and supports.

NAMI encourages the Committee to consider these opportunities to increase access to school-based mental health care, within the Committee’s jurisdiction:

- Increase the ability of Medicaid to support school-based mental health services, including providing updated CMS guidance to state Medicaid programs on how Medicaid can be utilized for this purpose.
- Provide incentives to school mental health programs to build strong partnerships with School-Based Health Centers, Federally Qualified Health Centers

⁴ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm>.

⁵ https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm?s_cid=mm6932a1_w.

⁶ <https://pubmed.ncbi.nlm.nih.gov/15939837/>.

⁷ <https://www.macpac.gov/subtopic/epsdt-in-medicaid/>.

(FQHCs), Behavioral Health Organizations (BHOs), and community-based mental health providers to ensure timely access to needed care.

- Provide incentives to ensure school-based health providers are adequately trained to recognize the mental and behavioral health needs of students and to offer culturally sensitive and responsive evidence-based services.

Child and Adolescent Mental Health Workforce

There are severe shortages of mental health professionals across almost all specialties in this country. For youth and young adults, the shortage is dire. In 2020, SAMHSA estimated that 4.5 million additional behavioral health practitioners are needed to address the needs of children with serious emotional disturbances and adults with serious mental illness, including an additional 49,000⁸ child and adolescent psychiatrists.

Expanding the child and adolescent mental and behavioral health workforce, as well as increasing cultural and linguistic competence among the workforce, is critical for addressing the enormous unmet mental health needs of children, adolescents, and young adults. NAMI encourages the Committee to take action to address mental health workforce issues and consider these opportunities within the Committee's jurisdiction:

- Increase the federal reimbursement rate for mental and behavioral health care services under Medicaid through the Medicaid Bump Act (S. 1727/H.R. 3450), which would enhance the ability to recruit and retain needed mental health providers.
- Recognize peer supports workers, mental health counselors and family therapists as integral mental health practitioners, increasing the supply of providers and addressing health disparities and barriers to access care through the Medicare Mental Health Access Improvement Act of 2021 (S. 828/H.R. 432) and the PEERS Act of 2021 (S. 2144/H.R. 2767).
- Create incentives to ensure that the workforce is diverse and culturally competent to best meet the diverse needs of children with mental health conditions.

Insurance Coverage and Access to Care

Medicaid and the Children's Health Insurance Program (CHIP), which now cover more than 37 million children, are vital sources of insurance coverage for mental health and substance use disorder services. However, beginning in 2017,⁹ the child uninsurance rate began to climb.

Even for people with insurance, timely access to qualified mental and behavioral health providers is often limited because cost-sharing requirements are too high, in-network provider capacity is low, access to out-of-network providers is prohibited, and essential mental and behavioral health services are often not covered. We encourage the Committee to ensure that all children and youth have comprehensive and affordable coverage for mental health care by considering these opportunities:

- Require that state Medicaid programs cover a more robust set of mental health benefits. Currently, many benefits that are critically important for people with mental health conditions are optional, including targeted case management, rehabilitation services, therapies, medication management, clinic services, licensed clinical social work services, peer supports, and stays in institutions of mental disease (IMDs) for children up to age 21.
- Ensure nationwide Medicaid expansion to address that certain low-income older adolescents in the 12 states that have not expanded Medicaid are ineligible for coverage.
- Ensure all pregnant women, children and youth enrolled in Medicaid and CHIP can maintain coverage for 12 months to reduce the risk that they will experience gaps in coverage or lose coverage altogether through provisions included in H.R. 5376, the Build Back Better Act.
- Make CHIP permanent through H.R. 1791, the Children's Health Insurance Program Permanency Act or the CHIPP Act, so that this critical program doesn't require periodic reauthorization by Congress and children's access to coverage isn't at risk.
- Make permanent the Medicaid Express Lane Eligibility option, which allows states to take various steps to streamline enrollment and eligibility renewals for

⁸ <https://annapoliscoalition.org/wp-content/uploads/2021/03/behavioral-health-workforce-report-SAMHSA-2.pdf>.

⁹ <https://cf.georgetown.edu/2020/10/08/childrens-uninsured-rate-rises-by-largest-annual-jump-in-more-than-a-decade-2/>.

children in Medicaid and CHIP, through provisions included in H.R. 5376, the Build Back Better Act.

- Provide Medicaid coverage of health care services for people 30 days prior to leaving jail or prison, which could help connect justice-involved youth and young adults to the care they will need in the community and reduce their risk of returning to jail or prison due to unmet health care needs, through the H.R. 955/S. 285, the Medicaid Reentry Act.
- Extend mental health parity protections to Medicaid fee-for-service.
- Ensure that children in foster care who have been diagnosed as having serious emotional disturbance (SED) and need specialized services delivered in facilities known as qualified residential treatment programs can access those services through S. 2689, the Ensuring Medicaid Continuity for Children in Foster Care Act of 2021.

Conclusion

Now more than ever, families and children from infancy through adulthood need access to mental health screening, diagnostics, and a full array of evidence-based therapeutic services to appropriately address their mental and behavioral health needs. NAMI would like to express our gratitude to the Chairman, Ranking Member and the Committee for your commitment to addressing the mental health needs of our nation's youth. If you would like to discuss any issue addressed in this statement, please contact Hannah Wesolowski, Chief Advocacy Officer at hwesolowski@nami.org.

NATIONAL ASSOCIATION FOR CHILDREN'S BEHAVIORAL HEALTH

201 E. Main St., Suite 1405
Lexington, KY 40507
Tel: 859-402-9768
Website: <https://nacbh.org/>

February 22, 2022

The Honorable Ron Wyden
Chairman
U.S. Senate
Committee on Finance
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance
Washington, DC 20510

Dear Chairman Wyden and Ranking Member Crapo:

The National Association for Children's Behavioral Health (NACBH) appreciates the opportunity to provide a written statement for the record, following up on the two excellent Finance Committee hearings on youth mental health held on February 8th and 15th.

First, we congratulate the committee for organizing such a huge topic into five areas of inquiry and action. Focusing input from the field, the public, and hearing witnesses in this way will allow a lot to be accomplished in a relatively short time frame.

Hearing witnesses were particularly well-chosen, and NACBH supports the many concrete suggestions they offered, especially around school-based services, crisis intervention, other community-based services, and examples of best practices that could be replicated. In addition, we appreciate the attention called to the pending implementation of the 988 suicide prevention hotline and the need to competently respond to young people who dial in, which includes ensuring that treatment services are actually available and accessible to youth reaching out for help. That is a looming challenge as the July 2022 hotline implementation approaches, and we link it with the longstanding issue of boarding in emergency departments to reiterate NACBH's response to the committee's September 2021 request for information:

Please provide Medicaid funding for the full range of necessary mental health and substance use treatment services by passing H.R. 2611, the Increasing Behavioral Health Treatment Act. This would remove the antiquated and discriminatory IMD exclusion for states that establish: a full array of community-based services; assessment and oversight to ensure treatment placements at the clinically indicated level; engagement strategies for specific populations such as youth and young adults; particular attention to transitions from institutional treatment settings; and annual reporting of demographic and utilization data for system accountability.

With the additional requirements of H.R. 2611,¹ this approach would bring Medicaid mental health and substance use disorder treatment into the 21st century with guardrails to prevent unnecessary institutionalization, and allow low-income and disabled beneficiaries to enjoy the promise of parity offered to most privately insured Americans. The nearly 50-year old Institutions for Mental Diseases exclusion is the largest violation of parity principles allowed to stand in this country, and truly inexplicable in light of Congressional champions' many passionate and eloquent statements on parity in the private sector.

As Chairman Wyden said on the recent release of the tri-department parity report, "If given the right tools," he is "confident that true mental health parity can become a reality in the American health-care system." For child and adolescent services in Medicaid, those tools could include the provisions of H.R. 2611 to fund a comprehensive array of services, use of validated assessment instruments such as CASII² and ECSII³ to guide appropriate placement decisions, and federal definitions of additional 24-hour settings (in Medicaid) and congregate care settings (in child welfare) to ensure federal oversight of safety and quality.

This would be a great opportunity to tackle some of the unfinished business of the Children's Health Act of 2000 and the Family First Prevention Services Act (FFPSA) which is also under this committee's jurisdiction. Part I of the Children's Act has never been implemented, leaving the use of seclusion and restraint in "certain non-medical, community-based facilities for children and youth" entirely unregulated at the federal level. Under FFPSA, four types of child caring institutions are eligible for Title IV-E federal matching funds, but only one is defined: Qualified Residential Treatment Programs. At a minimum, federal definitions should be established for the other three IV-E-eligible child caring institutions—settings specializing in providing prenatal, postpartum, or parenting supports for youth; supervised independent living settings; and settings providing high-quality residential care and support services to children who have been or are at risk of becoming sex trafficking victims—and Part I regulations promulgated for all four. Clearly, these are all programs serving children and youth with unique vulnerabilities and mental health needs, and not only should there be appropriate federal oversight of safety and quality, the Medicaid IMD exclusion should not continue as a barrier for health services reimbursement.

Thank you again for the opportunity to provide a written statement for the record. We will follow up with the staff identified for the five work groups, including additional information on the IMD exclusion and proposed cost offsets for NACBH's policy recommendations.

Sincerely,

Patricia Johnston
Director of Public Policy
pat.johnston@nacbh.org

NATIONAL ASSOCIATION OF SCHOOL PSYCHOLOGISTS

4340 East West Highway, Suite 402
Bethesda, MD 20814
Phone: 301-657-0270
FAX: 301-657-0275
<https://www.nasponline.org/>

February 7, 2022

Honorable Ron Wyden
Chairman
U.S. Senate
Committee on Finance
Washington, DC 20510

Honorable Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance
Washington, DC 20510

Dear Chairman Wyden and Ranking Member Crapo,

On behalf of the more than 25,000 members of the National Association of School Psychologists (NASP), I submit this statement for the record for the U.S. Senate Finance Committee hearing "Protecting Youth Mental Health: Part 1—An Advisory

¹ <https://www.congress.gov/bills/117/congress/house-bill/2611?q=%7B%22search%22%3A%5B%22hr+2611%22%2C%22hr%22%2C%22611%22%5D%7D&s=1&r=2>.

² https://www.aacap.org/aacap/Member_Resources/Practice_Information/CASII.aspx.

³ https://www.aacap.org/aacap/Member_Resources/Practice_Information/ECSII.aspx.

and Call to Action.” We share your goal of creating a comprehensive mental and behavioral health system that serves all people. NASP represents school psychologists who work with students, families, educators, administrators, and communities to ensure all of our students have the supports they need to be successful. School psychologists provide direct and indirect interventions to support student social-emotional learning, mental and behavioral health, and academic success.

As you know, we were experiencing a mental health crisis before COVID–19 laid bare existing inequities and exacerbated difficulties in children and youth receiving necessary care. This is in large part due to the critical role that schools play in our mental and behavioral health care system. Approximately 1 in 5 students will experience a mental health disorder over the course of their school trajectory, yet only 20% of those students who need care will receive it. Of those who do get the care they need, the vast majority of children and youth receive those services in school.

NASP recently surveyed our members, and more than half of survey respondents reported significant increases in the number of students presenting with social-emotional or mental and behavioral health challenges. In addition, the reported behaviors are much more severe than in the past. The scope of the problem is so significant that the American Academy of Pediatrics, the American Academy of Child & Adolescent Psychiatry, and the Children’s Hospital Association recently declared a national emergency for children’s mental health. This declaration was shortly followed by a December 2021 U.S. Surgeon General advisory calling for a unified national response to the mental health challenges young people are facing. These advisories underscore the need for immediate action from Congress to build capacity in our mental healthcare system.

Improving access to and the quality of mental health care for children and youth is predicated on addressing the critical workforce shortages of school-employed mental health professionals. While every school has access to the services of a school psychologist in some capacity, our field is experiencing a critical shortage, both in the number of practitioners and in the availability of graduate education programs and faculty needed to train the workforce necessary to keep up with the growing student population. In order to provide necessary comprehensive services, NASP recommends a ratio of one school psychologist per 500 students. Current data estimates a national ratio of about 1:1200; however, great variability exists among states, with some states approaching a ratio of 1:5000. It is estimated that we need an additional 63,000 school psychologists to meet our recommended ratio and ensure access to comprehensive school psychological services. Shortages in school psychology significantly undermine the availability of high-quality services to students, families, and schools, particularly in rural, underserved, and other hard to staff school districts. This is particularly devastating for communities in which the school psychologist, counselor, or social worker is the only mental and behavioral health provider readily available. Staffing shortages also undermine effective school community partnerships, as outlined in this brief NASP co-authored with the National Center for School Mental Health.*

Successful implementation of the Surgeon General’s recommendations will require interagency collaboration at the Federal level and coordination among government and non-governmental organizations at the state and local level. NASP is pleased to be collaborating with the Department of Health and Human Services and the Department of Education and we look forward to continued collaboration with Congress. The following recommendations do not represent the full slate of policy solutions needed to address this issue. Rather, the recommendations below are specific to areas within the jurisdiction of the Senate Finance Committee. We would be more than happy to discuss other policy solutions that we believe Congress must advance.

Necessary Updates to School-Based Medicaid

Schools have always played an important role in meeting the health care needs of their students, but there has never been a more important time to ensure school districts have the knowledge and tools to access Medicaid funding. Medicaid is the third largest federal funding stream for school districts, providing much-needed funding to support school health services, including mental and behavioral health. Despite this, the CMS school-based Medicaid claiming guides have not been updated since 1997 and 2003, respectively. Updating these guidance documents will allow CMS to finally incorporate the 2014 free care policy reversal, which expands eligibility for school-based Medicaid programs, build on the demonstrated efficacy of telehealth services, address some of the administrative challenges some schools face in

* <https://www.nasponline.org/x57108.xml>.

receiving Medicaid reimbursement. According to a recent report from the AASA, the School Administrators' Association, two-thirds of districts report using Medicaid reimbursement to support the work of school mental health professionals (*e.g.*, school psychologists and school social workers,) who provide comprehensive mental health services available to students. Medicaid funds also help implement, scale up, and sustain effective school community partnerships, which are a necessary component of a comprehensive system of school-based care.

We are pleased that the Department of Health and Human Services and the Department of Education are currently considering what administrative changes are necessary. NASP, in collaboration with several other education and school health organizations recommend that new guidance or technical assistance related to school-based Medicaid:

- Address the administrative and documentation challenges associated with school-based Medicaid, particularly those faced by small and rural school districts, and support states' efforts to include school psychologists and other school-based providers who are credentialed by state education agencies in becoming Medicaid-eligible providers;
- Highlight best practices and state examples for how Medicaid has increased the availability of school-based mental and behavioral health services, including expanding and streamlining the types of reimbursable providers and services; improving care coordination and partnerships with community-based mental and behavioral health services; and opportunities to allow for reimbursement of more early-intervention and prevention services, as well as building trauma-informed schools and preventing and treating substance use disorders;
- Address the use of telehealth services. This type of treatment modality is not a substitute for ensuring fully staffed schools, nor is it appropriate for everyone. However, in communities experiencing significant personnel shortages, telehealth services should be a viable option to connect students to care;
- Support improvements to the early and periodic screening, diagnostic, and treatment (EPSDT) requirements to ensure consistent application across states.

We encourage the Senate Finance committee to hold the Department of Health and Human Services to their commitment to update these resources and address the current barriers that prevent districts from accessing this critical federal funding stream to support student mental health.

We also recommend increasing the federal reimbursement rate for mental health and substance use disorder care under Medicaid through passage of the Medicaid Bump Act (S. 1727/H.R. 3450). As the Committee knows, Medicaid is the nation's largest insurer of mental health and substance use treatment for both adults and children. However, many beneficiaries remain on long wait lists for mental and behavioral health services or languish for long periods of time in emergency rooms awaiting treatment. The Medicaid Bump Act would incentivize states to expand their Medicaid coverage of mental health and substance use treatment services by providing a corresponding raise in the Federal Assistance Percentage (FMAP) matching rate to 90 percent for behavioral health services. Significantly, increasing Medicaid reimbursement rates also would flow to the mental health and substance use treatment workforce, greatly enhancing the behavioral health system's ability to recruit and retain needed providers.

Finally, we ask that you work swiftly with your colleagues on the Senate Appropriations Committee to pass a FY 2022 budget that includes robust increases for programs that increase access to comprehensive mental and behavioral health services for all students. We need Congress to act quickly to provide increased resources to already authorized Substance Abuse and Mental Health Services Administration (SAMHSA) and Department of Education programs that provide mental health services for young people, including the maximum level of funding for two grant programs within Safe Schools National Activities. The Mental Health Services Professional Demonstration Grants program and School-Based Mental Health Services Grants program together address the critical shortage of school-based mental health professionals in two distinct and essential ways: by increasing the available workforce, and by helping school districts support increased positions to improve access to services. The youth mental health crisis cannot be fully addressed without building a high-quality workforce capable of meeting the increasing needs of our students, educators, and communities.

Thank you for your leadership and commitment to improving our mental and behavioral health care system. We look forward to working with you on this critical issue. If you have any questions or would like to follow up, please contact Dr. Kelly

Vaillancourt Strobach, NASP Director of Policy and Advocacy at kvaillancourt@naspweb.org.

Sincerely,

Kathleen Minke, PhD, NCSP
Executive Director

NATIONAL HEALTH LAW PROGRAM
1444 I Street, NW, Suite 1105
Washington, DC 20005
(202) 289-7661
<https://healthlaw.org/>

U.S. Senate
Committee on Finance

On behalf of the National Health Law Program (NHeLP), we submit this statement for the record for the U.S. Senate Finance Committee hearing entitled “Youth Mental Health: Part I—An Advisory and Call to Action.”

NHeLP is a public interest law firm working to protect and advance the health rights of low income and underserved individuals. Founded in 1969, NHeLP advocates, litigates, and educates at the federal and state levels. Consistent with its mission, NHeLP works to ensure that all people in the United States have access to affordable, quality health care, including comprehensive behavioral health services.

As this committee is well-aware, an unacceptable number of children in the United States struggle with unmet mental health needs, and the pandemic has only exacerbated crucial gaps in services and supports. We are gravely concerned by the growth in the proportion of pediatric emergency department visits for mental health conditions during the pandemic.¹ Since the start of the COVID-19 pandemic, the proportion of pediatric emergency department visits for mental health conditions compared to visits for all other reasons has grown.² The American Academy of Pediatrics, Children’s Hospital Association, and the American Academy of Child and Adolescent Psychiatry have declared a “national emergency in child and adolescent mental health,” noting this increase in emergency department visits and increasing “rates of depression, anxiety, trauma, loneliness, and suicidality.”³

We appreciate the Senate Finance Committee’s commitment to examining ways to improve behavioral health and reduce gaps in care, and we commend the committee for inviting the Surgeon General to address these critical needs. Below, we offer policy options in three areas where additional legislation, oversight, or guidance would further the Senate Finance Committee’s priority of improving behavioral health care for young people and children: (1) improving access to intensive community-based services for children and youth enrolled in Medicaid; (2) enhancing oversight and enforcement of parity for mental health and substance use disorder services; and (3) improving Medicaid coverage for youth involved in the juvenile justice and foster care systems. We provided additional details on the recommendations below in our response to the Senate Finance Committee’s request for information, submitted November 12, 2021.

I. Intensive Community-Based Services for Children and Youth

The good news is that with the right approach, youth with even the most significant mental health needs can and do thrive in family settings.⁴ However, to do so, youth must have access to appropriate services and supports. At a bare minimum, any robust community-based system of care for children and adolescents with significant behavioral health needs must include: (1) intensive care coordination; (2) mobile response and stabilization services; (3) in-home services; and (4) therapeutic foster care.⁵ These are the essential building blocks to any functioning community-based system for children and adolescents with significant behavioral health needs.⁶ Such evidence-based interventions “can prevent the unnecessary use of emergency departments and other restrictive settings, such as inpatient and residential treatment facilities, that remove children and adolescents from their homes, schools, and communities.”⁷

Under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit, state Medicaid agencies are required to provide enrollees under age 21 with access to periodic and preventive screenings, as well as services that are necessary to “correct or ameliorate” medical conditions, including behavioral health conditions.⁸

Thus, states must cover medically necessary behavioral health services for enrollees under age 21, regardless of whether the services are included in the state's plan.

Because state Medicaid programs must cover children's behavioral health services, including the intensive services described above, it is unnecessary and counterproductive for Congress to mandate or incentivize children's behavioral health services that states are already required to provide pursuant to the EPSDT benefit.

However, compliance with EPSDT is still a serious issue, and enforcement of states' requirement to provide behavioral health treatment often requires years of litigation to vindicate the rights of Medicaid enrollees.⁹ Thus, **we recommend that the Senate Finance Committee evaluate the need for increased guidance and technical assistance, and oversight of states' implementation of the EPSDT mandate.** For example, recently MACPAC recommended that HHS should direct CMS and SAMHSA to issue joint guidance regarding states' obligation to provide these community-based services. We agree that updates to guidance to reflect current best practices may be helpful.

II. Enhancing Parity

Congress enacted federal mental health parity laws to end long-standing discriminatory practices that allowed insurance plans to restrict access to mental health and substance use disorder treatment. Parity laws require plans to cover these services on par with other medical surgical services. Yet, more than two decades after Congress's first attempts to level the playing field and enact behavioral health parity, serious gaps remain. In order to eliminate current holes in the system, Congress should: (a) improve enforcement mechanisms for current parity protections; (b) extend behavioral health parity to Medicare and Medicaid fee-for-service programs; and (c) require the agencies responsible for enforcing parity to establish a centralized, accessible, public-facing complaint process and create easy-to-understand educational materials about parity for the general public.

A. Improving Compliance and Disclosure

Despite strong efforts by Congress and the federal agencies, parity noncompliance remains a significant problem that prevents millions of people in the United States from accessing necessary behavioral health services. Enforcing behavioral health parity is a significant challenge for multiple reasons. First, the current system of parity compliance relies almost entirely on consumer complaints, placing the burden on an individual seeking behavioral health services to first be able to identify that their denial, increased costs, or additional administrative burdens are a parity violation, and then to walk through a convoluted web of paperwork, appeals, and agency enforcement mechanisms.

Additionally, analysis of parity complaints is complex, requiring evaluation of both quantitative treatment limits (QTLs) (*e.g.*, limits on the number of visits to a provider or the length of a specified treatment) and non-quantitative treatment limits (NQTLs) (*e.g.*, medical necessity criteria used to deny treatments or prescription drug formulary designs).¹⁰ While a fair amount of progress has been made identifying and correcting QTLs, addressing NQTLs has been more challenging.¹¹ In part, this is because enforcement of NQTLs requires disclosure of a broad range of detailed information by the plan itself. Not only is it difficult, if not impossible, for individuals to access this information, but even once they have it, the level of analysis required to determine whether a plan has violated parity rules is difficult and requires a high level of technical expertise. Over the past six years, Congress has taken several steps to improve enforcement of NQTLs. The 21st Century Cures Act included several provisions designed to increase transparency.¹² In December of 2020, the Consolidated Appropriations Act (CAA) amended the Mental Health Parity and Addictions Equity Act (MHPAEA) to require plans to perform and document a comparative analysis of NQTLs applied to mental health and substance use disorder benefits versus those applied to medical-surgical benefits. Plans must be prepared to disclose this analysis, upon request, to the applicable enforcement agency.¹³ Additionally, there have been recent legislative proposals to allow the Department of Labor to levy civil monetary penalties for violations of federal parity protections.¹⁴

While we support these efforts, we believe that there is more Congress can do to help ensure robust parity enforcement. The CAA takes one-step toward improving plan transparency and disclosure requirements, yet it relies exclusively on the plans themselves to perform a comparative analysis of NQTLs and to disclose all the infor-

mation necessary to support this analysis. We have little faith in health plans' willingness to perform a comprehensive analysis of NQTLs and even less confidence that plans will disclose the type of information truly necessary to perform this comparison or that they will disclose the information at a level that allows parity violations to be identified. The 2022 Annual Report to Congress noted that *none* of the comparative analysis reviewed contained sufficient information to comply with the requirements of parity.¹⁵ This lack of disclosure, even at a minimal level, occurs in practice even when plans are required to do so by law. For example, a case recently decided by First Circuit Court of Appeals involves a family who requested documents under the regulatory mandate that preceded CAA, but were unable to obtain the documents they needed from the plan, even with legal assistance.¹⁶ Congress must work with the enforcement agencies to ensure that, whenever it is required by law, plans fully disclose, upon request, all documents and information necessary to ensure parity compliance without necessitating affirmative litigation against the plan to do so.

Thus, in addition to the requirements imposed by the CAA, **the Senate Finance Committee should explore ways to build upon these enforcement efforts.** We are aware that additional guidance is forthcoming, but there is also a role for Congress. The recent tri-agency report to Congress suggested amending MHPEAEA to ensure that MH/SUD benefits are defined in an "objective and uniform manner, pursuant to external benchmarks that are based in nationally recognized standards."¹⁷ While we support this proposal, we also note it is important that any standards applied must keep in mind the non-discrimination provisions that protect the right of individuals with disabilities to not be segregated from society by receiving services in restrictive settings that can be provided through community-based services and not congregate settings. All too often, the "nationally recognized standards" rely on standards of care that incorporate an institutional bias. Instead, the standards must incorporate the types of intensive community supports outlined in this testimony above (*e.g.*, services such as intensive care coordination; mobile response and stabilization services; in-home services; and therapeutic foster care).

Another option would be to create neutral independent auditing entities, potentially housed within the parity enforcement agencies, that have the authority to investigate plans compliance with parity regulations. These entities would proactively examine plans for compliance and could also respond to complaints. We discussed this option in further depth in our comments to the committee, submitted November 2021.

B. Extending Parity to Medicare and Fee-For-Service Medicaid

Medicaid is the largest payer of mental health services in the United States and plays a vital role in ensuring access to behavioral health services for Medicaid's more than 80 million of low-income enrollees.¹⁸ Medicare covers nearly 62 million older adults and people with disabilities, including young adults and transition age youth with disabilities, and provides an important link to behavioral health coverage.¹⁹ Yet, current federal parity protections apply only to Medicaid Managed Care Organizations (MCOs), Medicaid Alternative Benefit Plans (ABPs) and the Children's Health Insurance Program (CHIP), but not to fee-for-service Medicaid or Medicare.

To strengthen behavioral health coverage in Medicare and Medicaid, **Congress should extend the federal parity protections to all Medicare plans and Medicaid fee-for-service plans.** However, as discussed above, extending federal parity protections alone is not enough. To ensure that parity provides meaningful protections for Medicare, Medicaid, and CHIP recipients, Congress must work to ensure that there is strong oversight and enforcement of these provisions in both public and private health plans. Congress should explicitly affirm that parity protections can be privately enforced by Medicare, Medicaid and CHIP beneficiaries and continue to mandate strong disclosure and transparency requirements for all health plans.

C. Improving Public Facing Materials and Supports

Behavioral health care and insurance systems can be difficult to navigate. Knowing what behavioral health services are covered and then finding care often requires multiple phone calls, sifting through complex insurance paperwork, provider directories and drug formularies. Most beneficiaries are not familiar with the specifics of federal parity protections. Even if they were, the current federal parity enforcement scheme is complex and multi-faceted with enforcement authority spread between states and multiple federal agencies. Further, our parity enforcement system

remains largely complaint driven, with the onus placed on individuals to file appropriate appeals and complaints, and there is no clear way to file a complaint for Medicaid. Navigating this patchwork system of enforcement is confusing and overwhelming.

Therefore, Congress should mandate that the agencies responsible for enforcing parity should coordinate to create a centralized, easily accessible, public complaint process. Further enforcement agencies should coordinate to produce easy-to-understand educational materials for the general public. These materials should include clear examples of what parity violations look like and should be part of an ongoing outreach campaign to provide up-to-date support, information, and resources on behavioral health parity.

III. Improving Coverage of Youth in the Juvenile Justice and Foster Care Systems

The behavioral health needs of justice-involved and child-welfare involved children and youth are significantly higher than their non-system-involved peers, yet their needs are far too often not met. Research suggests that 70 percent of youth in the juvenile justice system experience mental illness and 80 percent of children in foster care have significant mental health issues; in contrast between 18 and 22 percent of youth in the general population experience mental health issues.²⁰ There are several concrete steps Congress could take now to improve coverage of these populations, thus improving access to care.

First, the 2018 SUPPORT Act prohibits states from terminating youths' Medicaid eligibility upon incarceration, and instead requires states to suspend eligibility for the period of incarceration and then to lift that suspension upon release.²¹ This allows for youth leaving the juvenile justice system to more quickly and seamlessly receive behavioral health care they need upon release, including counseling, case management, substance use disorder treatment, and other supports. In addition, the SUPPORT Act requires states to conduct a redetermination of eligibility before youth are released from custody *without* requiring them to submit a new application. Finally, the law mandates that states process applications from eligible youth who apply for Medicaid prior to their release.

We are concerned, however, that the promises of the SUPPORT Act have not been fully realized. As a bipartisan group of Senators and Representatives identified last year, the full implementation of these provisions has been delayed in states across the country.²² It appears that CMS has yet to confirm that all state Medicaid programs have enacted these provisions in order to better serve these young people. Thus, we recommend that **the Senate Finance Committee investigate the status of implementation of Section 1001 of the SUPPORT ACT, and remove any barriers to implementation of the requirement to suspend, not terminate, Medicaid eligibility for youth in the juvenile justice system.**

Second, Congress could remedy gaps in coverage for youth who age out of the foster care system. While virtually all youth in foster care are covered by Medicaid, once a young person ages out of foster care, they may experience gaps in coverage. Currently, in order to be eligible for Medicaid under the former foster youth pathway, a young person must be (1) under age 26, (2) have been in foster care upon reaching age 18 (or any age up to 21 if the state extends foster care to that age), and (3) have been enrolled in Medicaid while in foster care. Thus, youth who move from one state to another to pursue education or employment may lose their eligibility.

Section 1002 of the SUPPORT Act included a partial remedy this problem by requiring every state to offer Medicaid coverage to any former foster youth up to age 26, including youth who were in foster care in a different state. Unfortunately, Section 1002 only applies to youth who turn 18 on or after January 1, 2023. Thus, children currently as young as 17 who are in the foster care system still risk losing their coverage if they move states after they age out of Medicaid. The Dosha Joi Immediate Coverage for Foster Youth Act would make Section 1002 effective immediately, ensuring Medicaid eligibility for all former foster youth in the country, even if they turned 18 before 2023, regardless of where they currently live.²³ An additional bill, the Expanded Coverage for Former Foster Youth Act would remove even more barriers to Medicaid eligibility for former foster youth.²⁴ Currently, youth must have been enrolled in Medicaid while in the foster care system and have been in foster care when they "aged out" at 18, or a later age up to 21 if a state has decided to extend foster care accordingly. The Expanded Coverage for Former Foster Youth Act would broaden eligibility to young people who (1) may not have been enrolled in Medicaid while in the foster care system; (2) left foster care prior to age 18 because

they were placed in legal guardianship with a kinship caregiver; or (3) were emancipated from foster care prior to age 18.²⁵ **We urge the Senate Finance Committee to move forward and pass both the Doshia Joi Immediate Coverage for Foster Youth Act and the Expanded Coverage for Former Foster Youth Act**

We appreciate the Senate Finance Committee’s commitment to engaging in bipartisan reform to improve access to timely, quality behavioral health care. Thank you for your consideration of our comments. If you have questions about these comments, please contact Jennifer Lav (lav@healthlaw.org).

Sincerely,

Jennifer Lav
Senior Attorney

End Notes

¹ CDC, Morbidity and Mortality Weekly Report, Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1–October 17, 2020 (November 13, 2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm?s_cid=mm6945a3_w.

² CDC, Morbidity and Mortality Weekly Report, Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1–October 17, 2020 (November 13, 2020) (“whereas the overall number of children’s mental health-related ED visits decreased, the proportion of all ED visits for children’s mental health-related concerns increased, reaching levels substantially higher beginning in late-March to October 2020 than those during the same period during 2019.”), https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm?s_cid=mm6945a3_w.

³ American Academy of Pediatrics, A declaration from the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry and Children’s Hospital Association (October 19, 2021), <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

⁴ “Family setting” is used here to refer to non-group home-based settings. A family could be biological parent(s), a foster parent, a grandparent or other relative, or adoptive family. See generally Annie E. Casey Found., *Every Kid Needs a Family* (2015), <http://www.aecf.org/m/resourcedoc/aecf-EveryKidNeedsAFamily-2015.pdf>. In 1999, the Surgeon General released a seminal report finding that there is convincing evidence to support the use of in-home services for this population. See SAMHSA and National Institute of Mental Health, *Mental Health: A Report of the Surgeon General* 168 (1999), <https://www.surgeongeneral.gov/library/reports/index.html>. See SAMHSA, *The Comprehensive Community Mental Health Services for Children with Serious Emotional Disturbances Program, Report to Congress* (2015), https://www.samhsa.gov/sites/default/files/programs_campaigns/nitt-ta/2015-report-to-congress.pdf. See also Joint CMS and SAMHSA Informational Bulletin, *Coverage of Behavioral Health Services for Children, Youth, and Young Adults with Significant Mental Health Conditions* 5 (May 7, 2013), <https://www.medicare.gov/federal-policy-guidance/downloads/cib-05-07-2013.pdf>. See Oswaldo Urdapilleta et al., *National Evaluation of the Medicaid Demonstration Waiver Home- and Community-Based Alternatives to Psychiatric Residential Treatment Facilities, Final Evaluation Report* (May 30, 2012, Amended April 2, 2013), <https://www.medicare.gov/medicaid-chip-program-information/by-topics/delivery-systems/downloads/cba-evaluation-final.pdf>.

⁵ As DOJ explained in its findings letter regarding its investigation of West Virginia Children’s Mental Health System,

A sufficient array of in-home and community-based services incorporates several discrete clinical interventions, including, at a minimum:

- Intensive care coordination, e.g., Wraparound with fidelity to the National Wraparound Initiative standards;
- In-home and community-based direct services of sufficient frequency, intensity, comprehensiveness, and duration to address the youth and family’s needs . . .
- Responsive and individualized crisis response and stabilization services available 24 hours a day, 7 days a week, including immediate access to back-up crisis stabilization when actually needed so a youth can spend the majority of his/her time living in a more integrated community setting; and

- Therapeutic Foster Care, which . . . is an intensive, individualized mental health service provided in a family setting, using specially trained and intensively supervised foster parents.

Department of Justice, *Findings Letter, Investigation of West Virginia Children's Mental Health System Pursuant to the Americans with Disabilities Act 22* (June 1, 2015), https://www.ada.gov/olmstead/documents/west_va_findings_ltr.pdf.

⁶*Id.*

⁷MACPAC, *Report to Congress on Medicaid and CHIP, Access to Behavioral Health Services for Children and Adolescents Covered by Medicaid and CHIP 79* (June 2021), <https://www.macpac.gov/wp-content/uploads/2021/06/June-2021-Report-to-Congress-on-Medicaid-and-CHIP.pdf>. For more information on the evidence base for these services, see Kim Lewis and Jennifer Lav, National Health Law Program, *Children's Mental Health Services: The Right to Community-Based Care, Appendix: Selected Students of Home-Bases Services for Children with Significant Mental Health Needs* (August 2018), <https://healthlaw.org/resource/childrens-mental-health-services-the-right-to-community-based-care/> and Jennifer Lav and Kim Lewis, National Health Law Program, *Children's Behavioral Health Mobile Response and Stabilization Services* (February 2021), <https://healthlaw.org/resource/childrens-behavioral-health-mobile-response-and-stabilization-services/>.

⁸42 U.S.C. §§ 1396a(a)(10)(A), 1396a(a)(43), 1396d(a)(4)(B); 1396d(r).

⁹See *e.g.*, *Rosie D. v. Romney*, 410 F. Supp. 2d 18, 25 (D. Mass. 2006); *Katie A. ex rel. Ludin v. Los Angeles County*, 481 F.3d 1150, 1158 (9th Cir. 2007); Settlement Agreement, *T.R. v. Dreyfus*, C09–1677–TSZ (W.D. Wash. December 19, 2013), <https://www.disabilityrightswa.org/wp-content/uploads/2017/12/Settlement-Agreement-and-Order-signed-8.30.2013-0.pdf>; Department of Justice, *Findings Letter, Investigation of West Virginia Children's Mental Health System Pursuant to the Americans with Disabilities Act* (June 1, 2015), https://www.ada.gov/olmstead/documents/west_va_findings_ltr.pdf; *Disability Rights North Carolina v. Brajer*, 5:16-cv-854 (E.D.N.C. 2016), <http://www.disabilityrightsncc.org/sites/default/files/L28-3-1%20Settlement%20Agreement.pdf>; Alabama Joint Settlement Agreement, https://centerforpublicrep.org/wp-content/uploads/2018/01/Alabama_Joint-Settlement-Agreement.executed.pdf.

¹⁰CMS, *The Mental Health Parity and Addictions Equity Act (MHPAEA)*, https://www.cms.gov/CCIIO/Programs-and-Initiatives/Other-Insurance-Protections/mhpaea_factsheet.

¹¹See, *e.g.*, Steve Melek et al., *Addiction and Mental Health v. Physical Health, Widening Disparities in Network Use and Provider Reimbursement*, https://assets.milliman.com/ektron/Addiction_and_mental_health_vs_physical_health_Widening_disparities_in_network_use_and_provider_reimbursement.pdf (parity issues remain in NQTLs of network adequacy and provider reimbursement); Mental Health and Substance Use Disorder Parity Task Force, Final Report 12 (2016), <https://www.hhs.gov/sites/default/files/mental-health-substance-use-disorder-parity-task-force-final-report.PDF>.

¹²21st Century Cures Act, Pub. L. 114–255 (2016). These provisions included a requirement for the Secretary of Health and Human Services to create a parity action plan, mandating that the Department of Labor issue a report on parity violations in Employee Retirement Income Security Act (ERISA) plans, and directing the Government Accountability Office to produce a report on parity compliance.

¹³Consolidated Appropriations Act of 2021, Pub. L. 116–260 § 203 (2020).

¹⁴Build Back Better Act, H.R. 5736, 117th Cong. (2021), <https://www.congress.gov/bills/117th-congress/house-bill/5376/text>.

¹⁵Departments of Labor, Health and Human Services, and Treasury, *2022 MHPAEA Report to Congress* (January 2022), <https://www.dol.gov/sites/dolgov/files/EBSA/laws-and-regulations/laws/mental-health-parity/report-to-congress-2022-realizing-parity-reducing-stigma-and-raising-awareness.pdf>.

¹⁶See *N.R. v. Raytheon*, No. 20–1639, 2022 WL 278537 (1st Cir. January 31, 2022).

¹⁷*Supra* note 15.

¹⁸Center for Medicare and Medicaid Services, *Behavioral Health in the United States*, <https://www.medicare.gov/medicaid/benefits/behavioral-health-services/index.html>.

¹⁹ Wyatt Kom, et al., Kaiser Family Foundation, *A Snapshot of Sources of Coverage Among Medicare Beneficiaries in 2018* (March 23, 2021), <https://www.kff.org/medicare/issue-brief/a-snapshot-of-sources-of-coverage-among-medicare-beneficiaries-in-2018/>.

²⁰ Sarah Hammond, *Mental Health Needs of Juvenile Offenders*, National Conference of State Legislatures. (2007), https://www.ncsl.org/print/health/Mental_health_needsojuvenileoffenders.pdf; *Mental Health and Foster Care*, National Conference of State Legislatures (November 1, 2019), <https://www.ncsl.org/research/human-services/mental-health-and-foster-care.aspx>.

²¹ See Jennifer Lav, *New Omnibus Opioid Law Contains Medicaid Fix for Justice-Involved Children and Youth*, National Health Law Program (January 30, 2019), <https://healthlaw.org/new-omnibus-opioid-law-contains-medicaid-fix-for-justice-involved-children-and-youth/>.

²² Senator Chris Murphy, Press Release: *Murphy, Booker, Cardenas, Griffith Demand Answers on Delayed Implementation of Health Care Coverage for Youth in Juvenile Justice System* (September 29, 2020), <https://www.murphy.senate.gov/newsroom/press-releases/murphy-booker-cardenas-griffith-demand-answers-on-delayed-implementation-of-health-care-coverage-for-youth-in-juvenile-justice-system>.

²³ Doshia Joi Immediate Coverage for Foster Youth Act, S. 712, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/senate-bill/712/>.

²⁴ Expanded Coverage for Former Foster Youth Act, S. 709, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/senate-bill/709>.

²⁵ *Id.*

NATIONAL HOSPICE AND PALLIATIVE CARE ORGANIZATION

1731 King Street
Alexandria, VA 22314
Tel. 703-837-1500
Fax. 703-837-1233
<https://www.nhpc.org/>

U.S. Senate
Committee on Finance

February 8, 2022

The Honorable Ron Wyden
Chairman
United States Senate
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
United States Senate
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Wyden and Ranking Member Crapo:

Thank you for holding today's hearing entitled "Protecting Youth Mental Health: An Advisory and Call to Action."

On behalf of the National Hospice and Palliative Care Organization (NHPCO), the nation's largest membership organization for hospice and palliative care professionals, we share your commitment to addressing the mental health crisis facing the America's young people.

One often overlooked aspect of mental health is addressing grief. NHPCO and our hospice and palliative care members nationwide have more than 40 years of experience in helping individuals, families, and communities process grief. As part of the Medicare hospice benefit, providers offer families of hospice patients 13 months of bereavement care after the death of a loved one. In times of need, hospice providers are often turned to as experts in bereavement care and extend this care to the wider community, free of charge.

The COVID-19 pandemic has changed how people die, and how we grieve. Families have had limited ability to visit those that are most vulnerable, including those experiencing serious illness and the end of life. Time spent together has been cut short. Many patients have lost the opportunity to choose the hospice benefit due to the rapid progression of the illness, and some families have been unable to access mental health care in the wake of a loss.

COVID-19 has brought new attention to critical mental health issues, including complicated and prolonged grief and the impact of bereavement on children. More than 175,000 American children have lost a parent or grandparent caregiver to COVID-19, and concentrated loss in underserved communities has unequally distributed the psychological cost of these losses. Some of the negative consequences of childhood grief are increased use of substance abuse, higher risk of depression and criminal behavior, lower employment rates and academic underachievement. This has underscored the need for a national conversation on grief, the expansion of grief literacy, and the extension of bereavement care in underserved vulnerable communities and across the country.

We are grateful for your leadership as the nation battles a mental health crisis. Congress must play an active role in addressing this crisis; including legislation to combat grief with funding for targeted care and research. As Congress continues to address this long-term effect of the COVID-19 pandemic, we look forward to continuing to collaborate toward this common goal. Should you have any questions, please don't hesitate to reach out to our Chief Advocacy Officer, Hannah Yang Moore (hmoore@nhpco.org).

Sincerely,

Edo Banach, J.D.
President and CEO

PARTNERSHIP TO END ADDICTION
711 Third Avenue, Fifth Floor, Suite 500
New York, NY 10017
T 212-841-5200
F 212-956-8020
<https://drugfree.org/>

February 24, 2022

The Honorable Ron Wyden
Chairman
U.S. Senate
Committee on Finance
221 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance
239 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Wyden and Ranking Member Crapo,

Thank you for holding this month's hearings, "Protecting Youth Mental Health: Part I—An Advisory and Call to Action" and "Protecting Youth Mental Health: Part II—Identifying and Addressing Barriers to Care," held February 8, and February 15, 2022, and for initiating a process to advance legislation to address the mental health and addiction crises. We appreciate the opportunity to have this letter entered into the hearing record.

Partnership to End Addiction is a national nonprofit uniquely positioned to reach, engage, and help families impacted by addiction. With decades of experience in research, direct service, communications, and partnership-building, we provide families with personalized support and resources—while mobilizing policymakers, researchers, and health-care professionals to better address addiction systemically on a national scale.

We greatly appreciate the Committee dedicating two hearings to the issue of youth mental health. We are also concerned by this growing crisis, as untreated mental illness is a significant risk factor for substance use, and mental illness and substance use disorder frequently co-occur. As highlighted by many witnesses and committee members, school-based mental health services are critically needed to reach more youth. We urge the Senate to advance the Mental Health Services for Students Act (S. 1841), the Pursuing Equity in Mental Health Act (S. 1795), and the Suicide Training and Awareness Nationally Delivered for Universal Prevention (STANDUP) Act (S. 1543). We encourage Congress to facilitate an earlier and broader approach to substance use prevention that includes mental health, as well as

other fields that promote child health and resilience and structural changes that facilitate healthy and stable families. As described in our blog published by *Health Affairs*, there are a number of policy initiatives to improve family stability and security and child health and resilience that Congress has recently undertaken in COVID-19-related legislation or is currently exploring in the Build Back Better Act. While these policy changes are seemingly outside the realm of substance use, they are critically important for prevention and will also reduce the risk for other negative mental and behavioral health outcomes that have the same risk and protective factors as substance use. As explained by the Surgeon General in response to questions from Sen. Warren, increasing access to affordable child care, for example, is important for improving children's mental health, along with other early investments in health and well-being. Sen. Casey and the Surgeon General similarly highlighted that children's mental health does not exist in a vacuum, and that broader family, community, and societal circumstances must also be addressed in order to protect youth. We encourage the Committee to consider such policies for inclusion in a legislative package.

To address many of the issues raised during the hearing, including the lack of access to evidence-based treatment and barriers to care, inadequate insurance coverage, inappropriate crisis response, and the need to meet people where they are with services and integrate services into the many systems with which youth interact, we encourage you to advance the following bills currently before your committee:

Medicaid Reentry Act (S. 285)

As noted in the hearings, youth with mental health disorders are overrepresented in the juvenile justice system. While using Medicaid to cover school-based mental health services was repeatedly discussed, another place Medicaid can have a role in expanding access to care is the criminal justice system. Individuals in jails and prisons have disproportionately high rates of mental health and addiction, and they face significant risk upon release. Individuals released from incarceration are often unable to afford or access care due to a lack of insurance coverage, as they lose their Medicaid benefits upon incarceration, and it can often take weeks or months to reinstate coverage. The Medicaid Reentry Act would help ease connections to community-based mental health and addiction services by allowing Medicaid-eligible individuals to restart coverage 30 days prior to release.

Crisis Assistance Helping Out On The Streets (CAHOOTS) Act (S. 764)

As both Chairman Wyden and Sen. Cortez Masto highlighted in the hearings, the CAHOOTS program in Eugene, Oregon, can serve as an exemplary model for other states and localities to improve their behavioral health crisis response systems by sending trained behavioral health providers to address such crises, rather than police. People in crisis related to mental illness and substance use disorder are more likely to encounter police than get medical attention, resulting in millions of people with mental health and addiction being jailed every year. As you know, mental health and substance use disorders are health-care issues, not crimes, and an appropriate crisis response should connect people to care, not jail. We encourage the Committee to advance the CAHOOTS Act to provide states with enhanced Medicaid funding and grants to adopt community-based mobile crisis services.

Non-Opioid Prevent Addiction in the Nation (NOPAIN) Act (S. 586)

Despite the existence of effective non-opioid pain management options, availability remains limited due to misaligned reimbursement policies that incentivize the use of opioids over the use of non-opioid alternatives. Under current law, hospitals receive the same payment from Medicare regardless of whether a provider prescribes an opioid or non-opioid, which leads hospitals to largely rely on opioids dispensed at a pharmacy after discharge at little or no cost to the hospital. The NOPAIN Act would help address this by directing the Centers for Medicare and Medicaid Services to provide separate Medicare reimbursement for non-opioid treatments used to manage pain in the hospital outpatient department and ambulatory surgery center settings. This can help ensure that safe, non-addictive therapies are available and reduce unnecessary exposure to opioids and the likelihood of opioid misuse or addiction.

Tobacco Tax Equity Act (S. 1314)

While tobacco and nicotine were not directly discussed during the hearing, nicotine is one of the most commonly used addictive substances among youth. One of the most effective ways to reduce tobacco use among youth is to increase the price of tobacco products. The Tobacco Tax Equity Act currently before the Committee would

increase the federal tax rate on cigarettes, peg it to inflation to ensure it remains an effective public health tool, and set the federal tax rate for all other tobacco products at the same level (including e-cigarettes, which are particularly popular among youth).

We also encourage you to address:

Insurance Parity

As several witnesses and members, including Chairman Wyden, noted, lack of parity creates many barriers to behavioral health care for youth. Existing parity law must be better enforced, as insurance companies continue to violate it, as highlighted by the administration's recent report cited by the Surgeon General. Further, despite Congress's prior work to improve insurance coverage for mental health and addiction treatment, it will be impossible to ensure parity unless the Mental Health Parity and Addiction Equity Act is fully extended to Medicare, all of Medicaid, and TRICARE. In addition to leaving millions of people without adequate mental health and addiction coverage, Medicare's exclusion from parity laws is additionally problematic because Medicare serves as a benchmark for other forms of health coverage.

Thank you again for your commitment to addressing the mental health and addiction crises and for considering the above bills for inclusion in a legislative package. We would be happy to answer any questions or provide additional information to assist in your work.

Sincerely,

Partnership to End Addiction

RAINBOWS FOR ALL CHILDREN
614 Dempster St., Suite C
Evanston, IL 60202
<https://rainbows.org/>

The state of youth mental health is in crisis. There is a shortage of mental health professionals in the United States and financial barriers for families seeking mental health services for their children. This is especially prevalent in minority and vulnerable communities. Intervention is needed now in order to mitigate the potential for another public health emergency if we ignore the mental health needs of an entire generation of children.

Approximately 68% of children living in the United States (or 51 million children) will experience a life-altering event triggering profound grief before they turn 18, including death in the family, divorce, abandonment, military deployment of a loved one, incarceration, or diagnosis of a life-threatening illness. Children who experience trauma and grief are at an increased risk for learning, emotional, and behavioral issues; physical health problems; aggression; and substance and alcohol abuse. These statistics have not been updated to recognize the 140,000 children who have experienced a major loss due to the COVID-19 pandemic, and time will only tell how our children will respond to the shared trauma of the pandemic.

There is an entire generation of children that are facing loss; loss of their loved ones, loss of crucial time in school, loss of routine and relationships, and a loss of their childhood due to the COVID-19 pandemic. Rainbows for All Children helps children and youth successfully navigate grief and heal from loss or trauma, leading to improvements in development, problem-solving skills, behavior, anger management, school attendance and academic performance, depression and anxiety, emotional pain and suffering, communication, and destructive behavior such as involvement with gangs, alcohol, and substance abuse.

Death isn't the only traumatizing loss caused by the pandemic. Pre-pandemic, 68% of children in the United States experience one or more traumatic event, **also known as an Adverse Childhood Experience**, at some point during their childhood. Some of these Adverse Childhood Experiences include being the victim of or witness to community or school violence, divorce or separation, sudden loss of a loved one, military family-related stressors, incarceration of a parent, living with a person who has a problem with alcohol or drugs, domestic violence, and psychological, physical, or sexual abuse.

- 25% of children will experience the breakup of their parents' marriage and 25% of that group will also experience the breakup of a parent's second marriage.

- 1 in 15 children will experience the death of a parent or sibling.
- 1 in 10 children will experience a parent's diagnosis of a serious medical condition.
- 8% will experience a parent or guardian being incarcerated, and half of these children will be under 10 years old.
- 3% will experience at least one parent being deployed.

These 51 million children will experience an Adverse Childhood Experience, and that is outside of the trauma of the COVID-19 pandemic that is impacting all children. Children often do not have the ability to cope with their feelings and experiences around a traumatic event or a loss. It can be difficult for children to process and understand what they have experienced. When children are exposed to Adverse Childhood Experiences, their neurodevelopment can be disrupted. As a result, the child's cognitive functioning or ability to cope with negative or disruptive emotions may be impaired. The child's reactions to Adverse Childhood Experiences can interfere with his or her daily life and ability to function and interact with others. Symptoms can include nightmares, depression, physical symptoms such as stomachaches and headaches, self-harm, insomnia, fatigue, appetite disturbances, abrupt changes in personality, poor emotional control, lack of motivation, substance abuse, truancy, academic problems, peer problems, anxiety, and more. Other children may hide their emotions, acting as though nothing has happened, but are still negatively impacted. Long-term effects can continue to surface for decades to come. **Assuming children are naïve, "they don't know what's going on" or that they are resilient is a neglect of a child's mental and emotional healing and development that may cause severe consequences.**

Adverse Childhood Experiences have negative, lasting effects on a child's health and well-being. We have yet to see how the ongoing COVID-19 pandemic will impact this generation of children. Research has shown that Adverse Childhood Experiences are strongly related to the development and prevalence of a wide range of behavioral and health problems throughout a person's life span, including substance abuse, mental health issues, depression, obesity, learning and behavioral issues, aggression, and more.

- Each Adverse Childhood Experience increased the likelihood of illicit drug use by 2- to 4-fold.¹
- Four or more Adverse Childhood Experiences puts a child at a twelve-time greater risk of committing suicide as a young adult. In one study, individuals who reported 6 or more Adverse Childhood Experiences had 24.36 times increased odds of attempting suicide.²
- Adverse Childhood Experiences may increase the risk for long-term physical health problems (*e.g.*, diabetes, heart attack) in adults.³
- Exposure to Adverse Childhood Experiences may increase the risk of experiencing depressive disorders well into adulthood.⁴
- Individuals who experience Adverse Childhood Experiences and do not receive treatment have elevated risks of early death.⁵

However, **the negative effects of Adverse Childhood Experiences are preventable**, and children can be taught coping skills to help them develop greater resiliency. Rainbows for All Children works to address Adverse Childhood Experiences as soon as possible after they occur to allow children to grow into flourishing and healthy adults. Rainbows creates a safe place for children to openly discuss their feelings with understanding and validation and provides the tools they need to process their experiences and their feelings. Children journey through a curriculum carefully designed support their emotional needs.

Children going through adverse experiences have shown a significant improvement by participating in Rainbows programs, including improvements in the areas of anger and stress management, stress level, and overall happiness. Evaluation of our programs has revealed the following results:

¹ SAMHSA. "Adverse Childhood Experiences." <https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>. Updated July 9, 2018.

² *Ibid.*

³ *Ibid.*

⁴ *Ibid.*

⁵ Velitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study." *American Journal of Preventive Medicine*, 14(4), 245–258. DOI: 10.1016/S0749-3797(98)00017-8.

- The number of children who agreed or strongly agreed they knew healthy ways to be less stressed nearly doubled (increased 91%).
- The number of children who agreed or strongly agreed they were stress free most or all of the time nearly doubled (increased 91%).
- The number of children who strongly agree they can go through hard times and still be okay increased 154%.
- 82% of children agree or strongly agree helping others can help them too.
- The number of children who strongly agree they are happy most or all of the time nearly doubled (increased 95%).
- The number of children who strongly agree the divorce was not their fault increased by 68%.
- 90% of children attend school regularly.
- 87% of children believe they were listened to in their groups.

Every day, we receive calls from families in communities across the U.S. looking for a Rainbows site for their grieving child in need, where no sites are active. We are working to garner funding to open Rainbows sites in schools in highly vulnerable communities, and to provide support and training to enhance currently existing Rainbows groups. In several communities, there are youth who need our programs, willing partnerships, and community volunteer facilitators. **All that is needed is funding to launch these new sites and bring our programming to children and communities that would greatly benefit from our volunteer-led, peer-to-peer support model of care.**

A Note on Surgeon General Vivek Murthy's Recommendations

Dr. Murthy gave four key recommendations in his statement to the committee:

- Ensuring that every child has access to high-quality, affordable, and culturally competent mental health care.
- Focusing on prevention by investing in school and community-based programs that have been shown to improve the mental health and emotional well-being of children at low cost and high benefit.
- Developing a better understanding of the impact that technology and social media has on mental health.
- Taking steps to guarantee that no child should feel ashamed of their hurt, confusion, or isolation, and no one should feel too ashamed to ask for help.

Rainbows programming aligns with three of Dr. Murthy's four recommendations. Rainbows programming has been developed over the past 38 years and we have a community of over 10,000 Rainbows-trained Facilitators with a repository of resources designed to guide youth in their grieving process. We have peer-support sites meeting in 38 states and 13 countries. Our programming is provided at **no cost to participants** and takes place in their own communities where they feel most understood—whether it be their school, community center, place of worship, or other location comfortable to our participants.

Recent studies have shown that peer support for children with mental health conditions can result in:⁶

- Increased social functioning
- Increased empowerment and hope
- Increased quality of life and life satisfaction
- Reduced use of inpatient services
- Decreased costs to the mental health system
- Decreased hospitalization
- Decreased self-stigma
- Increased community engagement
- Increased engagement and activation in treatment

The growth children see in peer support groups helps them to understand and cope with their grief and feel less isolated, as well as lessening the burden on an already burdened public health system. Finally, there are many benefits to group support that is not seen in individual settings, such as:⁷

- Feeling less lonely, isolated or judged

⁶SAMHSA. "Peer Support Recovery," https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tac/peers-supporting-recovery-mental-health-conditions-2017.pdf.

⁷Mayo Clinic. "Support groups: Make connections, get help," <https://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/support-groups/art-20044655/>. Updated August 29, 2020.

- Reducing distress, depression, anxiety or fatigue
- Talking openly and honestly about your feelings
- Improving skills to cope with challenges
- Staying motivated to manage chronic conditions or stick to treatment plans
- Gaining a sense of empowerment, control or hope
- Improving understanding of a disease and your own experience with it
- Getting practical feedback about treatment options
- Learning about health, economic or social resources

Conclusion

Assuring the healthy development of all children is essential for societies seeking to achieve their full health and potential. Finding early remedies to shared trauma and loss is critical to the flourishing of our communities. Rainbows for All Children works to promote conditions that reduce or eliminate risky behavior and develop healthy children. At Rainbows for All Children, we know first-hand the important work we are doing, and it has been a joy to see children on their journey of restored health. Our founder once said that she, “would never stop until every grieving child had a voice.” We are committed to ensuring her mission lives on with the same compassion and commitment.

REAP

P.O. Box 86341
 Portland, OR 97286
 Phone 503-688-2784
 Fax 1-888-473-2963
<https://reapusa.org/>

U.S. Senate
 Committee on Finance

REAP is a multi-cultural youth leadership non-profit organization focused on developing the next wave of leaders for the future now. Based in the state of Oregon, REAP serves culturally students across four counties, eight school districts in 24 schools.

REAP values mental health initiatives and social emotional learning as a dimension of support in our service to students. REAP has worked to elevate student voice around this topic since the formation of the organization whether through Mental Health Summits or collaborating with various local and state organizations to develop groundbreaking research and training concerning suicide prevention.

REAP is in support of the work Sen. Ron Wyden is doing to increase access to mental healthcare. REAP recently connected our students with the Sen. Wyden’s Mental Health Listening Session on January 31st. Students spoke of their experience with the lack of access to mental health support. Many students reported not having enough access to counselors in their schools, preventing timely care for student needs. This need is disproportionate among racially and culturally diverse students.

It is imminently vital to the lives of our youth that we strive to improve access to timely mental healthcare in effort to elevate the current and the next generation of leaders for a better future. REAP supports the bipartisan work that Sen. Ron Wyden and the U.S. Senate Committee on Finance to improve mental health systems in our country.

Sincerely,

Mark Jackson
 Executive Director

STATEMENT SUBMITTED BY ETHAN J.S.H. REED

Honorable Chairman Wyden, Ranking Member Crapo, and members of the Finance Committee, I share to express my support for today’s hearing on tackling the mental health and substance use crisis we are currently facing across America. As an 18-year old youth activist, I had begun my civic engagement shortly after my community of Douglas County, Colorado, was ravaged by a school shooting at a STEM school in Highlands Ranch, Colorado, and one of my good friends happened to be in the classroom where it had begun. Fortunately, he had made it out alive to safety, however he had to witness a classmate of his get shot in the back while attempting to run outside of the school. To this day he still suffers from several mental

health issues, including anxiety, PTSD, etc. I've unfortunately lost two friends to suicide as well—their names were Hannah and Olivia. Since these tragedies, it brought me to the realization of just how severe the mental health among young Americans truly is.

I have had the privilege to serve my home state of Colorado by championing two mental health bills in the state legislature, and it is with great hope I further mental health legislation and its priorities in Congress. I am currently working with congressional leadership and other members of Congress on the priorities of mental health and substance use legislation, and so I applaud the efforts by this esteemed committee to begin hearings on tackling this crisis.

I remain optimistic that by the end of this session of Congress, we will have passed several pieces of legislation, and a potentially landmark mental health package that will further provide benefits and support for mental health services for young Americans to continue to have adequate access for support. It is with good intentions that I will continue to work with Congress and this esteemed committee to get legislation prioritized for the millions of young Americans across this country suffering and struggling with mental health and substance use issues.

One thing is made clear—the young people are NOT okay. We need reliable and adequate services and support from adults and our elected officials to provide us the benefits and funding that is so desperately needed right now. The COVID-19 pandemic has only exacerbated this crisis, and the youth are in dire need of help. I urge all American families and parents to check up on their children and youth, because I can guarantee that we need to be asked more about how we are feeling and whether we are okay or not.

Thank you so much for giving me this privileged opportunity to share my shared experiences as a young American, and for my voice to be on this platform with the Finance Committee. Let's get to work on immediate mental health and substance use legislation.

SANDY HOOK PROMISE ACTION FUND
P.O. Box 3489
Newtown, CT 06470

Statement of Mark Barden, Co-Founder and CEO

I would like to begin by thanking Chairman Wyden, Ranking Member Crapo, and the members of the Senate Finance Committee for holding this important hearing today. I am grateful for your commitment to addressing the United States' growing mental health crisis and specifically, the mental health needs of our nation's youth.

My name is Mark Barden, and I am one of the co-founders of Sandy Hook Promise. On December 14, 2012, the youngest of my three children, my sweet little Daniel, was murdered in his first-grade classroom at Sandy Hook Elementary School. The pain my family has endured every day since Daniel was taken from us is impossible to fully convey to you.

Following the shooting, I began working with other family members whose loved ones were killed that day to find a way to prevent other parents from experiencing the senseless, horrific death of their child due to gun violence. The result was Sandy Hook Promise, a national nonprofit organization dedicated to honoring all victims of violence by turning our tragedy into a moment of transformation. By empowering youth to “know the signs” and uniting all people who value the protection of children, we can take meaningful action in schools, homes, and communities to prevent violence and stop the tragic loss of life.

Youth in this country are facing a mental health emergency. Since 2010, suicide has been the second-leading cause of death for young Americans aged 10–24.¹ Mental Health America's 2021 State of Mental Health report showed that 77,470 youth, over one third of whom identify as LGBTQ+, are experiencing frequent suicidal ideation.² Additionally, youth between the ages of 10 and 17 are now more likely than

¹ Ten Leading Causes of Death and Injury Charts, Center for Disease Control and Prevention. Available at <https://www.cdc.gov/injury/wisqars/LeadingCauses.html>.

² Mental Health America. (2021). The State of Mental Health in America. MHA. Retrieved from <https://mhanational.org/get-involved/download-2021-state-mental-health-america-report>.

any other age group to score for moderate to severe symptoms of anxiety and depression.³

Certain communities have borne the brunt of this tragic escalation. Suicide rates among American Indian and Alaskan Native adolescents ages 15–19 are 60% higher than the national average for all teenagers.⁴ Suicide and suicidal behaviors for Black youth are also rising; Black boys ages 5–12 are twice as likely to die by suicide as compared to their white peers.⁵

The ongoing COVID–19 pandemic has only exacerbated these already alarming trends. Last fall, the American Academy of Pediatrics (AAP), the Children’s Hospital Association (CHA), and the American Academy of Child and Adolescent Psychiatry (AACAP) declared a national emergency in child and adolescent mental health, specifically citing the toll of the pandemic.⁶ This was followed by a December 2021 U.S. Surgeon General advisory calling for a unified response to the mental health challenges facing young people.⁷

To address this crisis, it is crucial that all children and youth have access to mental health care and resources. When Sandy Hook Promise’s 15-year-old Youth Advisory Board (YAB) member Arriana Gross testified before the Energy and Commerce Committee in June 2020, she discussed having to travel almost 2 hours from her home and school in Covington, Georgia to receive mental health services. Too many young people currently have similar barriers to accessing mental health care.

Schools can serve as one of the best mechanisms to offer mental health care for youth, particularly for those living in provider shortage areas and low-resourced communities. Current availability of school-based mental health professionals remains low, particularly in schools where many students come from low-income households.⁸ To expand access to school-based mental health services, we recommend allowing a payment model to fund mental health professionals to provide services in schools through Medicaid. By creating a funding model that allows local education agencies (LEAs) and schools to coordinate Medicaid payments for school mental health services, we can start to address the gap in access to youth mental health care.

We also recommend guaranteeing reimbursements for pediatricians who conduct suicide-risk screenings through Medicaid. Screening for risk of suicidal behavior can be a crucial first step in preventing suicide among young people. In December 2021, the Health Resources & Services Administration (HRSA) accepted an update to the AAP’s Bright Futures Periodicity Schedule, adding screening for suicide risk for youth aged 12–21 to the current Depression Screening category.⁹ Many major health insurance companies reimburse providers for use of suicidal risk measures under CPT Code 96127 and, while many state Medicaid plans allow payment for adolescent health risk assessments, including depression screenings as a preventative service, it is important that we ensure that this extends to suicide-risk screenings.

We know that funding access to mental health care and resources has the power to save lives and help protect our children and youth. Thank you for your committee’s commitment to making youth mental health a top priority and for the opportunity to submit testimony today on this critical issue.

SPORTS AND FITNESS INDUSTRY ASSOCIATION

The Sports and Fitness Industry Association (SFIA) applauds the Senate Finance Committee for its leadership in bringing attention to the pandemic’s egregious effects on mental health. The December 2021 Surgeon General’s report, *Protecting*

³*Ibid* (4).

⁴*Ibid* (4).

⁵Bridge, J., Horowitz, L., Fontanella, C., Sheftall, A., Greenhouse, J., Kelleher, K., and Campo, J. (2018). Age-Related Racial Disparity in Suicide Rates Among U.S. Youths From 2001 Through 2015. *JAMA Pediatrics*, 172(7), 697. doi: 10.1001/jamapediatrics.2018.0399.

⁶AAP, AACAP, CHA declare national emergency in children’s mental health (October 2021), <https://publications.aap.org/aapnews/news/17718>.

⁷U.S. Surgeon General Issues Advisory on Youth Mental Health Crisis Further Exposed by COVID–19 Pandemic, U.S. Department of Health and Human Services (December 2021), <https://www.hhs.gov/about/news/2021/12/07/us-surgeon-general-issues-advisory-on-youth-mental-health-crisis-further-exposed-by-covid-19-pandemic.html>.

⁸https://nces.ed.gov/programs/digest/d19/tables/dt19_233.69b.asp?current=yes.

⁹<https://mchb.hrsa.gov/programs-impact/programs/bright-futures>.

Youth Mental Health, sounded the alarm in terms of what is happening in our schools and what families are experiencing at home.

We agree with U.S. Surgeon General Vice Admiral Vivek H. Murthy's findings that Americans are not protecting their mental and physical health enough. Equally troubling, we also agree with the Centers for Disease Control and Prevention report recent January 2022 findings on the sedentary lifestyle that is becoming all too common throughout America. Together, the rise in obesity and diabetes rates, as well as adult substance abuse and adolescent depression, anxiety, and suicide provide a fatal combination that will have longstanding repercussions for our nation's health-care system.

As the leading active lifestyle trade association in the U.S., we are responsible for tracking physical activity levels for Americans each year—data that is shared with the U.S. Department of Health and Human Services. Given the annual survey, we know firsthand how these rates have declined over time and their corresponding spike in behavioral health issues.

This lens provides important insight into the vital role that sports and exercise play in mental, social, and physical development. It is why SFIA has been working steadfastly on solutions to help Americans recover and reconnect. Those two words are behind our daily mission touting the benefits of exercise for all age groups. No matter the challenge, physical fitness is a key ingredient to healthy body and mind. The Surgeon General's report highlights this aspect and specifically, the stress that children experience when sports are canceled and conversely, the stress levels that are mitigated when a child exercises.

It comes as no surprise that we need policies to make exercise more accessible and affordable. This ranges from school and community-based programs to expanding the use of pre-tax medical accounts to encourage healthy lifestyles. For example, the U.S. Tax Code does not acknowledge exercise as a form of prevention despite overwhelming evidence on the health benefits of activity, yet endless medical treatments are deducted. It's time to hit reverse and allow families to use their own money for the sake of staying mentally and physically fit. These accounts continue to grow in popularity with over 96 million Americans having access to either a health savings account or flexible spending account.

Legislation known as the Personal Health Investment Today ("PHIT") Act embraces this approach. This bipartisan bill is led by Senators John Thune (R-SD) and Chris Murphy (D-CT), as well as Representatives Ron Kind (D-WI) and Mike Kelly (R-PA). The measure passed overwhelmingly in the House back in 2018 by a vote of 277 to 142. With over 4,000 industry stakeholders all in support, the PHIT Act serves as a multigenerational "win-win" designed to take on the pandemic's aftershocks.

As the Senate Finance Committee strives to address this important issue, we encourage you to consider all available remedies including broader treatment of physical activity as preventative care. SFIA looks forward to working with the Committee and serving as a data resource.

We respectfully submit the enclosed statement. If you have any questions or need additional information, please feel free to contact Tom Cove, SFIA President, at tcove@sfia.org, or visit our website at <https://sfia.org/>.

TEXAS CHILDREN'S HOSPITAL
6621 Fannin Street
Houston, Texas 77030
832-824-1000

February 7, 2022

Hon. Ron Wyden
Chair
U.S. Senate
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

Hon. Mike Crapo
Ranking Member
U.S. Senate
Committee on Finance

219 Dirksen Senate Office Building
Washington, DC 20510

On behalf of Texas Children's Hospital, we submit this letter for the record in connection with the Senate Finance Committee hearing, "Protecting Youth Mental Health: Part I—An Advisory and Call to Action," which was held on February 8, 2022. Located in Houston, Texas, Texas Children's Hospital is a not-for-profit organization with a mission to create a healthier future for children and women throughout our global community by leading in patient care, education and research. We are proud to be consistently ranked among the top children's hospitals in the nation.

According to the Child Mind Institute, an estimated 17.1 million children in the U.S. have or have had a psychiatric disorder, which is more than the number of children with cancer, diabetes and AIDS combined (2019). Pediatric emotional and behavioral health challenges were of growing concern pre-pandemic, but the impact of COVID-19 on the mental health of children has been catastrophic. A recent research study (Racine, et al., 2021) showed that the prevalence of anxiety and depression in children and adolescents doubled in the first year of the pandemic as compared to pre-pandemic estimates, with higher rates in data collected later in the pandemic—suggesting that as the pandemic continues, we may in fact see even more impact on pediatric mental health.

We know that children thrive on structure, routine, and predictability and that children who live in homes where their primary caregivers experience stress—related to financial hardship, job loss, and uncertainty—are at higher risk for the development of emotional and behavioral disorders. The pandemic has impacted nearly every household in the United States in both of these areas. In addition, COVID-19 restrictions removed children and families from their sources of support—school, friends, extended family members, places of worship, community centers, and youth programs at places like the YMCA and Boys & Girls Clubs. COVID-19 also has further magnified inequities that adolescents and children from disadvantaged backgrounds and impoverished communities face due to health disparities, social determinants of health, and lack of access to technology.

We see the mental health crisis at Texas Children's Hospital at every single entry point into our system—the Emergency Centers, outpatient clinics, and even in our pediatrician practices. Children and adolescents present to our Emergency Centers with acute behavioral health needs including aggressive episodes, suicidal ideation, and suicide attempts. From 2019–2021, the number of patients coming to Texas Children's Hospital's Emergency Centers for behavioral health crises went from fewer than 100 patients a month to upwards of 400 a month.

Often times, these patients and their families arrive at Texas Children's Hospital because they do not know where else to turn. For example, each week we see adolescents with severe developmental disabilities such as Autism and related aggressive and/or self-injurious behavior. Most of the time, their parents have spent the child's entire life advocating, caring for, and protecting their vulnerable child—but with the pandemic, they find their child out of his or her specialized school programs, with in-home therapies reduced or eliminated, and themselves unable to access respite care in the community. However, under these conditions, a child's aggressive behavior has become too hard to manage at home. We need to find better ways to care for these children and support their parents and families.

Appropriate discharge of behavioral health patients presenting to emergency centers has become very challenging. Often there are no beds at facilities equipped to provide the higher levels of care needed (such as psychiatric inpatient hospitalization or an intensive outpatient program), or no access to programs that can meet the patient's complex needs. As a result, children with acute mental health needs either remain in our Emergency Centers for extended periods of time or are admitted to our medical floors where, unfortunately, the staff are not trained or equipped to provide the best care for these children and adolescents. We have seen staff injured by behavioral health patients, as well as patients who find ways to self-harm or attempt to elope from the medical floors. The influx of behavioral health patients from 2019–2021 resulted in a 2,775% increase in the number of patient sitters needed for suicidal patients, and a 612% increase in the number of patient sitters needed for aggressive patients. At times, we have to shuttle patient sitters among our three campuses to keep staffing numbers in line with the number of behavioral health patients admitted. Not only are we seeing more behavioral health patients on our medical units, but they also are staying longer than other patient groups. This is especially true for our most vulnerable children in CPS custody and in foster care.

Meanwhile, in outpatient care, we have seen nearly 22,000 referrals in our mental health specialty areas this fiscal year to-date. This significant demand has created wait-lists of six months to a year for many of our behavioral health services. Children simply are not getting the care they need. We surveyed families of our behavioral health patients to hear more about how they felt the system was addressing their needs. We received feedback that our patients preferred to stay in our care when possible, but a lack of inpatient resources has caused us to have to transfer these patients to other facilities, many of which are unprepared to care for children's complex medical needs. We also heard their frustration and fear for the health, safety and well-being of their children.

As a result of what we have seen among our patients throughout the pandemic, Texas Children's Hospital created an internal Behavioral Health Task Force comprised of clinical and operational leaders to determine what steps we could take to meet the growing behavioral health needs of children who need our care, both immediately and over the long term. The behavioral health needs of our children will not go away in the next three to five years; in fact, we expect them to grow as the full effect of the pandemic is revealed, including longer-term mental health concerns, the impact of learning gaps that resulted from school closures, and grief and bereavement related to the over 900,000 Americans who have died from the virus. Therefore, through the Task Force's work, we have developed short- and long-term strategies that could meet the behavioral health needs of children in Texas that include both program and workforce development.

Our hope is to:

In the next year, deploy a Short-Term Strategy to:

- Implement Behavioral Health Support Team;
- Implement Inpatient Psychiatric Unit;
- Implement Intensive Outpatient Program;
- Expand outpatient programs;
- Improve training for staff and providers; and
- Improve "safe" care locations throughout the system.

Over the next three to five years, deploy a Long-Term Strategy inclusive of:

- Dedicated behavioral health urgent care;
- Dedicated behavioral health inpatient facility;
- Robust preventive care, family education and support; and
- Expanded behavioral health clinical research and education programs.

But, we cannot do it alone. Texas has severe gaps along the entire continuum of care—from early intervention and detection through crisis intervention and stabilization—in terms of access, capacity and workforce. This entire continuum of care is vital to ensuring the long-term health and well-being of children, and we are just one piece of that continuum. Our Emergency Centers are where frantic parents arrive when their kids are in crisis. Our goal is to keep children out of crisis, living safely at home with their families, and not returning to our Emergency Centers. Simply put, we need community partnerships that do not currently exist. In a robust continuum of care, early identification and intervention would help reduce the number of kids in emergency departments and keep them living in their communities and with their families whenever possible. Current resources are unable to meet demand. To effectively address the broader impacts that we have experienced, we offer the following suggested solutions.

- **Stronger Community Partnerships:** We know children's hospitals will never be able to meet the immense behavioral health needs in our state. Through strong partnerships with community stakeholders and service providers, we can ensure that our children get the right mental health care, in the right place, at the right time. Some examples include:
 - Expanding clinical collaboration between children's hospitals and the Texas Child Mental Health Care Consortium to partner on the development of strategies to increase access to evidence-based behavioral health services across the continuum of care;
 - Employing community health workers or navigators to coordinate family access;
 - Implementing pediatric primary care practice behavioral health integration;
 - Conducting pediatric training for crisis response;
 - Educating individuals providing daily care for children and adolescents in child welfare and juvenile justice settings regarding trauma informed care,

identifying mental health concerns, and finding the right resources for evidence-based mental health care for those in need;

- Establishing mental and behavioral health urgent care; and
 - Implementing community-based initiatives, such as school-based partnerships and initiatives to decompress emergency departments, including partial hospitalization and intensive outpatient programs.
- **Address Behavioral Health Workforce Limitations:** There is a national shortage of pediatric mental health professionals. Through support for workforce development that includes more specialists, increasing education in mental health assessment and interventions for general pediatric practitioners, and training peer support specialists, community health workers, and non-clinical professionals and paraprofessionals in early detection of mental health concerns, we can improve the long-term picture for pediatric mental health in Texas. We recommend achieving this by:
 - Increasing funding to support training the next generations of pediatric mental and behavioral health-care providers (child and adolescent psychiatry, developmental and behavioral pediatrics, psychology internship and fellowship programs);
 - Improving models of reimbursement that allow for billing of mental health services provided by advanced learners under supervision (*e.g.*, for psychology interns and fellows);
 - Requiring parity for mental health treatment for all insurance carriers;
 - Revisiting reimbursement for mental health services to reduce the number of “cash only” mental health providers in the community; and
 - Advocating to change ACGME residency training requirements to reflect “real world” pediatric practice that includes less acute medical care and additional training in developmental and behavioral health for emerging pediatricians, internal medicine, and family practice physicians.
 - **Increase Access to Behavioral Health Care for Families:** Expanding access to high quality, evidence-based care across the spectrum of mental health needs, from prevention and early intervention to acute and crisis care is critically important. We want to ensure that parents, caretakers, and family members can be engaged in collaborative decision-making and treatment planning to address their children’s mental health concerns by:
 - Increasing school-based mental health-care programs;
 - Creating models of community-based support for parents of children with mental health concerns to address parenting and parental mental health and substance abuse issues;
 - Expanding access to mental health services for women and families in the postpartum period, particularly those with critically ill newborns;
 - Improving high speed Internet infrastructure to increase access to telehealth and other virtual services; and
 - Continuing support for services rendered via telehealth and, where needed, telephone-only services, including those rendered when the patient is at home or at school.

We commend the committee for holding this important hearing on behavioral health and urge Congress to use these recommendations to take meaningful action to protect the well-being and mental health of all children across the country.

If you have any questions please contact Johnna Carlson, Texas Children’s Assistant Vice President of Government Relations, at jlcarls1@texaschildrens.org or Emily Felder, Shareholder, Brownstein Hyatt Farber Schreck, at efelder@bhfs.com.

Sincerely,

Karin L. Price, Ph.D.
Chief of Psychology

UCLA CENTER FOR THE DEVELOPING ADOLESCENT
760 Westwood Plaza, Semel B7-435
Los Angeles, CA 90095

U.S. Senate
Committee on Finance

As developmental scientists and Co-Executive Directors of the Center for the Developing Adolescent,¹ professors of psychiatry and psychology, and scientists at the Jane and Terry Semel Institute for Neuroscience and Human Behavior, all at UCLA, we have spent years studying adolescent development and well-being. We appreciate the Senate Finance Committee's commitment to addressing the youth mental health crisis and working toward policy solutions focused on prevention. As the Committee hearing made clear, the issue of youth mental health is real and serious, and predates the pandemic, with increases in loneliness, depression, and anxiety beginning at least a decade ago. The pandemic has been a strong reminder that as a society, we need to prioritize the well-being of our young people and give this issue the attention it deserves. We are pleased to submit a statement for the record as the Committee continues its work on this issue.

The adolescent years—from about 10 to around 25—are a period of remarkable learning and adaptation.² At the beginning of puberty, our brains are changing rapidly in response to our experiences, forming and strengthening connections between neurons (brain cells) faster than they ever will again. These changes make us especially sensitive to the world around us. As we engage with that world, our relationships and experiences in turn provide feedback that further shapes our developing brain.

The learning potential of this time of life creates enormous opportunity, opening a pivotal window to impact not only mental health, but life trajectories. With the right kinds of opportunities and support, we can leverage³ the remarkable adaptivity of these years to support positive learning and discovery and even mitigate the effects of earlier adversity.

Research on adolescent social and cognitive development tells us the kinds of opportunities and support that adolescents need to promote not only their mental health but their broader capacity to thrive. These include safe and satisfying ways to explore the world and test out new ideas and experiences, real-world scenarios in which to build and hone problem-solving and decision-making skills, avenues to develop a sense of meaning and purpose by helping and supporting families and communities,⁴ access to social interactions that support a positive sense of identity, and warmth and support from parents and other caring adults.

As Surgeon General Dr. Vivek Murthy shared in his Advisory and reiterated in his February 8 testimony, the COVID pandemic has created barriers to many of the opportunities that young people need for positive development. The pandemic has also exacerbated long-standing social inequities, disproportionately imposing these developmental barriers on youth of color and those from low-income families. It is not surprising that Dr. Murthy and the advisory flags these youth as being at higher risk of mental health challenges during the pandemic.

In his December 2021 Advisory, Dr. Murthy called for “policy, institutional, and individual changes in how we view and prioritize mental health.” As the Committee's work on youth mental health moves forward, we see an opportunity to not only address youth well-being at the crisis level, but to set a higher goal of helping youth to flourish by prioritizing adolescence itself. *As you consider policy solutions and work to establish the interventions and supports all youth need to protect their mental health, we urge you to ensure that your recommendations regarding funding, programs, and policies are grounded firmly in what science tells us is crucial to establishing the foundations for life-long health and well-being for all adolescents, including:*

- Exploration and Healthy Risk Taking—During adolescence, we are uniquely motivated toward new and intense experiences. This increased motivation to ex-

¹<https://developingadolescent.semel.ucla.edu/>.

²https://www.researchgate.net/profile/Ronald-Dahl/publication/230698133_Understanding_adolescence_as_a_period_of_social-affective_engagement_and_goal_flexibility/links/00463524c739f89085000000/Understanding-adolescence-as-a-period-of-social-affective-engagement-and-goal-flexibility.pdf.

³<https://www.nature.com/articles/nature25770>.

⁴<https://journals.sagepub.com/doi/10.1177/1745691618805437>.

plore and pursue novel experiences is fundamental to learning during this window of development. Inequities in our society often limit opportunities for healthy risk taking and amplify negative consequences of mistakes for young people from traditionally marginalized groups. We urge the Committee to prioritize investments in programs that provide safe opportunities for positive exploration and risk taking.

- **Contribution**—Opportunities to provide ideas, resources, and help that impact their social worlds support adolescents to build autonomy, identity, and intimacy, while providing real benefits to society. All adolescents need opportunities to make meaningful contributions to their families, peers, schools, and wider communities and to have those contributions recognized. As the Committee’s work moves forward, we encourage you to center this principle in both policy and practice, including ensuring that young people are at the table to share their lived experiences and ideas for solutions as part of the Committee’s work.
- **Emotional regulation and decision making skills**—Adolescence is a time when we are developing the skills to manage our emotions, control our behavior, and make good decisions. We must support young people in the development of these skills by providing opportunities to learn and observe coping skills, see examples of healthy emotional expression, have avenues to make real-world decisions, and receive support to learn from mistakes.
- **Identity**—During adolescence, we’re figuring out who we are, what we value, and who we want to be. This makes it a period of time when racism and other forms of discrimination can have a strong impact on a young person’s sense of self. We urge the Committee to prioritize efforts proven to support a positive sense of identity, including addressing racial disparities in discipline and access to messages and spaces that affirm a healthy racial-ethnic identity.
- **Connections**—Supportive relationships with parents and other caring adults are still extremely important in adolescence, even as peer relationships become a more central focus. Policies and programs that support the whole family are essential to the well-being of all adolescents, particularly those facing adverse experiences. We urge the Committee to prioritize investments in research-informed programs that support parents of adolescents, including within youth-serving systems such as the child welfare and youth justice systems.

Thank you for your commitment to addressing the youth mental health crisis and working toward policy solutions focused on prevention. As your work moves forward we hope you will consider funding, programs, and policies that are grounded firmly in what science tells us is crucial to ensuring that our youth can thrive in ways that ensure a bright future for us all. Please don’t hesitate to contact us (agalvan@ucla.edu and afuligni@ucla.edu) should you like to discuss the research on adolescent development and well-being or our recommendations.

Adriana Galván, Ph.D., and Andrew J. Fuligni, Ph.D.

UNIVERSITY HOSPITALS RAINBOW BABIES AND CHILDREN’S HOSPITAL

11100 Euclid Ave
Mailstop MPV 6003
Cleveland, OH 44106

In follow-up to the February 8, 2022 hearing, “Protecting Youth Mental Health: Part I—An Advisory and Call to Action,” Rainbow Babies and Children’s Hospital strongly endorses the positions taken by the American Academy of Pediatrics (AAP), the American Academy of Child and Adolescent Psychiatry (AACAP) and the Children’s Hospital Association (CHA) in their statement for the record.

Since the fall of 2021, the above member organizations have declared a national emergency in child and adolescent mental health. The situation, already dire prior to the Pandemic¹ has only worsened with increased social isolation, fear and grief amongst our children and adolescents. Twenty percent of children and adolescents experience a mental health disorder in a given year.² For children needing treatment, it takes on average 11 years after the first symptoms appear before getting

¹ Daniel G. Whitney and Mark D. Peterson, “U.S. National and State-Level Prevalence of Mental Health Disorders and Disparities of Mental Health Care Use in Children,” *JAMA Pediatrics* 173, no. 4 (2019): 389–391.

² Centers for Disease Control and Prevention (CDC), “Key Findings: Children’s Mental Health Report,” March 22, 2021.

that treatment.³ There is also alarming signal of inequity in mental health outcomes and access to high-quality mental health care services for children of color. Significant investments are needed now to better support and sustain the full continuum of care needed for children’s mental health. These investments will significantly improve the mental health of our children and our country as we avoid more serious and costly outcomes later—including suicidal ideation and death by suicide.

Rainbow Babies and Children’s Hospital is appreciative of the Senate Finance Committee’s recognition of the children’s mental health emergency and focus on the unique needs of this population. As the Committee works on legislative solutions, we echo the AAP, AACAP and CHA conclusions that the following policy priorities are critical to improve access to mental health services for children:

- Increased investments to support the recruitment, training, mentorship, retention and professional development of a diverse clinical and non-clinical pediatric workforce, including funding for minority fellowship programs for mental health physician specialists. We currently face dire shortages in mental health providers with an even more significant dearth of minority providers. We need to encourage more people to enter these fields.
- Address low Medicaid payment rates for pediatric mental health services, ways to better support coordination and integration of care and access to school-based services. These low rates result in lower provider engagement and participation in the Medicaid program as well as contribute to the mental health worker shortage with consequent limitations in access to services.
- Direct CMS to review how Early and Periodic Screening, Diagnostic and Treatment (EPSDT) is implemented in the states to improve access to early intervention services, developmentally appropriate mental health services and to provide guidance to states on Medicaid payment for evidence-based mental health services that promote integrated care. As noted earlier, delays in identification and treatment of mental health issues is a substantial problem. The EPSDT benefit is tailored to children’s unique needs and ensures that children receive care as early as possible.
- Dedicate support for the pediatric mental health system and infrastructure that are currently distressingly underfunded. An emphasis should be placed on community-based, ambulatory systems across a wide array of settings including primary care offices, early childhood education programs, family therapy and, when warranted, inpatient care.
- Expand telehealth services to include audio-only services, the lifting of originating site restrictions and geographic limitations and the encouragement of state Medicaid programs to continue telehealth coverage and payment.
- Ensure strong implementation, oversight and proactive enforcement of the mental health parity and addiction equity act. Payers and plan administrators are failing to cover mental health and substance use disorder care through limitations in in-network care, limitations in provider networks and the establishment of non-qualitative treatment limits unseen in medical and surgical benefits. Both public and private payers routinely exclude payment for mental health services provided by a primary care provider.

Our pediatricians, psychologists, child and adolescent psychiatrists and advanced practice nurses are eager to partner with you to advance policies that improve access to quality mental health services available to children. Please call on us as you develop policy improvements to address this national emergency for children’s mental health.



³National Alliance on Mental Illness, “Mental Health Screening,” accessed on November 10, 2021.