UNINTENDED CONSEQUENCES: MEDICAID AND THE OPIOID EPIDEMIC
UNINTENDED CONSEQUENCES: MEDICAID AND THE OPIOID EPIDEMIC

HEARING

BEFORE THE

COMMITTEE ON
HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE
ONE HUNDRED FIFTEENTH CONGRESS
SECOND SESSION
JANUARY 17, 2018


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UNINTENDED CONSEQUENCES: MEDICAID AND THE OPIOID EPIDEMIC

WEDNESDAY, JANUARY 17, 2018

U.S. Senate,
Committee on Homeland Security
and Governmental Affairs,
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m., in room SD–342, Dirksen Senate Office Building, Hon. Ron Johnson, Chairman of the Committee, presiding.
Present: Senators Johnson, Paul, Lankford, Hoeven, Daines, Heitkamp, Peters, Hassan, Harris, and Jones.

OPENING STATEMENT OF CHAIRMAN JOHNSON

Chairman JOHNSON. Good morning. This hearing will come to order.

I want to first of all thank all the witnesses for taking the time to appear, for taking the time to prepare your testimony, and I look forward to your oral testimony and your answers to our questions.

On its surface, people may be scratching their heads going, “Why is the Homeland Security and Governmental Affairs Committee (HSGAC) holding a hearing on potential Medicaid or other Government Federal funding of the opioid crisis? Why are you doing that in this Committee?” We actually have a pretty long history of delving into this particular epidemic, this particular health care crisis.

My own involvement started with reports at the Tomah Veterans Affair (VA) health care facility where there was overprescription, mixed toxicity of drugs resulting in the death of a young Marine because of drug toxicity, and finding that within that investigation we had, what was it, about a 350-page report, 5,000 pages of supporting documents we also noticed a drug diversion potential within that investigation. This Committee has held three field hearings in Wisconsin, a field hearing in Ohio, one in New Hampshire, one in Arizona. I proposed the Promoting Responsible Opioid Prescribing (PROP) Act, which the Centers for Medicare and Medicaid Services (CMS) actually viewed as so important that they implemented it without us having passed the law, which is kind of nice.

Senator Portman has been very active on this front, coming from Ohio—one of the States really stricken by this epidemic—instrumental in the passage of Comprehensive Addiction and Recovery Act (CARA), and in proposing the Synthetics Trafficking and Overdose Prevention (STOP) Act. Both Senator Portman and myself, and Senator Hassan, were at the White House last week for the signing of the International Narcotics Trafficking Emergency Re-
response by Detecting Incoming Contrband with Technology (INTERDICHT) Act, which funded and authorized detection devices for fentanyl, which is becoming more and more of a problem. And, of course, my Ranking Member—I appreciate Senator Peters filling in—but Senator McCaskill has been very aggressively pursuing the marketing through pharmaceutical companies and seeing how we can solve the problem from that aspect.

So this Committee has been highly involved in this, and I just want to kind of lay out specifically why I got involved in this particular issue. It started with a pretty interesting, pretty depressing article written in Commentary Magazine by Nick Eberstadt, a demographer who works for the American Enterprise Institute. In that article, he was quoting Alan Krueger, the former Chairman of President Obama’s Council of Economic Analysis, and Mr. Krueger published a report talking about prime, working-age male labor-force dropouts. He said nearly half of all prime-age, working-age male labor-force dropouts, an army now totaling roughly 7 million men, currently take pain medication on a daily basis.

He went on to quote the author of “Dreamland,” Sam Quinones. This resonated with me, having been a former employer, and I realize that for an awful lot of people, one of the primary motivating factors for getting a job is to get health care. And when you combine government programs that provide free health care and then on top of that a government program that provides you a prescription card that allows you access to products at a very low price that you can sell and divert into illegal drug-trafficking markets and supplement your income to the tune of thousands of dollars per year, unfortunately some people take advantage of that.

Mr. Quinones is quoted in that article out of his book “Dreamland,” and I just want to read the quote. He was actually referring to Portsmouth, Ohio, when he was talking about this: “The Medicaid card pays for medicine—whatever pills a doctor deems that the insured patient needs. Among those who receive Medicaid cards are people on State welfare or on a Federal disability program known as Supplemental Security Income (SSI). . . . If you could get a prescription from a willing doctor—and Portsmouth had plenty of them—the Medicaid health insurance cards paid for that prescription every month. For a $3 Medicaid co-pay, therefore, addicts got pills priced at thousands of dollars, with the difference paid for by U.S. and State taxpayers. A user could turn around and sell those pills, obtained for that $3 co-pay, for as much as $10,000 on the street.”

Later on, Nick Eberstadt just writes, “Disability checks and means-tested benefits cannot support a lavish lifestyle. But they can offer a permanent alternative to paid employment, and for growing numbers of American men, they do.”

Now, again, that article piqued my interest, and so I asked my staff—I said, OK, this is kind of being laid out there, not necessarily as a theory but anecdotally, showing a real problem. And so I asked my staff: Can you take a look, do a data search and find out and just identify individuals that have been either convicted or at least charged with taking their Medicaid card, obtaining those pills, and then selling those on the open market? In 4 days they
identified 261 defendants that had either been charged or convicted of doing just that.

OK. We have a problem that needs to be further explored, and so we did explore it, and today we are issuing a report\(^1\) based on our further study in which, again, the staff has uncovered over 1,000 defendants that have either been charged or convicted of using their Medicaid cards and diverting in some way, shape, or form.

Along the road, even though we are focusing on Medicaid, we have discovered about 243 defendants in the context of Medicare. In November 2017 there were 60 active criminal investigations of opioid diversion through the VA health care system. So, again, this is a governmentwide program phenomenon where American taxpayers are providing well-intentioned funds into some of these programs, and those funds are being utilized to divert drugs, sell them on the open market, and in some cases fuel some pretty interesting criminal enterprises or just support a lifestyle of non-work, which is not healthy.

I have as a follow-up today issued a letter\(^2\) to the Acting Secretary of Health and Human Services (HHS) asking what controls, what can we do, to what extent are they tracking this, to what extent are they aware of how much money we spend on Medicaid and Medicare that is being used in this case.

Now, I do want to point out what I am not saying either in this report or in this hearing. I am not making the claim that this epidemic is just because of Medicaid expansion. Obviously, there are more dollars available through Medicaid expansion. There are some indications—HHS had a study that we had to extract from them—showing that there may be a difference between Medicaid expansion States versus non-expansion States. But this crisis, this epidemic, began way before Medicaid expansion.

I also am not saying that Medicaid does not help an awful lot of people and the dollars used for treatment have not helped untold numbers of people. I am not saying this is a primary cause. I think what we are certainly saying is this is an unintended consequence. It is certainly a contributing factor, and it maybe enables something that maybe should not be enabled, and it is a very serious problem that has to be looked at. And, again, coming from the stand point of the problem-solving process, I think it is kind of hard to deny when you take a look at this report, take a look at some of these examples—and we have 110 of some of the most egregious examples in here involving drug rings, a grocery store being used as kind of a central port, pharmacists, and nursing homes. Again, it is almost hard to understand the complexity of some of these schemes, for example a podiatrist actually injecting chemicals to create pain so he can prescribe more opioids and facilitate diversion for profit.

So the schemes are actually really beyond your imagination, but people use their imagination, so it is kind of hard to deny, when you take a look at these examples, that this is not a problem that needs to be further explored. And I am just saying that we ignore

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\(^1\)The staff report referenced by Senator Johnson appears in the Appendix on page 91.
\(^2\)The letter to HHS referenced by Senator Johnson appears in the Appendix on page 87.
OPENING STATEMENT OF SENATOR PETERS

Senator Peters. Well, thank you, Mr. Chairman. Today, as you
mentioned, I am filling in for Ranking Member McCaskill who
wanted to be here but due to extenuating circumstances cannot be
here. But I would like to ask unanimous consent to include her
opening statement and a memorandum prepared by the Commit-
tee’s Democratic staff into the hearing record today.

Chairman JOHNSON. Without objection.

Senator Peters. Thank you, Mr. Chairman.

Before I begin my statement, I would also like to welcome our
new colleague to the Committee, Senator Doug Jones. Welcome to
this Committee. Congratulations on your election. You are going to
find this a very interesting Committee, one doing very important
work, and we know you are going to do an outstanding job. Thank
you for joining us.

Chairman JOHNSON. While you said that, I wanted to wait until
Senator Jones actually showed up. I also want to welcome you to
this Committee. I think you will find hopefully in the hearing
today, we do not do show trials here. This is really a very bipar-
tisan Committee. We conduct ourselves at that level of decorum,
and it is really about uncovering the truth, laying out realities so
you can solve problems. Again, I want to congratulate you on your
election and was really pleased—and we spoke earlier—that you
joined our Committee. I think you will enjoy your time here as
well.

Sorry for interrupting.

Senator Peters. No. That is good. Thank you.

At the start, I think before we start this hearing and hear the
testimony from the folks before us, I think it is important to reit-
erate that Medicaid expansion has produced not only historic cov-
erage gains, but it also has very far-reaching positive health effects
for American families. At its core Medicaid and the Affordable Care
Act (ACA’s) Medicaid expansion are critical programs that help
hardworking American families enroll in health care coverage and
protect our Nation’s vulnerable.

Nearly 80 percent of Medicaid enrollees come from a working
family, and over 40 percent of Medicaid enrollees are children.
Medicaid is a program that literally saves lives. I think we can all
agree that when you or your family member or friend gets sick or
hurt, we should be able to access affordable health care coverage.
Medicaid and Medicaid expansion serves as a bridge to affordable
health care for millions of working families in our country. And I
am sure we have all heard stories, but just as a reminder, these
programs are there to make sure that someone’s parent can have

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1The prepared statement of Senator Peters appears in the Appendix on page 52.
2The prepared statement of Senator McCaskill appears in the Appendix on page 47.
3The Memorandum prepared by the Minority Staff appear in the Appendix on page 255.
that needed surgery or a child’s family can afford the high cost of their cancer treatment or that a person who has been injured can get care that they need to get back to work.

Medicaid has also been critical in fighting the opioid epidemic. Opioid abuse and its tragic impact continues to be a growing problem in my home State of Michigan, as it is around the Nation. Between 2014 and 2015, the Centers for Disease Control (CDC) report that drug overdose deaths in Michigan increased by over 13 percent. In 2015, more than 2 million people across the Nation struggled with prescription pain reliever substance abuse disorder, an unfortunate number that continues to trend upward.

As we work to combat this very serious epidemic, the Affordable Care Act has greatly expanded access to treatment in Michigan and across the Nation, including for individuals with substance abuse disorders. Prior to the passage of the ACA, many individuals with substance abuse disorders were unable to get the care that they needed.

Since the passage of the Affordable Care Act, the uninsured rate in Michigan has been cut in half, and more than 600,000 individuals are now enrolled in our State’s Healthy Michigan expanded Medicaid program. Combined with the private exchanges in our State, nearly 900,000 individuals in Michigan have coverage through the Affordable Care Act. Many of these individuals are now able to access health care insurance for the very first time in their lives.

Since the ACA’s Medicaid expansion went into effect, more than 1.6 million Americans have gained access to this vital treatment.

Last year, this Committee, the Homeland Security and Governmental Affairs Committee, the Subcommittee that I am a Member of, which is the Permanent Subcommittee on Investigations, had a hearing on the opioid epidemic, and we heard from witnesses who, like each of you here today, are fighting on the front lines. I spoke with Dr. Thomas Gilson, a medical examiner from Cuyahoga County, who told me how Medicaid expansion is literally helping them save lives by getting people suffering from addiction into treatment programs.

I also spoke with Thomas Synan, Jr., chief of police for Newtown, Ohio, and he largely agreed with Dr. Gilson and went on to tell me, and I am going to quote him here, “To reduce demand and in turn reduce supply, we have to get people into treatment, and one of the programs our teams are doing out there in the Hamlin County area is signing people up for Medicaid to try to get them into that treatment.”

Their overwhelming message to me was that we must preserve Medicaid and work to improve the critical health services that the program offers because it is literally saving people’s lives each and every day.

And so today I appreciate each of you being here today, and I look forward to hearing about how we can work to improve our Nation’s Medicaid program to better serve the families enrolled and to continue our efforts to combat the abuse. I have no doubt that there are improvements that can be made, and we are going to hear about some of those improvements today, and I look forward to your suggestions. But I want to end by stressing as we make
these improvements, we must do it in a way that does not jeopardize the health care for those who so desperately need it.

Thank you.

Chairman Johnson, Thank you, Senator Peters.

I would also ask consent that my prepared opening remarks be entered into the record. Without objection.

As we are welcoming Senator Jones, we also have to say goodbye to Senator Tester, who has been a very valued Member of this Committee. We hate to see him leave, but, again, we are happy to have Senator Jones.

I do need to announce a change in the Subcommittee membership to make it official: Senator Hassan will replace Senator Tester on the Permanent Subcommittee on Investigations, and Senator Jones will replace Senator Hassan on the Subcommittee on Federal Spending Oversight and Emergency Management. So that makes it all official.

Now, it is the tradition of this Committee to swear in witnesses, so if you will all stand and raise your right hand. Do you swear that the testimony you will give before this Committee will be the truth, the whole truth, and nothing but the truth, so help you, God?

Mr. Adolphsen, I do.
Mr. Schalk, I do.
Mr. Tyndall, I do.
Dr. Hyman, I do.
Dr. Kolodny, I do.

Chairman Johnson, Please be seated.

Our first witness is Sam Adolphsen. Mr. Adolphsen is Vice President at Rockwood Solutions and a Senior Fellow at the Foundation for Government Accountability (FGA). Mr. Adolphsen previously served as the Chief Operating Officer (COO) at the Maine Department of Health and Human Services. He also served as Maine’s Deputy Commissioner of finance with oversight over the State’s Medicaid budget. Mr. Adolphsen.

TESTIMONY OF SAM ADOLPHSEN, FORMER CHIEF OPERATING OFFICER, DEPARTMENT OF HEALTH AND HUMAN SERVICES, STATE OF MAINE, AND VICE PRESIDENT, ROCKWOOD SOLUTIONS, AND SENIOR FELLOW, FOUNDATION FOR GOVERNMENT ACCOUNTABILITY

Mr. Adolphsen, Chairman Johnson, Members of the Committee, thank you for the privilege of testifying.

For 3 years, starting in 2014, I sat in my office in Maine, and I watched something terrible unfold right in front of me. I would review Medicaid pharmacy spending in one meeting, and then I would walk down the hall for my next meeting about the opioid crisis and how to stop it. And the only thing increasing as fast as the budget line for opioids was the body count from overdose deaths.

In the morning I would read a newspaper account of someone caught up in a drug arrest, and that afternoon I would see that

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1The prepared statement of Senator Johnson appears in the Appendix on page 45.

2The prepared statement of Mr. Adolphsen appears in the Appendix on page 56.
same person again when reviewing welfare enrollment data. It happened far too often.

Our welfare fraud team worked daily with drug enforcement agencies to investigate when Medicaid members sold their pills or Suboxone strips or traded their welfare cards for heroin. I worked with the Medicaid Fraud Control Unit as we reviewed cases of caregivers diverting pain pills from desperate and dying Medicaid patients. I wish these were isolated incidents, but they are not. The paths of dependency on Medicaid and addiction to opioids are often intertwined.

At the same time I was helping to run a Medicaid program that was funding record-breaking amounts of opioids, the Nation was being told that the solution to the drug problem was to put more people on Medicaid. Medicaid expansion was held up as the silver bullet solution to the drug crisis. But no one was considering the dangerous side effects of Medicaid. And the danger of prescription opioids is now better understood. They are the gateway to addiction. Four out of five heroin users started by abusing prescription drugs.

When that free plastic Medicaid card is issued, it does not only pay for drug treatment. It also supplies opioids at a staggering rate. The numbers are alarming. A quarter of Medicaid members get an opioid prescription, and the highest rate is among the Medicaid expansion population of able-bodied adults. A CDC study done by the Obama Administration showed that someone on Medicaid was six times more likely to die from an opioid overdose. While one out of every five people is on Medicaid, the program pays for two out of every five emergency room trips for opioid and heroin poisonings. Medicaid expansion has not fixed this problem, but it might have made the problem worse.

Rhode Island increased their Medicaid enrollment by 66 percent, and their overdose deaths doubled. West Virginia, Ohio, Pennsylvania, all expanded Medicaid, adding a total of a million and a half adults to the program. They rank first, second, and third, respectively, in the number of drug overdose deaths.

Of the 10 States with the highest rate of opioid deaths, nine have expanded Medicaid under Obamacare. This correlation is very concerning, and the question of causation begs for more inquiry.

As millions of adults have been added to the program, prescription drug abuse has multiplied. With no out-of-pocket costs and few restrictions on providers, prescription painkillers have flowed unchecked to Medicaid recipients, and this injected a whole new supply of free opioids into the market.

I also witnessed people on Medicaid withdrawing from the community, not working, living an isolated and idle life that is more prone to drug abuse and addiction. Fifty-two percent of able-bodied adults on Medicaid, half, do not work. And this is really tragic because we know that for so many, work is the best answer to move away from a life of crime or addiction.

Rather than expanding a broken program that funds pain pills, we should focus on breaking the cycle of pain and dependency by helping people get back to work.

This drug problem is bad enough. We have to make sure that Medicaid is not throwing fuel on the fire. We need to make sure
that Medicaid is not funding the drug problem but instead is structured to promote work and health for our neighbors.

Thank you.

Chairman JOHNSON. Thank you, Mr. Adolphsen.

Our next witness is Otto Schalk. Mr. Schalk is the Prosecuting Attorney for Harrison County, Indiana. In addition, Mr. Schalk produced the film “A Hit of Hell,” a documentary about the opioid epidemic. Mr. Schalk.

TESTIMONY OF OTTO SCHALK, PROSECUTING ATTORNEY, HARRISON COUNTY, STATE OF INDIANA

Mr. SCHALK. Thank you. Good morning. My name is Otto Schalk, and I am the prosecuting attorney for Harrison County, Indiana. We are a community in southern Indiana that in many ways is representative of much of our Nation. I am honored to serve my county and my State as a prosecutor, and I am humbled to be before you this morning. I embrace this opportunity to share with you what many of us in law enforcement see and deal with on a daily basis.

Every time a hardworking American pays their taxes, they are inadvertently funding drug dealers with a new supply of high-powered opioids that are poisoning our schools and our streets. That is a bold claim; however, as a prosecutor, it is something that I see routinely. It is no secret that our Medicaid program is ripe for fraudulent activity. Prosecutors know this, doctors know this, and the reality is that drug dealers know this as well. An individual need not only traffic illegal street drugs to qualify as a drug dealer; a Medicaid beneficiary that is selling their prescription pills is no different in the eyes of the law.

It bears mentioning that those who are impoverished are far more susceptible to end up in the criminal justice system. Anyone who has spent a day in a criminal courtroom across America knows this to be true. In my role as prosecuting attorney, I have prosecuted at an extreme disproportionate rate those that are Medicaid recipients. I see the disparity each and every time I walk into court. For a reference point, just looking at the reported data from our county from clients that are on probation that are in an alcohol and drug rehabilitation program, more than half of them are making less than $10,000 per year.

In the simplest of terms, whether it is labeled as Medicaid fraud or drug dealing, it exists for the same reason that bank robberies occur. There is a pile of cash, and those with ill intentions will let greed lead them to commit crimes. Now, common sense dictates that when we give someone making less than $10,000 per year, that is struggling to keep the lights on, that is struggling to put food in the refrigerator, and we give a 90-count bottle of hydrocodone each and every month, and some of these pills are going for $15 apiece on the street, tax free, they are going to see the opportunity for financial gain. If we believe otherwise, we are naive.

Unlike other street drugs such as heroin or meth, a dealer in opioids does not need to have someone that is well connected in the

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1The prepared statement of Mr. Schalk appears in the Appendix on page 64.
drug culture to funnel their supply. A dealer in opioids simply needs to know a willing doctor and claim to have an ailment. And if the opioid dealer is on Medicaid, they receive their supply of high-powered narcotics for free or nearly free. Simply polling our jail and our probation officers, I found that most of our inmates and probation clients that are on probation for drug-related charges are taking pursuant to a valid prescription two to four high-powered opioids each and every day. That is 60 to 120 pills they are being prescribed each month.

Now, conservatively, some of these pills are going for $30 apiece on the street. The incentive to opt out of Medicaid, to better one's lot in life, is drastically reduced for individuals that are making $3,600 a month tax free in selling their prescription pills that they are getting at no cost.

To that extent, the abuse that we see among Medicaid recipients as it relates to misuse and/or selling their prescriptions is rampant, and that is just based on what we are seeing and what we are filing. And those of us in law enforcement know that we are only catching a very small percentage of those committing these crimes. A reactive justice system, coupled with a shortage of resources, often leads to a small percentage of the bad actors being caught. A true number of those that are abusing the system would likely be staggering.

Now, to be clear, I am not here this morning saying that Medicaid is not a tremendous asset for our Nation, but I am speaking from my own personal experiences as a prosecutor, a prosecutor in the trenches. I see firsthand what is devastating our communities. I see day in and day out individuals that are Medicaid recipients dealing and abusing their prescription pills that are government funded. It is simply a fact. I see individuals getting arrested for selling their prescriptions, and yet they test clean for them when they are drug-tested during the jail booking process.

So is the opioid epidemic an unintended consequence of Medicaid? Certainly, with the increased amount of the impoverished having access to medical care, there is a greater likelihood that those who are impoverished are going to see the opportunity for turning a profit, albeit illegal, on the street. Now, one obvious solution would be to create more rigorous checks and balances of the medical bills being submitted through Medicaid for payment. Are the prescriptions necessary? Is the opiate prescriptions in line with the treatment plan? I have never understood why so many of the people that I am prosecuting are getting prescription after prescription of high-powered opiates when a simple over-the-counter drug would be just as effective.

The opioid epidemic has brought devastation to our schools and our communities. The opioid epidemic is far too complex to narrow its causation to one specific issue. And while the issues are complex and many, there is one recurring theme, and that is poverty. Until we take affirmative steps to create jobs, grow businesses, and slowly diminish the gap between the impoverished and the middle class, any changes that are made will be a Band-Aid fix to the underlying problem.
I want to sincerely thank each of you for the opportunity to be a part of the solution of this gripping epidemic. I look forward to answering any questions that you may have.

Chairman JOHNSON. Thank you, Mr. Schalk.

Our next witness is Emmanuel Tyndall. Mr. Tyndall is the Inspector General (IG) for the State of Tennessee. Prior to becoming Inspector General, Mr. Tyndall served with the criminal investigation division as a special agent for 10 years investigating TennCare cases, TennCare is Tennessee’s Medicaid. He has approximately 35 years of law enforcement experience and holds master’s degrees in health and human performance, management, and criminal justice administration. Mr. Tyndall.

TESTIMONY OF EMMANUEL TYNDALL,1 INSPECTOR GENERAL, STATE OF TENNESSEE

Mr. TYNDALL. Thank you, Mr. Chairman and Committee Members. As the Chairman said, I am Manny Tyndall. I am the Inspector General for the Office of Inspector General (OIG) in Tennessee. In 2004, the Office of Inspector General was created specifically to root out fraud and abuse in the TennCare program and criminally prosecute applicants and recipients who game the system. And as the Chairman alluded to, TennCare is simply our name for the Medicaid program in the State of Tennessee.

The Office of Inspector General receives and triages more than 4,000 complaints each year. I think you will find that Tennessee is one of a few, if not the only State that criminally prosecutes Medicaid applicants and recipients who engage in drug-seeking behavior or prescription drug diversion at the cost of the TennCare program. Our research indicates that States bordering Tennessee address recipient fraud administratively. I believe that suggests that Medicaid fraud is probably underreported nationwide.

What I would like to share with you today is some examples of how the TennCare program is defrauded and how prescription drugs paid for by TennCare are diverted for illegal use.

Approximately 80 percent of all arrests—2,400 of our arrests—were prescription drug diversion or doctor-shopping related; the ages ranged between 21 and 78; 1,678 arrests were for drug diversion, which includes sale and forgery.

The courts have ordered approximately $315,000 in restitution to be repaid to the Bureau of TennCare for these offenses; 709 arrests were for doctor shopping. Our doctor-shopping law became effective June 18, 2007. Since that date, the courts have ordered approximately $292,000 in restitution to be repaid to the Bureau of TennCare for those offenses.

Some of the schemes I have been witness to include:

Recipient receiving valid prescriptions for prescription drugs, having it filled and paid for by TennCare, and then selling a portion of the medication on the street.

Recipient is calling in prescriptions to pharmacies pretending to be employees of a medical practice and having TennCare pay for that medication.

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1The prepared statement of Mr. Tyndall appears in the Appendix on page 66.
Recipients are passing forged or altered prescriptions, written by other parties, and then passing those prescriptions at pharmacies and having TennCare pay for that medication.

Recipients are adding medication to a prescription being hand-carried between doctor’s office and the pharmacy and having TennCare pay for that medication. For example, they may receive a prescription for amoxicillin and between the doctor’s office and the pharmacy, they will add hydrocodone to that prescription and have TennCare pay for that medication.

Doctor shopping. Doctor shopping is where a recipient fails to advise a provider that within the last 30 days they have already received the same or similar narcotic medication that is being prescribed. There are usually multiple counts of this offense.

Nurses and medical technicians are selling prescriptions already signed by the doctor. Some of those prescriptions have sold for as much as $80.

We work very closely with our drug task forces who make the buys. Normally, one, two or three pills are purchased each time during a drug transaction, and usually three buys are made before we seek an indictment.

Depending on the type of medication and the milligram, prescription medication can sell for $5 to $10 per pill or some medications as much as $1 per milligram.

With there being little or no cost/overhead to the Medicaid recipient, if they were to sell an entire prescription of 90 hydrocodone 5-milligram tablets for $5 per pill, they would make approximately $450. If they did this every month it would garner approximately $5,400 a year, and that is a very conservative estimate. That is for one person for 1 year, and we make approximately 140 or more arrests each year. I am confident that many instances of TennCare fraud are not identified.

The following cases demonstrate the lengths some people will go to to obtain pain medication:

A husband and wife would take turns intentionally burning themselves on their lower legs with boiling water and go to a different emergency room to obtain pain medication and have TennCare pay for the ER visit and the medication.

We have charged four individuals for a fourth offense of doctor shopping.

We have charged one individual with 25 counts of prescription drug fraud where she forged or altered prescriptions in order to obtain hydrocodone and oxycodone and used her TennCare benefits to pay for the medication. She admitted to selling the pills to support her lifestyle.

I personally worked a case where I charged a young woman with 87 counts of obtaining a controlled substance by fraud, TennCare fraud, and identity theft. She was the office manager at a doctor’s office and would steal several prescription slips from a prescription pad each week. She would forge the doctor’s signature and the Drug Enforcement Administration (DEA) number on prescriptions in her name, her husband’s name, many of her friends, and even her grandmother’s name. Some prescriptions were paid for by TennCare, and some she would trade for half of the medication that person received.
Mr. Chairman, thank you for the opportunity to speak, and I am willing to answer any questions the Committee might have.

Chairman JOHNSON. Thank you, Mr. Tyndall.

Our next witness is Dr. David Hyman. Dr. Hyman is a physician and a professor of law at the Georgetown University Law Center. Dr. Hyman focuses his scholarship on the regulation and financing of health care. Dr. Hyman.

TESTIMONY OF DAVID A. HYMAN, M.D., J.D., Professor of Law, Georgetown University Law Center

Dr. HYMAN. Thank you, Mr. Chairman and Members of the Committee. Much of my testimony is drawn from a book that is going to be coming out in April, co-authored with Professor Charles Silver, on the American health care system. The book is titled “Overcharged: Why Americans Pay Too Much for Health Care, and it explains how the ways in which we have decided to pay for health care services have predictable consequences on the cost and quality of those services, as well as the rates of waste, fraud, and abuse. Our public programs are particularly vulnerable to the latter set of problems.

Today we are here to focus on the opioid epidemic. I commend the Committee for holding this hearing. Although a lot of what we have heard so far has been about the death rate, it is also important to note the opioid crisis has consequences in terms of destroyed lives, broken families and marriages, medical expenses, and lost productivity.

My testimony flags four distinct issues: the seriousness of the problem; the complexity of the causes; the ways in which the design of our public programs make them particularly vulnerable to the sorts of abuse and overuse of the sort that you have already heard about; and the role that patients have played in this particular problem. In the interest of time, I am going to focus on the latter two issues.

In terms of the role of the causes, it is important to note that these are prescription opioids, and apart from outright theft, you need a prescription from a physician in order to get them. There is a serious problem with overprescription. The causes of that are somewhat complex, but there are certainly bad-actor physicians out there who are willing to meet their patients in coffee shops and restaurants, write them prescriptions in exchange for cash. The book talks about one Dr. Yee who was responsible for essentially a mini-epidemic of opioid usage. There are particular parts of the country that have these problems. South Florida had so many pain clinics that the State earned the nickname “Oxy Express.” And so that again is an indication of the nature of the reimbursement system that enables these situations to develop.

Now, both Medicare and Medicaid were designed to mimic Blue Cross and Blue Shield programs circa 1965, that is, indemnity-based insurance where the amount that was paid was tightly controlled but the volume of services was really not controlled. If a physician said you needed something, the insurance paid for it.

1The prepared statement of Dr. Hyman appears in the Appendix on page 69.
There was not much in the way of networks or preapprovals or utilization review.

Over time the private market has evolved, but the public payers have remained largely passive bill payers. The results, as we observe in our book, are easy to observe with prescription drug fraud. The government has studied prescription drug fraud in public programs repeatedly, and each time it has concluded that fraud is rampant. A 2009 Government Accountability Office (GAO) report on the Medicaid programs in five large States opened with the observation that investigators “found tens of thousands of Medicaid beneficiaries and providers involved in potentially fraudulent purchases of controlled substances, abusive purchases of controlled substances, or both.” Sixty-five thousand beneficiaries had engaged in “doctor shopping.” Four hundred individuals had gotten prescriptions for controlled substances from between 21 to 112 medical practitioners and visited up to 46 different pharmacies to get them filled. As long as you have a prescription, it will be filled, and the public payers will pay for it.

Now, we have taken various steps to try and address these problems, including surveillance, prior approval, limitations on the number of pills that can be dispensed, disclosure of information to physicians about the risks of overprescription, and prescription drug monitoring databases. Each of these reforms has the potential to help reduce inappropriate prescribing, but design details make a big difference, as does implementation. And the fact they are necessary shows how the design features of Medicare and Medicaid make them vulnerable to waste, fraud, and abuse.

Last, the role of patients. The tendency is to focus on providers, but patients are often involved in prescription drug fraud. A 2011 GAO report involving Medicare found that doctor shopping was widespread, with more than 170,000 Medicare beneficiaries receiving prescriptions for controlled substances from five or more medical practitioners. Another study found that half a million Medicare beneficiaries were prescribed excessive amounts of opioids, including 22,000 who appeared to be doctor shopping. So the problem is not limited to Medicaid. It is not limited to public programs. But the design features of the public programs make them more vulnerable.

Thank you very much.

Chairman JOHNSON. Thank you, Dr. Hyman.

Our final witness is Dr. Andrew Kolodny. Dr. Kolodny is a physician and the co-director of Opioid Policy Research at the Heller School for Social Policy and Management at Brandeis University. He previously served as chief medical officer for Phoenix House and as chair of psychiatry at Maimonides Medical Center, New York.

Chairman JOHNSON. Dr. Kolodny.
TESTIMONY OF ANDREW KOLODNY, M.D., CO-DIRECTOR, OPIOID POLICY RESEARCH COLLABORATIVE, HELLER SCHOOL FOR SOCIAL POLICY AND MANAGEMENT, BRANDEIS UNIVERSITY

Dr. Koledny. Thank you for the opportunity to appear before you today. I would like to also thank Ranking Member McCaskill and Members of the Committee for this opportunity.

The opioid crisis is an epidemic of opioid addiction, meaning that the reason the United States is experiencing record-high levels of opioid overdoses, the reason we are seeing a soaring increase in infants born opioid-dependent, outbreaks of injection-related infectious diseases, impact on the workforce, the driver behind all of these health and social problems has been a sharp increase in the number of Americans suffering from opioid addiction.

The primary driver of the opioid addiction epidemic has been made clear by the CDC. This slide is a CDC graph. It shows that as opioid prescribing began to soar in the 1990s, it led to parallel increases in opioid addiction and overdose deaths. This is an epidemic caused by the medical community overprescribing opioids. On this graph the green line represents opioid prescribing, the red line represents opioid deaths, and the blue line represents opioid addiction. As the green line went up, as opioid prescriptions began to soar, it led to parallel increases in addiction and overdose deaths.

The reason the green line began rising, the reason the medical community began prescribing so aggressively is because we—doctors—were responding to a brilliant, multifaceted marketing campaign that changed the culture of opioid prescribing. Starting in the 1990s, we began hearing that patients were suffering because we were too stingy with opioids. We began hearing that we should stop worrying about getting patients addicted. We began hearing that even with long-term use, the risk that a patient would get addicted was much less than 1 percent.

We would have been less gullible if we were only hearing these messages from drug company sales reps. But we were hearing these messages from pain specialists, eminent in the field of pain medicine; we were hearing it from professional societies, from the Joint Commission, which accredits our hospitals; we were hearing it from the Federation of State Medical Boards—all of whom had financial relationships with opioid manufacturers.

I would like to thank Ranking Member McCaskill for launching an investigation of these relationships.

It is fair for you to ask about the role played by Medicaid, and it is fair to assume that access to medical providers offered by the Medicaid program could increase the risk that an individual would develop a disease frequently caused by doctors’ prescriptions. I believe that access to prescribers that Medicaid, Medicare, and commercial insurance offers does increase the likelihood that someone might develop a disease caused by prescriptions. But I do not believe that Medicaid should be singled out in this regard. Opioid

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1 The prepared statement of Dr. Kolodny appears in the Appendix on page 74.
2 The graph referenced by Mr. Kolodny appears in the Appendix on page 78.
overdoses have been increasing in people with all types of insurance and in people from all economic groups from rich to poor.

If you look at this graph—it is from a recent Health Affairs paper—you will see the orange line at the top of this graph. That represents people admitted to hospitals being treated for overdose insured by Medicare. You can see with all of the colors of the lines rising on this graph, they show that we have seen a rise in hospital admissions for opioid overdoses for all types of insurance, but what we see on this graph is that the fastest-growing share of hospitalizations for opioid overdose has been Medicare, not Medicaid. Medicare beneficiaries went from the smallest proportion of these hospitalizations in the 1990s to the largest share by the mid-2000s.

I also do not believe Medicaid expansion is making the epidemic worse. Medicaid expansion is not responsible for the very sharp increase we have seen in opioid overdose deaths over the past few years. The reason we are seeing a sharp increase in opioid overdose deaths, as you know, is because of fentanyl. Medicaid expansion has not led to more aggressive opioid prescribing. Since 2012, we have seen opioid prescribing trending down, thank heavens. The opioid crisis is getting worse, again, most rapidly in the States that have the most fentanyl.

Chairman Johnson, you have made the point that Medicaid is not a silver bullet for tackling opioid addiction. I agree with you. Medicaid is far from a silver bullet. With regard to improving access to effective addiction treatment, Medicaid is necessary, but it is not sufficient. The addiction treatment services that health insurance, including Medicaid, can pay for must also be available. The first-line treatment for opioid addiction is buprenorphine, also called “Suboxone.” Access to this treatment is not sufficient. For opioid-addicted individuals who are fortunate enough to access buprenorphine, too often their health insurance, including Medicaid, is only paying for the prescription. Patients with insurance must often pay out of their own pocket for the visit to the doctor. This is because there are not enough doctors prescribing buprenorphine, and the few who do do not accept insurance, including commercial and Medicare. And many State-licensed drug and alcohol treatment programs that do accept Medicaid are not offering medication-assisted treatment.

If you look at the last chart with these horizontal lines, that is showing you individuals who are receiving medication-assisted treatment within the State-licensed system. The fact that these lines are pretty much flat shows that, despite our worsening opioid addiction epidemic, we have not been increasing access adequately to medication-assisted treatment.

If we want to see opioid overdose deaths start to decline, there will need to be a massive Federal investment to build a treatment system that does not exist yet. I believe Medicaid is a necessary ingredient to make these programs viable. We must ensure that in every county in the United States an opioid-addicted American can walk into an outpatient treatment center and on that same day receive effective treatment regardless of their ability to pay for it.

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1 The graph referenced by Mr. Kolodny appears in the Appendix on page 79.
2 The chart referenced by Mr. Kolodny appears in the Appendix on page 82.
Until that happens, I believe overdose deaths will remain at record-high levels.

Thank you.

Chairman JOHNSON. Thank you, Dr. Kolodny.

I am going to defer my questions except for one, and if you would quickly put up the chart with opioid-related hospital stays,¹ because you had a similar chart and I just kind of want to get your reaction to this. We actually developed this off of the hard numbers in terms of the numbers of tens of thousands of people, and we plotted this chart with, inpatient stays per 100,000, the difference between Medicaid-paid versus private insurance-paid, and it reflects a pretty large difference dating back many years, with a slight uptick from about 350 per 100,000 to close to 450 per 100,000 for Medicaid-paid stays. Can you kind of explain that difference right there?

Dr. KOLODNY. It would be difficult to explain without reading through the full paper. The chart that I showed is from a Health Affairs paper that was published a few weeks ago, which has very current data in it, and I am more familiar with that data. Those were hospital admissions involving opioid overdoses, and what we saw in that chart was a very significant rise for all payer types, including self-pay. And what we saw in the Health Affairs paper is a very substantial increase for Medicaid but an even greater increase for Medicare.

Chairman JOHNSON. Medicare, OK. Again, these numbers come from Health and Human Services, and all we did is just take it and put it to number of stays per 100,000 just to make it a little bit more relatable.

With that, I will turn it over to Senator Peters.

Senator PETERS. Thank you, Mr. Chairman, and thank you to each of our witnesses for your testimony today.

If I could summarize what I heard from everyone—hopefully this is accurate—there is a recognition as to how important Medicaid is as a health provider for Americans who have the ability to access that and that health care should be quality health care that is affordable and accessible to everyone, and that this is not an indictment on that part of Medicaid, that we are going to continue to strengthen that if we can and make it work better. But there are some issues that we should be talking about, and certainly dealing with the opioid addiction, these are important issues that should be discussed and we should figure out what is going on.

Dr. Kolodny, I want to pick up on your comments in particular and have you expand. I understand that Medicaid beneficiaries do fill more opioid prescriptions. We do know that from some of the evidence out there. But I also know that during your time in New York City, you worked with Medicaid beneficiaries extensively. You served as a Medicaid provider at one point. Could you help this Committee understand why Medicaid patients, particularly individuals who qualify through disability and other issues related to that, would be prescribed more opioids? Is there something unique about the Medicaid population that we should be aware of?

¹The chart referenced by Senator Johnson appears in the Appendix on page 85.
Dr. KOLODNY. I would really like to see that data. I am not certain that we see far more opioid prescribing in Medicaid populations. One of the populations, for example, where we have seen very aggressive prescribing would be workers' comp. We see very aggressive prescribing in Medicare Part D. So we know that people with access to doctors and, in particular, people who are prone to injuries are going to be—and older people who are going to complain of pain are going to be most likely to be prescribed opioids. It is older Americans that are receiving the most opioid prescriptions.

Senator PETERS. Dr. Hyman, if you could talk a little bit about some of the work that you have done in this area and tracking use from folks in various medical plans as well. There is certainly a difference, and what we have heard here is that wherever there has been Medicaid expansion, there is increased opioid use and addiction. That may very well be a correlation, and correlations do exist, but it does not necessarily mean there is causation.

Do you believe this is merely a correlation or is there also causation that Medicaid expansion has led to increases in opioid addiction?

Dr. HYMAN. I believe correlation.

Senator PETERS. Simply correlation. Would you elaborate?

Dr. HYMAN. Based on the evidence that I have seen, it appears to be correlation, not causation—I am sorry. I neglected my thing. Based on the evidence I have seen, I would classify it as correlation, not causation.

Senator PETERS. Could you expand on some of that evidence?

Dr. HYMAN. So, the first thing that you—this is a general observation that I tell my students. Just because A comes before B does not mean that A causes B. Right? You need to look at preexisting trends, and if you look at preexisting trends in the States that expanded Medicaid, you see that they had higher opioid usage before the Medicaid expansion, which obviously was 2014. And so, you need to control for that prior trend in order to infer whether there is a sort of bump that is attributable to Medicaid. But even then, you need to control for other differences between the States that did not expand Medicaid, and you cannot do that just by cherry-picking individual States.

The other thing you want to do, obviously, is look not just at the States that expanded Medicaid but also the States that did not expand Medicaid and see what happened there, and look at the States that expanded Medicaid that did not experience finding themselves at the top of the distribution of States in terms of their death rate. And so, just because A precedes B or seems to go along with B does not mean that A causes B. It is sort of Statistics 101.

Senator PETERS. You also talked in your testimony about some of the structural aspects of Medicaid, and I have heard directly from physicians in Michigan with concerns that insurers in Federal health programs in particular like Medicaid often have policies that limit access to less addictive pain medications. I think our goal should be to look for alternatives that are not as addictive. You mentioned the issue in your testimony briefly and suggested that we need to change the ways that we reimburse for certain pain management treatments.
So within our Federal health programs, how can we do more to incentivize less addictive pain treatments?

Dr. HYMAN. So to the extent less addictive pain treatments are more expensive, you are going to need to start paying for more expensive pain treatments rather than just the cheapest one, and that is an issue that, as my written testimony indicates, has been leveled against private payers as well as public payers.

Second is you basically need to move away from an open-ended passive payer of bills to a much more active monitoring role in dealing with the, thankfully, relatively small number of true bad actors but also creating better incentives for both providers and patients not to overprescribe opioids nor to abuse them.

Senator PETERS. Dr. Kolodny, in your written testimony, you talked about the need to improve access to medication-assisted treatments, and I have recently introduced some bipartisan legislation with Senators Capito and Murkowski in the Senate called the “YOUTH Act,” which aims to increase access to these treatments, particularly for young adults and adolescents who, as you know, are often precluded from receiving these treatments.

I would like you to comment on that and whether or not it is necessary for us to expand some of these treatment options for adolescents, who are also very susceptible to these addictions.

Dr. KOLODNY. It absolutely is necessary, and adolescents are a group that may have even less access to some of the most effective treatments for opioid addiction because of the bias or stigma against treating opioid addiction with medication. Something I would just like to add a little more to was my comment about patients not having access to buprenorphine treatment paid for by their insurance. What is all too often the problem is that patients can access the medication, their Medicaid or their private insurance will pay for the prescription, but there really is not enough access to treatment programs that accept the patient’s insurance. So with Medicaid expansion, I think there are people who now are on buprenorphine for their opioid addiction because they have Medicaid that will pay for that prescription, and that prescription may be keeping them alive, but the Medicaid expansion has not helped them access the visit. And if we really want to see overdose deaths go down, where we want to be is in a place where someone who is opioid addicted, when they get up in the morning, and they are going to need to use very quickly after they get up, or they are going to be feeling very sick. People who continue to use, it is not because it is fun. They are using because they have to keep using to avoid feeling awful. If for that individual finding a treatment center that can treat their opioid addiction with medication is more difficult, more expensive, they have to pay that doctor out of their own pocket, even if they have the prescription coverage, if all of that is more expensive than calling a drug dealer and buying a bag of heroin, they are going to buy the bag of heroin. If we want to see overdose deaths come down, we have to change that balance. Effective treatment for opioid addiction has to be easier and less expensive than buying a bag of dope if we want to see deaths come down.

Senator PETERS. Great. Thank you.
Chairman JOHNSON. Before I turn it over to Senator Paul, I just want to chime in one more time.

Put up the one chart. Again, I think I have been very careful. Let me repeat, I agree that correlation does not mean causation, but this was an analysis that we got from HHS last year, and what they are just trying to show is, anecdotally, they compared States with a similar type of demographics, similar type of population, expansion versus non-expansion, and from my standpoint the results were somewhat stark: West Virginia, 27 percent increase in overdoses; Mississippi, 11 percent; Ohio, 41 percent, versus Wisconsin, 3 percent; Maryland, 44 percent now; Virginia, 22 percent; New Hampshire, 108 percent, versus Maine at 55 percent; North Dakota, 205 percent, versus South Dakota at 18 percent. Again, expansion versus non-expansion. Again, not saying it is causation, but it is this kind of information that would—and I will just ask, Dr. Hyman, it at least makes you curious and suggests that something ought to be further explored, don't you agree?

Dr. HYMAN. Oh, I certainly agree it should be further explored, and you have 10 States. There are obviously 50, right?

Chairman JOHNSON. Right. Again, this is just an analysis based on data, not a scientific study by any means. But you have other data that also says once Medicaid has been funding this, you throw more money into Medicaid, it might kind of help fuel it as well.

Dr. HYMAN. I think it is certainly worth study. I would note that the four States on the right have relatively low populations, and so even a small increase can have a big percentage impact. This is part of the process that you have to go through.

Chairman JOHNSON. Right. Again, all I am saying is it is worth dismissing. Let us put it that way. We should not dismiss it. Senator Paul.

OPENING STATEMENT OF SENATOR PAUL

Senator PAUL. I think we can argue that the increase in opioids that we have seen with Medicaid expansion might be unintended, but I do not think we can argue that it is unforeseen. You can argue causation and correlation all day long, but if the Medicaid population was using opioids at a greater amount than the non-Medicaid population before the expansion, if you give Medicaid more money, you are going to see the same thing, and more money will simply exacerbate something. So if they were prescribing opioids at twice the rate before, maybe they are still doing it at twice the rate. So Medicaid expansion did not cause prescribers to prescribe it more, but if they are already doing it and you fuel it with more money, you are going to get more of a problem.

So I think it is very predictable, and if you throw more money at Medicaid now and you do not have rules on prescribing or you do not have significant changes on prescribing, you are going to get more of the problem.

I agree with some of the issues on Suboxone and replacement and rehab. All of those things would be good. But if you do not fix the rules on prescribing—and normally I would say this is a State problem and we should not be involved. But all the money is Federal now, so it is 100 percent Federal in the Medicaid expansion.
So I guess one question I would have for the Chairman is: Do you have any ideas or thoughts—we want to do problem solving—about how we would change the prescribing habits other than just suggestions? I think suggestions are not enough here, actually.

Chairman JOHNSON. Well, again, I am not the witness here, but actually, what I want coming out of this hearing is to focus on that thought process. One of the reasons I have written a letter to HHS, is to let us get the information, let us get the data, and then we can work with the experts. What can we do to change the prescribing methodology, those types of procedures so that we stop overprescribing and we can actually effectively address this?

Senator PAUL. Mr. Adolphsen, do you have any ideas on how we would change prescribing habits through law?

Mr. ADOLPHSEN. Thank you, Senator. There are a couple of things that are already in law that I think States are not using well. I know Maine was not when we arrived there. Prescription monitoring in the Medicaid program, there is a program called “Lock-In” where you restrict a Medicaid member to one pharmacy, one doctor, one prescriber. Those programs are not used very effectively or are not used extensively in States. There is somewhat of an obsession with access in the Medicaid departments around the country, I think, and so it seems that folks are sometimes shy to do things that might restrict someone from that access. But I think the Lock-In program is good.

There are other controls, certainly. There is a drug utilization review program that is already in Medicaid, again, but not being used well. The bottom line is the money flows through Medicaid, and people, I think, view Medicaid as more than it is. It is really, as another witness said, a passive payer. And so they are not looking at a person holistically. And, causation, I have seen it line by line. I have seen a person access their welfare benefit, and a couple days later we see them in the data with an overdose. That is causation, and I think we can find that level of detail if you look at the States. But it needs more control.

Senator PAUL. I think, though, overall we are going to need a much more dramatic change in how we prescribe. I mean, Sam Quinones in his book talks about that it used to be physicians were worried about addiction, and in chronic pain we did not tend to use opioids as much. And some of this came from Big Pharma trying to change patterns of prescriptions; it came from within the pain community. And it came from distorting one study that talked about inpatient people on opioids that had really nothing to do with outpatient treatment and was misused to say that we could use opioids on an outpatient without any consequences.

So I think it has to be very dramatic, and I think it is going to have to actually be in law. As much as I am for freedom of the physician to prescribe stuff, if it is Federal money, we are going to have to oversee the Federal money, and we are going to have to figure out a way to say maybe other than terminal patients and a few other people, it needs to be something else. And you talk about expense. I have had a lot of experience with pain myself. Ibuprofen I think works in a fabulous way, and it is very cheap. But we have convinced patients that it is not good unless it is prescription, unless it is good stuff, unless it is a narcotic it is somehow not a good
painkiller. But ibuprofen is a very potent painkiller, particularly in higher doses.

But something dramatic is going to have to happen, and I promise you, if we just throw more money at this, the problem will get worse. We have one county in Appalachia, and we got rid of the really bad doctors. We have done some of the controls that the States have tried. And last year, I think it was 20,000 people got 2.8 million doses of opioids in one county, 150 doses per man, woman, and child. And this is after we have spent years in Kentucky really rooting out the bad doctors and doing some good things, and yet it is still an enormous problem.

So I think what we have to look at, Mr. Chairman, I think we have to look at the money. We are in charge of the money for the Medicaid expansion, and we are in charge of a good chunk of the Medicaid program. We need to put in place some rules on this. There is going to have to be a dramatic change in this. I am not so sure OxyContin should be used for chronic pain at all. So, I mean, we really probably need to get away from that, but we cannot have suggestions. What we tend to do up here is we write into law suggestions, and they never happen. This is a real epidemic, and we are fools to sit up here and say causation versus correlation. People are dying in Medicaid, and we are giving it away for $3. If we cannot get over the fact that you give people free medication and then we overprescribe it that there is going to be a problem. We have to have significant rules in place.

And, Mr. Schalk, you mentioned something about the payment with Medicaid, whether or not there could be more rules attached to how we pay people for opioids that might lead to improvement. Do you want to expound on that?

Mr. Schalk. Sure. So, in addition to—I said that I ordinarily see the impoverished that walk through the courtroom doors, but I have also prosecuted a prominent medical doctor in my community for committing Medicaid fraud, and what that illustrated to me was how susceptible Medicaid patients are to being victims of doctors that are committing Medicaid fraud themselves. And I want to say, as a whole, I believe the medical community is well intentioned and is seeking out a healthier community. But as we all know, it only takes one bad actor in a community to really exploit an already dangerous situation.

And so what we were seeing was that this doctor’s Medicaid patients, his prescription practices were far different than his prescription practices with non-Medicaid patients. And due to how vulnerable that segment of the community is, whether that is through drug addiction or criminal behavior, what we were finding was they were being treated differently. And I think if you talk to any prosecutor in any part of the country, they are going to tell you all their defendants, they always have that one go-to doctor that they seek out. We call them “pill mills” in law enforcement because that is really how we view them.

By regulating what the doctors are doing—and just like you, I am all for freedom in the medical community. However, I think we need to hold doctors more accountable. Are there prescriptions in line with the treatment program? As a prosecutor, it is very difficult to go after a medical doctor that is committing Medicaid
fraud because they are insulated under this treatment of care defense.

However, what is the difference between a doctor that is prescribing pills that are not necessary and the person who is dealing heroin on the street? They are both making a profit by selling something that is not needed.

And so I think that we need to hold our medical community to a higher standard as it relates to the egregious prescription practices. I think you are absolutely correct, Senator, that we have to regulate prescriptions.

Chairman Johnson. I am going to burn up more of my first-round time here. Your comment begs the question: How are they treating the Medicaid patient differently than their normal patients?

Mr. Schalk. What we found was that the volume of prescriptions that were being prescribed, what was different than the non-Medicaid prescription clients—now, in the case that we had, it was a very intricate set of facts, but in terms of—they were coming in testing dirty for meth, testing dirty for heroin, and yet they were still being given prescription after prescription, and from a medical perspective, I do not see how that is a viable or plausible solution.

Chairman Johnson. I want to quickly ask the doctors. We held a roundtable in Oshkosh, and I asked the doctors—I did not intend to bring this up, but it ties into this—we probably had a couple dozen doctors, and I just said, if there is one thing—this is about health care in general—if there is one thing that was a problem in health care, can you say what it was? And one doctor brought it up: Medicaid. And they all shook their head. And it shocked me. I said, “Describe that.” And they were talking about the high percentage of no-shows in appointments in Medicaid versus non-Medicaid patients. The reason I bring it up is because I wonder to what extent are doctors just giving somebody on Medicaid a month or 2-month supply of opioids so they do not have to schedule another appointment to have a no-show? Is that part of the kind of real-world reality that occurs? I will just ask the doctors on that. A legitimate question.

Dr. Koloednya. So I do not think that the problem you are describing is unique to Medicaid, no-shows, for example. You could see it with patients with any type of insurance. I think there are problems that add to overprescribing that have to do with our health care system, so that if a doc has 10 or 15 minutes to spend with a patient, writing a prescription is usually the quickest way to get the patient out of your office. And, it was mentioned earlier about paying for alternatives to treating pain with medication. It is not so much that payers will not cover physical therapy. But if you are a doctor with 10 minutes to spend with a patient, finding an in-network physical therapist for your patient, then making that referral is going to take a lot more time than writing the prescription. And usually the patient just wants the prescription.

So, I think we have a health care system that incentivizes treating lots of medical problems with a prescription pad.

Chairman Johnson. Well, again, across the board patients do not pay for the products they get, by and large.
Dr. Hyman, do you want to quickly chime in? Then we will go to Senator Lankford.

Dr. HYMAN. Yes, I certainly agree that writing a prescription is often an easy way to bring the clinical interaction to a close. I have also heard from many physicians about frustrations of dealing with Medicaid. Sometimes that is about the populations covered by Medicaid. Sometimes that is about the Medicaid program itself, which has bureaucratic rules and often pays slow and not very much. And that is at least the perception among physicians.

Chairman JOHNSON. Thank you. Senator Lankford.

OPENING STATEMENT OF SENATOR LANKFORD

Senator LANKFORD. Thank you, Mr. Chairman.

Let me bounce several questions and give you a practical example of this, what we have talked about already. In Oklahoma, there is currently a physician going through the process right now that saw 90 patients a day and was writing narcotics 'scripts to almost every one of them as they came through. Ninety a day, on average, between 15 to 30 seconds per person that he actually saw them before he was writing a 'script. So it is an issue that we have to resolve, and obviously locating these individuals and then identifying them and prosecuting them becomes exceptionally important.

I have a different angle on this that I want to be able to bring up. Mr. Schalk, you brought up in your testimony about Suboxone. You brought that up as well. The question I have is: In your testimony you had mentioned that that is being diverted. That is a drug designed to be able to help people get off of narcotics. That is now being diverted to being on the street as well as a narcotic. Can you talk me through what you are seeing there?

Mr. SCHALK. Yes, well, first, I am not an expert in addiction, but from a street-level prosecutor, we see Suboxone being heavily trafficked in our community.

Now, the flip side of that is we see other forms of opiate treatment, like Vivitrol, for instance, it is an injection, and we see the success rates far higher in our community with those having an injection as an opioid blocker as opposed to Suboxone. That is not taking away from the benefits of Suboxone, but I can tell you in southern Indiana, it is heavily trafficked illegally.

Senator LANKFORD. OK. Any other comments on that? Go ahead.

Dr. KOLODNY. I think that the diversion of Suboxone onto the black market needs to be understood. Many of the individuals who are buying Suboxone on the black market are using it in a somewhat self-therapeutic way, and I think with diversion of opioids onto the black market, there are really two things that you have to think about and that we would have to be concerned about.

One is whether or not the diverted opioids onto the black market are causing new cases of addiction or more people becoming addicted because of that diversion, which, if that is happening, it would be making our opioid addiction epidemic worse.

And the other thing you would want to be concerned about is whether or not the diverted opioid is contributing to overdose deaths. In the case of diverted buprenorphine, buprenorphine is a very different type of opioid. A young person who is interested or curious about experimenting with opioids, if that young person
makes the mistake of experimenting with buprenorphine, they are very likely to have a bad reaction to that drug, and it is not like they are going to be feeling lousy for a few hours and then they go home at the end of the party. It is a very long-lasting drug. They are likely to feel very sick. They are likely to not want to do that again.

Where you can see people get a euphoric effect from diverted buprenorphine is if they are an experienced opioid user and they have been off of opioids. Then they can feel good about it.

So I do not think that diverted buprenorphine is becoming a recreational drug causing new cases of addiction. And one of the unique properties of buprenorphine is that it is quite hard to overdose on. It has a ceiling on its effect. So even a patient who takes an extremely large dose or someone trying to get high by taking extra doses is unlikely to overdose, is unlikely to have respiratory depression. So I think the existence of this black market for buprenorphine has more to do with the fact that we are not making that treatment available to the people who need it.

Senator LANKFORD. OK. Thank you, by the way.

Senator Paul was mentioning as well that we are trying to figure out some way to be able to actually come up with some solutions in the process of this. Mr. Adolphsen, you had mentioned about pharmacy lock-ins. Oklahoma uses that, my State. Has that been successful? Not successful? What have you seen in locations like that?

Mr. ADOLPHSEN. So my impression of it, Senator, is that it is being used in a number of States, but not very aggressively. So you might find in a State with hundreds of thousands of people on Medicaid, a couple hundred people in the lock-in program because the parameters of——

Senator LANKFORD. They are identifying high risk.

Mr. ADOLPHSEN. Yes, the parameters are designed, though, again, with access in mind. They do not want to——

Senator LANKFORD. OK. What about States experimenting with limiting dosage for opioids?

Mr. ADOLPHSEN. I can say in my State of Maine we were very aggressive a couple years ago in limiting both the strength and length of prescriptions. It was not without controversy, but the early data coming back from Maine is that it has been very effective.

Senator LANKFORD. What about electronic prescriptions rather than paper prescriptions for opioids?

Mr. ADOLPHSEN. In that same law that was passed in Maine, they did a required prescription monitoring program requiring docs to enter it each time. Again, not without controversy, but it has so far early on proven to be helpful.

Senator LANKFORD. Obviously, there was a question on cost on that for physicians. There is a difference in input in personnel time to be able to do it as well as the equipment itself to be able to do it in the system. What have you seen on that versus what was threatened to be what the cost is and what the actual cost is in the transition?

Mr. ADOLPHSEN. I do not have the exact cost, but I know at the department level we provided free training. We used the number
of grants that we had for fighting the opioid crisis in order to help educate doctors, go into a hospital, help set it up. I think that is probably something that is a good thing to do, help on the cost side. But, it is an administrative burden, but I would argue probably one that could be worth it in this case.

Senator LANKFORD. Mr. Tyndall, did you all experiment with any of that in Tennessee?

Mr. TYNDALL. Yes, sir. Senator, thank you for the question. We started our monitoring database in 2006. We did not have anything before that, and we started it in 2006, and we have had a number of enhancements since then. And it is free to all physicians. Any medical provider that is enrolled, it is free of charge. And now we have had some enhancements where it is mandated that every medical professional has to enroll into the system as well as the pharmacist. So we monitor any drug prescribed or dispensed in the State of Tennessee, two through four. It is somewhat similar to the Kentucky All Schedule Prescription Electronic Reporting (KASPER) program in Kentucky, and that is the only State we kind of communicate with.

Senator LANKFORD. That was actually my next question. Is there cooperation with other States and sharing that information? If you live in Memphis, that is very different than a number of States that you might have the opportunity to be able to go outside of the State to be able to use it.

Mr. TYNDALL. Right. There are eight States that border Tennessee, and the only one that we really communicate with is Kentucky. We have a reciprocal agreement, I guess, to share the monitoring of prescription drugs two through four.

Senator LANKFORD. But they could not use, for instance, Medicaid, which is just part of what we are talking about today, but the Medicaid portion of it, they could not use in an out-of-State pharmacy, or they could?

Mr. TYNDALL. There are a number of rules, exceptions to all of that. Sometimes if it is an emergency and you are out of State, you can use your Medicaid benefits to do that. But I am not sure about all those exceptions that go with that.

Senator LANKFORD. One last quick question. If you are buying Sudafed in Oklahoma, you have to show a driver’s license to be able to do that, and it is tracked on just the usage of Sudafed regardless of where you get that. Is there any system like that that has been discussed or is in place on narcotics?

Mr. TYNDALL. Very similar in Tennessee. You have to sign a log and produce a photo ID to get Sudafed.

Senator LANKFORD. What about for narcotics?

Mr. TYNDALL. Part of our Controlled Substance Monitoring Database (CSMD) now, you have to present an ID when you pick up any kind of narcotic from the pharmacy. You also have to do that as well.

Senator LANKFORD. OK. Thank you.

Mr. TYNDALL. And one more thing, if I could add. Effective yesterday, with few exceptions TennCare will only pay for a 15-day supply of opioid medication within a 6-month period. So we have reduced it significantly to get opioids for a 6-month period in Tennessee.
OPENING STATEMENT OF SENATOR JONES

Senator JONES. Thank you, Mr. Chairman. Having come from a State that did not expand Medicaid and probably has one of the most restrictive Medicaid eligibility requirements in the country, we still have an incredible opioid problem. And I appreciate Senator Paul’s comments because what I am seeing in Alabama is a prescriber problem more than anything else. And I am curious, having been an old prosecutor myself, Mr. Schalk, can you give me an idea of—and I know this may be difficult, but how many of those folks that are being prosecuted for taking those prescriptions and selling the pills or doctor shopping, do you have an idea, a sense of how many of those people actually started out addicted to those opioids and they need the money and that is driving it, as well as just being generally impoverished?

Mr. SCHALK. Sure. I think certainly addiction plagues the criminal justice system, and we often throw around the term “drug dealer” very loosely. And we have many kinds of drug dealers in the criminal justice system. We have those that deal for profit, and then we have those that deal to feed their own addiction.

Senator JONES. Right.

Mr. SCHALK. I would say those that deal to feed their own addiction make up the overwhelming majority of those that are in our prisons.

Senator JONES. So if that is the case, do you have a process in place when you arrest somebody, do they get treatment? Is there a drug court or something like that that you can put these folks in to try to keep them out of the system a little bit better but to try to deal with that addiction so there is not recidivism?

Mr. SCHALK. We are blessed in my county to be small enough to have a tailor-made program for many of the individuals that are coming through the criminal justice system. If you go just a few minutes down the road to Louisville, which is, obviously, a much larger metropolitan area, it is much more streamlined. They just simply do not have the resources or ability. And so, yes, I think being able to make a tailor-made treatment program for an individual is a key ultimately to their success, and that includes—and a lot of time defendants do not want to hear this—being sober. And when you are struggling with opiate withdrawals, in my opinion, the best place sometimes to experience those are within a jail where we know you are going to be sober, you are not going to go out, and you are not going to use again.

But once we can have 90 days of sobriety, at that point we can then start exploring options, treatment programs that are available.

Senator JONES. I have also noticed in some of the charts that we have seen, I guess, there seems to be—the private payers seem to be doing a little bit better in terms of the opioid problem. What are the private payers doing differently than Medicaid that Medicaid can learn from to try to stem the prescriptions to begin with, which
I think is a big problem? I will just throw that open to anybody that might have a proposal or an answer.

Dr. KOLODNY. The explanation for why in the past few years we are seeing, for example, less hospitalizations paid for by a private insurance versus Medicare involving opioid overdose is not really clear. It is possible, as your question suggests, that there are things that the private payers are doing that maybe Medicare or Medicaid should replicate. I am not sure that that is the case. In the past couple of years, we have seen commercial private insurance companies begin to implement policies to promote more cautious prescribing, but it has been pretty new.

One possibility is that for people who become opioid addicted who fall out of the workplace because of their opioid addiction and become poor because of their opioid addiction, they may more likely wind up insured by Medicaid and fall out of the private system. So it is hard to say why we might see a greater problem in people insured by Medicare or Medicaid.

Senator JONES. All right. Yes?

Mr. ADOLPHSEN. Senator, I think it is because they are trying. Cigna announced that they pledged to lower prescription painkillers by 25 percent in 3 years. So they have acknowledged they have a role here that they might be playing in this issue. So I think Medicaid has acknowledged that, and it is a little ironic because Cigna is using the CDC’s guidelines—the CDC right down the street from Medicaid—but they have not seemed to get together on it. So I do think there is a level of acknowledgment and effort that the private insurers have made.

Senator JONES. What about the role of the prescription drug companies that are manufacturing these opioids? What role should they play?

Dr. KOLODNY. Well, something that the manufacturers of opioids should stop doing and I think something the Food and Drug Administration (FDA) could require them to stop doing if it properly enforced the Food, Drug, and Cosmetic Act (FDC), they should immediately cease promoting opioids for chronic pain. As Senator Paul mentioned earlier, opioids have not been shown to be safe and effective for long-term use for common chronic conditions like low back pain, fibromyalgia, chronic headache. These are good medicines to ease suffering at the end of life. They are good medicines when you are using them from a couple of days after major surgery. But for daily long-term use, they may be more likely to harm the patient than help the patient. Right now we have a law that says that drug companies are only allowed to promote products for conditions where the benefits are likely to outweigh the risks, and those conditions, they become the indication on the label. And if the company gets caught promoting use not on the label, they get into trouble. The label on opioid analgesics is very broad, which has allowed the manufacturers to promote for conditions where we really should not be prescribing opioids.

Senator JONES. Does anybody else want to take a shot at that? Otherwise, Mr. Chairman, that is all I have. Thank you.

Chairman JOHNSON. I just wanted to quickly follow up. That is a problem with FDA approval on that particular drug, right, too expansive an approval?
Dr. KOLODNY. Yes, I mean, if we could go back in time to the introduction of OxyContin, if FDA had properly enforced the Food, Drug, and Cosmetic Act, they would have told Purdue, “Great, you have extended-release oxycodone. That sounds like a good drug for cancer patients. We are going to let you send your sales force to the hospices and to the oncologists and to palliative care doctors.” FDA did not do that. And there would not have been that much money for Purdue to make if their product had only been prescribed to patients at the end of life. So they promoted broadly, and FDA allowed it. But with every manufacturer of opioids, they have done the same thing because the big market is chronic pain. Millions of Americans suffer from chronic pain. That is where they are going to make their money, and so that is what they have been promoting use for.

Chairman JOHNSON. Well, it is never too late for the FDA to change it.

Dr. KOLODNY. That is correct, and our new FDA Commissioner may be finally the FDA Commissioner to do that. He has certainly made some statements leading us to believe he may take some of the steps necessary.

Chairman JOHNSON. OK. I will follow up later.

Dr. HYMAN. If I could just add, I would point out once the FDA approves a drug, physicians can use it for off-label indications. They do not require the FDA's permission. And once it has been approved, notwithstanding some people's views on the scope of the FDC, there are serious constitutional questions raised by attempts to prohibiting pharmaceutical companies unless they are engaging in false and misleading speech.

Chairman JOHNSON. OK. Senator Harris.

OPENING STATEMENT OF SENATOR HARRIS

Senator HARRIS. Thank you.

Dr. Kolodny, I was struck by your fourth slide which showed that hospitalizations for opioid overdose are increasing most rapidly, as you have mentioned, in Medicare but also increasing for people with private insurance and people without insurance and people with Medicaid. These facts make it clear, to me at least, that diversion is a risk regardless of the type of insurance coverage a person may have.

To follow up on this conversation, in 1996 Purdue Pharma released OxyContin, an opioid that they falsely claimed would deter addiction, as you have mentioned. In the 5 years from 1997 to 2002, OxyContin prescriptions grew from 670,000 to 6.2 million. And overall sales of prescription opioids increased roughly four times between the years of 1999 and 2014.

A number of Senators—Senator Claire McCaskill and myself included—have ongoing investigations of drug companies and distributors who helped cause and exacerbate the opioid epidemic. To that end, you have mentioned a bit about what the FDA responsibilities are. Can you talk about what you believe Congress can do to hold pharmaceutical companies responsible for its role in causing the opioid epidemic?

Dr. KOLODNY. That is a really good question. I think one thing that Congress could do is hold FDA's feet to the fire through your
oversight role of FDA because FDA really has failed to properly enforce the laws and has allowed opioid manufacturers to improperly promote opioids.

I do think that I am very pleased by your investigation and Ranking Member McCaskill’s investigation of the role that manufacturers have played. I do want to point out, though, that Senator Grassley and former Senator Baucus launched a similar investigation in 2011. The Senate Finance Committee began an investigation, and the Senate Finance Committee has yet to release its findings from that investigation. So I think, making those findings public would be very helpful, I think, for changing the behavior of the manufacturers. Many of the organizations or front groups that they give money to, they are continuing to fund, and they are front groups that are blocking Federal and State efforts to promote more cautious prescribing. The Associated Press and the Center for Public Integrity did investigations showing that the opioid lobby, the manufacturers, the distributors, have spent more than $880 million over the past decade blocking efforts to promote more cautious prescribing, and I think the findings from these investigations may make it more difficult for them to continue doing that.

Senator HARRIS. And you mentioned front organizations. Can you talk about who and what they are?

Dr. KOLODNY. These would be organizations that in some cases are pure AstroTurf organizations created by industry——

Senator HARRIS. AstroTurf, what do you mean?

Dr. KOLODNY. AstroTurf is an organization meant to look like a grassroots organization, but it has been artificially created by industry. One of the organizations that was very damaging was the American Pain Foundation, which was an AstroTurf organization. That shut down on the day that the Senate Finance Committee launched its investigation.

There are also medical societies, professional organizations that “front group” might be a bit strong, but that take very significant funding from opioid manufacturers and promote the interests of opioid manufacturers rather than the interests of patients. So, for example, the American Academy of Pain Medicine and the American Pain Society have promoted very aggressive prescribing of opioids and have really come to the defense of manufacturers every time efforts are raised that could potentially better regulate them.

Senator HARRIS. Thank you, and I plan to follow up on your suggestions. Thank you.

Medicaid is, of course, one of the leading sources of substance abuse treatment, covering about one-third of opioid addiction treatment. In June of last year, I toured and met with the patients at the Martin Luther King, Jr. Outpatient Center in Los Angeles. I will tell you that Medi-Cal pays for 70 percent of the care there. The nonpartisan Government Accountability Office found that Medicaid expansion increased access to substance abuse treatment, and the Urban Institute found much more rapid growth in spending on opioid treatment medications and overdose reversal medications in States that expanded Medicaid, suggesting, of course, that more of those who need treatment are getting it thanks to Medicaid expansion.
The President’s own opioid commission called for the expansion of Medicaid by having the administration grant waivers for all 50 States to eliminate barriers within the Medicaid program in order to help more people have access to treatment.

My question is: If Medicaid funding is cut, what happens to the one in three people who receive treatment under Medicaid for opioid addiction?

Dr. Kołodyń. So I think that there are individuals right now who are, thanks to Medicaid expansion, alive, who are having their opioid addiction effectively treated. If they were to lose Medicaid coverage, for example, I think that there would be a very high likelihood that these individuals would relapse, and if relapsing, a high likelihood that they could die from an overdose.

We have an exceptionally dangerous black market opioid supply. We have never had heroin as dangerous as we do today because of fentanyl that is in it or fentanyl that is sold as heroin. A relapse is not a benign event. One relapse can be fatal. And if patients lose health coverage that is paying for their addiction treatment, they are at very high risk for relapse and loss of life.

Senator Harris. Thank you. And, Mr. Schalk, I appreciate your comments as a fellow prosecutor. I think we both appreciate—and certainly your work has pointed this out—that one of the best ways that we can be smart on crime is to follow what the public health model has taught us, which is if you want to deal with an epidemic, be it drug, crime, or health, one of the most effective and smartest and efficient ways to deal with it is not reacting after but actually preventing before these crimes occur. So I appreciate your comments and the work that you have done highlighting that point.

Mr. Schalk. Thank you, Senator.

Senator Harris. It is in the best interest of public safety and also taxpayer dollars.

Mr. Schalk. Thank you.

Senator Harris. Thank you, Mr. Chairman.

Chairman Johnson. Senator Hoeven.

OPENING STATEMENT OF SENATOR HOEVEN

Senator Hoeven. Thank you, Mr. Chairman.

I expect that each of you have looked at Chairman Johnson’s chart on the rise in overdose deaths increasing from 2013 to 2015, and also comparing the number of overdose deaths in expansion and non-Medicaid expansion States. So I would ask each of you, starting with Mr. Adolphsen. Thank you for putting the chart up. To what do you attribute it? What is causing it? What should be done about it?

Mr. Adolphsen. Thank you, Senator. I think we have heard from a number of folks, not just in this hearing but in previous hearings, that we have a real supply side problem on opioids. And I think when you are in a hole, you stop digging. And expansion has really opened the door to a massive increase in these opioids in the market on the supply side. So I think when you look at a State that has expanded, that has added hundreds of thousands of people who suddenly are not just eligible for the treatment that we

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1 The chart referenced by Senator Hoeven appears in the Appendix on page 86.
have heard about but they are also eligible to receive no-cost pre-
scriptions, you are inevitably driving up the supply of this into the
market.

Senator HOEVEN. And what should be done?

Mr. ADOLPHSEN. Well, I think there are some options. One of the
things that ought to be considered is maybe disconnecting sub-
stance abuse treatment from the rest of the benefit. So, for ex-
ample, there obviously are millions of Americans out there who need
substance abuse treatment. No one would argue that fact. How-
ever, is it best delivered with an entire Medicaid package that in-
cludes access to more opioids? And that is really the problem that
I saw, was we had folks over on one side of the house getting treat-
ment, and those same folks were still getting opioids that caused
the addiction in the first place. And those two kind of butt heads.

So I think it does not necessarily have to be one without the
other. The substance abuse treatment should be very targeted and
focused and not necessarily come with all of these unintended con-
sequences.

Senator HOEVEN. Mr. Schalk?

Mr. SCHALK. Senator, looking at these numbers, what is clear to
me is when we give more prescriptions, when we give greater ac-
cess to those that are most susceptible to addiction, that are most
susceptible to the criminal justice system, at a certain point they
are going to transition from these opioids that a doctor is pre-
scribing, and they are going to start seeking their high from some-
where else. Perhaps that is because the doctor said, “I am no
longer going to write you a prescription. I cannot justify this.” At
a certain point, when they transition from the pills that their doc-

tor is prescribing them, they transition from there to fentanyl and
heroin laced with fentanyl, that is where these deaths are coming
from. It is from injecting heroin after—and no one just starts on
heroin. It is a progression. And almost without fail, before someone
begins down the path of injecting heroin, they are abusing their
prescription pills. And I think just looking at the fact when we are
making these prescription pills more readily available to a greater
segment of our population, this is what happens.

Senator HOEVEN. And what should be done?

Mr. SCHALK. I believe that while this is a multifaceted issue, we
need to hold the medical community more accountable, would be
one key aspect, as it relates to their prescription practices. We are
giving doctors in many ways complete discretion to prescribe syn-
thetic heroin, and that is a lot of power. And so I think we need
to take a closer look at the prescription practices. Are they in line
with the treatment plan? Are they improving quality of life? And
if those answers cannot be met, then we need to hold the doctor
accountable as to why were they prescribing this unneeded and un-
necessary drug to this individual?

Senator HOEVEN. Mr. Tyndall?

Mr. TYNDALL. Thank you, Senator. And I do not know that I
could speak to expansion and non-expansion. That is probably
above my pay grade in Tennessee, but certainly I think that the
more people who have access to low-cost and no-cost prescription
drug medication, the probability of drug-seeking behavior and pre-
scription drug diversion increases.
Senator Hoeven. What would you do?

Mr. Tyndall. Well, I think there ought to be penalties if you are involved in drug-seeking behavior or selling your medications, especially by Medicaid. The penalties need to be more severe for that.

Senator Hoeven. Dr. Hyman?

Dr. Hyman. So I would echo what has been said about the supply side aspects, that, there are physicians who will write prescriptions for opioids, and there are patients who will take them and get those prescriptions filled. And that is a gateway for some of them to more severe drugs once they are cutoff.

I think on the solution side, so far we have talked a lot about the patient and doctor shopping. It is important to recognize, as I said at the outset, it takes a physician to write the prescription. And so we ought to be looking for outliers in the frequency of prescribing, both relative to the patients that they are seeing and also relative to the doses that they are basically writing on the prescription pad. And, you may be an outlier because you are in the pain management business and you see a population of patients that badly need pain management. Or you may be an outlier because you will basically write a ‘script for everybody who comes through the door. My suggestion would be not necessarily criminal sanctions as your starting point, given the difficulties that Mr. Schalk has already talked about, but some combination of financial incentives and licensure sanctions. State medical boards ought to be more active in this space.

Senator Hoeven. Dr. Kolodny?

Dr. Kolodny. So I think this is an interesting association, and it is worth investigating to see if this really holds out if you were to compare the specific timeframes of Medicaid expansion, were to look at States, and it is certainly worth looking at.

I do believe that we have a good understanding of why the opioid addiction epidemic is getting worse and why in States where it has gotten much worse, why that happened.

Something that is important to understand is we have two groups of Americans who are opioid addicted: we have a younger group and an older group.

The older group are people who are becoming opioid addicted mostly through medical treatment. That older group has not been turning to the black market. They are getting opioids prescribed to them for chronic pain. Up until around 2011, we were seeing most of the overdose deaths in older people getting pills prescribed to them by doctors. It is possible in that older group, because prescribing has become a bit more cautious, overdose deaths may be stabilizing, coming down a bit.

The younger group are people in their 20s, 30s, and early 40s, they are becoming opioid addicted from using prescription opioids, either medically or recreationally, or sometimes a combination of both. That younger group, when they become opioid addicted, has a hard time maintaining their supply visiting doctors. Doctors and dentists, as we have been discussing, are too comfortable giving young people lots of opioids, but we do not like to give healthy-looking 25-year-olds a large quantity on a monthly basis. So the young person who becomes opioid addicted winds up on the black market. The pills are very expensive on the black market, and something
we have seen happening steadily over the past 20 years is a rising use of heroin in these young people who wind up on the black market and switch to it because it is much cheaper.

Beginning in around 2013, overdose deaths in this younger group, in the group that has been switching to the black market, the group that has been using heroin, overdose deaths are soaring because of fentanyl, because the heroin supply is so dangerous right now. I think that is really the primary driver. I do not believe it is Medicaid expansion. I do not think Medicaid expansion is helping us as much as it could in terms of addiction treatment because the services are not there. I think people are getting their prescription paid for.

So we have to do a lot more if we want to see overdose deaths come down, but I do not believe that overdose deaths are rising because of Medicaid expansion. I think it is fentanyl that is causing the very sharp rise that we have seen in recent years.

Senator Hoeven. Thank you.
Thank you, Mr. Chairman.
Chairman Johnson. Senator Daines.

OPENING STATEMENT OF SENATOR DAINES

Senator Daines. Mr. Chairman, thank you. And I want to thank the Chairman for producing this report. It raises some serious questions about whether Medicaid expansion is having a counterproductive impact on the opioid epidemic by proliferating prescription opioid pills. I come from a State that is an expansion State, the State of Montana. I am particularly concerned by the report's exposure of how Medicaid expansion dollars have resulted in addiction among some recipients and facilitated illicit distribution of these drugs to others struggling with substance dependence. In short, the report provides, I would argue, a more complete picture on the consequences of Medicaid expansion, and we must not ignore its conclusions.

The first question is for Mr. Adolphsen. You mentioned in your testimony that 52 percent of able-bodied adults on Medicaid do not work and that only 16 percent work full-time. Can you share more about the positive correlation that you have found between having a job and reducing drug dependency among healthy working-age Americans?

Mr. Adolphsen. Thank you, Senator. That is right, that data that you referenced is very clear. The number of able-bodied adults on Medicaid has quadrupled from 7 million in 2000 to 28 million today. Half of those do not work at all. We know from the addiction specialists, the recovery community, that work is a pillar of recovery, and certainly in a program that is paying for the amount of substance abuse treatment that Medicaid is, we think it makes a lot of sense to encourage and assist people getting back to work.

Unfortunately, that is not what we see. We are seeing the rolls, particularly for able-bodied adults, continue to grow, and many of those people are not working at all.

Senator Daines. Are you aware of what percentage of able-bodied Medicaid recipients actually return to full-time gainful employment?
Mr. ADOLPHSEN. Well, what we are seeing is enrollment continue to go up, so if they were moving into full-time employment, if you work even at minimum wage full-time, you are out of poverty. So if folks were quickly getting back in the work force, working a full-time job or a couple part-time jobs, they would quickly cycle off of Medicaid because they would be earning income above the threshold. That is just not what we are seeing. We are seeing folks come on to the program, stay on the program. So, unfortunately, that is an indicator that has not been successful at returning people to work the way we would like to see.

Senator DAINES. Why is that? What do you see? It is usually all about incentives. What is the incentive to stay on Medicaid versus move and become gainfully employed?

Mr. ADOLPHSEN. Sure, there are probably a lot of things that go into that, but I think one thing we probably can all agree on is we all need deadlines and a push in our life to accomplish certain things, and Medicaid has been free of any requirement for kind of community engagement or work activities. That has not been a hallmark of the program, which historically might have made more sense when there were not able-bodied working-age adults on the program. But as I mentioned, that number has grown dramatically with the expansion under ACA, and I think that kind of incentive structure is needed within the program to help clear that pathway and encourage people to get back into the workforce or into training or volunteering and community engagement.

Senator DAINES. Medicaid has been held up as a cure-all silver bullet for opioid treatment, which, by its own right, is critical to helping addictions. However, the evidence seems to suggest that Medicaid is a two-edged sword by proliferating prescription opioid pills due to the ease of access. There is always going to be leakage of diverted prescription opioids with or without Medicaid expansion. I think we probably would all agree with that.

Mr. Adolphsen, what makes those eligible under Medicaid expansion more susceptible to facilitating illicit drug diversion?

Mr. ADOLPHSEN. Thank you, Senator. I think we have heard a lot of great examples of that here in the testimony, the temptation to turn a free prescription into several thousand dollars in those types of things. I know one of the disconnects I saw in our Medicaid program in Maine was someone would have this access to Medicaid, and they might come into substance abuse treatment possibly, funded by Medicaid. But the success rate, unfortunately, is not very high in some of those programs, typically under 30 percent, sometimes in the teens. It is a difficult addiction to beat, so it is tough.

So what happens, if somebody is in treatment for, say, a week or a couple of weeks even, but then they come out of treatment, and they still have the rest of their Medicaid benefit, they still have their full pharmacy benefit, they still have access to some of those other more dangerous drugs that may have led them into the addiction in the first place.

So I think we need to do a better job of connecting those two dots within the program.

Senator DAINES. So when you look at those individuals who are getting hooked on diverted drugs—we have kind of been looking at
the balance here of those coming on, those coming off. Do you believe that more individuals are getting hooked on diverted drugs than successfully completing opioid treatment?

Mr. ADOLPHSEN. Yes, 12.5 million self-reported opioid abuse last year, painkiller abuse last year, and I think we heard from another witness already that something like a couple million people are trying to get into treatment. So it is pretty clear that on the supply side, the number of people misusing or becoming addicted is growing and outpacing the number of folks that are going into treatment and completing it.

Senator DAINES. Mr. Schalk, in your experience as a prosecutor, and, Mr. Tyndall, as the Tennessee IG, you both have indicated the extent of Medicaid prescription fraud is unknown due to underreporting and other barriers. How expansive do you think the fraud might be?

Mr. SCHALK. Staggering. Based on the limited numbers that we see as opposed to what we know is going on, what we see is going on, I believe that if we were to look at the amount of Medicaid fraud that was happening just in my own community, Members would be outraged.

Senator DAINES. So “staggering” is a strong word. “Outraged” is a strong word. I guess maybe it goes back to my background in chemical engineering. I tend to be more of a quantitative guy. I know the Chairman is a numbers guy, too. Do you have any sense of kind of trying to quantify the size of the bread box here without—“staggering” is related—there is something in your mind saying it is large. Can you maybe try to quantify that for us?

Mr. SCHALK. To sit and quantify with a number I would not be able to do. I can only ascertain from my own experiences that I see from an investigative side, from a courtroom side. Unfortunately, Senator, I am not able to sit and quantify with a particular number.

Senator DAINES. Mr. Tyndall?

Mr. TYNDALL. Thank you, Senator. I can only echo what Mr. Schalk just said. I have to cover 95 counties in Tennessee. I have 14 agents. I have not had 100 percent of everybody 100 percent of the time, and we stay pretty busy just working the cases that we are aware of.

Senator DAINES. So what steps would you advise Congress—this is a great opportunity for you all to put it in the record here and instruct this Committee. What would you advise Congress, the States, or CMS do to take up, to address this problem? A couple things.

Mr. SCHALK. Well, as has been echoed throughout this hearing, I believe that reexamining the prescriptions that are being written is an essential element to being a key part of the solution. And, obviously, when doctor bills are being submitted through Medicaid, it is no secret that the checks and balances are far less than when they are being submitted through a for-profit payer.

So, with that, I think when we are looking at prescriptions, is this prescription being written to pad a Medicaid fraud on behalf of the doctor? Again, is this prescription improving quality of life? Is it medically necessary? Is it within the scope of the treatment? And, frankly, can I go and get an over-the-counter that can be just
as effective? As Senator Paul said, ibuprofen is very effective. However, an overwhelming majority of the people that come through my courtroom, they do not believe ibuprofen is appropriate. They believe they need a high-powered painkiller. And I think we need to as a society take a step back from that and say ibuprofen sometimes is appropriate. Now, it is not always appropriate, and I recognize that. But I think recognizing that ibuprofen is appropriate more often than not is a good step toward reducing this problem.

Senator Daines. I am out of time. Mr. Chairman, thank you for allowing me additional time.

Chairman Johnson. Well, I will say I want to finish up with my questions here. I am going to ask the exact same questions. So each one of you, if you had one recommendation in terms of a law change that would help solve this crisis, I will give you the opportunity to address that as well. But thank you, Senator Daines, for your questions.

I want to start with the two doctors and just ask a question. Why did it take so long for the medical community to just recognize the extent of the opioid addiction? Why did you not have the feedback loop? You have ongoing education. You have your medical journals. I mean, why did it take so long? And why did it take this epidemic just bursting onto the scene here before—and I am not even sure all doctors are aware of it still. I hope they are, but we——

Dr. Kolodny. Yes, I——

Chairman Johnson. Well, let me finish up. We held a roundtable in Wisconsin, and that is when I was shocked that you had an entire generation of doctors trained that these were not a problem. Again, that goes to marketing or whatever. But why wasn’t this known really within a couple years?

Dr. Kolodny. Yes, that is a great question. I think for many years the feeling in the medical community and even the position of the American Medical Association (AMA) was that the opioid problem was about the bad apples, that there were some doctors out there that are really drug dealers running pill mills, and that there are some people out there pretending to be patients but they are really drug abusers and they want to get their hands on these drugs, and that the opioid crisis had nothing to do with well-meaning doctors taking care of their legitimate patients. I think that was the thinking for quite a while when the reality is that the opioid crisis is really driven by well-meaning doctors who have been overprescribing to patients, getting patients addicted, but also indirectly causing addiction by stocking homes with a highly addictive drug, creating customers for the drug-dealing doctors, the pill mills, for the diversion and the fraud. So the bigger problem has been the well-meaning doctors.

I think part of the problem is it is not just the medical community, but policymakers really for many years failed to look at the root of the problem, which was overprescribing. Instead, what they accepted was the way industry had been framing the problem and the way that the pain organizations funded by industry were framing the problem. What policymakers such as yourself were told was that all of this bad stuff that you are hearing about involving opioids, that is the drug abusers. There is a subset of our population that wants to get high off of drugs, and maybe because doc-
tors are prescribing more, the drug abusers are getting their hands on these drugs. And, yes, we should do something about the drug abuse problem and diversion, but let us not forget that tens of millions, a hundred million Americans have chronic pain, they are being helped by these medicines, and that your job as a policymaker is to balance these two competing problems. You want to do something about the pain problem and do something about the drug abuse problem, but do not make the pain problem worse, do not punish the pain patients for the bad behavior of the drug abusers. So it was framed as if we had these two distinct groups and the harms were limited to so-called drug abusers. Policymakers accepted that.

If you look at what was coming out of the Federal Government even over the past Administration, if you look at what was coming out of Substance Abuse and Mental Health Services Administration (SAMHSA), National Institute on Drug Abuse (NIDA), Office of National Drug Control Policy (ONDCP), it was almost an exclusive focus on the issue of non-medical use, kids getting into Grandma’s medicine chest. Nobody was asking why does every Grandma now have opioids in her medicine chest. Now we are finally asking that question.

Chairman JOHNSON. The whole point of the PROP Act was to acknowledge the fact that government policy was requiring providers to ask the question: “Are you satisfied with your pain medication?” And if you got a bad survey result, it affected your reimbursement, so, government policy actually fueled that.

Dr. Hyman, at what point did the medical community all of a sudden wake up and say, “This is a real problem?” Has it literally just been the last couple years even though this has been around for a couple decades?

Dr. HYMAN. I think it is quite recent that the medical community has woken up to it, and you have already alluded to some of the incentives that they had to—I do not want to say “not wake up to it,” but to focus their attention on other areas. Lots of aspects of the health care system more or less run on autopilot. People keep doing things the way they were trained to do them. New information may not be available, or if it is available, they may say, oh, that is just one study.

And this is not just about opioids, right? I can tell you story after story where there is a surgery or a treatment that gets deployed, it sort of spreads like wildfire, subsequent research indicates that it is not such a great treatment, and it is very hard to stamp out once it is out there because the same sort of passive payer of bills creates an incentive for people to keep doing what they are doing.

Chairman JOHNSON. So a one-number answer out of both of you. What percentage of the medical community do you think get it now, fully understand it? We will start with Dr. Hyman.

Dr. KOLDONY. It is age-related. Young doctors get it. They have come of age during the opioid crisis. In some cases they have lost peers to opioid overdoses. Older doctors, in my experience, doctors maybe older than 50, tend to still—many of them tend to be prescribing pretty aggressively.

Chairman JOHNSON. So what percent? Only half of doctors, 50 percent are getting——
Dr. KOLODNY. It is very difficult to give you an answer.

Chairman JOHNSON. I realize that. I am not going to hold you to it. Would you venture a guess?

Dr. KOLODNY. I would guess that maybe a third of—it is a wild guess, that maybe a third of the prescribers are still very misinformed about opioids and are prescribing very aggressively.

Chairman JOHNSON. They do not read the news? Dr. Hyman, do you agree with that or——

Dr. HYMAN. Well, even if they read the news, they may not view themselves as part of the problem, right? They may view themselves as treating with compassion and care the patients that present in front of them. If you made me give a number, I would fall back on my medical school training where an attending told me, “There are only two numbers in medicine—80 percent and 20 percent.” So I would give you the 20 percent number, which is a little lower. I think it is higher among younger physicians for the reasons that Dr. Kolodny has already alluded to.

Circling back to the question about the frequency of fraud and a quantitative figure, the standard figure in the literature is 10 percent. There is not a great empirical basis for that number, but if you add in waste and overuse, you can get much higher numbers. And I am happy to share with you some of the research that has been done on that.

Chairman JOHNSON. One of the questions we have submitted to CMS is how much are they spending reimbursing for opioids. That would be just kind of a nice macro number to know.

I want to switch over to the prosecutor and inspector general. An indicator of the problem we have here is there is actually a website—and I am not going to promote it, but there is a website you can check to see what the cost is to make sure you are not getting ripped off by your drug dealer in terms of these opioids. So, I mean, that is a problem. Can you speak to the relative cost of street heroin versus opioids? Any of you three.

Mr. TYNDALL. I do not know that I can give any specifics, but my understanding is that now because of the reformulation of some of the narcotics that we receive, they are a bit harder to use, and they are becoming more expensive. Heroin is growing cheaper and cheaper by the day, so people are now turning to heroin as opposed to prescription drugs.

Mr. SCHALK. What we saw was at the pinnacle of Opana abuse, they were going—we had high school kids that were spending $200 a day on two Opanas, $100 apiece for a simple pill. Once that supply ran up and the formulation changed where it was not as easy to abuse, that is when heroin came in, and it devastated our community. And heroin, from our experience, has been easier to get, it is cheaper to get, and the effect—one you go down the road of heroin, you do not want to go back to pills because the high is not as good.

Chairman JOHNSON. Do people actually buy fentanyl, or do they buy it because they think it is heroin?

Mr. SCHALK. What we see are people buying heroin that is laced with fentanyl.

Chairman JOHNSON. OK. I read something in a magazine article, that $800 worth of fentanyl produces about $800,000 of street...
value. So if you have the demand, the profit motivation is so high you are going to have the supply.

When I started this inquiry, again, it was based on that article talking about funding a lifestyle of not working, supplying free health care, and access to products so beneficiaries can sell opioids as an income supplement. In terms of our actual investigation, though, we found far more complex and larger schemes. Again, I want to ask the prosecutor: is that just because we really do not go after the single users, the people who have been using it, and we really are focusing what limited investigation and prosecutorial resources we have in terms of the larger schemes?

Mr. SCHALK. I think, like any law enforcement agency, we have to focus our resources and our efforts on the most prominent issues, and oftentimes that is the bigger players that we are going after. If we were to sit and—we would need to expand our police agencies tenfold to have a direct—to hold everyone directly accountable in our area.

Chairman JOHNSON. But with what you were talking about, you think this is enormous. So you think it is enormous because individuals literally are accessing, that is, using their Medicaid cards, or Medicare or VA benefits, and they are getting the pills, and they get a large quantity—by the way, does anybody know what an average quantity is the doctors—I mean, what would be a typical monthly supply of one of these opioids?

Dr. KOLODNY. Well, the vast majority of the prescriptions are written for acute pain, so if you are looking at numbers of prescriptions written, most of them are for acute pain, and they are for a small quantity.

Chairman JOHNSON. Or short term.

Dr. KOLODNY. Yes.

Chairman JOHNSON. What about chronic?

Dr. KOLODNY. So when you measure consumption in terms of weight of opioid consumed in the United States in terms of a morphine equivalent, the bulk of our consumption is chronic pain, and the average patient is given a 1-month prescription with an enormous amount of opioid in it. So it could be about 70 milligram morphine equivalents or more per day. Some patients are on even greater quantities that are very dangerous.

Chairman JOHNSON. How many pills would that be a day or a month? I mean, let us say the average size in terms of milligrams.

Dr. KOLODNY. So for a patient who is receiving opioids for chronic pain, they could be taking one pill in the morning, one pill at night. But each of those pills could be the equivalent of 25 or 30 Vicodin in one pill. So it would be the equivalent of taking 50 pills a day, only they are taking it in an extended-release drug.

Chairman JOHNSON. So you really can, because of the street value per milligram, or whatever it is.

Dr. KOLODNY. It is about $1 a milligram. The most popular opioid on the black market is the 30-milligram immediate-release oxycodone, which will do what a $10 bag of heroin will do. And the effect is actually almost identical. In fact, some people prefer the effect of oxycodone. They are using heroin because it is cheaper, not because it is a stronger effect.
Mr. TYNDALL. Mr. Chairman, the prescriptions we are seeing sometimes it is 90 to 120 pills per month, depending on the—and hydrocodone tends to be kind of the drug of choice in Tennessee. You may get 5 milligrams, 7.5 milligrams, or 10 milligrams. So depending on the milligram and the number of pills, if a person wants to sell 120 10-milligram pills, that is a pretty good chunk of change for a month’s work.

Chairman JOHNSON. So when you have the difference between acute versus chronic, how are you going to control prescriptions based on chronic pain? You are not going to require a doctor to keep writing that every 3 days. One of the solutions sometimes is just limit it to a 3-day supply. But that is just not—that may be appropriate for acute pain for a dentist or something like that, but not for chronic pain.

Dr. KOLODNY. So for chronic pain, we should not be putting patients on long-term opioids. We have to prevent new starts. For the vast majority of these patients, opioids are not safe or effective. And I think that has been one of the main goals of the CDC guideline, is to prevent more people from winding up on long-term opioids. We have about 10 million Americans who are on opioids chronically, so many Americans on opioids chronically that we are seeing ads on television for drugs to treat the side effects of being on opioids chronically, like constipation. These 10 million Americans who are on opioids chronically, many of them may not be able to come off. Even though the medical community is figuring out we should not have started them on opioids, we also do not want them to cut them off abruptly. We have to try and help some of these patients come off. Some of them can come off. Some of them need addiction treatment. Some of them may just need to be maintained on safer, lower doses of the medication they are already on. The trick is to prevent more people from winding up stuck in their shoes.

Chairman JOHNSON. So Mr. Adolphsen quoted some figures in terms of, unfortunately, the ineffectiveness of treatment. Can the doctors speak to that? What kind of success rates do we have? And also just in terms of Suboxone, does that also give a high? Why would that be diverted and be able to be sold?

Dr. KOLODNY. So if you are an experienced opioid user and let us say you are in jail, so you have been off of opioids, and somebody smuggles buprenorphine—Suboxone—into you in jail and you take it, you will feel a strong opioid effect as if you have just used just about any opioid. If you are taking buprenorphine the way you are supposed to on a regular basis, you are not feeling high from it. Patients feel normal. They look normal. I have had patients who are physicians who I would allow them to operate on me while they were on buprenorphine treatment. People can function very well.

Most patients who are treated with buprenorphine do well. More than half of patients have good outcomes. Some younger patients with more severe opioid addiction, when you try and treat them with buprenorphine, in the first year or so they do not do that great. They come on and off. Sometimes they will trade it. But it is the first-line treatment, and people who stick with it have good outcomes, and it is more effective than the Vivitrol monthly injection.
Chairman JOHNSON. So successful treatment with Suboxone, how long does that take? Months? Years?

Dr. KOLODNY. What I can say is that short-term use of buprenorphine, Suboxone, does not work well. When patients come off, they are at very high risk of relapse. So we are talking about a longer-term treatment. Some patients, maybe it means for the rest of their lives. I would hope not. I think there are people who can come off, and maybe we will come up with other treatments for opioid addiction so that there are better options available.

Chairman JOHNSON. How often do they take that?

Dr. KOLODNY. It is taken every day. Some patients will take it in the——

Chairman JOHNSON. So just once a day.

Dr. KOLODNY. Yes, once a day or twice a day.

Chairman JOHNSON. So we would probably have to make sure that we test to make sure they take——

Dr. KOLODNY. Yes, you want to make sure you test so that it is in their urine so that you know they are not trading it or selling it.

Chairman JOHNSON. Dr. Hyman, do you have anything to add about treatment?

Dr. HYMAN. I agree with everything Dr. Kolodny said, although you should count the people who drop out as failures unless they re-enroll.

Dr. KOLODNY. No. I agree.

Dr. HYMAN. And the second point I would make—and this is sort of the incidental consequence of once you start testing people, you have suddenly created a Gold Rush for urine testing. So there is a huge amount of money that is spent on urine testing as part of the treatment.

Chairman JOHNSON. Buy the stock, huh? Well, again, those are my questions, so I will just go starting from my left to right: is there one overall suggestion you would have in terms of a change in law or something we should do as a Nation to try and solve this problem? Mr. Adolphsen.

Mr. ADOLPHSEN. Thanks, Senator. I think incumbent on us first is just to recognize that Medicaid has a large role as a funder of opioids, and so we need to recognize that and understand that we have to do something about it, admit we are part of the problem, so to speak, in the Medicaid program. Slow down the Medicaid rush. It is increasing the supply. There is no question about it. Even if you go back before expansion, Medicaid enrollment doubled from 2000 to 2013. So that is an issue, so I think we need to slow that down.

I would target benefits. I think if somebody is in need of substance abuse treatment, they are low-income, everybody in this room, everybody around us wants that person to have the substance abuse treatment. But it does not necessarily have to come with all the other potential side effects of having that Medicaid card and the free access it provides to other things like opioids.

Chairman JOHNSON. So put some kind of controls around the benefit. Mr. Schalk?

Mr. SCHALK. Thank you, Senator. From a very broad perspective, we need to obviously diminish the gap between the impoverished
and the middle class. We do that, in my opinion, by creating jobs, incentivizing businesses to grow. When we have people that are going to work in the morning, their likelihood of walking through the courthouse doors as a defendant reduces drastically, especially when we are talking about drug abuse.

From a more narrow perspective, as we have echoed here today, I believe that regulating the prescriptions that are being written by our medical community would go a long way in curbing the issues that we are seeing and discussing today. Thank you.

Chairman JOHNSON. Mr. Tyndall.

Mr. Tyndall. I am going to brag on Tennessee just a little bit, Mr. Chairman. Our Controlled Substance Monitoring Database requires every drug, every narcotic that is dispensed, it has to be entered into our Controlled Substance Monitoring Database no later than the following business day. So if that is true—and it also requires our physicians to check that CSMD prior to prescribing a narcotic. So if that is true, the doctor should see that this person has already received that narcotic within 24 or 48 hours and they should not, I would hope, be prescribing the same or similar medication for that patient.

Chairman Johnson. Do you know relative to other States, are you that much further advanced in terms of that type of monitoring? Is it comparable?

Mr. Tyndall. I am not sure, but I think we are much more progressive and aggressive in monitoring and trying to identify people who are committing TennCare fraud, Mr. Chairman.

Chairman JOHNSON. OK. Dr. Hyman?

Dr. Hyman. I would change the incentives for physicians to prescribe opioids to Medicare and Medicaid beneficiaries as profusely as they do.

Chairman JOHNSON. OK. You have to describe that more specifically. What are the incentives right now? And what is the difference between the incentives as they prescribe in Medicaid and Medicare versus private insurance?

Dr. Hyman. So the incentives for—as I said, Medicare and Medicaid are both sort of passive payers of bills, and so nobody is going to look too closely at your prescribing practices unless, many years later somebody happens to be paying attention. So, when you couple that with the reality that the way you bring a clinical encounter to a close is by filling out a prescription and handing it to the patient, what you want is a system that does not pay providers to continue that way of doing things, right? So you could use either carrots or sticks to do so, and I would be happy to talk about how you would design that.

Chairman JOHNSON. So it kind of goes back to how you have to target the benefits, you have to control them. You have to just make it more difficult for doctors to write prescriptions for Medicaid and Medicare versus private insurance. There are more controls in private insurance, is what you are telling me?

Dr. Hyman. Because of the limited networks and the sort of for-profit nature of the insurer, there is going to be a tighter feedback loop in the private sector than you will see in the public programs.

Chairman JOHNSON. OK. Dr. Kolodny?
Dr. KOLODNY. Yes, so to bring our opioid addiction epidemic under control and ultimately to an end, First off, you have to frame it the right way, and if you understand that it is an addiction epidemic, an epidemic of people with the disease of opioid addiction, what we need to do about it is very similar to what you would do for any disease outbreak, any disease epidemic. It is similar to what you would do for an Ebola outbreak, a measles outbreak, an HIV epidemic. What we have to do really are two things: We have to prevent more people from becoming opioid addicted. We have to see that the people who are opioid addicted have access to effective treatment.

To prevent more people from becoming opioid addicted, more than anything else, what you are hearing today and what we know is that we are going to need much more cautious prescribing. Even though prescribing is trending in the right direction, we are still massively overprescribing. Until prescribing becomes more cautious, we are going to keep creating new cases of addiction.

For the millions that are addicted, they really need access to effective treatment. And when I say “effective treatment,” I am not really talking about detox or rehab, which does not work well for most people who are opioid addicted. I am talking about long-term outpatient treatment. And as you have pointed out, Medicaid is not a silver bullet. I believe to really have the right system available where someone in every county in the United States can walk into a treatment center and be treated that same day, regardless of their ability to pay for that treatment, to really get there I think requires an investment in the billions, I would estimate $6 billion a year to start to build out these systems, and a commitment from Congress for 10 years of about $60 billion to get where we need to be. And when you consider what this problem is costing us, both the human cost and the economic cost, I think that investment is very worthwhile.

Chairman JOHNSON. It will be interesting to see how much we actually spend on opioids and how much money we might save by spending on Suboxone or something like that.

Again, thank you all. I enjoyed the hearing. I learned an awful lot, and that is because you folks did a great job. So I appreciate your time, your testimony, and your answers to our questions.

The hearing record will remain open for 15 days until February 1 at 5 p.m. for the submission of statements and questions for the record. This hearing is adjourned.

[Whereupon, at 12:17 p.m., the Committee was adjourned.]
A P P E N D I X

Opening Statement of Chairman Ron Johnson
“Unintended Consequences: Medicaid and the Opioid Epidemic”
January 17, 2018

As submitted for the record:

Good morning. The dramatic increase in drug overdose deaths throughout America has appropriately been labeled a national health care crisis. In 2016, there were nearly 64,000 overdose deaths, making drug overdoses the leading cause of accidental fatalities. As a result, much attention has been paid to what caused this epidemic and what can be done to end it.

This Committee has worked to examine the root causes of the opioid crisis for some time. We have held field hearings across the country to hear from doctors, law-enforcement officials, local government leaders, and families affected by the opioid crisis. In 2016, after a lengthy, bipartisan investigation, the Committee issued a 359-page report detailing evidence of opioid over-prescription and drug diversion at a VA medical center in Wisconsin.

Last summer during the debate over health care reform, I read an article by scholar and political economist Nicholas Eberstadt in Commentary magazine titled “Our Miserable 21st Century.” Citing Alan Krueger, the chairman of President Obama’s Council on Economic Advisers, Eberstadt wrote that “nearly half of all prime working-age male labor-force dropouts—an army now totaling roughly 7 million men—currently take pain medication on a daily basis.” Eberstadt asked how so many millions of unemployed men could afford a constant supply of pain medication. He surmised, “one main mechanism today has been the welfare state: more specifically, Medicaid… Medicaid has inadvertently helped finance America’s immense and increasing appetite for opioids in our new century.”

Intrigued by this article, I asked my staff to research cases in which Medicaid was used to obtain opioids and then illegally traffic them. In a few short days, we identified 261 defendants involved in opioid-related Medicaid fraud. Building on that initial research, we have identified more than 1,000 instances involving Medicaid and opioid abuse. This research, summarized in a staff report that I am releasing today, presents evidence that federal spending on health care is being used as a funding source that helps to fuel the opioid epidemic.

There are undoubtedly many causes to the opioid epidemic, making it easy to point multiple fingers of blame. Most agree that development, marketing, and medical training regarding drug usage—and the resulting over-prescription of opioids—have played a role. In addition, drug traffickers take full advantage of America’s unsecured borders to flood heroin and fentanyl into lucrative domestic markets. But we must not ignore the growing evidence that one of the contributing causes appears to be connected to federal spending itself.

Medicaid is not alone in creating these perverse incentives. Other federal programs are also being exploited to obtain opioids. In preliminary research, my staff found hundreds of examples of opioid-related fraud in the Medicare program, and similar fraud schemes in connection with Veterans Affairs benefits and food stamp programs.

The purpose of this hearing is not to deny the benefits that federal spending on healthcare provides to millions of Americans. Nor does it seek to assert that federal spending is the primary cause of overdose deaths. The purpose of this hearing is to draw attention to the often-overlooked reality that federal programs, like Medicaid, create incentives for fraud and abuse involving opioids. With the evidence we have gathered, we must recognize that federal spending...
on healthcare—while certainly doing good—is also being used as a funding source that helps to fuel the opioid epidemic.
U.S. Senate Homeland Security and Governmental Affairs Committee

“Unintended Consequences: Medicaid and the Opioid Epidemic”

January 17, 2018

Ranking Member Claire McCaskill

Opening Statement

Thank you, Mr. Chairman. Mr. Chairman, as everyone can agree, the deadly scourge of opioids in our communities is the most critical national public health issue confronting our country today. We must do everything in our power to confront this epidemic head-on and bring every tool possible to the fight.

I look forward to working with Chairman Johnson and my Democratic and Republican colleagues to uncover the real causes of the opioid epidemic. But this idea that Medicaid expansion is fueling the rise in opioid deaths is total hogwash. It is not supported by the facts. And I am concerned that this committee is using taxpayer dollars to push out this misinformation to advance a political agenda. The work we do in this Committee has real world consequences. And if we advance an idea that’s not supported by the facts, we can endanger people’s lives.

So, Mr. Chairman, let’s look at the facts. Two researchers recently reviewed data from the National Vital Statistics Mortality Files. This data shows all the reasons people die in the United States, state by state. They reviewed the data for five years and found there is no statistically significant evidence that Medicaid
expansion affects drug-related overdoses. Separate scientific studies conducted by
other authors show that opioid epidemic predates Medicaid expansion and that
recent increases in overdoses stem from fentanyl and heroin, not prescriptions
obtained through Medicaid. Unlike the report released by the majority staff today,
these studies were both scientific and comprehensive.

Rather than fueling the opioid epidemic, Medicaid expansion is providing
important tools for patients, doctors, and states to combat this crisis. Medicaid is a
first responder to the epidemic, not the cause. Medicaid expands access to our
most valuable tool in the fight against opioids — addiction treatment. Only 10% of
individuals who meet the diagnostic criteria for a substance abuse disorder receive
treatment in any year and, although there are many reasons for failure to treat, key
reasons include lack of insurance coverage and inability to pay.

Following expansion under the ACA, approximately 12 million Americans
were able to receive health care coverage under Medicaid for the first time —
including thousands of people addicted to opioids.

Medicaid provided coverage to three in ten people grappling with opioid
addiction in the United States in 2015. Medicaid covers services to treat substance
use disorder, such as intensive outpatient treatment and inpatient detoxification.
The ACA broadened Medicaid coverage to include medication-assisted treatment, a recovery program that combines medication with counseling and other therapies.

Medicaid expansion helps address the opioid problem – it did not create it. Let’s look at some more facts. In September, Mr. Chairman, you invited Dr. Katherine Baicker to a hearing on the history and current realities of the U.S. healthcare system. Last month, Dr. Baicker and her colleagues issued a report examining data from the state of Oregon. By comparing the use of opioids between the population that received health care coverage under Medicaid expansion and the uninsured population, Dr. Baicker found that Medicaid expansion had a near-zero effect on opioid use—meaning that the expansion itself did not cause increased opioid use among the newly covered population. The study also found that expanding Medicaid coverage resulted in a higher use of opioid treatment by the newly covered population.

Mr. Chairman, I have asked my staff to draft a memorandum to staff summarizing the important scientific data on this topic. I ask unanimous consent for it to be entered into the record.

The science dispels any anecdotal information that Medicaid expansion is fueling the opioid epidemic. But the Chairman is correct that the ongoing opioid epidemic is a real public health crisis. In the United States today, too many opioids
are prescribed, too many are abused, and too many are paid for by the federal government. But instead of blaming a first-responder to this crisis, we should work together to hold those truly responsible for fueling the worst public health crisis in decades accountable.

I have devoted the better part of the last two years to this effort. I began my investigation because time and time again, we have heard about how opioid manufacturers used legal and illegal techniques to expand their market share and increase dependency on powerful – often deadly – painkillers. And we have heard about the failure of opioid distributors to monitor the flow of hundreds of millions of painkillers to pharmacies across the United States and then on to the black market. So, in an effort to determine the extent of the opioid industry’s culpability, I issued document requests to the largest opioid manufacturers and distributors.

My investigation is still ongoing. Meanwhile, dozens of states and counties – including Harrison County, Indiana, whose Prosecuting Attorney is here today – have sued opioid distributors or manufacturers or both for allegedly fueling the opioid epidemic. I am confident that over the coming years we will learn the full extent of industry’s role in causing this crisis.

It’s time for us to stop playing politics with people’s lives. And I invite the Chairman to join me in investigating the true root causes of the epidemic – and to
stop spreading this false, biased, and debunked narrative that the Medicaid expansion caused the opioid crisis.

    Thank you, Mr. Chairman.
OPENING STATEMENT OF SENATOR PETERS
JANUARY 17, 2018

Thank you, Mr. Chairman, for convening this important hearing, and thank you to the witnesses for being here today.

I would also like to welcome our new colleague Senator Doug Jones to the Committee. We look forward to working with you.

Medicaid expansion has produced not only historic coverage gains, but also far reaching positive health effects for American families.

At its core Medicaid and the ACA’s Medicaid expansion are critical programs that help hard working American families enroll in health care coverage and protect our nations most vulnerable.

Nearly 80 percent of Medicaid enrollees come from a working family and over 40 percent of Medicaid enrollees are children.

Medicaid is a program that saves lives.

I think we can all agree that when you or a family member or a friend gets sick or hurt – we should be able to access affordable health care coverage.
Medicaid and Medicaid expansion serves as that bridge to affordable health care for millions of working families in our country.

I am sure we have all heard the stories, but as a reminder – these programs are there to make sure someone’s parent can have that needed surgery or a child’s family can afford the high cost of their cancer treatment or that a person that’s been injured can get the care they need to recover and get back to work.

Medicaid has also been critical to fighting the opioid epidemic.

Opioid abuse – and its tragic impact – continues to be a growing problem in my home state of Michigan and around the nation.

Between 2014 and 2015 the Centers for Disease Control reports that drug overdose deaths in Michigan increased by over 13 percent.

In 2015, more than 2 million people across the nation struggled with a prescription pain reliever substance abuse disorder – an unfortunate number that continues to trend upward.

As we work to combat this serious epidemic - the Affordable Care Act has greatly expanded access to treatment in Michigan and around the nation – including for individuals with substance abuse disorders.
Prior to passage of the ACA, many individuals with substance abuse disorders were unable to get access to the care they needed.

Since passage of the Affordable Care Act, the uninsured rate in Michigan has been cut in half and more than 600,000 individuals are now enrolled in our states Healthy Michigan expanded Medicaid program.

Combined with the private exchange in our state nearly 900,000 individuals in Michigan have coverage through the Affordable Care Act - many of these individuals are accessing health insurance for the first time in their lives.

Since the ACA’s Medicaid expansion went into effect more than 1.6 million Americans have gained access to substance abuse treatment.

Last year, the Homeland Security and Government Affairs Committee Permanent Subcommittee on Investigations had a hearing on the opioid epidemic we heard from witnesses who – like you – are fighting this crisis on the frontlines.

I spoke with Dr. Thomas Gilson a Medical Examiner from Cuyahoga County who told me how Medicaid expansion is literally helping them save lives by getting people suffering from addiction into treatment.
I also spoke with Thomas Synan Jr. Chief of Police for Newtown, Ohio. He largely agreed with Dr. Wilson and went on to tell me:

“To reduce demand and in turn reduce supply we have to get people into treatment and one of the programs our teams are doing out there in the Hamlin County area is signing people up for Medicaid to try to get them into that treatment.”

Their overwhelming message to me was that we must preserve Medicaid and work to improve the critical health services the program offers, because it is literally saving people’s lives every day.

And so today – I appreciate each of you being here and I look forward to hearing about how we can work to improve our nation’s Medicaid program to better serve the families enrolled and to continue our efforts to combat opioid abuse.

I have no doubts that improvements can be made and I look forward to hearing all your suggestions, but I want to end by stressing we must do so in a way that does not jeopardize care for those that need it.
TESTIMONY ON UNINTENDED CONSEQUENCES: MEDICAID AND THE OPIOID EPIDEMIC

U.S. Senate Committee on Homeland Security and Governmental Affairs

January 17, 2018

Sam Adolphsen
Senior Fellow
Foundation for Government Accountability
Chairman Johnson, Ranking Member McCaskill, and members of the committee, thank you for the privilege of testifying. I am Sam Adolphson, a Senior Fellow at the Foundation for Government Accountability (FGA). FGA works at the state and federal level on healthcare and welfare policy issues.

Prior to joining FGA in 2011, I served for three years as the Chief Operating Officer of the Maine Department of Health and Human Services. In that role, I oversaw operations for Maine’s welfare programs, including Medicaid. My duties included direct responsibility for the state’s welfare fraud department and the Medicaid audit division. Our department also worked directly with the Attorney General’s Medicaid Fraud Control Unit.

As your committee explores this important area, I’d like to draw to your attention to three specific areas in the Medicaid program related to the opioid crisis in America:

First, the Medicaid program has expanded dramatically to able-bodied adults. This is not exclusively positive, with no potential for harmful side effects. Like a doctor prescribing a drug, it is important that lawmakers ask the right questions and prescribe policy with a careful eye towards mitigating harmful unintended consequences.

Second, there is a robust black market of welfare funds being traded underground around the country. This includes people accessing Medicaid services who are not eligible. This fraud not only robs funds meant for the truly needy, but it is also helping to fuel the drug crisis in alarming ways.

Third, Medicaid’s structure provides concerning levels of unfettered access to opioids. It also creates barriers to work, the very thing that is proven to help people move away from addiction, into a productive life, and even long-term recovery from substance abuse.

The Opioid Problem

For several years, our country has faced a massive drug crisis that continues to decimate our families and communities.

We know that legal opioids—prescription painkillers—play an outsized role in contributing to this epidemic. By now, you have heard the facts and figures:

- There were more than 33,000 opioid overdose deaths in 2015.
- About half of those deaths were the result of prescription painkiller overdoses.
- On an average day in 2016, there were 650,000 opioid prescriptions written.
- Four out of five new heroin users started by misusing prescription painkillers, meaning that legal prescription abuse is the gateway to illegal drug addiction and death.

Unfortunately, the battle ground of addiction is not confined to dark alleys. It exists in the sterile rooms of our doctors’ offices and hospitals.

Appropriate use of painkillers is life-changing to the recovery of so many. But misuse is life-ending.

We understand the potential dangers of prescription opioids are now more widely understood thanks to recent explorations by diverse groups like state governments, addiction specialists, and pharmacy experts.
Medicaid Expansion Was Supposed to Help—Are We Sure It Is Not Hurting?

The solution to the opioid problem, however, is less clear. One of the most widely touted solutions has been to increase immediate access to the Medicaid program. This approach has been held up as a panacea by some lawmakers, government officials, and advocates who suggest that the expansion of Medicaid under the Affordable Care Act is the key to solving the crisis in their states.5

This promotion of Medicaid expansion as a solution to the opioid epidemic often centers on the presumed benefit of treatment to addicts. For example, Rhode Island Governor Gina Raimondo recently said that in Rhode Island they are, "very effectively using Medicaid coverage to allow people to seek treatment for their opioid addiction."6

What we do know for sure is that Rhode Island expanded Medicaid right after the passage of Obamacare and has since seen their Medicaid program grow by 66 percent (from 190,000 people to more than 315,000).6

It does not appear that Medicaid coverage has done anything at all to mitigate the opioid crisis. According to the CDC, Rhode Island was in the top ten in the country in 2016 for opioid-related overdose deaths.7 The Rhode Island Department of Health reported 181 overdose deaths in 2012 before expansion and 336 last year that were mostly opioid-related.8

Has adding more than 100,000 people to Medicaid cured the drug crisis in Rhode Island? So far, no.

Early data shows similar results in other states around the country. West Virginia added 160,000 people to Medicaid through Medicaid expansion and continues to lead the nation in drug overdose deaths with 52 deaths per 100,000 residents.9

Similarly, Ohio added 725,000 people to Medicaid and has the second highest rate of overdose deaths in the country.10

Pennsylvania added more than half-a-million adults to Medicaid and has the third highest rate of overdose deaths in the country.10

In fact, of the states with the highest age-adjusted rates of opioid overdose deaths:

- Five of the top five are Medicaid expansion states
- Nine of the top ten are Medicaid expansion states
- 23 of the top 15 are Medicaid expansion states11

This correlation is deeply concerning. Is the addition of tens of millions of able-bodied adults to Medicaid partly responsible for the opioid crisis?

That question of causation begs for more inquiry.

There are limited recent studies of this question, but a CDC report from the Obama administration in 2009 sheds some light on Medicaid’s connection to opioids. The report overviewed findings from a study of Washington state Medicaid enrollees between 2004-2007. It found that Medicaid enrollees were 5.7 times more likely to die from a prescription opioid overdose than someone not on Medicaid.12

There are complex factors at work here. But this complexity does not mean Medicaid played no role in the damage. Medicaid provides very low, or no-cost, access to drugs for patients with loose prescriber controls. What is also very clear is that people on Medicaid use a large share of prescribers overall. Medicaid is a factor in a large share of the negative effects of legal and illegal opioids.

Most people who become addicted to heroin start by abusing prescription painkillers and Medicaid dispenses those opioids at a staggering rate.
I saw this personally as the COO at the Maine Department of Health and Human Services. Pharmacy was one of the fastest growing Medicaid budget lines. Opioids were at the top of the drug list, almost any way the data was viewed. Although Maine has not expanded Medicaid under the ACA, Maine expanded Medicaid back in the early 2000s and still covers more able-bodied adults than the federal baseline.

A recent study by Express Scripts of three million Medicaid members highlights that between 20-25 percent of Medicaid individuals received an opioid prescription in 2015. The same report indicates this rate of opioid prescription is highest among able-bodied adults ages 18-64, which is the Medicaid expansion population.

The study also notes that Medicaid recipients eligible for Temporary Assistance for Needy Families (TANF) are receiving opioids at the highest rate of any group. Since TANF households almost always include a child at home, it means that the most opioid-dependent Medicaid population is parents caring for children, often young children. Teens in these homes have access to these drugs as well. That is a concern as we see the abuse of opioids increasing among young people.

In the current Medicaid expansion environment, 20 percent of the population is on Medicaid. While Medicaid covers one out of five people, it is the payer for 36.5 percent of all Emergency Department visits for Opioid poisonings. Forty percent of all heroin poisonings that present at the ED are Medicaid recipients and just under half (47 percent) of all methadone poisonings in the ED are experienced by individuals on Medicaid.

These opioid-related ED visits have spiked since 2014, when Medicaid expansion began. In Rhode Island, for example, ED visits paid for by Medicaid for opioid-related reasons more than tripled, from 500 in 2011 to 1,850 in 2015. Nationally, Medicaid funded about 122,000 opioid related ED trips in 2011 and funded about 280,000 in 2013.

Illegal Trafficking and Fraud in Medicaid Has Played a Role in the Opioid Crisis

These numbers show there is clearly a challenge with Medicaid and Medicaid expansion funding legal prescriptions for opioids that results in abuse, overdoses, and addiction. The flood of opioids into the market in the form of painkillers and other opioids like suboxone have made the drugs more available than ever.

The massive supply of opioids that Medicaid has made readily available has helped to create an underground market that is helping to fuel the epidemic. Again, during my time in Maine as COO of Maine DHHS, we regularly saw the intersection between the criminal drug world and welfare benefits, including Medicaid.

Too often, individuals we saw in newspaper accounts of drug arrests matched up with our enrollment information for Medicaid and other welfare programs. I saw unfortunate instances of people utilizing their welfare benefits and subsequently showing up in drug arrests, or worse, tragic accidents including death.

There is no shortage of examples of these benefits funding the drug trade in cases ranging from millions of dollar national cases to local drug dealings in rural Maine:

- In 2017, in just one instance, the United States Attorney General arrested more than 400 people committing more than a billion-dollars’ worth of fraud in Medicaid and Medicare for illegal prescription of opioids and other charges.17
- In 2016, in Maine, a couple was arrested and charged with trafficking oxycodone. When they were arrested, drug agents found dozens of pills, along with $59,000 in cash and eight welfare cards, including a medical card that did not belong to the couple.28

FOUNDATION FOR GOVERNMENT ACCOUNTABILITY ... 4
A Maine Drug Enforcement Agent also highlighted how often welfare cards are being used in the illegal drug trade, testifying that "it is common practice for drug dealers to take custody of a drug user's EBT (welfare) card either as direct payment or in lieu of immediate payment."\textsuperscript{29}

These cases raise a lot of important questions that should be asked. When arrests happen and thousands of prescription pain pills are seized, where did they come from? When someone is arrested dealing prescription meds, do we check if they are on Medicaid and receiving prescriptions pain killers? Are those cases followed up to determine the source? States have the data to answer these questions—I have seen it.

A 73-year old grandmother was killed last year in Maine by a driver who had methadone, benzodiazepine, other opiates, and cocaine in his blood when he caused the crash.\textsuperscript{23} Where did he get these drugs? Did Medicaid pay for them?

Another way that drugs are being accessed illegally through Medicaid is by people scamming the system to become eligible for Medicaid in the first place. They then use their benefit to gain access to prescription drugs, funded by Medicaid.

This fraud is happening because states are not carefully checking the income of people applying for Medicaid. The tidal wave of enrolment created by Medicaid expansion exacerbated this problem.

Recently, the state of Arkansas cleaned up its Medicaid rolls and found inaccuracies that led to 80,000 people being on the program that should not have been.\textsuperscript{24} Arkansas removed:

- 16,500 individuals for unreported income
- 23,700 individuals with connections to other states, including living in, or receiving benefits in another state
- 4,100 inmates that were not eligible for Medicaid

Arkansas is not alone. Oregon found that it may have spent more than $37 million each month on ineligible Medicaid members\textsuperscript{25} and two different Minnesota Medicaid audits found errors in 20 and 38 percent of all cases, respectively.\textsuperscript{25}

We know that Medicaid is funding a huge portion of the painkiller prescriptions and other opioids in this country. We can all agree that this spending should be limited to eligible individuals, not hundreds of thousands, or millions, of people who aren’t truly eligible for Medicaid.

The Structure of Medicaid Facilitates Drug Abuse

The research is clear that someone on Medicaid is more likely to be addicted to, or die, from opioids. There are many aspects to this dynamic, but let me just discuss the three key areas of work, access, and incentives.

Work is Key

While many view Medicaid as the solution to the drug problem, a better solution may be the very thing that Medicaid so often undermines—work. We know that for most people, the best answer to so many of the problems they face is employment. That is where Medicaid has created a very real problem because it fosters dependency.

Fortunately, the Centers for Medicare and Medicaid Services is now allowing states to improve health by promoting work.
A recent study by the Foundation for Government Accountability found that 52 percent of able-bodied adults on Medicaid do not work at all. Only 16 percent work full time. In the Medicaid expansion population, the problem is even worse. In Ohio, 57 percent of able-bodied adults enrolled in Medicaid expansion are not working. In Nevada, 60 percent report zero income.26

How is this connected to the opioid crisis? Because for people struggling with addiction, work is a key to recovery. The addiction help website addiction.com even calls work “a pillar of recovery” and lists 14 advantages to work for those in recovery.27

In Maine, we heard from people in recovery programs that they felt that the Medicaid-funded treatment they were in was too burdensome. This was not because they did not want to get treatment. They struggled because they said they wanted to work, yet the requirements of the treatment program made it difficult to do so. They recognized how important work was to their own recovery. Shouldn’t our policies do the same?

Medicaid pays people not to work, so they do not. And instead of being out in the community, participating in the workforce, people are stuck at home, too often remaining isolated and idle. These are some of the very lifestyle circumstances that lead to addiction.

Medicaid policy changes that promote work would do more than just get people back into a job—they could save lives, keep people in recovery, and help solve the drug crisis.

Access and Incentives

Medicaid also provides access to prescription drugs that is unparalleled and too easy. The day you become eligible for Medicaid, you get a plastic card that turns on immediately, and at little or zero cost you get access to health care, including prescription painkillers.

This dynamic manifest itself in many ways, including people going to multiple doctors and pharmacies to get prescriptions for painkillers. We saw this often at Maine DHHS. With very limited co-pays, no premiums, and few restrictions on providers, prescription painkillers flowed unfettered to Medicaid recipients. I saw personally that every month opioids were found at or near the top of the list of most utilized prescriptions. Federal policy limits how many guarantors state can use to prevent such practices.

At the same time that opioid abuse and addiction increased, there was a dramatic shift in who was paying for these drugs. According to a 2016 Health Affairs study, opioid pain reliever overdose deaths quadrupled from 1999 to 2013, while consumer out-of-pocket spending for 100 milligrams of opioids dropped from $4.40 to $.00.28 The cost was shifted to public and private insurers, including Medicaid.

Is it surprising that a drug that costs less to the person is being abused more? Nowhere is that dynamic more obvious than in Medicaid, where the member typically bears none of the out-of-pocket cost. Medicaid-funded opioids are entirely cost free to the recipient.

At the Maine Department of Health and Human Services we also saw our Medicaid members receiving large doses of painkiller mixes and receiving them from multiple doctors and filling them at multiple locations. This is happening across the country as well. According to Express Scripts, nine percent of Medicaid recipients were prescribed opioids by more than four doctors, and one out of every four got a prescription from more than one doctor. Similarly, members often used multiple pharmacies, with one member using 24 different pharmacies to fill opioid prescriptions.29
In my home state of Maine, we have made moves to address all of these areas. Maine has requested work requirements in the Medicaid program to help get people back to work through community engagement. Maine has limited and tracked prescriptions of opioids in Medicaid and uses a Medicaid program called “lock-in” to help control opioid abuse.23

Other states are exploring these areas as well to help deal with Medicaid’s role in the opioid epidemic, with many states requesting work requirements in Medicaid and moving to place limits on opioid prescriptions. These are important steps to explore.

Conclusion

The drug crisis impacts us all and there are many questions about how to solve the problem. Though many voices continue to stress that Medicaid expansion is the key to fixing this problem, the early data demonstrates that Medicaid may actually be causing some of the damage.

It is important that we ask the right questions to make sure that Medicaid is not funding the drug problem and instead is structured to promote work and health for our neighbors.


23 Ibid.

32 Centers for Disease Control and Prevention, "Oxycodone is second leading cause of drug-related deaths in the U.S.," U.S. Department of Health and Human Services (October 30, 2009), https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5842a1.htm.


Unintended Consequences: Medicaid and the Opioid Epidemic

Good morning. My name is Otto Schalk, and I am the Prosecuting Attorney for Harrison County, Indiana. We are a community in Southern Indiana that in many ways is representative of much of our nation. I am honored to serve my county and state as a Prosecutor, and I’m humbled to be before you this morning. I embrace this opportunity to share what many of us in law enforcement see and deal with on a daily basis.

Every time a hard working American pays their taxes, they are inadvertently funding drug dealers with a new supply of high powered opioids that are poisoning our schools and our streets. That’s a bold claim; however, as a Prosecutor, it’s something that I see routinely. It’s no secret that our Medicaid program is ripe for fraudulent activity. Prosecutors know this, doctors know this, and the reality is that drug dealers know this as well. An individual need not only traffic illegal street drugs to qualify as a drug dealer; a Medicaid beneficiary that is selling their prescription pills is no different in the eyes of the law.

It bears mentioning that those who are impoverished are far more susceptible to end up in the criminal justice system. Anyone who has a spent a day in a criminal courtroom across America knows this to be true. In my role as Prosecuting Attorney, I have prosecuted at an extreme disproportionate rate those that are Medicaid recipients. I see the disparity each and every time I walk into court. For a reference point, just looking at the reported data in our county from clients that are on probation that are in an alcohol and drug rehabilitation program, more than half make less than $10,000 per year.

In the simplest of terms, whether it is labeled as Medicaid fraud or drug dealing, it exists for the same reason that bank robberies occur. There is a pile of cash and those with ill intentions will let greed lead them to commit crimes. Common sense dictates that when we give someone making less than $10,000 per year, that is struggling to keep the lights on, and put food in the refrigerator, that we give a 90 count bottle of hydrocodone each and every month, and those pills are going for $15 a piece on the street, tax free, they are going to see the opportunity for financial gain. If we believe otherwise, we are naive.

Unlike other street drugs such as heroin or meth, a dealer in opioids doesn’t need to know someone that’s well connected in the drug culture to funnel their supply, a dealer in opioids simply need to know a doctor and claim to have an ailment. And if the opioid dealer is on Medicaid, they receive their supply of high powered narcotics for free or nearly free. Simply polling our jail and probation officers, I found that most of our inmates and probation clients with drug related charges are taking pursuant to a prescription, 2 to 4 high powered opioids each day. That’s 60 to 120 pills they are being prescribed each month. Conservatively, many of these pills are going for $30 a piece on the street. The incentive to opt out of Medicaid, to better ones lot in life, is drastically reduced for individuals that are making $3,600 a month tax free in selling their prescription pills that they getting at no cost.
To that extent, the abuse that we see among Medicaid beneficiaries as it relates to misuse and/or selling their prescriptions is rampant, and that is just based upon what we are seeing and filing. And those of us in law enforcement know that we are only catching and prosecuting a very small percentage of those committing these crimes. A reactive justice system, coupled with a shortage of resources, often leads to a small percentage of the bad actors being caught. A true number of those that are abusing the system would likely be staggering.

To be clear, I’m not here this morning saying that Medicaid isn’t a tremendous asset for our nation, but I am speaking from own personal experiences as a county prosecutor. A prosecutor in the trenches. I see firsthand what is devastating our communities. I see day in and day out individuals that are Medicaid recipients dealing and abusing the prescription pills that are government funded. It’s simply a fact. I see individuals getting arrested for selling their prescriptions, and yet they test clean for them when drug tested during the jail booking process. I see suboxone being dealt and trafficked. The same drug being used to treat opiate addiction is sold on the street is as prevalent or more prevalent than hardened street drugs.

I’m not an expert on addiction treatment, and I’m not going to testify to treatment options, but as a prosecutor, as a tax payer, I’m appalled that my taxes help fund a drug that is so heavily trafficked amongst my community, especially where the opportunities for abuse far outweigh the intended benefits.

So is the opioid epidemic an unintended consequence of Medicaid? Certainly, with the increased amount of the impoverished having access to medical care, there is a greater likelihood that those who are impoverished are going to see the opportunity for turning a profit, albeit illegal, on the street. One obvious solution would be to create more rigorous checks and balances of the medical bills being submitted through Medicaid for payment. Are the prescriptions necessary? Is the opiate prescriptions in line with the treatment plan? I’ve never understood why many of those people that I prosecute are getting prescription after prescription of high powered opiates when a simple over the counter drug would be just as effective.

The opioid epidemic has brought devastation to our schools and our communities. The opioid epidemic is far too complex to narrow its causation to one specific issue. And while the issues are complex and many, there is one reoccurring theme, and that is poverty. Until we take affirmative steps to create jobs, grow businesses, and slowly diminish the gap between the impoverished and the middle class, any changes that are made will be a band-aid fix to the underlying problem.

I want to sincerely thank you for the opportunity to be a part of the solution of this gripping epidemic. I look forward to answering any questions that you may have.
Opening/Introductory Statement
U.S. Senate Homeland Security and Government Affairs Committee

Mr. Chairman, ladies and gentlemen of the committee, thank you for the invitation to speak. I am Manny Tyndall. I am currently the Inspector General for the Office of Inspector in Tennessee.

In 2004, the Office of Inspector General was created specifically to root out fraud and abuse in the TennCare program and criminally prosecute applicants and recipients who game the system.

We receive and triage more than 4,000 complaints each year.

I think you will find that Tennessee is one of a few, if not the only state, that criminally prosecutes Medicaid applicants and recipients who engage in drug seeking behavior or prescription drug diversion at the cost of the TennCare program. Our research indicates that states bordering Tennessee address recipient fraud administratively.

I believe that suggests Medicaid fraud might be under reported nationwide.

What I would like to share with you today is some examples of how the TennCare program is defrauded and how prescription drugs paid for by TennCare are diverted for illegal use.

Approximately 80% of all arrests (2,400) were prescription drug diversion or doctor shopping related. The ages ranged between 21 – 78.

- 1,678 arrests were for Drug Diversion which includes sale and forgery
  - The courts have ordered approximately $315K in restitution to be repaid to the Bureau of TennCare for these offenses.

- 709 arrests were for Doctor Shopping
  - Since that date, the courts have ordered approximately $292K in restitution to be repaid to the Bureau of TennCare for these offenses.

Some of the schemes I have been witness to include:

1. Recipients receiving a valid prescription, having it filled and paid for by TennCare then selling a portion of the medication.

2. Recipients calling prescriptions in to pharmacies pretending to be an employee of a medical practice and having TennCare pay for the medication.

3. Recipients passing forged/alter prescriptions (written or forged by other parties) and having TennCare pay for the medication.
Opening/Introductory Statement  
U.S. Senate Homeland Security and Government Affairs Committee

4. Recipients adding medication to a prescription being hand carried between doctor’s office and pharmacy and having TennCare pay for the medication. (Amoxicillin add hydrocodone).

5. Patients and medical staff stealing prescription pads, forging prescriptions and having TennCare pay for medication.

6. Parents selling their children’s medication (e.g. Adderall) in conjunction with their own medication—oxycodeone in this case.

7. Doctor shopping: Doctor shopping is where a recipient fails to advise a provider that within the last 30 days they have already received the same or similar narcotic medication that is being prescribed. There are usually multiple counts of this offense.

8. Nurses/medical technicians selling prescription slips already signed by the doctor

NOTE: In any one of these events the medication could be paid for by TennCare and lead to an illegal drug sale.

We work very closely with our local Drug Task Forces who make the buys. Normally, 1, 2, or 3 pills are purchased during a drug transaction and usually 3 buys are made before we seek an indictment.

Depending on the type of medication and the mg, prescription medication can sell for $5.00 to $10.00 per pill or some medications $1.00 per mg.

With there being little or no cost/overhead to the Medicaid recipient, if they were to sell an entire prescription of 90 hydrocodone 5mg tablets for $5.00 per pill, they would make approximately $450.00. If they did this every month it would garner approximately $5,400 a year conservatively. That is for one person for one year. We make approximately 140 or more drug sale arrests each year. I am confident that many instances of TennCare fraud are not identified.

The following cases demonstrate the lengths some people will go to obtain pain medication:

1. A husband and wife would take turns intentionally burning themselves on their lower legs with boiling water and go to a different emergency room to obtain pain medication and have TennCare pay for the ER visit and medication.

2. We have charged four individuals for a 4th offense of doctor shopping

3. We have charged one individual with 25 counts of prescription drug fraud where she forged and/or altered prescriptions in order to obtain hydrocodone and oxycodeone and used her TennCare benefits to pay for the medication. She admitted to selling the pills to support her lifestyle.
4. I personally worked a case where I charged a young woman with 87 counts of obtaining a controlled substance by fraud, TCF, and identity theft—3 counts per event. She was the office manager at a doctor’s office and would steal several prescription slips from a prescription pad several days each week. She would forge the doctor’s signature and DEA number on prescriptions in her name, her husband’s name, many of her friends, and even her grandmother’s name. Some prescriptions would be paid for by TennCare and some she would give to her friends in exchange for 1/2 of the medication. She admitted she was using approximately 25 hydrocodone pills per day.

Mr. Chairman, ladies and gentlemen of the committee I again thank you for the opportunity to speak today and I am willing to try to answer any questions you might have about these cases or what we are doing in Tennessee to combat prescription drug diversion.
Testimony of Professor David A. Hyman, M.D., J.D.
Georgetown University Law Center
U.S. Senate Committee on Homeland Security and Governmental Affairs
Wednesday, January 17, 2018

Mr. Chairman and Members of the Committee:

Thank you for inviting me to testify before you today at this hearing on “Unintended Consequences: Medicaid and the Opioid Epidemic.” I am a professor at Georgetown University Law Center, and an adjunct scholar at the American Enterprise Institute and Cato Institute. I am here in my academic capacity; no one paid me to appear, or to prepare or submit these remarks.

Much of my testimony is drawn from a forthcoming book I co-authored with Professor Charles Silver of the University of Texas on the American health care system. The book, which is titled Overcharged: Why Americans Pay Too Much for Health Care (forthcoming, 2018), explains how the ways in which we have decided to pay for health care services has predictable consequences on the cost and quality of the resulting goods and services. To put it bluntly, we pay too much, and get too little (in terms of the quality and value). The book also explores how these same features make our public programs extremely vulnerable to fraud, waste, abuse, and overutilization. The book concludes that if we want to address these problems, we must change the incentives that our current health care system creates -- for both providers and patients.

None of this should come as a surprise. The HHS OIG and GAO have submitted scores of reports on these matters. Criminal prosecutions and civil enforcement actions have become routine, along with record-breaking payments from hospitals and pharmaceutical companies. The GAO has long labeled both Medicare and Medicaid as “high risk” programs.1

Today, we are here to focus on the opioid epidemic. I commend the Committee for considering these issues. The opioid epidemic has had a staggering cost -- whether framed in terms of lost and destroyed lives, broken families and marriages, medical expenses, or lost productivity. The sources of the epidemic are complex, as are the trade-offs with the various strategies for addressing it.

Today, my goal is to flag four important issues: (1) the seriousness of the opioid epidemic; (2) the complexity of the causes of the epidemic; (3) the ways in which the design of the Medicare and Medicaid system make them vulnerable to abuse and over-use of the sort that has fueled the opioid epidemic; and (4) the role that patients have played in health care fraud and overutilization.

Seriousness of the Opioid Epidemic

I suspect Committee members are well aware of the dismal statistics about the opioid epidemic, but it is useful to review some of the figures. The death toll from opioids has climbed dramatically in recent years.2 The CDC’s latest figures (as of January 7, 2018) indicate that there

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were 66,817 drug overdose deaths in the 12-month period ending June, 2017, with roughly three-quarters of that total attributable to opioids, and 40% attributable to prescription opioids.\footnote{National Center for Health Statistics, Centers for Disease Control and Prevention, Vital Statistics Rapid Release: Provisional Drug Overdose Death Counts, \url{https://www.cdc.gov/nchs/nvsiv/sr-drug-overdose-data.htm}}

Certain states have been particularly hard hit. According to the CDC, “in 2016, the five states with the highest rates of death due to drug overdose were West Virginia (52.0 per 100,000), Ohio (39.1 per 100,000), New Hampshire (39.0 per 100,000), Pennsylvania (37.9 per 100,000) and Kentucky (33.5 per 100,000).”\footnote{Id.} Comparing 2015 and 2016, there were “statistically significant increases in drug overdose death rates [in] Connecticut, Delaware, Florida, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin.”\footnote{David Blumenthal & Shancor Searvi, To Combat the Opioid Epidemic, We Must Be Honest About All Its Causes, Harvard Bus. Rev. Oct. 26, 2017, at \url{https://hbr.org/2017/10/to-combat-the-opioid-epidemic-we-must-be-honest-about-all-its-causes}.}

Finally, the consequences of the opioid epidemic go far beyond the death toll. In 2014, according to the National Survey on Drug Abuse and Health, an estimated 92 million Americans used prescription opioids; 11.5 million misused them; and almost 2 million had a use disorder.\footnote{Nora D. Volkow and A. Thomas McLellan, Opioid Abuse in Chronic Pain — Misconceptions and Mitigation Strategies, N Engl J Med 2016; 374:1253-1263, March 31, 2016, \url{http://www.nejm.org/doi/full/10.1056/NEJMp1507771#article}.} These figures reflect the substantial degree to which opioids are “widely diverted and improperly used.”

\textbf{Complexity of the Causes of the Opioid Epidemic}

If we are looking for the root causes of the opioid epidemic, there is plenty of blame to go around. Prescription opioids are a controlled substance, so one needs a prescription from a physician or licensed health care provider to obtain them. Over-prescribing is an unfortunate reality, with some physicians more overt about this than others. In our book, we describe the behavior of Dr. Alvin Yee, who found practicing in an office setting unduly constraining:

He’d see a dozen or more patients a night, at eateries like Carl’s Jr. and Denny’s and at coffee shops like Starbucks. He once met a patient at an auto dealership. Wherever he was, Dr. Yee would take out his stethoscope, listen to patients’ hearts and lungs, and evaluate their vital signs. Sometimes, he performed neurological exams.

Yee’s unusual practice style appealed to Millennials. One-third of his patients were in their 20s. Remarkably, many of these young people needed help with pain. Yee gave them prescriptions for OxyContin, Xanax, Roxicodone, and Vicodin. Some patients had trouble concentrating. He wrote them scripts for Adderall, an
amphetamine. Despite his low overhead, Yee wasn’t cheap. Initial visits cost $600; follow ups were $300. Convenience came at a price.

Yee stopped seeing patients after two of his patients died and the feds arrested him for prescription drug fraud. A few of the folks who visited him before he shuttered his practice were U.S. Drug Enforcement Administration agents. Yee gave them prescriptions for controlled substances too. He wrote prescriptions for one agent after being told that the medicine was for a friend who was unable to keep her appointment. Another undercover agent said he was a former heroin addict who’d been borrowing painkillers from others. Yee gave that agent a prescription too, telling him, “You won’t be having to bum off of your friends anymore.” Yee was so quick on the draw that he once reportedly pulled out his prescription pad while gambling at a Las Vegas casino.

There are plenty of unscrupulous providers like Dr. Yee out there. In 2011, the New York Times observed that “pill mills” were everywhere in Florida; “so many out-of-staters flocked to Florida to buy drugs at more than 1,000 pain clinics that the state earned the nickname ‘Oxy Express.’”

Thankfully, providers like Dr. Yee, are outliers, but more subtle forms of over-prescribing are still too common – whether it is prescribing an opioid the patient doesn’t really need, prescribing a dose that is too large; or prescribing a course of treatment that is too long. These outcomes may be the result of genuine disagreements about optimal treatment strategies, or uncertainty about the appropriate level of pain management, or the humane desire to ensure that one’s patients are not in pain.

But other factors may play a role as well. Some pharmaceutical companies appear to have engaged in overly aggressive marketing practices. Insurers are reportedly reluctant to cover more expensive pain medications that are less prone to abuse. Additional incentives to prescribe opioids may have resulted from the Joint Commission’s Pain Management Standards, and CMS’ inclusion of questions about pain in HCAHPS. Insurance (both public and private) makes obtaining opioids less expensive at the point of purchase – but also funds treatment for substance abuse.

To sum up, like many social problems, the opioid epidemic has multiple inter-locking causes. Attempts to “fix” the problem should start with an accurate diagnosis of its causes – followed by a targeted set of strategies that take account of the associated trade-offs.

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Design Features of Public Programs That Make Them More Vulnerable to Fraud, Waste, and Abuse

Medicare and Medicaid were both designed to mimic the structure of Blue Cross and Blue Shield health insurance plans circa 1965, when health insurance was structured on an indemnity basis. There were no networks, or pre-approvals, and utilization review was quite limited. If your doctor wanted you to have a treatment, it happened, and the insurer simply paid the bill. The large volume of services and the lack of coordination made it difficult to monitor quality of care.

Over time, the private coverage market has evolved – but public payers have remained largely passive bill-payers. The results are easy to observe. As we observe in our book:

The government has studied prescription drug fraud in public programs repeatedly, and each time it has concluded that fraud is rampant. A 2009 GAO report on the Medicaid programs in five large states (California, Illinois, New York, North Carolina, and Texas) opened with the observation that investigators “found tens of thousands of Medicaid beneficiaries and providers involved in potential[ly] fraudulent purchases of controlled substances, abusive purchases of controlled substances, or both.” Sixty-five thousand beneficiaries had engaged in “doctor shopping,” by acquiring prescriptions for the same type of controlled substances from six or more different medical practitioners during fiscal years 2006 and 2007. Four hundred of them got prescriptions for controlled substances from 21 to 112 medical practitioners and visited up to 46 different pharmacies to have them filled.

Some of the specific findings were macabre. An Ohio physician who specialized in pain management was convicted of filing $60 million worth of fraudulent Medicaid, Medicare, and insurance claims. The doctor got patients hooked on controlled substances “so that he could profit from their habit[s] and increase the income he received from their medical claims. Two patients who regularly saw him died under his care, one from a multiple-drug overdose in the physician’s office and one from an overdose of OxyContin taken on the same day that the prescription was written.” . . . No wonder the GAO concluded that the five states it examined “did not have a comprehensive fraud prevention framework” for dealing with controlled substances.

Various steps have been taken to address these problems, including improved surveillance, prior approval, limitations on the number of pills that can be dispensed, disclosure of information to physicians, and prescription drug monitoring databases. These reforms have the potential to help reduce inappropriate prescribing – but design details and implementation affect their impact. And, the fact they are necessary shows how design features of Medicare and Medicaid make them vulnerable to fraud, waste, and abuse.

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The Role of Patients

In many of the schemes we explore in our book, providers are the bad actors, and patients are the innocent victims. But, we also find evidence of patient complicity in some of these schemes. In the words of Peggy Sposato, a former emergency room nurse who joined the Department of Justice as an investigator, "To look at health care fraud and not [see] that the beneficiaries are somehow involved is to be blind to the problem."11 Doctor shopping to obtain prescriptions for opioids is one obvious example of the problem. I have already mentioned the 2009 GAO study of Medicaid patients, but the problem also affects Medicare. As we note in our book,

A 2011 GAO report found that doctor shopping was widespread, with more than 170,000 Medicare beneficiaries receiving prescriptions for controlled substances from five or more medical practitioners in 2008. Six hundred Medicare beneficiaries obtained prescriptions from 21 to 87 medical practitioners in a single year. These examples are part of a much larger phenomenon. In 2014, researchers at Harvard Medical School released the results of a study of more than 1.2 million medical records of Medicare patients who took opioids like hydrocodone, fentanyl, morphine, and oxycodone. Nearly 35 percent had prescriptions from more than one doctor. One-third of this group got their prescriptions from four or more doctors. In 2016, half a million Medicare beneficiaries (excluding those with cancer or in hospice) were prescribed “excessive” amounts of opioids (relative to standards set by the CDC), including 70,000 who received “extreme” amounts of narcotics (i.e., more than 240 mg of morphine every day for the entire year), and 22,000 who appeared to be “doctor shopping” (i.e., going to multiple physicians to obtain multiple prescriptions for opioids).

To sum up, some of the scams we explore in our book -- including some of those involving opioids -- would not be possible without the complicity of patients.

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Statement for the Record

Andrew Kolodny, MD
Co-Director, Opioid Policy Research Collaborative
Heller School for Social Policy and Management
Brandeis University

Before the U.S. Senate Committee on Homeland Security and Governmental Affairs
"Unintended Consequences: Medicaid and the Opioid Epidemic."
January 17, 2018

Chairman Johnson, Ranking Member McCaskill and Members of the Committee, thank you for inviting me to appear before you today to discuss the relationship between the Medicaid Program and the opioid addiction epidemic.

The opioid crisis is an epidemic of opioid addiction—meaning the reason the US is experiencing record high levels of opioid overdose is because of a sharp rise in the number of opioid-addicted Americans.

The primary driver of the opioid addiction epidemic has been made clear by the CDC. This CDC graph shows that as opioid prescribing began to soar, beginning in the 1990s, it led to parallel increases in opioid addiction and overdose deaths. This is an epidemic caused by the medical community overprescribing opioids. On this graph, the green line represents opioid prescribing, the red line represents opioid deaths, and the blue line represents opioid addiction. As the green line went up, as opioid prescriptions started to soar, it led to parallel increases in addiction and overdose deaths.

Source: CDC
The reason the green line began rising, the reason the medical community began prescribing so aggressively, is because we (doctors) were responding to a brilliant, multi-faceted marketing campaign that changed the culture of opioid prescribing. Starting in the 1990s, we began hearing that patients were suffering because we were too stingy with opioids. We began hearing that we should stop worrying about addiction. We began hearing that even with long-term use, the risk that a patient would get addicted was much less than 1%. We began hearing that opioids were safe and effective for chronic pain and that we could improve the quality of life in our patients if we prescribed more liberally. We began hearing that opioids are a gift from mother nature and should be used much more for just about any complaint of pain.

We would have been less gullible if we were only hearing these messages from drug company sales reps. But we were hearing these messages from pain specialists, eminent in the field of pain medicine; we were hearing it from professional societies; from the Joint Commission, which accredits our hospitals; and we were hearing from the Federation of State Medical Boards—all of whom had financial relationships with opioid manufacturers. I would like to thank Ranking Member McCaskill for her investigation of these relationships.

It is fair for you to ask about the role played by Medicaid. And it is fair to assume that access to medical providers offered by the Medicaid program could increase the risk that an individual would develop a disease frequently caused by doctors’ prescriptions.

I believe the access to prescribers that Medicaid, Medicare and commercial insurance offers does increase the likelihood that someone might develop a disease often caused by prescriptions.

But I do not believe that Medicaid should be singled out in this regard. Opioid overdoses have been increasing in people with all types of insurance and in people from all economic groups, from rich to poor. Overdoses have increased in people with Medicaid, Medicare and Commercial insurance. They have also increased in people without insurance. Where we have seen the fastest-growing share of hospitalizations for opioid overdose has been Medicare, not Medicaid. Medicare beneficiaries went from the smallest proportion of these hospitalizations in the 1990s to the largest share by the mid-2000s.
Hospitalizations in the United States for opioid and heroin poisoning by payer, 1993–2014

Source: Health Affairs

I also do not believe Medicaid expansion is making the epidemic worse. Nor do I believe that Medicaid expansion has caused a significant rise in exposure to prescription opioids because opioid prescribing has been trending down slightly since 2012.

The opioid crisis is getting worse more rapidly in states with more illicitly synthesized fentanyl. In many cases these are also states that expanded Medicaid, but I do not believe that Medicaid expansion caused the increase in fentanyl.

Chairman Johnson, your report makes the point that Medicaid is not a "silver bullet" for tackling opioid addiction. I agree with you. Medicaid is far from a silver bullet. With regard to improving access to effective addiction treatment, Medicaid is necessary but it is not sufficient. The addiction treatment services that health insurance, including Medicaid, can pay for must also be available.

The first-line treatment for opioid addiction is buprenorphine, also called Suboxone. Access to this treatment is not sufficient. For opioid-addicted individuals who are able to access buprenorphine, too often their health insurance only pays for the prescription. Patients with Medicaid, Medicare and commercial insurance must often pay out of their own pocket for the...
visit with the doctor. That is because there are not enough doctors prescribing buprenorphine and the few who do often do not accept insurance, including commercial and Medicare. And many state-licensed drug and alcohol treatment programs that do take insurance do not offer medication-assisted treatment.

Over the past decade there has been only a slight increase in use of medication-assisted treatment with in the state-licensed treatment system.

![Figure 34. Heroin admissions aged 12 and older with planned medication-assisted opioid therapy, by age group: 2005-2015](image)

Source: SAMHSA

If we want to see opioid overdose deaths start to decline there will need to be a massive federal investment. We need to build a treatment system that does not exist yet. I believe Medicaid is a necessary ingredient for making these programs viable. We must ensure that in every county in the US an opioid-addicted American can walk into an outpatient treatment center and receive effective care that same day, regardless of their ability to pay for it. Until that happens, I believe overdose deaths will remain at record high levels.
Hospitalizations in the United States for opioid and heroin poisoning by payer, 1993–2014

source Author’s analysis of data from the Healthcare Cost and Utilization Project (see Note 6 in text). note The numbers of hospitalizations are weighted to reflect nationally representative totals.
Figure 24. Heroin admissions aged 12 and older with planned medication-assisted opioid therapy, by age group: 2005-2015

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11/01/16.
MEDICAID SPENDING
FEDERAL MANDATORY OUTLAYS, PAST AND PROJECTED

Billions of dollars

$201b

$410b

$655b

'08 '11 '13 '15 '17 '19 '21 '23 '25 '27

Office of Management and Budget, Congressional Budget Office
OBAMACARE-MEDICAID VS. GCHJ
CUMULATIVE SPENDING 2017-2026

Current law: $5,668 billion
GCHJ: $5,442 billion

difference: ($226 billion)
(3.99%)
OPIOID-RELATED HOSPITAL STAYS
INPATIENT STAYS PER 100,000

Medicaid-paid

Private insurance-paid

Department of Health and Human Services. Note: Medicaid eligibility was expanded beginning Jan. 1, 2014.
RISE IN OVERDOSE DEATHS
INCREASE FROM 2013 TO 2015

Department of Health and Human Services. Note: Medicaid eligibility was expanded beginning Jan. 1, 2014.
The Honorable Eric D. Hargan  
Acting Secretary  
Department of Health & Human Services  
200 Independence Avenue, S.W.  
Washington, D.C. 20201

The Honorable Seema Verma  
Administrator  
Centers for Medicare & Medicaid Services  
200 Independence Ave S.W.  
Washington, D.C. 20201

Dear Acting Secretary Hargan and Administrator Verma:

As the opioid epidemic continues to affect communities across America, policy-makers and the public must understand the root causes of this public health crisis. While there is clearly no single cause to the epidemic, evidence has emerged that Medicaid is playing a perverse and unintended role in helping to fuel and fund the opioid epidemic. I write to provide the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) with the results of an examination into the perverse incentives created by Medicaid that contribute to the opioid crisis. I respectfully request information and material about what the Department is doing to prevent improper use of the Medicaid program to obtain opioids.

In February 2017, demographer Nicholas N. Eberstadt wrote in Commentary magazine about how Medicaid helps to finance “America’s immense and increasing appetite for opioids in our new century.”1 To examine this issue, my staff searched court files and open-source databases and interviewed experts and law enforcement officials, who are increasingly focused on Medicaid fraud involving opioids. The inquiry found:

- Medicaid is a well-intentioned program that has inadvertently contributed to the nation’s opioid epidemic because it incentivizes the abuse and sale of dangerous drugs.

- Growing evidence indicates that Obamacare’s Medicaid expansion may be fueling the epidemic even more. Drug overdose deaths per one million people are rising nearly twice as fast in expansion states as non-expansion states,2 while Medicaid-funded hospital stays related to opioids in the fourth quarter of 2014 jumped 37 percent as compared to the same period the prior year.3

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2 HHS produced an analysis to me showing internal data on drug overdose death rates in expansion versus non-expansion states between 2013 and 2015. It is unclear when HHS created the analysis.
In our nation’s courts, prosecutors have convicted or charged at least 1,072 people in recent years with abusing Medicaid to obtain or sell prescription opioids. The numbers of criminal defendants increased 18 percent in the four years after Medicaid expanded compared to the previous four years, while the number of criminal cases jumped 55 percent post-expansion.

The cases range from large-scale fraud schemes involving major drug rings to individual nurses and doctors stealing or over-prescribing pills, all at Medicaid’s expense.

Other federal programs, including Medicare, are also being exploited to obtain or sell opioids. In preliminary research, Committee staff found 243 instances of opioid-related Medicare fraud in recent years.

We do not represent that this is a scientific examination, and also acknowledge that the large numbers of defendants and court cases are not necessarily indicative of causation. Nor does this examination imply that Medicaid is the sole cause of the opioid epidemic; the problem has many causes and numerous possible solutions. The examination also does not imply that all opioid use is bad; clearly, opioids are an important pain management tool when used appropriately. But the data uncovered in this examination point to a larger systemic problem—because opioids are easily obtained and inexpensive through Medicaid, the structure of the program itself creates a series of incentives for beneficiaries to use opioids and sell them for potentially enormous profits. The data also likely represents a conservative estimate of Medicaid fraud involving opioids, because health care fraud is often not prosecuted and crime overall is significantly under-reported.

President Trump declared the opioid epidemic as a Nationwide Public Health Emergency in October 2017. Although there are many factors contributing to the epidemic, and while Medicaid undoubtedly assists in treating opioid abuse, this examination presents evidence that the Medicaid program is also playing a role in funding the opioid epidemic. This facet of the opioid epidemic should not be ignored. Therefore, I respectfully ask that HHS and CMS review this report and please provide the following information and material:

1. Please provide a detailed accounting of how much the Medicaid program has spent on prescription opioids over the past 10 years, including the amounts spent on prescriptions for beneficiaries and for treatment for opioid addiction and overdoses.

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2. Please provide a detailed accounting of how much the Medicare program has spent on prescription opioids over the past 10 years, including the amounts spent on prescriptions for beneficiaries and for treatment for opioid addiction and overdoses.

3. Please provide a full and complete explanation of the Department’s efforts to address Medicaid’s role in contributing to the opioid epidemic, including any new initiatives since the beginning of the Administration in January 2017 and since the President’s declaration that the opioid crisis is a Nationwide Public Health Emergency in October 2017.

4. Please provide a full and complete explanation of the Department’s work to improve the structure of the Medicaid program to limit the perverse incentives that lead to opioid abuse.

5. Please produce all data, documents, studies, or other analyses referring or relating to each of the following topics:
   a. Medicaid’s role in the opioid epidemic;
   b. Opioid prescription rates for Medicaid beneficiaries as compared to non-Medicaid beneficiaries, broken down by state;
   c. Opioid overdoses and overdose death rates for Medicaid beneficiaries as compared to non-Medicaid beneficiaries, broken down by state;
   d. The effectiveness of Medicaid spending on treatment for opioid abuse; and
   e. The potential for abuse of medications designed to treat opioid abuse—such as suboxone—and whether treatment drugs are themselves being abused to defraud Medicaid.

6. Please provide a full and complete explanation of the Department’s efforts to oversee state Medicaid programs and Medicaid fraud control units to prevent Medicaid fraud involving opioid abuse.

7. Please provide a full and complete explanation of the Department’s efforts to support federal, state, and local prosecutors in addressing Medicaid fraud involving opioid abuse.

8. In July 2017, I asked the Department of Health and Human Services Office of Inspector General to examine data suggesting a correlation between Medicaid and opioid overdoses. Please provide a full and complete explanation of the Department’s efforts to cooperate with the Inspector General’s ongoing review.

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The Honorable Eric D. Hargen
The Honorable Seema Verma
January 17, 2018

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Please provide this information as soon as possible but no later than 5:00 p.m. on January 31, 2017.

The Committee on Homeland Security and Governmental Affairs is authorized by Rule XXV of the Standing Rules of the Senate to investigate “the efficiency, economy, and effectiveness of all agencies and departments of the Government.” Additionally, S. Res. 62 (115th Congress) authorizes the Committee to examine “the efficiency and economy of all branches and functions of Government with particular references to the operations and management of Federal regulatory policies and programs.” When delivering the information, please produce to the Majority staff in room 340 of the Dirksen Senate Office Building and to the Minority staff in room 442 of the Hart Senate Office Building.

If you have any questions, please feel free to contact me directly or ask your staff to contact Jerry Markon at (202) 224-4751. Thank you for your attention to this matter.

Sincerely,

Ron Johnson
Chairman

cc: The Honorable Claire McCaskill
Ranking Member

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DRUGS FOR DOLLARS: HOW MEDICAID HELPS FUEL THE OPIOID EPIDEMIC

A Majority Staff Report of the Committee on Homeland Security and Governmental Affairs United States Senate Senator Ron Johnson, Chairman

January 17, 2018
EXECUTIVE SUMMARY

The dramatic increase in drug overdose deaths throughout America has appropriately been labeled a national health care crisis. In 2016, the nearly 64,000 drug overdose deaths outnumbered every other cause of accidental fatalities.¹ As a result, Americans have been paying much attention to what caused this epidemic and what can be done to end it. Less attention is paid to the possibility that federal programs—namely, Medicaid—have contributed to the epidemic.

There are many causes to the opioid epidemic, making it easy to point multiple fingers of blame. Most agree that development, marketing, and medical training regarding drug usage—and the resulting over-prescription of opioids—have played a key role. In addition, drug traffickers take full advantage of America’s unsecured borders to flood heroin and fentanyl into lucrative domestic markets. Solutions directed at these problems are similarly nuanced and multifaceted.

But what if one of the contributing causes is connected to federal spending itself?

During the 2017 debate on repealing and replacing the Affordable Care Act (ACA), spending on Medicaid and Medicaid expansion took center stage. Proponents of Medicaid expansion often cited its critical role in funding treatment for drug addiction. This argument proved so effective that it became a generally accepted truth, as evidenced by a recent New York Times article:

Public appreciation for the program [Medicaid] has steadily increased as people come to understand its importance in the health care system, including its central role in combating the opioid epidemic.²

Yet in a February 2017 Commentary magazine article, Nicholas N. Eberstadt cited a study by Alan Krueger, former chairman of the President’s Council of Economic Advisors, that paints an entirely different picture of the role Medicaid has played in the opioid epidemic.³ Eberstadt argues that Medicaid actually incentivizes—perversely—opioid abuse.

This majority staff report examines those perverse incentives. It does not deny the benefits that federal spending on healthcare provides to millions of Americans. Nor does it argue that federal spending is a primary cause of overdose deaths. The purpose of this report is to simply explore and present evidence that federal spending on healthcare—primarily Medicaid, though other federal programs have facilitated illicit use and distribution of opioids—is also being used as a funding source that helps to fuel the opioid epidemic.

Medicaid was envisioned by politicians from both parties as “a small program to cover poor people’s medical bills.” Yet, what began as “something of an afterthought” has mushroomed into a massive entitlement covering an estimated 70 million people, more than one-fifth of the U.S. population. In the words of USA Today, “[t]he United States has become a Medicaid nation.” As Medicaid has grown, evidence has emerged that it is playing a more perverse, if unintended role: fueling and ultimately funding the opioid epidemic that is ravaging communities across the country. Now, as Congress continues to wrestle with health care reform, new data suggest that the ACA Medicaid expansion may be making the opioid epidemic even worse.

While Medicaid undoubtedly helps many deserving recipients, it also creates a series of incentives for potential abuse of opioids, which are rooted in federal law itself. Patients on Medicaid typically “pay no part of costs for covered medical expenses,” other than perhaps a small co-payment. Federal law requires that Medicaid co-payments and other “cost-sharing” borne by Medicaid recipients at lower income levels be nominal, and the Obama Administration determined that states could charge those on Medicaid no more than $4 for some classes of drugs. For dangerous opioids such as oxycodone, Medicaid co-pays can run as low as $1 for as

(According to demographer Nicholas Eberstadt, the recent study indicated that “nearly half of all prime working-age male labor-force dropouts—an army now totaling roughly 7 million men—currently take pain medication on a daily basis.” Eberstadt continued: “But how did so many millions of un-working men, whose incomes are limited, manage to make it to afford a constant supply of pain medication”? OxyContin is not cheap. As the book Dreamland: The True Tale of America’s Opiate Epidemic carefully explains, one main mechanism today has been the welfare state: more specifically, Medicaid. . . .)

2 Id.
6 See Medicaid and Children’s Health Insurance Programs: Essential Health Benefits in Alternative Benefit Plans, Eligibility Notices, Fair Hearing and Appeal Processes, and Premiums and Cost Sharing; Exchanges: Eligibility and
many as 240 pills—pills that can be sold for up to $4,000 on the street. As one longtime local prosecutor in opioid-ravaged eastern Kentucky recounted in *Dreamland: The True Tale of America’s Opiate Epidemic:* “We can talk morality all day long, but if you’re drawing five hundred dollars a month and you have a Medicaid card that allows you to get a monthly supply of pills worth several thousand dollars, you’re going to sell your pills.”

Many people are falling victim to these temptations, a trend that is potentially destructive for Medicaid recipients, who can be especially susceptible to opioid addiction and abuse. In courts across the country—overwhelmingly in Medicaid expansion states—prosecutors are identifying Medicaid fraud involving opioids. This report highlights nearly 300 criminal cases involving at least 1,072 defendants in which people have been convicted or charged of abusing Medicaid to obtain or sell opioids. The criminal schemes range from simplistic—beneficiaries selling opioids obtained through Medicaid—to complex health care fraud involving Medicaid reimbursement. For example:

- Many perpetrators specifically targeted those on government assistance. In one Connecticut case, a ringleader recruited Medicaid beneficiaries to obtain nearly $200,000 of oxycodone from pharmacies through forged prescriptions. “He preyed on a lot of low-income people with Medicaid cards,” according to a police lieutenant who helped oversee the investigation. Pharmacists “were very trusting just because it was Medicaid,” said the lieutenant, who added: “Absolutely, Medicaid is what allowed him to make so much money.”

- In addition to prosecuting Medicaid beneficiaries who help divert pills, authorities are bringing cases against everyone from drug lords who flooded major cities with

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10 The Committee’s Majority staff interviewed a number of law enforcement officials, including a police detective from Wisconsin who is a U.S. Department of Justice task force officer focused on drug enforcement.


13 Telephone Interview by S. Conn. on Homeland Sec. & Governmental Aff. Maj. staff with Wallingford, Conn. Lieutenant (Nov. 16, 2017).
Medicaid-obtained opioids, to a Pennsylvania podiatrist who defrauded the program by giving pill-seekers painful toe injections.

- Defendants include nurses, pharmacists, and some of the community’s most trusted members, such as an Indiana doctor who delivered an estimated 4,000 babies.

- Some who are targeted threaten violence: a Louisiana doctor convicted of over-prescribing painkillers in a scheme to bilk Medicaid was caught on tape threatening to kill the federal agents investigating him. “They won’t even be able to have an open casket funeral,” court documents quote him as saying.

Because crime is typically under-reported and health care fraud is often not prosecuted, the court cases highlighted are likely only a small fraction of the true number of schemes to defraud Medicaid for opioids. Nonetheless, the cases show the broader Medicaid-opioid connection, a relationship that pre-dates the Medicaid expansion. “Much has been written about the opioid epidemic in America and its devastating effects on families and communities,” wrote the Medicaid and CHIP Payment and Access Commission (MACPAC), which provides data and policy recommendations to Congress. “In many ways, Medicaid is at its center.”

Medicaid is not the only federal program creating perverse incentives—and serving as a funding source—for obtaining and illicitly distributing opioids. Majority staff found hundreds of examples of opioid-related fraud in the Medicare program, and additional fraud schemes in connection with Veterans Affairs benefits and the food stamp program. The research suggests, however, that Medicaid is the federal program most prone to abuse, and the primary government funding source for the epidemic.

This report is not meant to suggest that Medicaid, or any other federal program, is the only factor contributing to the opioid epidemic. But if Medicaid is helping to drive the epidemic, it stands to reason that expanding the program—particularly to people most susceptible to abuse—could worsen the problem. The epidemic has indeed spiraled into a national crisis since the Obamacare Medicaid expansion took effect in 2014. Drug overdose deaths have risen rapidly, at a much faster pace than before expansion. An astonishing 97.5 million Americans age 12 and over now use prescription pain relievers.

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16 Arthur Hughes, et al., Prescription Drug Use and Misuse in the United States: Results from the 2015 National Survey on Drug Use and Health, Substance Abuse & Mental Health Servs. Admin., Nat’l Surv. on Drug

Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate
In Kentucky, for instance, “the expansion of Medicaid through the Affordable Care Act increased the percentage of Clay County residents with Medicaid and gave more of them access to free prescription drugs, including pain pills.”17 With about 60 percent of county residents now on Medicaid—up from 35 percent in just three years—use of oxycodone has risen while the waiting list for the local inpatient drug treatment facility has grown more than 50 percent.18 Although not indicative of causation, this and other recent evidence suggests, at a minimum, a correlation between Medicaid expansion and opioid abuse.

Perhaps Sam Adolphsen, a former Maine Department of Health and Human Services official, said it best. “As 15 million able-bodied adults were added to Medicaid through Obamacare, the drug problem only grew worse,” he wrote. “As legislators debate the specifics of repealing and replacing Obamacare, they should resist the feel-good talking point that Medicaid is a silver bullet for solving the opioid epidemic. In reality, Medicaid may be fueling the problem and may be largely responsible for starting the epidemic in the first place.”19 

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17 Phil Galewitz, Pharmacies Thrive Selling Opioids for Depressed Small Town Pain, KAISER HEALTH NEWS (Feb. 8, 2017), https://khn.org/news/pharmacies-thrive-selling-opioids-for-depressed-small-town-pain/ (Kaiser Health News is a non-partisan news service that covers health care and is considered highly credible).
18 Id.
FINDINGS

Under the direction of Senator Ron Johnson, Chairman of the Senate Committee on Homeland Security and Governmental Affairs, majority committee staff searched open-source databases for examples of individuals prosecuted for selling opioids obtained using Medicaid cards. In just four days, searches identified 261 people convicted nationwide of exploiting Medicaid cards to obtain opioids, which were often resold at enormous profit. In July 2017, Chairman Johnson reported these findings and other data suggesting a correlation between Medicaid and opioid overdoses to the Department of Health and Human Services Office of Inspector General. The inspector general is now examining the matter.

This majority staff report is the product of a more thorough review of court cases and other data conducted after Chairman Johnson’s letter to the inspector general. This inquiry found:

- Medicaid has contributed to the nation’s opioid epidemic by establishing a series of incentives that make it enormously profitable to abuse and sell dangerous drugs.

- Growing evidence indicates that the Medicaid expansion, by providing prescription opioids to a wider pool of people, may be worsening the epidemic.

- At least 1,072 people have been convicted or charged nationwide since 2010 for improperly using Medicaid to obtain prescription opioids, some of which were then resold on the nation’s streets. The number of criminal defendants increased 18 percent in the four years after Medicaid expanded, 2014-2017, compared to the four years prior to Medicaid expansion.

- The criminal activities range from beneficiaries simply selling opioids they obtained through the Medicaid program to more attenuated health care fraud involving Medicaid reimbursement.

- The cases reflect massive frauds and bizarre twists, from a $1 billion scheme to defraud Medicaid and Medicare involving numerous health care providers, to a New York doctor and oxycodone distributor who blamed her actions on an alternative personality named “Nala.”

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• Prosecutors are increasingly targeting suboxone—a drug that treats opioid addiction but itself can be addictive—meaning that the epidemic has reached the point where people are defrauding Medicaid using the very drugs designed to help the victims.

• The case numbers are a conservative estimate, because evidence shows crime is under-reported, health care fraud in particular is rarely detected, including by government agencies, most health care fraud investigations never lead to prosecutions, and Medicaid anti-fraud efforts have fallen short.

• More than 80 percent of the 298 separate Medicaid-opioids cases identified were filed in Medicaid expansion states, led by New York, Michigan, Louisiana, New Jersey, and Ohio. The number of criminal cases increased 55 percent in the first four years after Medicaid expansion, from 2014 to 2017, compared to the four-year period before expansion.

• Other preliminary data suggests a connection between Medicaid expansion and opioid abuse. Drug overdose deaths per one million people are rising nearly twice as fast in expansion states as non-expansion states, while opioid-related hospital stays paid for by Medicaid massively spiked after expansion.

26 See Letter from Sen. Ron Johnson to Daniel R. Levinson, supra note 20 (Chairman Johnson obtained internal data compiled by HHS showing drug overdose death rates in expansion versus non-expansion states between 2013 and 2015).
• Medicaid spending to treat victims is escalating, especially in expansion states. Spending on a single opioid overdose medication, for example, increased an astonishing 90,205 percent between 2011 and 2016, with costs rising “most notably after 2014.”

• Other federal programs are also being exploited to obtain or sell opioids. In preliminary research, majority staff found 243 instances in recent years of opioid-related Medicare fraud. In November 2017 alone, the Department of Veterans Affairs had 60 ongoing criminal investigations concerning diversion of opioids. Majority staff also found instances of opioid-related fraud in the food stamp program involving dangerous drugs such as oxycodone, vicodin, hydrocodone, and morphine.


29 Correspondence between U.S. Dep’t of Veterans Aff. Off. of Inspector Gen. and Maj. Staff, S. Comm. on Homeland Sec. & Governmental Aff. (Nov. 9, 2017).
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MEDICAID AND OPIOIDS: A BRIEF HISTORY

Opioids are a class of drugs that range from pain relievers available legally by prescription—such as oxycodone, hydrocodone and codeine—to illegal narcotics such as heroin. According to MAPC’s “The origins of widespread prescription opioid use can be traced back to the 1990s.” 30 That is when the medical profession began using pain as a so-called fifth vital sign, and drug manufacturers heightened their marketing campaigns. Deaths from prescription opioid overdoses quadrupled from 1999 to 2011, 31 as did opioid prescriptions, even though pain levels reported by Americans had not changed. 32 By 2013, drug overdoses were the nation’s leading cause of deaths from injury, prompting Eberstadt to write: “The opioid epidemic . . . that has been ravaging and shortening lives from coast to coast is a new plague for our new century.” 33

At the same time, Medicaid—barely even noticed when signed into law the same day as Medicare in 1965—had exploded from its modest beginnings into what The New York Times recently called “a behemoth.” 34 By 2013, as the federal government and some states ramped up to expand the program even more, “over one-fifth (21 percent) of all civilian men between 25 and 55 years of age were Medicaid beneficiaries. For prime-age people not in the labor force, the share was over half (53 percent).” 35 As Medicaid grew, it along with other government health care programs became “among the biggest suppliers of prescription painkillers.” 36 For Medicaid patients especially, doctors did not hesitate to pick up their pens: studies cited by the Centers for Disease Control and Prevention (CDC) “indicate that opioid prescribing rates among Medicaid enrollees are at least twofold higher than rates for persons with private insurance.” 37 According to another study by Express Scripts, a large prescription benefit plan, the top opioid pain medications dispensed for Medicaid members include several of the most potentially deadly: Hydrocodone-Acetaminophen, Oxycodone-Acetaminophen, and Oxycodone. The study, entitled “A Nation in Pain: Focus on Medicaid,” concluded that the opioid epidemic has harmed

30. MEDICAID & CHIP PAYMENT ACCESS COMM’N, supra note 14.
33. Eberstadt, supra note 3.
34. Zemike, Goodnough & Belluck, supra note 4.
35. Eberstadt, supra note 3.
Americans of all ages and socioeconomic backgrounds, but has especially affected Medicaid beneficiaries. 36

“Once a pharmacist was found, another problem presented itself: how to pay for the prescription. The price of each patient’s prescribed drugs was between eight and twelve hundred dollars . . . for junkies, and even for dealers with more discipline, coming up with that kind of money was hard. And so the Medicaid card entered our story.”
—Sam Quinones, Dreamland

When Medicaid recipients fill opioid prescriptions, many find that the dangerous drugs are available to them virtually free of charge. Under Medicaid, states may charge out-of-pocket costs, such as co-payments, for prescription drugs and other medical services, known as “cost-sharing.” 39 Federal law requires that such cost-sharing be limited to a nominal amount for Medicaid recipients at lower income levels. 40 In July 2013, the Centers for Medicare & Medicaid Services (CMS), which oversees Medicaid, issued a regulation defining nominal cost-sharing for “preferred drugs” as “no more than $4,” and cost-sharing of no more than $8 for non-preferred drugs. Even in limiting the out-of-pocket costs to Medicaid recipients, CMS voiced concern that any costs to beneficiaries could affect their access to care. 41 Today, four years into Medicaid expansion, while a majority of states charge Medicaid patients some degree of cost-sharing for prescription drugs, a significant number do not. According to a 2017 data compiled by the Kaiser Family Foundation, adults on Medicaid are entitled to free prescription drugs in 12 states. 42

With people on Medicaid getting more—and more dangerous—opioids so cheaply, tragic outcomes followed. Studies show that Medicaid patients misuse opiates at a significantly higher level than those with private insurance, and are at a much higher risk of dying. Express Scripts put the disparity in stark terms: Medicaid recipients are 10 times more likely to suffer from addiction and substance abuse than the general population. Nearly one quarter of people on

36 Ward, supra note 12.
41 Id. (“We agree that a patient’s ability to pay cost sharing imposed for a service can affect a patient’s access to care and that low-income patients are particularly sensitive to such costs.”).
Medicaid have filled an opioid prescription, the study noted, with beneficiaries often going "to great lengths, sometimes traveling across states, to find prescribers willing to write excessive opiate scripts." In 2016, the Obama Administration's CMS reported that beneficiaries are at three-to-six times greater risk of overdosing from prescription painkillers than non-Medicaid patients. "Research shows the opioid epidemic has a disproportionate impact on Medicaid beneficiaries," CMS concluded.43

Even as Medicaid provided incentives to misuse opioids, it also enabled people to profit. With beneficiaries holding “a ‘free’ plastic card loaded with unlimited government funds that often increases access to opioids,”44 everyone from doctors to nurses to pharmacists and violent drug lords took advantage. While many Medicaid patients hooked on opioids turned to the well-intended treatment the program offers, others found that the path to ease their pain lay right inside their wallets. In the article for Commentary, Eberstadt quoted Dreamland author Quinones as laying out the incentives for financial gain through the eyes of opioid-ravaged Portsmouth, Ohio:

[The Medicaid card] pays for medicine—whatever pills a doctor deems that the insured patient needs. . . . Medicaid health-insurance cards paid for that prescription every month. For a three-dollar Medicaid co-pay, therefore, addicts got pills priced at thousands of dollars, with the difference paid for by U.S. and state taxpayers. A user could turn around and sell those pills, obtained for that three-dollar co-pay, for as much as ten thousand dollars on the street.45

Few would dispute that Medicaid is run and supported by people with good intentions and that the program helps many of the nation’s least fortunate. This report is not meant to suggest that Medicaid is the only factor contributing to the opioid epidemic, nor that everyone on Medicaid responds to its opioid-related incentives in the same ways.

43 Ward, supra note 12.
44 CRS. FOR MEDICARE & MEDICAID SERVS., supra note 31.
45 Adolphsen, supra note 19.
46 Eberstadt, supra note 3.
Yet the evidence is overwhelming that those incentives remain embedded in the very structure of the Medicaid program itself. More than half a century after Medicaid began, despite the program’s benefits, what is now the nation’s largest health insurer has also helped cause one of the nation’s deadliest health crises. In the words of Eberstadt: “Medicaid inadvertently helped finance America’s immense and increasing appetite for opioids in our new century.”

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48 Eberstadt, supra note 3.
THE MEDICAID EXPANSION

In 2010, the Affordable Care Act expanded Medicaid eligibility to include adults under 65 with incomes up to 133 percent of the federal poverty level. The expansion took effect on January 1, 2014, in most states adopting it. Overall drug overdose deaths, largely from opioids, rose seven percent in 2014, compared to six percent the year before, according to CDC data. In 2015, the CDC reported, overdose deaths spiked 11.4 percent. Last year, in 2016, CDC data show a staggering rise of 21 percent—the largest one-year increase in U.S. history. The surge in deaths even fueled a two-year decline in U.S. life expectancy, a first since the early 1960s. Of the 63,632 total drug overdose deaths in 2016, more than 42,000 were from opioids, a 28 percent increase in opioid-related deaths in a single year. A surge in deaths from fentanyl and other synthetic opioids was the primary cause, but deaths from prescription painkillers such as oxycodone and hydrocodone also spiked 14 percent over 2015. “It’s even worse than it looks,” Keith Humphreys, an addiction specialist at Stanford University, told The Washington Post. With official figures likely under-counting the actual number of opioid deaths by 20 percent or more, Humphreys said, “the opioid epidemic alone is deadlier than the AIDS epidemic at its peak.”

Hardest hit have been Medicaid expansion states. Internal data from the Department of Health and Human Services (HHS) comparing expansion and non-expansion states show drug overdose deaths rose nearly twice as fast per one million people in expansion states between 2013 and 2015. In 2015, according to CDC figures, the five states with the highest rate of overdose deaths were all expansion states: West Virginia; New Hampshire; Kentucky; Ohio and Rhode Island. As the CDC points out: “Opioids—prescription and illicit—are the main driver of drug overdose deaths.”

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States that expanded Medicaid have also taken the brunt of a large spike in post-expansion hospital visits, funded by federal and state taxpayers. Opioid-related inpatient hospital stays paid for by Medicaid jumped 37 percent in the fourth quarter of 2014, compared to the fourth quarter of 2013, according to HHS data. That figure compares to a six percent increase in opioid-related hospital stays funded by private insurance during the same period. In the fourth quarter of 2015, opioid-related hospital stays paid for by Medicaid jumped another 16 percent over the same period from the year before. HHS also ranked by state the rate per 100,000 people of opioid-related inpatient hospital stays in 2014, the last year for which data is available. Each of the top ten jurisdictions—Maryland; Massachusetts; Washington, D.C.; Rhode Island; New York; West Virginia; Connecticut; Washington; Oregon and Illinois—expanded Medicaid. All of them far exceeded the national rate of hospital stays caused by opioids of 224.6 per 100,000 people.

\[^{35}\] Healthcare Cost & Utilization Project, supra note 27.
In response to the deluge of victims, Medicaid spending is escalating, especially in expansion states. In Kentucky, for example, Medicaid payments for substance abuse treatment for people newly enrolled under Obamcare soared 700 percent between the first quarter of 2014 and the second quarter of 2016.\textsuperscript{55} Nationwide, spending on Medicaid-covered prescriptions to treat opioid addiction and overdoses has increased dramatically in recent years, “most notably after 2014,” another recent study found.\textsuperscript{56} Medicaid spending on naloxone, a federally approved medication to treat opioid overdoses, skyrocketed 90,205 percent between 2011 and 2016. The increase is especially pronounced in Medicaid expansion states, where Medicaid payments for “specially treatment” for substance use disorder “largely related to opioids” have increased 75 percent “in expanding states relative to non-expanding states, post expansion.”\textsuperscript{57}

\textsuperscript{55} \textit{Medicaid} & \textit{CHIP Payment Access Comm’n}, supra note 14.
\textsuperscript{56} Lisa Clemans-Cope, \textit{et al.}, supra note 28.
MEDICAID, OPIOIDS, AND THE LEGAL SYSTEM

The human tragedy of the opioid epidemic is playing out in courtrooms across the nation, as prosecutors have increasingly focused on health care fraud. The crackdown reflects the conclusions of the U.S. Government Accountability Office, which in 2015 found potential prescription drug fraud and abuse among thousands of Medicaid beneficiaries and hundreds of prescribers in four states.58

To better document the role of Medicaid in the opioid crisis, majority staff compiled information from court cases involving improper use of Medicaid to obtain or sell opioids. Searches of open-source databases from 2010 to 2017—four years before Medicaid expansion and four years after—resulted in several hundred cases.59 During that period, the searches show, at least 1,072 people were convicted or charged nationwide with exploiting Medicaid to obtain or sell prescription opioids. The cases—nearly 300 in all—were filed in federal, state, and local courthouses, with specific charges ranging from Medicaid fraud to drug trafficking. Eighty-five percent of the cases were in Medicaid expansion states. Prosecutors brought 117 criminal cases in the four years before the expansion took effect in 2014. In the four years since expansion, at least 181 cases have been filed—a 55 percent increase. The number of criminal defendants increased 18 percent in the four years after Medicaid expanded, compared to the four years prior to Medicaid expansion.

Even this much activity in our courts is just the tip of the proverbial iceberg and likely represents only a fraction of the actual amount of Medicaid fraud involving opioids. Government reports and studies show that all crime is generally under-reported, while healthcare fraud in particular "is rarely detected."60 Even when law enforcement finds enough evidence to investigate, only a small number of cases result in prosecution.61 Efforts to fight Medicaid fraud have been hampered by limited law enforcement budgets and the complexity of some cases. Last year, the head of the Department of Justice Criminal Division suggested that the government is

59 The searches were conducted in Lexis Advance and PACER, the federal court database, and yielded press releases from law enforcement agencies, news articles, and court documents. Search terms included the words Medicaid; charge; and specific prescription opioids or commonly used brand names, such as oxycodone, OxyContin, hydrocodone, Percocet, codeine and suboxone. In some instances, committee staff followed up with phone calls to prosecutors' offices to solidify case details. Cases were counted if they met the criteria—Medicaid fraud involving opioids. The searches were thorough; however, they were not scientific or comprehensive, and are intended to represent only a sampling.
60 Jestlow & Burton, supra note 23.
still unaware of the extent of Medicaid fraud, 53 years after the program was signed into law. “One can only imagine that significant fraud exists in other government health care programs, such as Medicaid . . . it’s troubling as a prosecutor and as a taxpayer,” then-Assistant Attorney General Leslie R. Caldwell, told a health care trade group.62

Despite the limitations, the searches reveal a compelling universe of cases that show the depth and depravity of the Medicaid-opioids connection. The tales of prosecutors, agents and judges fighting to safeguard the nation’s streets illustrate that the opioid epidemic is indeed raging across America—and that Medicaid is assisting it in a variety of ways. There appears to be no limit to the types of schemes used to scam the Medicaid program, from large drug rings that employ beneficiaries as “runners” to fill oxycodone prescriptions, to nurses working the night shift who steal hydrocodone pills from patients. Illicit painkillers obtained with Medicaid cards are being resold at handsome profits nationwide, in places ranging from the streets of Milwaukee to a Native American reservation in upstate New York.

These criminal enterprises are creating a new class of drug dealers, who profit from pills that are otherwise legal and at the federal government’s expense. The taxpayer-funded wealth can be staggering: one New York physician and accused trafficker lives in a mansion known as “The House that Oxycodone Built.” Another owner of dozens of skilled nursing facilities, charged with orchestrating a $1 billion scheme to defraud Medicaid (and Medicare), drove a $1.6 million Ferrari. Some cases test the limits of the bizarre. In Georgia, a woman allegedly impersonated her twin sister to get Medicaid-funded oxycodone.

Even legitimate methods to treat opioid addiction are falling victim to the temptation to send Medicaid the bill. An increasing number of recent prosecutions have targeted the illicit use of suboxone, which is used to help addicts but can also get them re-hooked. In one Kentucky case, the owner of a suboxone clinic is accused of improperly prescribing medication and defrauding Medicaid, prompting the state’s attorney general to decry how “wrongful prescribing of suboxone is flooding our communities with yet another drug that is killing our children.” All of these varied criminal cases highlight the human toll of an epidemic that has captured the nation’s attention, such as the recent guilty plea of an Ohio doctor and his wife for running a pill mill that distributed Medicaid-funded oxycodone. Seven patients died from the illicit prescriptions. New York attorney general Eric T. Schneiderman captured the urgency of both the opioid crisis and its connection to Medicaid as he in 2016 announced the indictment of a suboxone clinic owner accused of defrauding Medicaid. “The opioid epidemic should not serve

as an excuse for unscrupulous individuals to illegally line their own pockets,” he said. “Medicaid is intended to protect some of our most vulnerable citizens.”

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CASE STUDIES

Case Study 1: Drug Dealer “Would Solicit People with Medicaid Cards” to Fill Prescriptions for Opioids

Key Facts

- Ramphis Pacheco ran a drug ring near New Haven, Connecticut that distributed more than 6,000 oxycodone pills, valued on the street at $185,400.\(^{64}\)
- Pacheco deliberately targeted Medicaid recipients to act as “runners” and fill the illicit prescriptions using their Medicaid cards in exchange for cash.\(^{65}\)
- Police said Pacheco “preyed on” these Medicaid beneficiaries and that numerous pharmacies did not question the phony prescriptions “because of the mere fact that [the beneficiaries had] Medicaid.”\(^{66}\)

Background

According to narcotics detectives in Wallingford, Connecticut, Ramphis Pacheco “was the brains behind the [drug] ring” that operated from May through October 2014.\(^{67}\) Pacheco took advantage of the unique status of prescription opioids, which can be obtained legally and then resold on the street. Using this business model that targeted Medicaid beneficiaries to purchase opioids for resale, Pacheco experienced high profits—until a call from a suspicious Rite Aid employee eventually tipped off the police.\(^{68}\) After a six-month investigation,\(^{69}\) the probe culminated in Pacheco’s arrest in 2015, as well as charges against 11 other defendants who served as his accomplices.\(^{70}\)

The Scheme

According to one detective involved in the case, Pacheco recruited and “preyed on” Medicaid beneficiaries, people who were “down on their luck” and had incentives to earn extra money by using their Medicaid cards to obtain opioids.\(^{71}\) Law enforcement officials described

\(^{64}\) Lauren Sievert, Police Identify 11 Charged In Prescription Drug Probe, REC-J., Feb. 19, 2015, at A03.
\(^{65}\) Telephone Interview with Wallingford, Conn. Detective, supra note 13.
\(^{66}\) Id.
\(^{68}\) Telephone Interview with Wallingford, Conn. Detective, supra note 13.
\(^{70}\) Sievert, supra note 64; see also CBS CONN., supra note 67.
\(^{71}\) Telephone Interview with Wallingford, Conn. Detective, supra note 13.
how “Pacheco would recruit people in need of money,”77 and would “solicit[] people” with Medicaid cards.78 Pacheco paid these individuals small accounts of money to obtain opioid prescriptions from multiple doctors and give him the pills, which Pacheco would then resell on the street.79

Not only did some Medicaid beneficiaries have a strong incentive to work with Pacheco, but they turned out to be ideal accomplices: They could fill prescriptions for oxycodone without drawing attention from pharmacies. When beneficiaries entered pharmacies “with their Medicaid cards and [driver’s] licenses,” they could get opioids because they “were really who they said they were,”79 one detective said. According to law enforcement, the trust that pharmacists placed in these beneficiaries “was based on the program itself . . . . Medicaid is what allowed [Pacheco] to make so much money, with so little risk . . . .”79

By targeting indigent people on Medicaid, Pacheco was able to “maximize [his] profits.”77 He gave co-conspirators about $50 to fill OxyContin and Percocet prescriptions at pharmacies.78 The payments constituted a “minimal amount of money” in return for the rewards: 30 mg pills of OxyContin, often as many as 120 per prescription.77 Pacheco’s decision to target those on Medicaid who had low-cost access to high-value drugs meant he realized higher profits than if he had obtained the pills by other means. Pacheco knew it. He targeted “people with Medicaid so the pills would not cost any money,”80 which made “[Pacheco’s] profit margin . . . huge.”81 Law enforcement confirmed that Pacheco could make more than $3,000 selling the contents of just one bottle of oxy.82

The Aftermath

Pacheco ultimately pleaded guilty in 2015 to multiple drug-related charges.83 He has been serving out his sentence at the Robinson Correctional Institute in Enfield, Connecticut, and

77 Stewart, supra note 69.
78 Telephone Interview with Wallingford, Conn. Detective, supra note 13.
79 Stewart, supra note 69.
80 Telephone Interview with Wallingford, Conn. Detective, supra note 13.
81 Id.
82 Id.
according to Connecticut’s Department of Corrections, he is scheduled to be released in January 2018.\footnote{https://www.nbcconnecticut.com/news/local/Prescription-Drug-Ring-Leader-Prevod-on-P国家标准BIed-Pills-Cops-2021100201.html\#amp-rv (last updated Feb. 17, 2015).

\footnote{See Connecticut Department of Corrections Inmate Information Query for Ramphisa Pacheco, CONN. DEPT OF CORRECTION, http://www.cicintocinfo.state.ct.us/ (last visited Jun. 5, 2018) (enter information for Ramphisa Pacheco into search query).}
Cast Study 2: Bronx Drug Market

Key Facts

- A Bronx grocery store was the site of a massive prescription drug ring trafficking oxycodone, HIV medication, and other drugs. 85
- The operation targeted Medicaid recipients and enabled them to supplement their income and profit from prescriptions, with a ringleader standing at a street corner and directing neighborhood residents on Medicaid inside the store.
- The accused perpetrators are also charged with orchestrating the near-fatal shooting of a rival prescription drug trafficker, illustrating the violence that can result from the nexus between Medicaid and opioids.

Background

Carlos Paniagua; Osvaldo Paniagua, Jr.; Rafael Paniagua; Osvaldo Paniagua; Joan Torres; Victor Luna; and Ramon Pichardo were accused of running a prescription drug ring out of the Joaquin Grocery & Deli Store (the Joaquin Grocery) in the Bronx, New York. 86 The operation extended from at least 2008 to June 2014. 87 A neighborhood resident described the Joaquin Grocery as a “typical bodega, with a few men and women hanging out, socializing.” 88 Neighbors began to suspect illicit activities were being conducted at the store, the resident was quoted as saying, when “all the merchant disappeared.” 89

86 Id.
90 Id.
The Scheme

The drug transactions at the Joaquin Grocery typically “took place in a small room behind a door at the back of the store, where Medicaid beneficiaries provided their bottles to the defendants for cash.”\(^{53}\) Having amassed large quantities of Medicaid-funded OxyContin pills, the defendants then re-sold them on the street.\(^{92}\)

As prosecutors explained, the scheme showcased the financial incentives that can lead to Medicaid being exploited to obtain or sell opioids. The ringleaders would “profit by exploiting the difference between the cost to the patient of obtaining bottles of prescription drugs through Medicaid—which typically is zero—and the hundreds of dollars per bottle that pharmacies or individuals pay to purchase those drugs.”\(^{93}\)

A conversation between an FBI confidential source and a participant in the scheme demonstrated its profitability. The confidential source, seeking to bring in 190 Percocets to the grocery, asked the participant how much a single Percocet pill would cost. “Four dollars. Four, four and a half,” the participant responded.\(^{94}\) In other words, at $4 a pill, a bottle with 190 Percocets would generate a street value of $760. The scale of the operation was enormous: the cars allegedly used in the scheme contained 1,000 bottles of prescription medication and hundreds of loose pills.\(^{55}\)

To attract business, according to informants, Carlos Paniagua would stand at a restaurant on the corner of 150th Street and Morris Avenue directing Medicaid beneficiaries to the Joaquin Grocery.\(^{56}\) In October, 2010, the scheme turned violent. When a rival prescription drug trafficker attempted to steal the grocery’s illegal prescription drug supply, participants in the Joaquin drug ring alleged shot their rival, almost killing him.\(^{57}\)

Aftermath

A number of the accused perpetrators have pleaded guilty, while charges are pending for others. Preet Bharara, then-U.S. attorney in Manhattan, stated that “instead of earning an honest living at their grocery store, the defendants turned it into a drug market that took advantage of

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\(^{54}\) Id.
\(^{55}\) Compl. at 21, United States v. Paniagua, supra note 88.
\(^{56}\) Id.
\(^{57}\) Shanahan & Hirsch, supra note 89.
\(^{58}\) Compl. at 2, United States v. Paniagua, supra note 88.
\(^{59}\) See STX. NEWS SERV., supra note 85.
impoveryed Medicaid beneficiaries, spawned violence in its neighborhood, and endangered public health and safety.\textsuperscript{98}

According to George Venizelos, the FBI's former assistant director in charge, the defendants "defrauded Medicaid and the U.S. taxpayers while threatening the health of patients whose prescriptions were filled with diverted, mishandled and repackaged medications.\textsuperscript{99}

After the arrests, the Joaquin market closed for business, prompting a longtime resident to say the neighborhood breathed a "sigh of relief," adding "you have no idea how glad we are."\textsuperscript{100} Nevertheless, the damage had been done, with Medicaid beneficiaries and defendants profiting from diversion of taxpayer-funded pills to the streets.

\textsuperscript{99} Id.
\textsuperscript{100} Shanahan & Hirsch, supra note 89.
Case Study 3: Pharmacist Defrauds Medicaid, Filling Opioid Prescriptions from “Dr. T” and “Dr. Z”

Key Facts

- David Russo, a Maryland pharmacist, admitted in federal court that he improperly billed Medicaid for hundreds of thousands of illicit prescriptions for opioids, defrauding the program out of at least $90,000.\textsuperscript{101}
- Russo knew that two physicians—identified only as “Dr. T” and “Dr. Z”—wrote prescriptions for excessive amounts of oxycodone and methadone, yet he continued to fraudulently bill Medicaid for these prescriptions.\textsuperscript{102}
- In a relatively short time, Russo became one of “the largest dispensers of [oxycodone and methadone] in the entire State of Maryland” before law enforcement caught on to his scheme.\textsuperscript{103}

Background

“Licensed pharmacists know that it is improper to . . . fill a prescription that is issued outside the usual course of medical treatment.”\textsuperscript{104} Yet that is exactly what David Russo admitted to doing, at taxpayer expense.\textsuperscript{105} Russo, a licensed pharmacist, owned and operated Western Maryland Pharmaceutical Service, Inc.\textsuperscript{106} doing business as “Russo’s Rx,” in Hagerstown, Maryland.\textsuperscript{107} In May 2013, federal prosecutors filed charges against Russo after he unlawfully “submitted claims for controlled substances” for approximately two years.\textsuperscript{108} Russo ultimately defrauded Medicaid and Medicare, receiving payments from the government totaling in the tens of thousands of dollars.\textsuperscript{109}

\textsuperscript{103}Id. at 3.
\textsuperscript{104}Id. at 1.
\textsuperscript{105}Id.
\textsuperscript{108}See Compl. at 3, United States v. Russo, supra note 106 (detailing Russo’s running this scheme from “sometime in or about January 2009 until in or about December 2010, in the State and District of Maryland, and elsewhere”).
\textsuperscript{109}See Plea Agreement Attachment A at 3, United States v. Russo, supra note 102.
The Scheme

Russo established a reputation with customers for his willingness to fill prescriptions for oxycodone and methadone that “he knew were issued outside of the legitimate medical course.”\(^{110}\) According to the Justice Department, “[t]he sheer number of prescriptions for oxycodone and methadone indicated that the prescriptions were not valid.”\(^{111}\) For example, “[t]from January 1, 2009 through December 31, 2010, Russo’s Rx dispensed over 700,000 dosage units of oxycodone and 117,000 dosage units for methadone for . . . invalid prescriptions” written by doctors.\(^{112}\) This volume of prescriptions made Russo “one of the largest dispensers of [oxycodone and methadone] in the entire State of Maryland.”\(^{113}\)

Most of the illicit prescriptions were written by “Dr. T” and “Dr. Z,” whose offices were not close to Russo’s pharmacy.\(^{114}\) In fact, when Drug Enforcement Administration (DEA) agents interviewed other pharmacies located near Russo’s Rx, each of them “advised the DEA about the[r] concerns about the legitimacy . . . of Dr. T and Dr. Z’s prescriptions.”\(^{115}\) Believing that the patients were “pharmacy-shopping,” these pharmacies refused to fill the prescriptions.\(^{116}\) Russo took a different approach. Customers “knew that Russo’s Rx was the ‘one and only pharmacy that would fill’” prescriptions from Dr. T and Dr. Z.\(^{117}\)

Russo had other reasons to know that he was filling suspect prescriptions. Some customers came to him from out of state.\(^{118}\) Others called “ahead of time to ask [Russo] if he had [Ox]ycodin ‘in stock’ and how much it would cost.”\(^{119}\) Some clients came together in vans.\(^{120}\) Still, Russo continued providing pills.

Not only did Russo develop a reputation for filling prescriptions that Medicaid would reimburse, he also accepted cash from certain patients.\(^{121}\) Russo even had a cash counting machine at his pharmacy, which helped him count at least 55 cash deposits totaling $862,000 between December 2009 and June 2010.\(^{122}\)

\(^{111}\) Id.
\(^{112}\) Id.; see also Plea Agreement Attachment A at 3, United States v. Russo, supra note 102.
\(^{113}\) Plea Agreement Attachment A at 3, United States v. Russo, supra note 102.
\(^{114}\) Id. at 2.
\(^{115}\) Id.
\(^{116}\) See Id.
\(^{117}\) Id.
\(^{118}\) Id.
\(^{119}\) Id.
\(^{120}\) Id.
\(^{121}\) Id.
\(^{122}\) Id.
Ultimately, Russo’s scheme not only defrauded taxpayers, but also enabled the black market for opioids. The DEA interviewed some of Russo’s customers, who “admitted buying the drugs for resale—sometimes in the parking lot of the pharmacy.”

Aftermath

In June 2013—two months after the Department of Justice filed charges—Russo pleaded guilty to health care fraud for defrauding Medicaid and Medicare. A federal judge sentenced him to 30 months in prison and ordered him to pay restitution of more than $200,000. Russo also forfeited $39,000 in cash agents seized from his pharmacy. As part of his plea agreement, Russo surrendered his pharmacy license.

As Russo was sentenced, Gary Tuggle, then-Assistant Special Agent in Charge of Baltimore’s DEA District Office, said the case exemplified how “[p]rofessionals, such as doctors and in this case a pharmacist, who knowingly abuse their power and the public trust are drug dealers, no different than the street dealers that sell illicit drugs.”

121 Id.
123 See Compl. at 1, United States v. Russo, supra note 106.
125 Id.
126 Id.
127 Id.
Case Study 4: A $1 Billion Fraud

Key Facts

- On July 22, 2016, the Department of Justice charged Philip Esformes, Odette Barcha, and Arnaldo Carmouze with conspiracy, money laundering, and health care fraud in connection with a $1 billion scheme involving numerous Miami-based health care providers. Esformes and Barcha were also charged with obstruction of justice. The case is the Justice Department’s largest single criminal health care fraud prosecution ever brought against individuals. Part of the scheme included giving pill-seekers opioids to entice them to participate.
- The conspirators are charged with fraudulently billing Medicaid and Medicare for about 14,000 patients.
- In court documents, prosecutors accuse Esformes of participating in kickbacks with corrupt medical professionals that included “high-end escorts” being flown to Orlando and “chauffeured in limousines for liaisons with Esformes at the Ritz-Carlton Hotel.”
- The scheme allegedly fueled an extravagant lifestyle for Esformes, who drove a $1.6 million Ferrari.

Background

Philip Esformes operated the Esformes Network, a group of more than 30 skilled nursing homes and assisted living facilities that served thousands of Medicaid and Medicare patients. A man who “seemed to live in perpetual motion,” he and his father and business partner “took in millions of dollars annually from federal programs for the sick and disabled.” Esformes was also known as a prominent philanthropist; he and his family gave “millions of dollars to synagogues, schools and medical facilities in the United States and Israel.”

111 Id.
115 Id.
116 Id.
The Scheme

Esformes, Barcha and Carmouze are accused of admitting people to the Esformes Network who did not qualify for skilled nursing home care or for placement in an assisted living facility. Specifically, patients who were drug addicts, prosecutors said, were prescribed opioids such as OxyContin to entice them to stay in the facilities. Once admitted, the patients would receive medically unnecessary services that were billed to Medicaid and Medicare. The Esformes facilities earned more than $200 million in government reimbursements for fraudulent services. Esformes, Barcha and Carmouze are also accused of receiving kickbacks by steering these beneficiaries to other health care providers, who would also perform medically unnecessary treatments—also billed to Medicaid and Medicare.

The fraudulent scheme reportedly fueled Esformes’ lavish lifestyle, which included $2.4 million of leased luxury vehicles, $2.1 million of leased private jets, $8.9 million spent to pay credit card bills, and $960,000 spent to purchase watches. As of August 2014, Esformes reported personal savings and assets worth $78 million.

According to prosecutors, Esformes took active measures to cover up his activities. In 2006, he had paid $15.4 million to resolve civil federal health care fraud claims for conduct that was “essentially identical” to the later criminal scheme. Following the payment, Esformes and his co-conspirators employed sophisticated money laundering techniques to hide their identities from investigators.

Esformes’s efforts to cover his tracks also reportedly reached to the state government of Florida. In February 2017, the Justice Department charged Esformes with bribing a former state employee at the Florida Agency for Health Care Administration. Esformes’s business associates, the charges alleged, paid the former employee $200 for information about each patient complaint and $3,000 for each unannounced inspection schedule.

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137 O’Keefe, supra note 132.
139 Id.
140 Id.
141 Id.
142 U.S. Dep’t of Just, Press Release, supra note 130.
143 Weaver, supra note 133.
Aftermath

The case is still pending, and all three defendants have pleaded not guilty. 143 A lawyer for Esformes says he “adamantly denies any wrongdoing” and “stands by his lifelong record of hard work and success, of providing quality service to people in his nursing homes, and of helping persons in need.” 144 But the allegations illustrate not only potential misuse of taxpayer-funded benefits, but also how desperate addicts can inadvertently participate in and facilitate the opioid-related fraud of health care providers.

144 Jackson & Marx, supra note 134.
Case Study 5: Small-town doctor defrauds Medicaid, endangers patients with opioids

Key Facts

- In 2013, state prosecutors charged a small-town Indiana OB/GYN—who had delivered an estimated 4,000 babies in his career—with Medicaid fraud, theft, dealing in controlled substances, and corrupt business influence.143
- The probe began after two pharmacies told authorities that Dr. Paul Kelty was “prescribing the powerful and highly addictive painkiller hydrocodone to patients who appeared to be drug abusers.”144
- Court documents stated that Kelty “repeatedly overbilled Medicaid for office visits” with female patients;145 and prosecutors say the scheme specifically targeted Medicaid beneficiaries and the Medicaid program.148

Background

Kelty, an obstetrician and gynecologist, was a fixture in the small Indiana town of Corydon, where he had delivered babies for decades.149 His office was “just down the road from the Harrison County Justice Center.”150 In 2015, Kelty pled guilty to charges of Medicaid fraud and corrupt business practices.151 The court sentenced him to four years of home incarceration and required him to pay more than $22,000 in restitution.152 Kelty also lost his license to practice medicine.153

The Scheme

The investigation began in February 2013, when investigators with the Indiana state police, the state attorney general’s office, and the Harrison County prosecutor’s office raided

143 See Grace Schneider, Doctor Freed as Bond is Reduced, COURIER-J (Louisville, Ky.), June 1, 2013, at B1.
144 Id.
145 Id.
146 Telephone interview by S. Comm. on Homeland Sec. & Governmental Aff. Staff with Otto Schalk, Harrison County’s Prosecuting Atty’ (Nov. 29, 2017).
147 Schneider, supra note 145.
150 As detailed below, Dr. Kelty also forfeited $700,000 in a related civil case. See id.
151 Id.
Kelty’s office in Corydon. The affidavit for the search warrant noted that at least six of Kelty’s patients had fatally overdosed since 2008.

The following month, the Indiana Attorney General petitioned the state licensing board to suspend Kelty for “practicing pain management by issuing monthly controlled substance prescriptions to patients, in spite of the fact his specialty is OB/GYN” and other alleged violations, “all presenting an alleged clear and present risk to the public.”

The Indiana Attorney General’s investigation found that between 2009 and 2012, Kelty treated 1,283 patients and wrote 31,490 prescriptions totaling 1.08 million pills. In a 78-page affidavit filed with Kelty’s arrest in May 2013, Harrison County Prosecutor Otto Schalk stated that “Dr. Kelty was requiring his patients to submit to unnecessary office visits and procedures, which ultimately would be turned in as unnecessary claims constituting Medicaid fraud.”

Schalk added: “Virtually all of Kelty’s patients were being prescribed hydrocodone and some patients were receiving a cocktail of hydrocodone and Xanax, and that combination of those taken concurrently is eight times more likely to result in an overdose.”

In treating one Medicaid patient—who was “an inappropriate candidate for chronic opioid therapy” due to “[h]er history of sexual and physical abuse, as well as a history of illegally obtaining drugs from [her] family members”—Kelty neither took a medical history nor performed an initial physical examination. Kelty simply “prescribed opiates to her without medical legitimacy” and maintained the prescriptions throughout the patient’s pregnancy. As a result, the patient’s daughter was born “with a diagnosis of neonatal abstinence syndrome.” The baby spent nearly two months in a neonatal intensive care unit. The expert reviewing Dr. Kelty’s files concluded that “[b]oth mother and child were put in jeopardy as a result of [Dr. Kelty’s] inappropriate and dangerous prescribing habits, all the while being reimbursed by Medicaid.”

154 Alter, supra note 150.
155 Id.
158 Alter, supra note 150.
159 Id.
160 Aff. of Dr. Timothy E. King at 4, Indiana v. Paul Kelty, No. 31D01-1305-FB-365 (Harrison Cty. Super. Ct. May 3, 2013) (Committee staff obtained court records from the Harrison County Prosecutor’s Office. Not all of the records are available online).
161 Id.
162 Id.
163 Id.
Another Medicaid patient visited Kelty every one to three weeks, and Kelty “routinely refilled her hydrocodone prescriptions” despite his knowledge “of [the patient’s] excessive drug seeking.” In this case, Dr. Kelty knew the patient was getting additional hydrocodone from a dentist and “that she patronized multiple pharmacies to obtain opiate.”

Aftermath

Dr. Kelty ultimately pleaded guilty to one count of Medicaid fraud and one count of corrupt business influence. A judge sentenced him to four years of home incarceration. Dr. Kelty also forfeited $790,000 in a companion civil action, some of which was used to fund and produce a documentary concerning the dangers of prescription-drug and heroin addiction. But Kelty’s willingness to take advantage of Medicaid beneficiaries and prescribe drugs—furthering addiction and creating opportunity for pill diversion—had already taken its toll on the community he served for so long.

164 Id. at 7.
165 Id.
167 Id.
168 Id. at 2.
Case Study 6: Taxpayer Dollars Down the Toilet

Key Facts

- On April 15, 2015, Patricia A. Hoehn pleaded guilty in a scheme to use opioids to defraud the Missouri Medicaid program.¹⁰
- Hoehn, a licensed pharmacist, admitted in federal court that she used three prescriptions for a cough syrup containing hydrocodone, while falsely representing to Medicaid that the medication had been prescribed to three children.¹¹
- In her plea agreement, Hoehn admitted that she destroyed her cell phone by putting it in a toilet to prevent law enforcement officials from obtaining incriminating information.¹² While her case involves smaller amounts of Medicaid dollars than others, it illustrates the depths to which some defendants will go to conceal the use of Medicaid to obtain opioids.

The Scheme

Hoehn, of Farmington, admitted in court documents that she used “three prescriptions that falsely stated and represented to Medicaid that a licensed medical doctor had prescribed a cough syrup that contained hydrocodone, a narcotic opioid pain medication, to three children.” In reality, the documents say, “the prescriptions were false because no licensed medical doctor had actually prescribed the drugs to these three children on these three dates, and Hoehn knew that the children were not actually receiving these drugs.”¹³

Hoehn, who was the pharmacist-in-charge of the pharmacy where she worked, stated that she had ordered the drugs for three minor children of co-workers.¹⁴ Over the span of 19 months, Hoehn “presented 28 prescriptions for Tussionex—a cough syrup containing the opiate narcotic hydrocodone—to the Medicaid program. Some of the Tussionex prescriptions were in Hoehn’s handwriting. Ultimately, Medicaid funded $4,794 worth of Tussionex.”¹⁵

After a Missouri State Highway Patrol Trooper asked to examine her cell phone, Hoehn admitted¹⁶ that she destroyed the phone to prevent law enforcement officers from “searching it

¹¹ Id.
¹² Id.
¹³ Id.
¹⁴ Gov’t Sent’g Mem. at 2, United States v. Hoehn, No. 4:14 CR 00312 (CEJ) (E.D. Mo. 2015), ECF No. 43.
¹⁵ Id. at 1–2.
¹⁶ Id. at 3.
for text messages regarding these false prescriptions.” 177 When asked why she went so far as to place her phone in the toilet, Hoehn said “because everyone told me to.” 178

**Aftermath**

Hoehn pleaded guilty in April 2015 to three felony counts involving false statements to the Missouri Medicaid program. The Government’s sentencing memorandum pointed out that Hoehn caused financial loss to the Missouri Medicaid program, which already faced funding limitations. 179 Prosecutors emphasized that her actions had deprived the program of resources to help Missouri residents in need. Hoehn’s false statements, the memo said, “further impeded the program from achieving its important policy objectives of taking care of low income patients.” 180

On July 30, 2015, a federal judge sentenced Hoehn to three years of probation. 181 She was ordered to perform 100 hours of community services and pay $4,794 in restitution to the Missouri Medicaid Fraud Control Unit. 182

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179 Gov’t Sent’g Mem. at 3, United States v. Hoehn, supra note 174.
180 Id.
181 DAILY J. ONLINE, supra note 178.
182 Id.
Case Study 7: Doctor’s Alleged Behavior Highlights Suboxone-Related Medicaid Fraud

Key Facts

- Curtis Edens, a Kentucky doctor who operated a Suboxone clinic that catered to Medicaid beneficiaries, stands accused of illegally prescribing addiction-treatment drugs and defrauding Medicaid.\textsuperscript{118} He has pleaded not guilty.\textsuperscript{119}
- Dr. Edens’s Suboxone clinic was so crowded with patients, some from out of state, that patients had difficulty finding parking.
- The case reflects an escalating problem: Medicaid fraud relating to abuse of an opioid, Suboxone, that is itself used to treat opioid addiction.

Background

Dr. Edens specialized in “obstetrics/gynecology,”\textsuperscript{115} but was also a “Suboxone clinic doctor.”\textsuperscript{116} He surrendered his Kentucky medical license in November, 2016,\textsuperscript{117} and was living in South Carolina when a grand jury in Lawrence County, Kentucky indicted him in May 2017.\textsuperscript{118} Dr. Edens waived extradition and returned to Lawrence to face the charges\textsuperscript{119} in an investigation overseen by the Kentucky Attorney General’s Office of Medicaid Fraud and Abuse.\textsuperscript{116} The grand jury charged Dr. Edens with Medicaid fraud, improperly prescribing a controlled substance, and theft by deception.\textsuperscript{111}

\textsuperscript{113} See Agreed Order of Surrender at 2, In Re The License To Practice Osteopathy In the Commonwealth of Kentucky Held By Curtis D. Edens, D.O., License No. 02610, 108 West Madison Street, Louisville, Kentucky 41230-1327, No. 1355 (Ky. B. Licenses 2016), http://www.state.ky.us/agencies.kbi/file/orders/02610.pdf.
\textsuperscript{115} See Agreed Order of Surrender, supra note 185 at 10, 12.
\textsuperscript{117} Id.
\textsuperscript{119} Id. at 1-2; see also Press Release, Kentucky.gov, supra note 186.
The Scheme

In 2016, Dr. Edens operated a Suboxone clinic at which prosecutors allege he illegally charged Medicaid beneficiaries cash for his services.\textsuperscript{195} Prosecutors say he also defrauded Medicaid by improperly prescribing Suboxone to patients.\textsuperscript{195} Although little additional information has been made public in the criminal case, Kentucky’s Board of Medical Licensure has previously addressed Dr. Edens’s medical methods.

In a November 2016 Order for Dr. Edens to surrender his license, the Board described what it called troubling details of Dr. Edens’s practice and his treatment of patients.\textsuperscript{196} Dr. Edens agreed to the Board’s stipulation of facts, which concluded that he:

- prescribed Suboxone to pregnant women, which experts say can cause miscarriage or premature labor;
- consistently failed to document any physical exams;
- consistently documented urine drug tests as negative when they were positive; and
- failed to meet minimum standards in prescribing and monitoring medications.\textsuperscript{195}

The Board’s Order also noted that when police responded to a call from Dr. Edens’s clinic in 2011,\textsuperscript{197} they found “that the parking area was so crowded that patients had to park” anywhere they could.\textsuperscript{197} The Board noted that “numerous vehicles were from surrounding counties and several were from out of state.”\textsuperscript{198}

Aftermath

The prosecution of Dr. Edens continues, and the case reflects a larger trend: abuse and diversion of Suboxone. Kentucky Attorney General Andy Beshear asserts that Suboxone “is being actively abused by thousands of Kentuckians.”\textsuperscript{199} In an increasing number of instances nationwide, Medicaid is footing the bill for these illicit prescriptions.

\textsuperscript{195} Press Release, Kentucky.gov, supra note 186.
\textsuperscript{196} See Indictment at 4-5, Kentucky v. Edens, supra note 190 (alleging that “from December 20, 2011 through July 12, 2012,” Edens “knowingly or wantonly devised a scheme” to defraud the Kentucky Medical Assistance Program).
\textsuperscript{197} Agreed Order of Surrender at 1, supra note 185.
\textsuperscript{198} Id. at 12 (reflecting Edens’s agreement and signature).
\textsuperscript{199} Id. at 2.
\textsuperscript{199} Id.


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Majority Staff Report  
Committee on Homeland Security and Governmental Affairs  
United States Senate
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In Kentucky, according to Attorney General Beshear, “the wrongful prescribing of Suboxone is flooding [Kentucky] communities with yet another drug that is killing our children, destroying our families and scarring our neighborhoods. While there are honest, legal Suboxone clinics that provide real and needed treatment in our state, the rogue clinics who value money over lives must be shut down.”

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200 Press Release, Kentucky.gov, supra note 186.
Case Study 8: Pain Doctor Threatens Murder to Protect Pill Mill

Key Facts

- From the outside, Dr. Shannon C. Ceasar ran a thriving medical practice in New Orleans. In reality, Dr. Ceasar was operating what authorities called a “pill mill.” In April 2017, he pleaded guilty in federal court to health care fraud.\(^{201}\)
- In telephone calls recorded by law enforcement, Dr. Ceasar threatened in graphic terms to kill the agents investigating him, vowing that “they won’t even be able to have an open casket funeral. There will be nothing left above the Adam’s apple.”\(^{202}\)
- Dr. Ceasar’s willingness to hand out prescriptions for oxycodone defrauded Medicaid, costing taxpayers $93,901.\(^{203}\)

Background

No stranger to law enforcement, Dr. Ceasar had been investigated by the FBI in 2007 for alleged “wrongful prescribing habits stemming from his operation of a [previous] clinic.”\(^{204}\) Dr. Ceasar voluntarily surrendered his Drug Enforcement Administration (DEA) registration number that year.\(^{205}\) He later obtained a new DEA number, and opened the Gulf South Physicians Group in Metairie, Louisiana. Dr. Ceasar purported to run a family practice, and advertised himself “as a sub-specialist in chronic pain and substance abuse treatment and management.”\(^{206}\)

The Scheme

“Despite aspects of legitimate medical practice at [Gulf South Physicians Group],” court documents alleged that Dr. Ceasar “ran what he admitted . . . was, in essence a ‘pill mill,’ i.e., an operation in which he prescribed controlled substances to drug seekers and drug abusers without a legitimate medical purpose . . . .”\(^{207}\) Dr. Ceasar regularly prescribed high doses of opioids

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\(^{203}\) Plea Agreement at 2, United States v. Ceasar, supra note 201.

\(^{204}\) Factual Basis for Plea Agreement at 2, United States v. Ceasar, No. 2:16-cr-00174-MLCT-DEK (E.D. La. Apr. 5, 2016), ECF 43.

\(^{205}\) Id.

\(^{206}\) Id.

\(^{207}\) Id. at 4.
including oxycodone, for $500 a prescription, often knowing that drug traffickers and addicts would sell or abuse the medications. To cover his tracks, Dr. Ceasar “doctored” the files of co-conspirator patients, and wrote the prescriptions in other people’s names rather than the names of his co-conspirators.

Furthermore, Dr. Ceasar routinely “breached the standard of care,” ensuring that almost anyone could obtain opioids. He generally issued prescriptions “with little or no investigation into a patient’s past use of prescription drugs and without consultation with a patient’s prior physician(s).” He rarely reviewed drug screen tests. And he often prescribed drugs to patients at their first appointment, with little physical examination. Dr. Ceasar’s prescription-writing habits knew no bounds: he wrote and delivered prescriptions to patients in the clinic parking lot, and at all hours. He even “left signed prescriptions available at the clinic for distribution” when he was absent and even outside the country.

Although Dr. Ceasar accepted only cash from “co-conspirator” patients, many of his customers had government health insurance that enabled them “to fill their prescription[s] with little or no out-of-pocket expenses” for the valuable pills Ceasar provided. Between 2012 and 2016, Ceasar repeatedly issued medically unnecessary prescriptions for oxycodone and Suboxone, knowing that Medicaid would foot the bill.

The medical and financial toll added up. Overall, Dr. Ceasar prescribed nearly 30,000 oxycodone pills for no legitimate medical purpose. Insurers paid $150,788 for the scams—Medicaid paid $93,901, while Medicare paid $32,027.

With Dr. Ceasar’s fraud came great profit, and he made clear that he would take whatever steps necessary to protect his “practice.” When he suspected he was under investigation, he made repeated threats to kill law enforcement officers. For example, during one telephone call with

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208 Id. at 5.
209 Id. at 5.
210 Id. at 8.
211 Id. at 5.
212 Id. at 6.
213 Id. at 6.
214 Id. at 6.
215 Id. at 6.
216 Id. at 6.
217 Id. at 6.
218 Id. at 8.
219 Id. at 7.
220 Id. at 17.
221 Id. at 9.
222 Id. at 20 (Ceasar also defrauded Blue Cross Blue Shield of Louisiana, with damages of $24,859.98).
223 Id. at 10.
a confidential source in July 2016, Dr. Ceasar said: “God help them, I swear to god ... I have a f****** arsenal in there enough to supply a small militia, you know I collect guns, I swear to god if they come in there with a warrant I’m going to kill every single one of those sons of bitches.” Dr. Ceasar’s statement was apparently no empty threat: authorities later seized 33 weapons, including rifles, revolvers, pistols and shotguns, from his residence.

Later the same day, authorities recorded Dr. Ceasar telling another confidential source: “[I]f they happen to f**k with me again, they are all going to die. Every single one of them.” Officers arrested Dr. Ceasar the day after learning of his threats.

Aftermath

Dr. Ceasar pleaded guilty in U.S. District Court in New Orleans to committing and attempting to commit health care fraud, conspiracy to distribute and dispense oxycodone outside the scope of professional practice, and threatening to assault or murder federal law enforcement officers. His sentencing is scheduled for January 2018. In the words of former U.S. Attorney Kenneth A. Polite:

[ R ]ather than doing no harm as a physician, Shannon Ceasar illegally dispensed oxycodone into a community struggling with an epidemic of opioid addiction. Then, when the governing medical board and law enforcement dared to challenge his criminality, Ceasar threatened to kill them. This level of disregard for human life, particularly from a physician, is absolutely despicable.

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224 Id. at 10.
226 Factual Basis for Plea Agreement at 12, United States v. Ceasar, supra note 204.
227 Plea Agreement at 1-2, United States v. Ceasar, supra note 201.
Case Study 9: Healers or Dealers? Ohio Doctor and Office Manager Wife Admit to Defrauding Medicaid

Key Facts

- Dr. David Kirkwood ran a “pill mill” that distributed thousands of illicit oxycodone pills, all paid for by Medicaid or Medicare. His wife worked as his office manager. Overall, the scheme defrauded taxpayers out of nearly $160,000.230
- Federal prosecutors said seven people died of drug overdoses resulting from the illicit prescriptions. The Kirkwoods ultimately pleaded guilty to health care fraud.231
- The government sought to seize approximately $2.5 million that Dr. Kirkwood and his wife gained through the conspiracy.232

Background

In one sense, Dr. Kirkwood was an established physician with a long record of serving patients. He received his medical degree in Kentucky in 1983 and his license from Ohio in 1984.233 Between 1986 and 2014, Dr. Kirkwood ran Kirkwood Family Practice in Dayton, Ohio.234 Beverly Kirkwood served as office manager starting in 2009.235

The Kirkwoods’ practice proved to be both busy and lucrative. Dr. Kirkwood “saw up to 100 patients per day, charging them $100 per office visit.”236 But various warning signs led federal and state law enforcement authorities to obtain a warrant and raid the Kirkwoods’ office in October 2012.237 A federal grand jury in U.S. District Court in Dayton indicted the couple in 2014.

231 Id.; see also Indictment at 13-14, United States v. Kirkwood, No. 3:14-cr-168 (S.D. Ohio 2014), ECF 4 (minute entries detailing the Kirkwoods’ guilty pleas).
233 Indictment at 2, United States v. Kirkwood, supra note 231.
234 Id. at 1.
235 Id.
236 Id. at 9-10 (alleging Dr. Kirkwood would “examine” between 60-100 patients per day); see also U.S. Att’y Off., S. Dist. of Ohio Press Release, supra note 236.
The Scheme

Beneath the Kirkwoods' family business lurked a darker reality. The couple fueled the opioid epidemic—and bilked federal taxpayers—to line their own pockets. The "investigation found that this doctor took advantage of those suffering from addiction in the Dayton area for personal gain," according to Ohio’s Attorney General.238 By doing so, the Kirkwoods not only harmed patients, but also ultimately defrauded Medicaid. The Kirkwoods allegedly conspired to:

[F]raudulently obtain money and funds from medical benefit plans, including Medicare, Medicaid and Medicaid managed care organizations (MCOs), through the billing of medical examinations and prescribing of controlled substances which were billed to Medicare, Medicaid and MCOs without determining if there existed any legitimate medical need or purpose . . . [for the prescription of controlled substances including opioids].239

Dr. Kirkwood "provided large amounts of prescription medications" to addicts or those diverting and selling opioids.240 The drugs included Opana, methadone, hydrocodone, and oxycodone.241 The Kirkwoods allegedly sought "[t]o make as much money as possible" by distributing the drugs "to patients, other drug users, and conspirators."242 They often pocketed cash payments for office visits.243 Prosecutors said the Kirkwoods' prescriptions fueled trafficking and addiction in numerous states, including not only Ohio, but also Florida, Kentucky, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia.244

Moreover, the Kirkwoods allegedly knew what they were doing, having learned that a vast number of their patients were drug addicts.245 According to prosecutors, the couple simply ignored "red flags" indicating that customers resold and abused the opioids.246

Dr. Kirkwood also ignored how some patients' physical traits—such as obesity and heart problems—made prescribing drugs dangerous for them.247 Yet he still prescribed "excessive

239 Indictment at 20-21, United States v. Kirkwood, supra note 231 (The Kirkwoods also, allegedly, repeatedly used billing codes to charge insurers "that reflected a service that was more costly than what David Kirkwood actually performed." See Indictment at 21, 22).
240 Id. at 21.
241 Id. at 23.
242 Id. at 9.
243 Id. at 22.
244 Id. at 9.
245 Id. at 23.
246 Id. at 24.
247 Id. at 24-25.
amounts" of opioids for these at-risk patients. For example, Dr. Kirkwood prescribed methadone and oxycodone, as well as other drugs to one patient for no "legitimate medical purpose and outside the scope of medical practice," leading to that patient’s death.

Aftermath

Dr. and Mrs. Kirkwood pleaded guilty to committing health care fraud, and Dr. Kirkwood also pleaded guilty to unlawful drug trafficking. The couple is awaiting sentencing and have agreed to pay to nearly $160,000 in restitution for the loss to Medicaid and Medicare.

"When a doctor distributes Oxycodone without a legitimate medical purpose and outside the scope of medical practice, that’s not just bad practice. It’s unlawful drug trafficking," U.S. Attorney Benjamin Glassman said after the Kirkwoods admitted their guilt. "In pleading guilty, David Kirkwood admitted that he was distributing opioids and other controlled substances as a drug dealer, not as a doctor."

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249 Id.
250 Id. at 19; see also Mot. to Am. Indictment at 1, United States v. Kirkwood, No. 3:14-cr-168 (S.D. Ohio 2014), ECF 56 (consistent with the plea agreement, amending Count 8 to omit the sentence, “Death resulted . . . from the use of the multiple controlled substances so distributed.”).
252 Id.
253 Id.
Case Study 10: A Foot Above Podiatry, Inc.

Key Facts

- A podiatrist prescribed opioids to “pill seeking” patients after performing painful and medically unnecessary procedures on their toes and feet undertaken “to create the appearance of legitimacy for his prescription of opioids.”
- As part of his scheme, the defendant prescribed excessive amounts of oxycodone to those who appeared to be “addicts” or even “drug dealers.”
- The podiatrist submitted fraudulent claims for the procedures to Medicaid, along with Medicare and four private insurance companies.
- In total, the podiatrist pocketed approximately $5 million from the scheme.

Background

Stephen Monaco was a licensed podiatrist who had practiced in Pennsylvania since 1983. He was the president and operator of A Foot Above Podiatry, Inc. in Havertown.

Monaco advertised himself as a committed physician, willing to address a variety of health concerns. “I believe in finding solutions to all foot and ankle related problems, from complex musculoskeletal issues to skin and soft tissue concerns. We take a holistic approach and always recommend conservative care first,” he was quoted as saying.

The Scheme

For nearly seven years, Mr. Monaco capitalized on his “patients” opioid addictions and...
exploited vulnerabilities in the Medicaid and Medicare programs. From January 2008 through October 2014, he performed unnecessary procedures on patients seeking opioids, who appeared to be addicts or possible drug dealers. According to court documents, these procedures included "injections; nail avulsions (the separation and removal of an entire nail plate or portion of a nail plate; a procedure generally requiring injected local anesthesia); and nail excisions (the separation and removal of an entire nail plate or portion of a plate, followed by removal of the associated nail matrix; performed under local anesthesia)."

After inflicting such pain, Monaco would reward his patients with oxycodone, creating the appearance that these prescriptions were legitimate. He would then submit the claims to the patients' insurance providers, including Medicaid. During this time period, Monaco also submitted claims for services he did not perform.

In one particularly egregious instance, when a visibly pregnant woman came to Monaco's practice, he declined to turn her away. Instead, according to court documents, Monaco prescribed the woman oxycodone throughout her pregnancy, endangering her unborn child, and "administered painful injections in the pregnant woman's heels, for which he billed Medicaid, to justify the prescriptions." Five days before the patient gave birth, Mr. Monaco wrote her yet another prescription for 90 pills of oxycodone. The baby was born addicted to opioids and "required extensive, and invasive, neonatal care to save his life and minimize the potential for cognitive and developmental deficits."

In some cases, staff members tried to stop Monaco from prescribing oxycodone to patients and even "took [his] pens away so that he could not write prescriptions." It did not work: Monaco used the money from his fraudulent scheme to fund a "lavish lifestyle," which included a Bentley and a 19,000-square-foot home complete with an elevator, an eight-car garage, a theater, and spa.

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262 U.S. Att'y Off. E. Dist. of Pa. Press Release, supra note 254; see also Gov't Sent'g Mem. at 3, United States v. Monaco, supra note 255.
263 Notice of Forfeiture at 7, United States v. Monaco, supra note 257.
265 Notice of Forfeiture at 7-10, United States v. Monaco, supra note 257.
266 Gov't Sent'g Mem. at 7, 9-10, United States v. Monaco, supra note 255.
267 Id. at 7-8 n.6.
268 Id. at 7-8.
269 Id. at 10.
270 Id. at 10.
Aftermath

It wound up taking an FBI operation to unmask Monaco’s fraud. In 2012, an undercover FBI agent posing as a Medicare beneficiary seeking treatment visited A Foot Above on five occasions, recording her interactions with Monaco using a concealed video camera. The agent began each visit by complaining of a “non-specified discomfort in her toes after exercising.” Monaco treated the undercover agent by “merely [clipping] her toenails and [wiping] her toes with alcohol.” According to court documents, Monaco then “submitted false claims on behalf of the [agent] to Medicare for services he had not performed. To justify payments for the services billed for the [agent], Monaco included a false diagnosis of peripheral arterial disease,” a narrowing of the arteries that reduces blood flow.

On June 22, 2016, prosecutors charged Monaco with “knowingly and willfully” defrauding Medicaid, Medicare, and a number of insurance companies. The case was part of a larger health care fraud takedown of 301 individuals who were charged with participating in schemes resulting in approximately $900 million in fraudulent claims. In August 2016, Monaco pleaded guilty to health care fraud and surrendered his Drug Enforcement Administration license. On February 7, 2017, he was sentenced to 8 years in prison and ordered to pay $4,960,295 in restitution.

Monaco’s case provides one of the more bizarre examples of the lengths to which pill-seekers will go to obtain prescriptions. It likewise illustrates the criminal creativity of some doctors, whose unscrupulous prescribing can facilitate the abuse and diversion of opioids.

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271 Gov’t Plea Mem. at 6, United States v. Monaco, No. 2:16-cr-00255-JS (E.D. Pa. 2015), ECF 8 (on file with S. Comm. on Homeland Sec. & Governmental Aff.).
272 Id. at 6.
273 Id.
274 Id.
275 Id.
276 Notice of Forfeiture at 10, United States v. Monaco, supra note 257.
278 approximately-900

Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate
CASE SUMMARIES

Case Summary 1: “Super Dave” Drug Ring

- **Defendant(s):** David Thompson, Julian Cintron, and Alejandrin O DeJesus
- **Case Year:** 2017
- **State:** Connecticut
- **Case Status:** All three pleaded guilty in U.S. District Court in Connecticut. The court sentenced Thompson, known as “Super Dave,” to 14 years in prison, Cintron to 9 years in prison, and DeJesus to 11 years in prison.
- **Description of Scheme:** The three men ran an organization that stole the identities of medical providers. They used the stolen identities to write fraudulent opioid prescriptions for individuals called “runners,” who filled the prescriptions. Nearly all of the prescriptions were billed to Medicaid.
- **Key Facts:**
  - Between February 2013 and September 2015, the drug ring stole the personal identifying information of more than 50 doctors and other medical professionals and fraudulently obtained more than 80,000 oxycodone pills.
  - After the runners filled the prescriptions, the organization then re-sold the Medicaid-funded 30 mg oxycodone pills for $20 to $30 each.
  - In total, the drug ring wrote more than 800 fraudulent prescriptions using more than 270 different “patient” names.

Sources:

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279 Case year, unless otherwise noted, refers to year of conviction or the year charges were filed if the case is still pending.
Case Summary 2: New York City Opioid Quid Pro Quo

- **Defendant(s):** 13 individuals, including two doctors and former New York State Assemblyman Alec Brook-Krasny; 3 medical clinics; and 2 corporate entities.

- **Case Year:** 2017

- **State:** New York

- **Case Status:** Prosecutors filed charges against 13 individuals and 5 entities in Manhattan state Supreme Court in April 2017. The case is pending.

- **Description of Scheme:** The medical providers are accused of writing medically unnecessary prescriptions for people seeking opioids. As payment, the doctors allegedly performed medical procedures and tests that were medically unnecessary or below standards for reimbursement. Federal officials say the scheme defrauded Medicaid and also Medicare out of millions of dollars.

- **Key Facts:**
  
  - Individuals seeking opioid prescriptions came to three medical clinics in New York City. Medical providers prescribed the opioid medication, provided that the individuals agreed to certain medical treatment or diagnostic tests, which could be billed to their health insurance—Medicaid or Medicare.
  
  - In addition to running expensive medically unnecessary tests, practitioners billed Medicaid for medical treatment that was far below standards for reimbursement. This included, for example, billing a few minutes in a massage chair as a full physical therapy session.
  
  - From 2012 to 2017, these clinics and medical practitioners allegedly prescribed six million oxycodone pills and ordered government-reimbursed procedures generating more than $24 million in revenue.
  
  - The laboratory run by Alec Brook-Krasny allegedly altered urinalysis test results for patients, enabling them to test positive for alcohol yet continue to receive opioid prescriptions.

**Sources:**


Case Summary 3: Maryland Pill Mill

- **Defendant(s):** Dr. Kofi Shaw-Taylor and nine other individuals.

- **Case Year:** 2017

- **State:** Maryland

- **Case Status:** In August 2017, local prosecutors charged Dr. Shaw-Taylor in Anne Arundel County Circuit Court with 289 counts including conspiracy to commit drug distribution and Medicaid fraud.

- **Description of Scheme:** Dr. Shaw-Taylor, a urologist, and his co-conspirators allegedly operated two clinics that doubled as pill mills, prescribing opioids and other controlled substances and billing Medicaid for drugs with no apparent medical purpose. The prescriptions led to the deaths of two patients.

- **Key Facts:**
  - Dr. Shaw-Taylor allegedly charged patients up to $500 in cash per visit for prescriptions.
  - Approximately 1,083 Medicaid patients received prescriptions from Dr. Shaw-Taylor, 737 of whom had no corresponding medical visits.
  - From June 2015 through April 2017, for example, Dr. Shaw-Taylor is accused of prescribing 283,666 doses of oxycodone for 403 Medicaid beneficiaries. Of these Medicaid beneficiaries, 336 received prescriptions for opiates and benzodiazepines, a dangerous combination of drugs that the FDA has warned should not be taken together.
  - At least two of Dr. Shaw-Taylor’s patients died from overdoses of the Medicaid-funded medications.

**Sources:**

Case Summary 4: Doctor Writes More Opioid Prescriptions than Entire Medical Staff

- **Defendant(s):** Dr. Pawankumar Jain
- **Case Year:** 2016
- **State:** New Mexico
- **Case Status:** In February 2016, Dr. Jain pleaded guilty in U.S. District Court in New Mexico to unlawfully dispensing controlled substances and health care fraud. His sentencing is pending.
- **Description of Scheme:** Dr. Jain, a neurologist who operated a pain management practice in Las Cruces, prescribed painkillers to patients—including Medicaid and Medicare beneficiaries—with no legitimate medical purpose.
- **Key Facts:**
  - Prosecutors allege that Dr. Jain specifically targeted Medicaid and Medicare by submitting claims for prescription medications he dispensed outside the usual course of medical practice.
  - At least four people died of overdoses from the drugs—primarily oxycodone and methadone—Dr. Jain prescribed to them.
  - In 2011, Dr. Jain was the top prescriber of pain medicines in New Mexico, writing prescriptions for more than three million doses of medication to over 3,200 patients. The second-ranked prescriber was the entire staff of residents at the University of New Mexico Hospital, which prescribed 500,000 fewer doses for seven times as many patients.

Sources:
Case Summary 5: “It was like sex for pills.”

- **Defendant(s):** Dr. Jose Jorge Abbud Gordinho
- **Case Year:** 2016
- **State:** West Virginia
- **Case Status:** In April 2016, Dr. Gordinho was sentenced to 8 years in prison after pleading guilty in U.S. District Court in West Virginia to illegally prescribing opioids and defrauding Medicaid and Medicare.
- **Description of Scheme:** Dr. Gordinho prescribed hydrocodone, an opioid pain reliever, for illegitimate purposes and billed Medicaid and Medicare for medically unnecessary services.
- **Key Facts:**
  - In exchange for illegitimate prescriptions, Dr. Gordinho requested sexual favors from female patients. “It was like sex for pills,” the sentencing judge quoted a clinic staff member as saying.
  - Dr. Gordinho continued to prescribe pain medications for patients who failed drug tests, contrary to standard medical practice.
  - The court ordered Dr. Gordinho to pay more than $48,000 in restitution for defrauding Medicaid and Medicare.

**Sources:**
Case Summary 6: A Major Oxycodone Trafficker Who “Dealt Illegal Prescription Pills at the Taxpayers’ Expense.”

- **Defendant(s):** Michael A. Mancusi
- **Case Year:** 2012
- **State:** New York
- **Case Status:** In October 2012, Mancusi pleaded guilty in Richmond County Criminal Court to multiple felonies, including criminal possession and grand larceny. The court sentenced him to seven years in prison.

**Description of Scheme:** Following two car accidents, Mancusi fraudulently claimed serious injuries to obtain no-fault insurance benefits through Medicaid, along with Social Security Disability Insurance and Medicare. He allegedly then used the benefits to obtain prescriptions for pain medications, which he re-sold for a handsome profit.

**Key Facts:**

1. From 2011 to 2012, Mancusi fraudulently received prescriptions for more than 6,000 oxycodone pills, as well as prescriptions for alprazolam (Xanax).
2. After filling the prescriptions, Mancusi and an accomplice sold them to buyers, generating more than $75,000 in a single year from the sales.
3. Prosecutors called Mancusi “a major oxycodone trafficker” and said his conviction ended “a scheme that dealt illegal prescription pills at the taxpayers’ expense.”

**Sources:**

Case Summary 7: Medicaid “Runners” and Stolen Prescription Pads

- **Defendant(s):** Jimmie Lee Simmons, Shantel Williams, and James Marsh, along with four other co-defendants.

- **Case Year:** 2014

- **State:** New York

- **Case Status:** Simmons, Williams and Marsh were convicted in U.S. District Court in Rochester on charges related to obtaining and distributing pain medicine. The court sentenced Simmons to 6 months in prison; Williams to 12 months in prison, and Marsh to five years in prison. The other four defendants were convicted as well.

- **Description of Scheme:** Williams took prescription pads from the doctor’s office where she worked and wrote fraudulent prescriptions for OxyContin. The trio targeted Medicaid beneficiaries, known as “runners,” to fill the illicit prescriptions.

- **Key Facts:**
  - Simmons recruited people willing to use their Medicaid benefits to fill the fraudulent prescriptions. In return, the co-conspirators paid these individuals $100 for each prescription charged to their Medicaid card.
  - Williams sold the fraudulent prescriptions to her co-conspirators for $860 each.
  - In total, the Justice Department estimated that the group filled 47 prescriptions, with a street value of $180,000. The trio was ordered to pay more than $45,000 in restitution to Medicaid.

**Sources:**


Case Summary 8: A Pharmacy Calls, a Drug Dealer Answers

- **Defendant(s):** Nelson Quezada Sr. and his son, Riquelvin Quezada
- **Case Year:** 2016
- **State:** New York
- **Case Status:** Both individuals face drug charges and are awaiting trial. The senior Quezada has been charged with Operating as a Major Trafficker, the only New York state drug charge that carries a maximum sentence of life in prison.
- **Description of Scheme:** Father and son allegedly used stolen prescription pads to write fraudulent prescriptions for $1.5 million worth of oxycodone. They recruited “runners” to fill the prescriptions with Medicaid cards. The pills were then resold on the black market at huge profit.
- **Key Facts:**
  - The Quezadas targeted Medicaid beneficiaries who lived in their Bronx neighborhood to fill the prescriptions at pharmacies in the Bronx and elsewhere. They paid runners up to a few hundred dollars per prescription.
  - The investigation identified 464 fraudulent oxycodone prescriptions, totaling more than 51,000 pills, with a street value of more than $1.5 million.
  - The Quezadas forged prescriptions with blank paper containing the names of doctors not involved in the scheme. Most of the prescriptions contained a phone number, and if any pharmacies called to verify information, investigators believe a member of the drug ring answered the phone.

Sources:
Case Summary 9: Four Million Hydrocodone and Millions in Medicaid Fraud

- **Defendant(s):** Babubhai “Bob” Patel; his brother, Vinod Patel; and 36 other defendants.
- **Case Year:** 2014
- **State:** Michigan

**Case Status:** Bob Patel was convicted in U.S. District Court in Michigan after a seven-week trial in 2012 and sentenced to 17 years in prison. Vinod Patel was convicted in 2014 of conspiracy to commit health care fraud and conspiracy to pay health care kickbacks. In July 2017, his sentence was vacated by an appeals court and sent back to the district court for resentencing.

**Description of Scheme:** Authorities say Bob Patel masterminded a massive health care fraud and drug distribution ring that paid kickbacks to physicians in exchange for patient referrals for home health care, which were billed to Medicaid and Medicare.

**Key Facts:**

- Vinod Patel hired marketers to find and recruit patients to visit physicians who worked with the home health services company he owned with his brother. In exchange for meeting with the physicians, Vinod Patel offered the patients prescription drugs, including opioid painkillers and Xanax.
- Vinod Patel was arrested in connection with a larger investigation into his brother, Bob, who defrauded Medicaid and Medicare through his network of 26 pharmacies.
- Bob Patel provided kickbacks and other illegal benefits to doctors in exchange for writing illegitimate prescriptions, to be filled at his pharmacies through Medicaid, Medicare, and private insurance.
- In total, the scheme bilked Medicaid and Medicare out of more than $60 million between 2006 and 2011 and dispensed more than 250,000 illicit dosages of oxycodone, along with four million dosages of hydrocodone.

**Sources:**

Case Summary 10: A Nurse Grabs Norco, and Medicaid Pays

- **Defendant(s):** Stefanie Cook

- **Case Year:** 2017

- **State:** Mississippi

- **Case Status:** In January 2017, Cook was charged with Medicaid fraud and obtaining possession of a controlled substance by fraud, misrepresentation or subterfuge. Her trial is pending.

- **Description of Scheme:** Cook, a nurse who worked at a nursing center, allegedly stole prescription painkillers intended for a Medicaid patient at the nursing facility.

- **Key Facts:**
  - Cook worked as a registered nurse at the Covington County Nursing Center in Collins, Mississippi. She allegedly obtained Norco, a combination of acetaminophen and hydrocodone, from a patient.
  - The case illustrates that the nexus between Medicaid and opioids can extend from large-scale drug rings to individual medical professionals abusing their positions to obtain opioids.

*Sources:*
Case Summary 11: Former Medical Resident Uses Family to Defraud Medicaid

- **Defendant(s):** Kyle Betts
- **Case Year:** 2017
- **State:** Missouri
- **Case Status:** Betts pleaded guilty in U.S. District Court in St. Louis to obtaining prescription drugs that contained controlled substances through misrepresentation, fraud, forgery, deception, and subterfuge. The judge sentenced him to three years of probation.

**Description of Scheme:** Mr. Betts, a former medical resident, wrote more than 70 fraudulent prescriptions for opioid pain relievers such as Percocet and Norco, with some of the illicit drugs paid for by the Illinois Medicaid program and Medicare.

**Key Facts:**

- Betts, who worked at St. Louis University Hospital, wrote prescriptions using the names of six people, including family members and former romantic partners, though he did not have a physician-patient relationship with any of them.
- Betts personally went to pharmacies and presented some of the fraudulent prescriptions.
- The scheme extended from November 2014 through February 2016.

**Sources:**


2. Former Medical Resident Admits Writing Fake Prescriptions, Assoc. Press St. & Loc. (St. Louis), May 20, 2017.
Case Summary 12: Kickbacks At A Medical Clinic

- **Defendant(s):** Natalia Dochim
- **Case Year:** 2016
- **State:** New York
- **Case Status:** Prosecutors charged Dochim with health care fraud, grand larceny, and money laundering.
- **Description of Scheme:** Dochim, aided by co-conspirators, is accused of luring Medicaid patients to her medical clinic by paying kickbacks and offering Suboxone prescriptions, defrauding Medicaid out of more than $170,000.
- **Key Facts:**
  - Prosecutors alleged that Dochim, who operated the clinic, targeted Medicaid patients by presenting it as a legitimate substance abuse program.
  - In reality, prosecutors say, the clinic often failed to take obtain medical histories for patients, prescribed Suboxone at the maximum dosage, and sent patients to a purported detoxification program that consisted of vitamin injections, which is not an approved treatment for opioid addiction.
  - Dochim, through the clinic, allegedly billed Medicaid for services never provided, including spirometry, a pulmonary function test, and allergy testing. She is accused of laundering the illicit Medicaid funds she received through various shell companies.

**Sources:**
Case Summary 13: Taking Patient Information at a Drug Treatment Center

- **Defendant(s):** Shanta R. Barnes

- **Case Year:** 2015

- **State:** Louisiana

- **Case Status:** Barnes pleaded guilty in U.S. District Court in Baton Rouge to health care fraud and aggravated identity theft. A judge sentenced her to five years in prison, ordered her to pay $17,582 in restitution and fined her $25,000.

- **Description of Scheme:** As program director of an in-patient drug treatment center, Barnes used patient information, including Medicaid identification numbers, to obtain powerful opioids for her own use while defrauding Medicaid.

- **Key Facts:**
  - Barnes worked for Louisiana Health and Rehabilitation Options in Baton Rouge, where she gained access to patients' dates of birth and Medicaid identification numbers.
  - She used the information to obtain fraudulent prescriptions in the names of Medicaid recipients and caused the submission of false claims to Medicaid.
  - In less than a single year, Barnes obtained nearly 6,000 80-mg oxycodone pills through the scheme.

**Sources:**


Case Summary 14: Abusing an Opioid Treatment Drug to Defraud Medicaid

- **Defendant(s):** Dr. Richard Ng

- **Case Year:** 2014

- **State:** Massachusetts

- **Case Status:** Dr. Ng pleaded guilty in Suffolk Superior Court to submitting false Medicaid claims; excessive Medicaid charges, and illegal prescribing. The judge sentenced him to two-and-a-half years in prison, fined him $10,000, and ordered him to pay approximately $9,700 in restitution.

- **Description of Scheme:** Dr. Ng, the former head of a substance abuse clinic, defrauded Medicaid and fraudulently prescribed suboxone to patients by writing falsified treatment notes to justify the prescriptions.

- **Key Facts:**
  - Dr. Ng wrote prescriptions using false names for a number of patients, prescriptions that were funded by the Massachusetts Medicaid program.
  - Dr. Ng also charged patients, including Medicaid beneficiaries, a $100 “new patient registration fee,” which was paid to him directly with cash or check. The fee was in addition to payments Dr. Ng received from Medicaid for his services, which violated state regulations.
  - For nine patients, Dr. Ng improperly wrote suboxone prescriptions, even though the patients were not taking suboxone and drug tests indicated they were still taking other opioids. To justify the prescriptions, he wrote false medical notes saying the patients had therapeutic levels of suboxone in their system and had been tolerating their suboxone treatment without difficulty.

**Sources:**
Case Summary 15: Pennsylvania Suboxone Clinic

- **Defendant(s):** Mark R. Foster and Terri C. Brown
- **Case Year:** 2017
- **State:** Pennsylvania
- **Case Status:** A federal grand jury indicted Foster and Brown in October 2017 in U.S. District Court in Pittsburgh on charges of health care fraud and unlawfully distributing controlled substances. They have pleaded not guilty.

- **Description of Scheme:** Prosecutors say Foster and Brown conspired at their suboxone clinic to create illicit prescriptions for opioids, some of which were fraudulently billed to Medicaid.

- **Key Facts:**
  - Brown owned and operated Cherry Way, a suboxone clinic in Bridgeville, with Foster serving as the clinic’s medical director.
  - According to the indictment, the pair created unlawful prescriptions for suboxone, Percocet and Adderall, which were dispensed to Brown and others.
  - Brown then allegedly submitted fraudulent claims to Medicaid and a private insurer to cover the costs of the illicit prescriptions.

**Sources:**

Case Summary 16: “I’m Sorry I Failed to Behave Like a Physician”

- **Defendant(s):** Dr. Chethan V. Byadgi and Dr. Rujaa Nebbari
- **Case Year:** 2017
- **State:** Pennsylvania

- **Case Status:** Dr. Byadgi and Dr. Nebbari pleaded guilty in Lackawanna County Court of Common Pleas to conspiracy to commit unsubmitted reimbursement, theft by deception, and insurance fraud. They were each sentenced to 9 to 23 months in jail, followed by 12 years of probation, and ordered to pay nearly $200,000 in restitution. The judge also banned the pair from participating in the Medicaid and Medicare programs as providers for five years.

- **Description of Scheme:** Dr. Byadgi and Dr. Nebbari had untrained staff members write suboxone prescriptions for drug addicts while the doctors submitting false insurance claims showing the physicians had performed the services. Court documents said the pair fraudulently collected more than $169,000 in reimbursements from Medicaid, Medicare, and private insurers.

- **Key Facts:**
  - The investigation began when a former medical assistant who worked with the doctors at walk-in clinics in Scranton contacted authorities. The medical assistant said she treated and wrote prescriptions for suboxone patients never seen by doctors, who were often absent from the clinics. The medical assistant was not a licensed practitioner in Pennsylvania.
  - Clinic patients told investigators that they rarely met with the doctors and were treated by medical assistants.
  - The presiding judge told Dr. Byadgi and Dr. Nebbari at sentencing: “You had the ability to intervene in their lives and to make their life better. Neither one of you took that responsibility.”
  - Dr. Nebbari, apologized to the judge: “I’m sorry I failed to behave like a physician.”

**Sources:**
Case Summary 17: “Defrauding The Medicaid System to Illegally Obtain Narcotics Is Dangerous and Feeds Cycle of Abuse”

- **Defendant(s):** William Martinez
- **Case Year:** 2015
- **State:** New York
- **Case Status:** Martinez pleaded guilty in Monroe County Court to criminal possession of a controlled substance. The judge sentenced him to 1 ½ years in prison and ordered him to pay restitution to the Medicaid program.
- **Description of Scheme:** Mr. Martinez posed as a doctor to unlawfully obtain opioids using his Medicaid card.
- **Key Facts:**
  - In 2015, Martinez contacted a CVS pharmacy in Rochester falsely claiming to be an emergency room doctor.
  - Martinez called in a Percocet prescription for himself and then picked up the illegally obtained drugs, paying with his Medicaid benefits card.

**Sources:**
Case Summary 18: Woman Sells Her Own Hydrocodone

- **Defendant(s):** Pamela Sue Gilbertson

- **Case Year:** 2011

- **State:** Indiana

- **Case Status:** In July 2011, a judge sentenced Gilbertson to two years of probation after she pleaded guilty in Jefferson County Circuit Court to possession of a narcotic drug.

- **Description of Scheme:** Gilbertson obtained Medicaid-funded hydrocodone through her own prescriptions and sold some of the pills on the black market.

- **Key Facts:**
  - Indiana State Police arrested Gilbertson, who had no previous criminal record, in May 2010.
  - Law enforcement acted on a tip that Gilbertson had been selling her pills.
  - The original charges, dropped as part of Gilbertson’s plea deal, included dealing of a controlled substance.
  - Gilbertson admitted she used Medicaid, along with disability insurance, to purchase the hydrocodone she sold to others.

**Sources:**
Case Summary 19: Pennsylvania Addiction Clinic-Turned-Pill Mill

- **Defendant(s):** Dr. Dominic W. Dileo

- **Case Year:** 2017

- **State:** Pennsylvania

- **Case Status:** Dileo pleaded guilty in July 2016 in U.S. District Court in Pittsburgh to distributing Xanax and conspiracy to distribute Suboxone. A judge sentenced him to one year in prison.

- **Description of Scheme:** Dileo was head doctor of a Pennsylvania addiction clinic that illegally distributed prescription pain pills and defrauded Medicaid. Three other clinic employees pleaded guilty in the scheme.

- **Key Facts:**
  - The scheme involved the illegal distribution of Suboxone, a drug used to treat opiate addiction that also can be addictive. Authorities described the clinic as a “pill mill.”
  - Prosecutors said clinic employees defrauded Medicaid by submitting bills for services they knew were not covered and by falsifying medical records in preparation for a federal audit.

**Sources:**
Case Study 20: Doctor Shopping at Medicaid’s Expense

- **Defendant(s):** James Jeffrey Bond
- **Case Year:** 2015
- **State:** Tennessee
- **Case Status:** Bond pleaded guilty in Sumner County Circuit Court to committing fraud.
- **Description of Scheme:** Bond improperly obtained opioid painkillers using benefits from TennCare, Tennessee’s version of Medicaid.
- **Key Facts:**
  - A resident of Gallatin, Bond defrauded Medicaid to obtain illicit Oxycodone, Hydrocodone and Tramadol.
  - He engaged in the scheme by going “doctor shopping”—seeking out different doctors to obtain controlled substances. Studies show that people seeking opioids most commonly engage in doctor shopping.
  - Bond was on probation from a similar charge when he was arrested again and charged with defrauding Medicaid.

**Sources:**
Case Study 21: Cheating Medicaid out of Almost a Million Dollars

- **Defendant(s):** Dr. Diana Williamson and eight co-defendants.
- **Case Year:** 2012
- **State:** New York
- **Case Status:** Dr. Williamson pleaded guilty in U.S. District Court in Manhattan to conspiracy to distribute oxycodone and conspiracy to commit health care fraud. A federal judge sentenced her to three years in prison, fined her $17,500, and ordered her to pay $301,000 in restitution and forfeiture. All eight co-defendants pleaded guilty and have been sentenced.
- **Description of Scheme:** Dr. Williamson defrauded Medicaid out of more than $300,000 by writing bogus oxycodone and Percocet prescriptions for about 30 patients at a Harlem clinic. She blamed her actions on what she called an alternate personality named “Nala.”
- **Key Facts:**
  - Williamson, a Manhattan-based primary care physician, wrote prescriptions that resulted in her patients obtaining about 11,000 oxycodone pills through health care fraud. Her patients had no legitimate need for the medication.
  - The patients then sold the pain pills to a drug ring, which peddled them on the street for up to $33 each.
  - Medicaid wound up reimbursing nearly $1 million in drug expenses attributable to the oxycodone prescriptions that Williamson wrote.
  - Preet Bharara, then-U.S. attorney in Manhattan, stated that Williamson “violated the central tenet of being a doctor—to first do no harm—and cheated an already-strapped Medicaid system out of almost a million dollars.”

**Sources:**

Case Summary 22: A Chiropractic Clinic that Fed Opioid Addiction

- **Defendant(s):** Dr. Edward Sweeney, Dr. Mark Boles, and Dr. Jack Taylor
- **Case Year:** 2016
- **State:** Pennsylvania
- **Case Status:** Dr. Sweeney pleaded guilty in 2015 to participating in a corrupt organization, after originally being charged with Medicaid fraud, and was sentenced to two years of probation. Dr. Boles pleaded no contest in 2016 to participating in a corrupt organization, also after originally being charged with Medicaid fraud. A judge sentenced him to five years of probation. Dr. Taylor pleaded guilty in 2016 to insurance fraud and was sentenced to seven years of probation.
- **Description of Scheme:** Doctors operating out of a chiropractic clinic illegally prescribed OxyContin, oxycodone, hydrocodone, and other controlled substances in return for insurance reimbursements.
- **Key Facts:**
  - Authorities said the doctors prescribed the illicit drugs to people who did not need the medications and were using them “as a ruse in order to feed their addictions.”
  - The chiropractic clinic received more than $2 million in insurance reimbursements over five years.
  - Pennsylvania Attorney General Kathleen G. Kane said the evidence showed “that these physicians believed they were above the law and what’s worse, they allegedly preyed upon drug-addicted patients to line their own pockets.” She added that “Doctors are supposed to help free patients from the grip of addiction, not put them into the throes of it.”

Sources:

Case Summary 23: Woman Accused of Impersonating Her Twin Sister to Get Medicaid-Funded Opioids

- **Defendant(s):** Ruby Anne Clement
- **Case Year:** 2014
- **State:** Georgia
- **Case Status:** Prosecutors charged Clement with forgery in 2014.
- **Description of Scheme:** Clement allegedly impersonated her twin sister to secure prescription medication, which was billed to Medicaid.
- **Key Facts:**
  - Clement allegedly began posing as her twin sister, who had been in jail, to obtain pain care treatments at a medical facility.
  - Prosecutors accused Clement of receiving a lumbar procedure while impersonating her sister and getting a prescription afterward for oxycodone.
  - After receiving a second oxycodone prescription, Clement went back to the clinic, where she was met by deputies and arrested.

**Sources:**
Case Summary 24: “Those Pills Are More Serious than Cocaine and Heroin”

- **Defendant(s):** Doraymus Robinson and Carolyn Richardson
- **Case Year:** 2017
- **State:** New York
- **Case Status:** Richardson pleaded guilty in April 2017 to conspiracy to distribute oxycodone. A judge sentenced her to 12 years in prison. Robinson pleaded guilty to the same charge in March 2017 and received eight years in prison.
- **Description of Scheme:** The duo created fake prescription pads using an authentic Drug Enforcement Administration number of an unrelated doctor. Posing as this doctor, they fraudulently wrote and filled prescriptions for opioids, paying for the drugs with Medicaid cards or cash, and re-selling the medication on the street.
- **Key Facts:**
  - Law enforcement officials recovered Medicaid and government identification cards belonging to dozens of individuals, which were used to write the fake prescriptions.
  - When authorities first arrested Richardson, she possessed 252 oxycodone pills, 230 methadone tablets, and 108 Xanax pills. Three months later, authorities again arrested Richardson after she filled new prescriptions for 180 oxycodone and 120 methadone tablets.
  - At sentencing, a judge scolded Robinson for “buying . . . literally thousands, thousands of oxycodone pills and selling them for substantial amounts of money . . . . [T]hose pills are more serious than cocaine and heroin.”

**Sources:**
Case Summary 25: Defrauding Medicaid In Several Ways

- **Defendant(s):** Dr. Fernando Jayma
- **Case Year:** 2017
- **State:** Massachusetts
- **Case Status:** In May 2017, a judge sentenced Dr. Jayma to two-and-a-half years in jail after he pleaded guilty in Berkshire Superior Court to illegal prescribing of controlled substances, Medicaid False Claims, and larceny.
- **Description of Scheme:** Dr. Jayma prescribed opioids to patients, many of whom are substance abusers, with no medical purpose. Many of these patients filled the illicit prescriptions with Medicaid cards.
- **Key Facts:**
  - Dr. Jayma defrauded Medicaid by asking another doctor to see his patients when he was away, even though the doctor was not credentialed as a Medicaid practitioner. Dr. Jayma’s staff then billed Medicaid as if Dr. Jayma had seen the patients himself.
  - Dr. Jayma ignored red flags of patients’ substance abuse as he continued to prescribe them oxycodone and other opioids.
  - In 2013, Dr. Jayma was the second-highest prescriber of oxycodone within the Massachusetts Medicaid system, prescribing opiates at 11 times the average rate.

Sources:
Case Summary 26: Jury Convicts Doctor Of Health Care Fraud

- **Defendant(s):** Dr. George Kudnumi
- **Case Year:** 2017
- **State:** Kentucky
- **Case Status:** A federal jury convicted Dr. Kudnumi in January 2017 in U.S. District Court in Louisville of unlawfully distributing controlled substances and health care fraud. A judge sentenced him to four years in prison.
- **Description of Scheme:** Dr. Kudnumi prescribed medically unnecessary opioids to patients in exchange for cash and billed Medicaid for medically unnecessary transvaginal ultrasounds.
- **Key Facts:**
  - Dr. Kudnumi charged new patients $75 for gynecological exams and $35 in cash for subsequent visits for refills of oxycodone and hydrocodone.
  - Medicaid paid Dr. Kudnumi $555.73 for each ultrasound.
  - Dr. Kudnumi never actually performed some of the ultrasounds. For others, his office never prepared procedure reports for patients.
  - The court ordered Dr. Kudnumi to pay $77,384 in restitution to Kentucky’s Medicaid program for fraudulent billing.

**Sources:**
Case Summary 27: Forging Opioid Prescriptions Using Real Doctors’ Names

- **Defendant(s):** Barry Lee Dorsey, II; Tyesha Renee Dorsey; and Zachary Edward Rathke
- **Case Year:** 2017
- **State:** Pennsylvania
- **Case Status:** In March 2017, a federal grand jury of the U.S. District Court in Pittsburgh indicted all three defendants on charges including conspiracy to commit fraud against the United States and health care fraud. In July 2017, Rathke pleaded guilty to conspiracy and in October 2017, Mr. Dorsey pleaded guilty to conspiracy and aggravated identity theft. Both are awaiting sentencing. Ms. Dorsey’s trial is scheduled for 2018.
- **Description of Scheme:** The three defendants allegedly forged prescriptions, filled them using Medicaid benefits, and sold the drugs on the street for substantial profit.
- **Key Facts:**
  - Medicaid was the primary funding mechanism of the fraudulent prescriptions, which were mostly for Oxycodone or Percocet.
  - The defendants forged the prescriptions using the names, medical license numbers, and signatures of real doctors.

**Sources:**
Case Summary 28: Car Crash Leads To Opioid Addiction, Medicaid Fraud

- **Defendant(s):** Ashley Bardell

- **Case Year:** 2017

- **State:** Connecticut

- **Case Status:** In February 2017, a judge sentenced Bardell to 40 months in prison after she pleaded guilty in Bristol Superior Court to sale of narcotics. Authorities also charged five other individuals.

- **Description of Scheme:** As part of a prescription drug ring, Bardell filled illicit prescriptions for oxycodone and paid for most of the prescriptions with her Medicaid insurance.

- **Key Facts:**
  
  - According to the Drug Enforcement Administration, the prescriptions that Bardell used to purchase opioids came from a forged doctor’s prescription pad.
  - Bardell received a total of 600 Oxycodone tablets with the fraudulent prescriptions, some of which she later sold for cash.
  - Bardell’s attorney told the court that Bardell became dependent on painkillers when she was prescribed Percocet following a car accident in 2014.

**Sources:**


Case Summary 29: Millions Of Doses Of Opioids After Little Medical Examination

- **Defendant(s):** Dr. Abbey Akinwumi
- **Case Year:** 2016
- **State:** Michigan
- **Case Status:** Dr. Akinwumi pleaded guilty in November 2015 in U.S. District Court in Detroit to prescribing pain medicine outside the bounds of legitimate medical practice. A judge sentenced her to seven years in prison.

- **Description of Scheme:** Dr. Akinwumi prescribed large amounts of medically unnecessary opioids, defrauding Medicaid on behalf of patients receiving the drugs, which were then resold on street.

- **Key Facts:**
  
  - In total, Dr. Akinwumi admitted to issuing, without medical justification, more than 500,000 dosage units of Oxycodone, 300,000 dosage units of Opana, and more than 2 million dosage units of Hydrocodone.
  
  - She wrote many of these prescriptions after only a cursory examination of the patient, or with no examination at all.
  
  - In exchange for the prescriptions, Dr. Akinwumi billed the patients’ Medicaid insurance, along with Medicare and private insurance, for medically unnecessary procedures that included draining abscesses and repairing wounds.

**Sources:**
Case Summary 30: Operation Pill Count

- **Defendant(s):** Timothy E. Riley and Darla L. Jackson
- **Case Year:** 2016
- **State:** Ohio
- **Case Status:** In December 2016, Jackson pleaded guilty in Perry County Common Pleas Court to aggravated trafficking in drugs. In March 2016, authorities charged Riley with felony drug trafficking and permitting drug abuse.
- **Description of Scheme:** Jackson filled her prescription for OxyContin, then re-sold the drugs on the street. The case was part of a broader prescription drug investigation in which prosecutors charged 12 people. Medicaid funded many of the illicit prescriptions.
- **Key Facts:**
  - Detectives watched Jackson fill her prescription for oxycodone at a pharmacy and then sell the pills to customers waiting outside in the parking lot.
  - Riley allegedly pre-arranged those drug sales outside the pharmacy.
  - The broader investigation was known as “Operation Pill Count.”

**Sources:**
Case Summary 31: An Oxycodone Distribution Mill, At Medicaid’s Expense

- **Defendant(s):** Kian Gohari

- **Case Year:** 2016

- **State:** New York

- **Case Status:** A federal jury in March 2017 convicted Gohari in U.S. District Court in Manhattan of conspiracy to distribute narcotics and conspiracy to commit mail fraud. A judge sentenced him to 30 months in prison.

- **Description of Scheme:** Gohari owned a pharmacy in Brooklyn, where he distributed more than 25,000 medically unnecessary oxycodone pills, billing the majority of the pills to Medicaid and defrauding the program out of hundreds of thousands of dollars.

- **Key Facts:**
  - Gohari distributed the illicit oxycodone pills to a co-conspirator who brought him prescriptions for high-end medications—including HIV drugs and expensive pain gels—many of which were also medically unnecessary.
  - Authorities said Gohari billed Medicaid for these high-end prescriptions for hundreds of thousands of dollars, in addition to fraudulently billing Medicaid for the majority of the oxycodone pills.
  - Gohari’s co-conspirator sold the oxycodone pills in Brooklyn and Manhattan.
  - Preet Bharara, then-U.S. attorney in Manhattan, said Gohari “turned his Brooklyn pharmacy into an illegal oxycodone distribution mill.”

**Sources:**
Case Summary 32: Medically Unnecessary Opioids Lead to Four Patient Deaths

- **Defendant(s):** Dr. Charles Fred Gott
- **Case Year:** 2016
- **State:** Kentucky
- **Case Status:** In June 2015, a federal grand jury in U.S. District Court in Bowling Green indicted Dr. Gott on charges of conspiracy to distribute and dispense controlled substances without a legitimate medical purpose, health care fraud, and money laundering. In July 2016, he was indicted on further charges related to the death of several of his patients. He has pleaded not guilty, and his trial is scheduled to begin in February 2018.
- **Description of Scheme:** Dr. Gott allegedly prescribed medically unnecessary opioids, including pills to patients who died as a result of the medication. Prosecutors allege Dr. Gott fraudulently billed Medicaid, Medicare, and private insurance for office visits and for expensive, medically unnecessary tests.
- **Key Facts:**
  - At least four of Dr. Gott’s patients died, authorities said, as a result of the medically unnecessary medications he prescribed, which included Methadone, Hydrocodone, Clonazepam, and Oxymorphone.
  - To bolster his billings to Medicaid, Medicare, and private insurance, Dr. Gott allegedly directed staff to administer medically unnecessary electrocardiogram and spirometry tests to patients.

**Sources:**
Case Summary 33: Doctor Writes Fraudulent Opioid Prescriptions, Defunds Medicaid

- **Defendant(s):** Dr. John Terry; Thomas Ray; and Stephen Heffner, Jr.
- **Case Year:** 2016
- **State:** Pennsylvania
- **Case Status:** Dr. Terry pleaded guilty in January 2016 in U.S. District Court in Williamsport to writing fraudulent oxycodone prescriptions. A judge sentenced him to 20 months in prison. Ray pleaded guilty to possession with intent to distribute a controlled substance and was sentenced to 71 months in prison. Heffner pleaded guilty to theft or embezzlement in connection with health care and was sentenced to six months of probation.
- **Description of Scheme:** Dr. Terry wrote fraudulent opioid prescriptions for Ray and in Heffner’s name, defrauding Medicaid and Medicare.
- **Key Facts:**
  - Prosecutors said Terry wrote oxycodone prescriptions for Ray that showed reckless disregard because the drugs were medically unnecessary and were resold on the street. Medicaid paid for these prescriptions.
  - Terry wrote other fraudulent oxycodone prescriptions in Heffner’s name, even though Heffner was not his patient and the drugs were intended for someone else. Medicare funded those prescriptions.
  - After authorities searched his office in 2013, Dr. Terry voluntarily surrendered his medical license and Drug Enforcement Administration registration.

**Sources:**
Case Summary 34: Selling Opioids To Undercover Police

- **Defendant(s):** James “Tank” Williamson
- **Case Year:** 2014
- **State:** New Jersey
- **Case Status:** Williamson pleaded guilty in Camden County Superior Court to distribution of a controlled dangerous substance. A judge sentenced him to seven years in prison.
- **Description of Scheme:** Williamson sold prescription narcotics to an undercover investigator, part of a larger probe into doctors and pharmacies suspected of illegally diverting drugs through Medicaid beneficiaries.
- **Key Facts:**
  - In his plea agreement, Williamson admitted that he sold oxycodone to an undercover investigator between October 2012 and January 2013.
  - According to authorities, Williamson also sold more than an ounce of Percocet pills to an undercover officer during three transactions at a Camden restaurant.

Sources:
Case Summary 35: Visiting A Doctor, Lying About Needing Opioids

- **Defendant(s):** Brandy Archie
- **Case Year:** 2015
- **State:** Missouri
- **Case Status:** Archie pleaded guilty in December 2015 in U.S. District Court in St. Louis to health care fraud and possession with intent to distribute prescription drugs. A federal judge sentenced her to one year and one day in prison.
- **Description of Scheme:** Ms. Archie sold Medicaid-funded pain pills and other drugs.
- **Key Facts:**
  - Between October 2014 and January 2015, Archie sold nearly 1,000 doses of Percocet, Adderall, and other drugs.
  - Archie visited a doctor numerous times and falsely stated she needed prescription drugs for her medical conditions. She later admitted she had always intended to sell the medication.

**Sources:**
Case Summary 36: Pill Mill With A Motorcycle Club: ‘The Cat In The Hat’ From The Stand

- **Defendant(s):** Dr. William J. O’Brien III
- **Case Year:** 2016
- **State:** Pennsylvania
- **Case Status:** A federal jury in U.S. District Court in Philadelphia convicted Dr. O’Brien on charges including conspiracy to distribute controlled substances, distribution of controlled substances resulting in death, conspiracy to commit money laundering, conspiracy to commit bankruptcy fraud; and making false statements under oath in a bankruptcy proceeding. A judge sentenced him to 30 years in prison.
- **Description of Scheme:** Dr. O’Brien, who practiced osteopathic medicine, operated a “pill mill” with members of a motorcycle club. The pill mill dispensed and resold hundreds of thousands of oxycodone and methadone pills. Medicaid paid for some of the medication.
- **Key Facts:**
  - Members of the conspiracy sold controlled substances worth about $5 million. Dr. O’Brien pocketed an estimated $2 million in proceeds.
  - Dr. O’Brien mounted “an unorthodox defense that included asking a witness to read Dr. Seuss’ The Cat in the Hat from the witness stand.”
  - Nick DiGiulio, of the Department of Health and Human Services Office of Inspector General, said after the verdict: “We are thankful the jury saw the obvious—that the defendant is a dangerous person exploiting his medical license to operate as a drug dealer.”

Sources:
Case Summary 37: Pharmacy-Hopping With A Medicaid Card

- **Defendant(s):** Earl Kearson
- **Case Year:** 2015
- **State:** Connecticut
- **Case Status:** Prosecutors charged Kearson with possession of narcotics, insurance fraud, forgery, and illegally obtaining a controlled substance.
- **Description of Scheme:** Mr. Kearson was accused of unlawfully filling a prescription for 120 Oxycodone pills using his Medicaid card.

**Key Facts:**

- Kearson allegedly presented a prescription, which was written by a doctor at a cancer hospital, for the oxycodone at a CVS store.
- The pharmacist became suspicious and alerted police, saying there had been a rash of questionable prescriptions in recent weeks.
- Detectives verified that the oxycodone prescription had been previously filled at a Walgreens with Kearson’s Medicaid account.

**Sources:**
Case Summary 38: Massive Amounts Of Opioids, Multiple Patients And Medicaid Fraud

- **Defendant(s):** Dr. John Katsetos
- **Case Year:** 2015
- **State:** Connecticut

**Case Status:** Dr. Katsetos plead guilty in U.S. District Court in Hartford to conspiracy to distribute and to possess with intent to distribute narcotics, and health care fraud. He was sentenced to seven years in prison, ordered to pay $497,789 in restitution and ordered to forfeit $559,000, which was the value of his medical practice.

**Description of Scheme:** Dr. Katsetos, who practiced medicine for more than 20 years, prescribed more than two million dosages of highly addictive opioids to more than 2,000 patients, defrauding Medicaid and Medicare.

**Key Facts:**

- Dr. Katsetos failed to perform rudimentary examinations of patients to justify giving them oxycodone and other medications. He had been previously warned about his prescription practices by a doctor and several pharmacists, some of whom stopped filling the prescriptions.
- Dr. Katsetos saw multiple patients at once and billed Medicaid and Medicare for individual visits for each of those patients. At least one former patient, who traveled approximately 180 miles to receive prescriptions from Dr. Katsetos, died of an overdose.
- Deirdre M. Daly, then-U.S. attorney for Connecticut, said Dr. Katsetos “repeatedly violated his oath to protect his patients from harm,” and “flooded our community with highly addictive controlled substances.”

**Sources:**


Case Summary 39: So Many Opioids the Pharmacy Can’t Keep Up

- **Defendant(s):** Dr. Sam Jahani and Dr. Eric A. Peper
- **Case Year:** 2015
- **State:** Colorado
- **Case Status:** Dr. Jahani pleaded guilty in 2015 in U.S. District Court in Denver to conspiracy. A judge sentenced him to six months in prison. Dr. Peper pleaded guilty to conspiracy and received a sentence of time served.
- **Description of Scheme:** According to court documents, the two doctors prescribed large amounts of opioid pain relievers to patients without medical need for the drugs, defrauding Medicaid, Medicare and private insurers. Several patients died of overdoses.
- **Key Facts:**
  - Pharmacists told authorities that Dr. Jahani and Dr. Peper, who worked together at a clinic, prescribed oxycodone at such high levels that pharmacies had trouble keeping the drug in stock.
  - Emergency department personnel reported visits from numerous Jahani and Peper patients on dangerously high levels of narcotics.
  - A government expert determined that many patients seen by the two doctors were prescribed opioids with virtually no physical examination and little examination of their medical histories.
  - Court documents said the duo fraudulently billed Medicaid, Medicare and private insurers for office visits associated with the illicit prescriptions.

**Sources:**
Case Summary 40: Cheap Opioids Lead To Medicaid Fraud

- Defendant(s): David Piaquadio
- Case Year: 2015
- State: Pennsylvania
- Case Status: Authorities charged Piaquadio in 2015 in U.S. District Court in Williamsport with conspiracy to distribute controlled substances, possession with intent to distribute controlled substances, and distribution of controlled substances. He pleaded not guilty, and his trial is scheduled for January, 2018.
- Description of Scheme: Piaquadio allegedly obtained opioids through prescriptions for himself and others, defrauding Medicaid in the process.
- Key Facts:
  - Court documents show Piaquadio obtained more than 5,000 oxycodone and Percocet tablets and more than 180 fentanyl patches with a doctor’s prescription from pharmacies in Pennsylvania.
  - Prosecutors accuse Piaquadio of submitting claims to Medicaid for the drugs.
  - Piaquadio also allegedly obtained oxycodone and Percocet tablets and fentanyl patches from other people who had prescriptions for the drugs and were eligible for Medicaid and Medicare.

Sources:
Case Summary 41: Pain-Relief Creams and Medicaid Fraud

- **Defendant(s):** Dr. Elena Lev Polukhin, Boris Leo Rabichev, and Richard Wayne Custer.
- **Case Year:** 2016
- **State:** Minnesota
- **Case Status:** Dr. Polukhin pleaded guilty in 2016 in U.S. District Court in St. Paul to soliciting and receiving kickbacks. A judge sentenced her to 18 months in prison and ordered her to pay $421,329 in restitution. Rabichev pleaded guilty in 2015 to conspiracy and received a sentence of 18 months in prison. Custer pleaded guilty in 2015 to conspiracy and was sentenced to four years of probation.
- **Description of Scheme:** Dr. Polukhin conspired with a pharmacy manager and a pharmacist to defraud Medicaid and Medicare for topical pain-relief creams while also writing illegitimate prescriptions for oxycodone and morphine.
- **Key Facts:**
  - Dr. Polukhin specialized in pain management and rehabilitation, and the vast majority of her patients were Medicaid or Medicare beneficiaries.
  - From February 2011 through December 2014, Dr. Polukhin arranged with Best Aid Pharmacy to fill prescriptions written by her for topical pain-relief creams containing pain relievers and other drugs.
  - Dr. Polukhin received kickbacks from Best Aid in the form of payments to a charitable trust she controlled.

**Sources:**
Case Summary 42: “We Will Not Allow Medicaid To Pay For Drugs That Were Illegally Obtained”

- **Defendant(s):** Linda Masse
- **Case Year:** 2015
- **State:** New York
- **Case Status:** Masse pleaded guilty in 2015 in Schenectady County Court to criminal possession of a forged instrument. A judge sentenced her to felony drug court.
- **Description of Scheme:** Masse admitted to forging her employer’s signature to obtain hydrocodone and oxycodone from pharmacies, drugs that were paid for by Medicaid.
- **Key Facts:**
  - Masse, who worked for a physician specializing in Obstetrics and Gynecology, used 18 forged prescriptions from her employer’s practice to get narcotics from pharmacies at Walmart and CVS.
  - During the scheme, Masse obtained more than 2,000 hydrocodone and oxycodone pills.
  - New York Attorney General Eric T. Schneiderman said after announcing the guilty plea: “Forgery and Medicaid fraud are blatant abuse of the trust and privileges afforded to medical professionals . . . Above all, we will not allow Medicaid to pay for drugs that were illegally obtained.”

**Sources:**
Case Summary 43: Forging Prescriptions to Get Medicaid-Funded Oxycodone

- **Defendant(s):** Michael James Lott
- **Case Year:** 2015
- **State:** Idaho
- **Case Status:** Lott pleaded guilty in 2015 in U.S. District Court in Boise to acquiring and obtaining a controlled substance by misrepresentation, fraud, and deception and false statement relating to health care matters. A judge sentenced him to three years of probation.
- **Description of Scheme:** Lott used forged prescriptions to obtain Medicaid-funded oxycodone.
- **Key Facts:**
  - Lott admitted that he began altering his legitimate prescriptions to fill the prescriptions ahead of schedule. Eventually, Lott began forging new prescriptions altogether.
  - In April 2014, Lott filled a fraudulent oxycodone prescription and submitted it to Medicaid for payment.
  - The Drug Enforcement Administration investigated the case, along with the Department of Health and Human Services Office of Inspector General and state and local law-enforcement officials.

**Sources:**
Case Summary 44: Gym Owner Sells Oxy, Bills Medicaid

- **Defendant(s):** Scott Rabine

- **Case Year:** 2015

- **State:** New York

- **Case Status:** Rabine pleaded guilty in 2015 in Warren County Court to criminal sale of a controlled substance and grand larceny. The court sentenced him to 10 years in prison.

- **Description of Scheme:** Rabine sold prescription painkillers outside a gym he owned and fraudulently pocketed more than $4,600 in Medicaid benefits.

- **Key Facts:**
  - Rabine’s gym, Spartan Fitness, was popular with local high school students and athletes.
  - Rabine sold undercover police officers Medicaid-funded oxycodone pills at least four times outside of the facility. One of the sales was for 134 pills, and all of them were captured on video and audio.
  - At sentencing, Rabine’s lawyer argued that he had sold “relatively small amounts” of painkillers that were legitimate medications, not “drugs that destroy lives” like heroin or crack cocaine. Prosecutors rejected that characterization.

**Sources:**
Case Summary 45: A Stash Of $1 Million Cash

- **Defendant(s):** Dr. Hussein “Sam” Awada

- **Case Year:** 2015

- **State:** Michigan

- **Case Status:** In February 2015, Dr. Awada pleaded guilty in U.S. District Court in Detroit to writing prescriptions for controlled medications without medical justification and to health care fraud. The judge sentenced him to seven years in prison, and Dr. Awada agreed to forfeit seized assets to repay the government $2.3 million.

- **Description of Scheme:** Dr. Awada worked with co-conspirators to recruit patients with Medicaid, Medicare, and private insurance coverage, prescribing them opioids and billing for unnecessary medical procedures and tests that were never performed. Co-conspirators then bought the pills back from the “patients” and resold them to street drug dealers.

- **Key Facts:**
  - From 2010 through 2012, Dr. Awada wrote fraudulent prescriptions for 80,000 doses of oxycodone and Roxicodone.
  - Dr. Awada admitted to defrauding Medicaid, Medicare, and Blue Cross Blue Shield out of about $2.3 million.
  - Prosecutors alleged that Dr. Awada stashed $1 million cash in his house and sent some of his illicit profits to Lebanon.

**Sources:**
Case Summary 46: Kickbacks To Doctors And Middle East Bank Accounts

- **Defendant(s):** Waleed Yaghmou
- **Case Year:** 2014
- **State:** Michigan

- **Case Status:** Yaghmou pleaded guilty in 2014 in U.S. District Court in Detroit to conspiracy to distribute and possess with intent to distribute controlled substances, and money laundering. The court sentenced him to six years in prison, and he agreed to forfeit nearly $1 million seized from a bank account he maintained in the Middle East. At least 40 other people were charged in what prosecutors called a large-scale health care fraud and drug distribution scheme. Nearly all have been convicted.

- **Description of Scheme:** Yaghmou owned a pharmacy that participated in a fraud scheme in which owners of home health agencies gave kickbacks to doctors who prescribed medically unnecessary opioids and medical services, defrauding Medicaid, Medicare and private insurers.

- **Key Facts:**
  - Yaghmou admitted to fraudulently dispensing 1,500 oxycodone, 100,000 hydrocodone, and 100,000 alprazolam doses, knowing that the medications had no legitimate medical purpose.
  - Some medications billed to Medicaid, Medicare and private insurance under the scheme were never provided to patients.
  - Yaghmou received nearly $2 million in cash payments, nearly half of which was kept in the foreign bank account.
  - The Drug Enforcement Administration believes the drugs distributed in this scheme traveled along U.S. Route 23 into Ohio and West Virginia.

**Sources:**


Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate
Case Summary 47: The Largest Drug Dealer In A Small Town

- **Defendant(s):** Dr. Lafayette Twyner

- **Case Year:** 2014

- **State:** Iowa

- **Case Status:** Dr. Twyner pleaded guilty in 2014 in U.S. District Court in Des Moines to illegally dispensing hydrocodone resulting in death, and health care fraud. A federal judge sentenced him to five years in prison.

- **Description of Scheme:** Dr. Twyner prescribed pain medications to patients with no legitimate medical need, including self-admitted addicts. In exchange for the illegitimate prescriptions, he billed the patients’ insurance, including Medicaid and Medicare, for office visits where they sought drugs.

- **Key Facts:**
  - Prosecutors alleged that Dr. Twyner prescribed 920 hydrocodone pills to a single patient in just two months.
  - Dr. Twyner continued to prescribe pain medication to patients who showed signs of abuse. For example, Dr. Twyner prescribed hydrocodone for an undercover police officer who said he no longer needed the medication but he liked how it made him feel.
  - In calling for Dr. Twyner to serve prison time, prosecutors described him as “the largest drug dealer” in the small town of Newton, Iowa. “He was neither naïve nor inexperienced,” prosecutors wrote. “He knew exactly what he was doing and its impact on the lives of those he was supposed to be helping.”

- **Sources:**
Case Summary 48: Pill Mill In The Land Of Lincoln

- **Defendant(s):** Dr. Viwathna Bhuthimethee
- **Case Year:** 2014
- **State:** Illinois
- **Case Status:** Dr. Bhuthimethee pleaded guilty in 2014 in U.S. District Court in Springfield to health care fraud and illegal distribution of a controlled substance. The judge sentenced him to one year in prison.
- **Description of Scheme:** Dr. Bhuthimethee defrauded Medicaid at the walk-in clinic he owned by prescribing opioid pain medications to patients with no medical need for the drugs.
- **Key Facts:**
  - Dr. Bhuthimethee prescribed hydrocodone and Xanax with no legitimate medical purposes, including to some patients who had already failed drug tests and overdosed on the medication.
  - For example, authorities said, the doctor prescribed more than 2,000 illicit painkiller or anti-anxiety pills to four women over a two-year period.
  - Stephen R. Wigginton, then-U.S. attorney in Iowa, said Dr. Bhuthimethee “did not operate a legitimate medical practice, but instead was engaged in a scheme to distribute controlled substances illegally, thereby defrauding Health Care Benefit Programs, namely, Illinois Medicaid, by running what was in essence a prescription service for drug addicts, commonly known as a ‘Pill Mill.’”
  - “As I have long noted,” Wigginton added, “whether you are a doctor, a lawyer, a pharmacist, or an accountant, you cannot hide behind a license and a diploma.”

**Sources:**
Case Summary 49: A Few Hydrocodone Pills at Taxpayer Expense

- **Defendant(s):** Shawna Russell Smith
- **Case Year:** 2014
- **State:** Mississippi
- **Case Status:** The state attorney general's Medicaid Fraud Control Unit charged Smith in Union County with Medicaid fraud and illegally obtaining a controlled substance.
- **Description of Scheme:** Smith, a registered nurse, allegedly took hydrocodone from patients, defrauding Medicaid in the process.
- **Key Facts:**
  - According to the indictment, Smith worked as a nurse at a care center in New Albany, Mississippi.
  - Authorities allege Smith misappropriated for her own use one tablet of hydrocodone that had been prescribed for a patient. Smith allegedly filed a claim for reimbursement with the Mississippi Division of Medicaid.
  - Smith also allegedly obtained hydrocodone from two other patients and converting them to her own use.
  - Even though it involved a small amount of opioids, the case shows that the connection between Medicaid and opioids can extend from major pill mills to minimal drug diversions, all at taxpayer expense.

**Sources:**

Case Summary 50: Five Doctors for Opioids

- **Defendant(s):** Kari Ann Monroe
- **Case Year:** 2014
- **State:** North Carolina
- **Case Status:** Sheriff's deputies arrested Monroe in Moore County in 2014 on multiple charges including Medicaid fraud, obtaining a controlled substance by withholding information from a health care provider, and trafficking opium.
- **Description of Scheme:** Monroe allegedly visited five different doctors to obtain prescriptions for opioids, a practice commonly known as “doctor shopping.”
- **Key Facts:**
  - Monroe received prescriptions for a range of opioids, including Oxycodone, Oxymorphone, Opana, and Suboxone.
  - Authorities charged Monroe with seeing the five doctors between January 2013 and December 2013.

**Sources:**
Case Summary 51: From Pain Pills to Pakistan

- **Defendant(s):** Dr. Syed Jawad Akhtar-Zaidi

- **Case Year:** 2014

- **State:** Ohio

- **Case Status:** In August 2014, a federal grand jury in the U.S. District Court in Cleveland indicted Dr. Zaidi on charges of health care fraud, money laundering, conspiracy to distribute controlled substances, and distribution of controlled substances. Later that year, Dr. Zaidi missed his arraignment and is now a fugitive believed to be living in Pakistan.

- **Description of Scheme:** Dr. Zaidi ran a pain management clinic where he allegedly enriched himself, prescribing large amounts of illicit opioids and fraudulently billing Medicaid and other insurers for office visits with no medical purpose.

- **Key Facts:**
  - Prosecutors accused Dr. Zaidi of prescribing thousands of doses of OxyContin, Percocet, vicodin, and morphine to patients without adequately verifying their identity or medical history or performing a complete medical examination.
  - With no legitimate medical need for the opioids, Dr. Zaidi then allegedly billed Medicaid, Medicare, and private insurers for office visits that should have been used to help diagnose patients.
  - Dr. Zaidi reportedly instructed staff not to report patients they suspected of “drug seeking” or “doctor shopping” to law enforcement.
  - The Department of Justice sought to seize more than $4.8 million in accounts controlled by Dr. Zaidi, along with 139 pieces of jewelry worth more than $90,000. In 2016, a federal appeals court upheld a judge’s order of forfeiture of the seized assets.

**Sources:**
Case Summary 52: Medicaid-funded Opioids in her Children’s Names

- **Defendant(s):** Felicia L. Prysock
- **Case Year:** 2017
- **State:** South Carolina
- **Case Status:** Prysock pleaded guilty in November 2017 in U.S. District Court in Columbia to aggravated identity theft and possession of a controlled substance by forgery. She is scheduled to be sentenced in February 2018.
- **Description of Scheme:** Prysock filled forged opioid prescriptions in the names of her children and used Medicaid to pay for them.
- **Key Facts:**
  - According to court documents, Prysock filled 10 fraudulent prescriptions in her children’s names between July 2016 and April 2017. Medicaid paid for the drugs.
  - Prosecutors say the medications included oxycodone, hydrocodone, and Adderall.
  - U.S. Attorney Beth Drake stated that the Department of Justice “continues to vigorously prosecute those who deal prescription drugs to our most vulnerable citizens, many of whom suffer from debilitating addictions.”

**Sources:**
Case Summary 53: Prosecutors: Doctor and Pharmacists Defrauded Medicaid

- **Defendant(s):** Dr. James E. Ranochak, Brent A. Losier, and Charles Ringer
- **Case Year:** 2017
- **State:** Indiana

**Case Status:** A federal grand jury in Hammond indicted Dr. Ranochak, Losier and Ringer in June 2017 on charges of conspiracy to illegally dispense and distribute controlled substances, distributing a controlled substance, and conspiracy to commit health care fraud. All have pleaded not guilty, and their trial is scheduled for June 2018.

**Description of Scheme:** Prosecutors allege that the three conspired to defraud the Indiana Medicaid program by submitting thousands of dollars in fraudulent claims for medically unnecessary opioids and for controlled substances dispensed to patients who had not been seen by a doctor.

**Key Facts:**

- Dr. Ranochak stands accused of working with Losier, a pharmacy owner, and Ringer, a pharmacist, to prescribe hydrocodone and methadone, along with testosterone, to patients without medical need for the drugs. Many of these prescriptions were billed to Medicaid.
- To increase the amount Losier’s pharmacy could bill Medicaid per patient, Dr. Ranochak allegedly prescribed non-controlled medications to patients. The trio then allegedly required patients to fill these prescriptions before they could obtain their pain medications, which are controlled substances.
- Prosecutors alleged that Losier dispensed medication to patients using pre-signed prescriptions when Dr. Ranochak was on vacation.
- Dr. Ranochak reportedly told patients he would charge more for office visits if they came back for refills on pain medicine before their prescriptions ended.

**Sources:**


Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate
Case Summary 54: Stolen Prescription Pad Sends Opioids to the Street

- **Defendants:** Jennifer Bicego, Luke Gutkowski, Dustin Friz, Trisha Burkett, Jona Lafferty, Lance Roe, Charles Loveall, Brandon Madden, Andrew Pell, and Rachel Vito

- **Case Year:** 2017

- **State:** Michigan

- **Case Status:** Prosecutors charged all 10 individuals in East Lansing 54B District Court in January 2017 on counts related to Medicaid fraud and obtaining controlled substances by fraud.

- **Description of Scheme:** Prosecutors allege that the defendants used a stolen prescription pad to defraud Medicaid and sell opioids on the street.

- **Key Facts:**
  - The felony criminal complaint says the scheme originated with Bicego, who unlawfully obtained a prescription pad from a doctor’s office where she had worked. The pad was then used to forge prescriptions for OxyContin, Norco, Percocet and Adderall.
  - Co-conspirators allegedly filled the fraudulent prescriptions—some of which were billed to Medicaid—at several pharmacies, then sold the pills for cash or traded them for other drugs.
  - “When misused, prescription drugs can be every bit as dangerous as street drugs,” Michigan Attorney General Bill Schuette said in announcing the charges.

**Sources:**
Case Summary: “We are not going to tolerate drug dealers in white coats”

- **Defendant(s):** Dr. Craig Gialanella and 16 co-defendants
- **Case Year:** 2017
- **State:** New Jersey
- **Case Status:** In July 2017, the New Jersey Attorney General’s office charged Dr. Gialanella with distribution of narcotics and his co-defendants with related drug counts.
- **Description of Scheme:** Prosecutors say Dr. Gialanella worked with a network of alleged drug dealers to write fraudulent prescriptions for opioids and sell some of the drugs on the street, defrauding Medicaid and private insurers.
- **Key Facts:**
  - Prosecutors alleged that in 2016, Dr. Gialanella wrote 413 prescriptions in the names of 30 individuals for approximately 50,000 30-milligram oxycodone tablets. Prosecutors said the drug ring sold those tablets, known as “Blues,” for between $18 and $25 per pill.
  - Dr. Gialanella allegedly charged those looking for prescriptions for office visits that did not involve a medical examination or treatment. Medicaid paid for some of the visits.
  - Some of these “patients” travelled more than 100 miles to see Dr. Gialanella, a primary care physician.
  - “We are not going to tolerate drug dealers in white coats,” New Jersey Attorney General Christopher S. Porrino said as his office announced the charges.

**Sources:**
Case Summary 56: Illicit Opioids and Medicaid Fraud in The Bay State

- **Defendant(s):** Dr. Fernando Jayma
- **Case Year:** 2017
- **State:** Massachusetts

**Case Status:** Dr. Jayma pleaded guilty in April 2017 in Hampden Superior Court to charges of illegal prescribing of controlled substances, Medicaid false claims, and larceny. A judge sentenced him to two-and-a-half years in jail and ordered him to permanently resign his medical license and pay $9,778 in restitution.

**Description of Scheme:** Dr. Jayma illegally prescribed opioids to patients and defrauded Medicaid.

**Key Facts:**

- Dr. Jayma wrote illicit prescriptions for opioids, including oxycodone, morphine and methadone, causing pharmacies to falsely bill Medicaid for the medications.
- The doctor also defrauded Medicaid by arranging for another doctor to see his patients while he was away and directing his staff to bill Medicaid as if Dr. Jayma was treating those patients. Medicaid had not credentialed the other doctor.
- Dr. Jayma’s illicit prescriptions went to patients with no legitimate medical need for the drugs. Some of the patients had a documented history of substance abuse.

**Sources:**

Case Summary 57: Recruiting “Runners” to Get Oxycodeone Paid for by Medicaid

- **Defendant(s):** Raymond Morales
- **Case Year:** 2016
- **State:** Connecticut
- **Case Status:** Morales pleaded guilty in June 2016 in U.S. District Court in Hartford to conspiracy to distribute and possess with intent to distribute oxycodone. A judge sentenced him to seven years in prison. Prosecutors charged ten other people in the investigation.
- **Description of Scheme:** Morales recruited “runners” to fill fraudulent prescriptions for a drug ring that distributed oxycodone in the New Haven area. Medicaid paid for nearly all of the illicit prescriptions.
- **Key Facts:**
  - Investigators discovered that Morales had a close associate who worked as a pharmacy technician and helped him to fill the fake prescriptions.
  - The drug ring stole the personal identifying information of more than 50 doctors and other medical professionals to obtain oxycodone, which it then sold on the street for $20 to $30 per 30-milligram pill.

**Sources:**


Majority Staff Report  
Committee on Homeland Security and Governmental Affairs  
United States Senate
Case Summary 58: Nurse Accused of Grabbing Norco From Hospital Patient

- **Defendant(s):** Timothy Jones
- **Case Year:** 2016
- **State:** Mississippi
- **Case Status:** A Lauderdale County grand jury indicted Jones in August 2016 on charges of Medicaid fraud and acquiring or obtaining possession of a controlled substance by fraud, misrepresentation, or subterfuge.
- **Description of Scheme:** Jones allegedly defrauded Medicaid by obtaining opioids belonging to a nursing home patient.
- **Key Facts:**
  - Jones worked as a registered nurse at East Mississippi State Hospital in Meridian.
  - According to the indictment, Jones obtainedNorco containing hydrocodone from a patient at the hospital. The patient was receiving Medicaid benefits from the state.

Sources:
Case Summary 59: Nurse Grabs Percocet, Hydrocodone Intended for Patients

- **Defendant(s):** Cheryl Renee Hamblet
- **Case Year:** 2016
- **State:** Mississippi
- **Case Status:** Hamblet pleaded guilty in June 2016 in Choctaw County Circuit Court to Medicaid fraud and obtaining a controlled substance by fraud. A circuit court judge sentenced her to three years in prison, with two years suspended.
- **Description of Scheme:** Hamblet used opioids intended for patients at a nursing home, defrauding Medicaid.

**Key Facts:**

- Hamblet worked as a Licensed Practical Nurse at a Mississippi nursing home.
- With access to controlled substances at the facility, she diverted for her own use Percocet and hydrocodone meant to be dispensed to three patients.
- Though the investigation involved a small amount of opioids, Mississippi Attorney General Jim Hood affirmed the importance of the case, which his Medicaid Fraud Control Unit prosecuted. “Our office is deeply committed to protecting our state’s most vulnerable residents,” Hood said as the judge sentenced Hamblet.

**Sources:**

Case Summary 60: Fake Prescription in North Carolina

- **Defendant(s):** Shatiaa Neshate McNair
- **Case Year:** 2016
- **State:** North Carolina
- **Case Status:** Sheriff’s deputies arrested McNair in July 2016 on charges of Medicaid recipient fraud; obtaining a controlled substance by fraud/forgery; felony possession of a controlled substance; trafficking opiates, and identity theft.
- **Description of Scheme:** Ms. McNair allegedly used a fraudulent prescription to obtain oxycodone from a pharmacy, defrauding Medicaid.
- **Key Facts:**
  - According to the Moore County Sheriff’s Office, McNair filled the fake prescription at a Moore County-area pharmacy.
  - McNair allegedly obtained 120 dosage units of oxycodone with the illicit prescription.

Sources:
Case Summary 61: Prosecutors: Pharmacist Submitted Hundreds of Falsified Claims, Defrauded Medicaid

- **Defendant(s):** Joseph "Jess" Collins

- **Case Year:** 2016

- **State:** Tennessee

- **Case Status:** A Claiborne County grand jury indicted Collins in October 2016 on charges of TennCare fraud, insurance fraud, and computer crimes.

- **Description of Scheme:** Collins, a pharmacist, allegedly submitted fraudulent claims for prescriptions medications to TennCare (Tennessee's Medicaid program) and Medicare.

- **Key Facts:**
  - Prosecutors allege that Collins presented for payment hundreds of falsified claims for opioids and other drugs he claimed to have dispensed. Oxycodone and Rebif—an injectable drug used to treat multiple sclerosis—were among the medications.
  - Tennessee Bureau of Investigation agents with the state’s Medicaid Fraud Control Unit led the investigation, along with the Department of Health and Human Services Office of Inspector General.

**Sources:**
Case Summary 62: “Medicare and Medicaid Are Not a Means to Line the Pockets of
Fraudsters.”

- **Defendant(s):** Beth Palin and Joseph D. Webb
- **Case Year:** 2016
- **State:** Virginia
- **Case Status:** A judge in U.S. District Court in Abingdon convicted Palin and Webb in April 2016 of conspiracy to commit health care fraud and health care fraud. The judge sentenced them to 36 months each in prison and ordered them to pay $1.4 million in restitution.
- **Description of Scheme:** Palin and Webb owned a laboratory. They worked with a doctor from a self-described suboxone clinic to bill patients for medically unnecessary urine screenings, defrauding Medicaid, Medicare and private insurers out of more than $14 million.
- **Key Facts:**
  - Webb and Palin owned Bristol Labs, which specialized in urine drug screen testing. They worked with a doctor who opened what prosecutor said “purported to be” a substance abuse treatment program that treated opioid addicts with suboxone.
  - The doctor sent all patients to Bristol Labs for drug screenings that were medically unnecessary and not used in patient care. Medicaid programs in Virginia and Tennessee paid for many of these screenings, along with Medicare and private insurers.
  - Webb and Palin then opened their own addiction practice, which also billed Medicaid and other forms of insurance for medically unnecessary drug screenings.
  - After the judge sentenced Webb and Palin, John P. Fishwick Jr., then-U.S. attorney, said the defendants “stole over a million dollars from health care programs designed to provide care to those who need the most help. Medicare and Medicaid are not a means to line the pockets of fraudsters.”

**Sources:**
Case Summary 63: A Doctor Who Prescribed Excessive Opioids, Defrauded Medicaid and Had an Offshore Bank Account

- **Defendant(s):** Dr. Nicola Tauraso

- **Case Year:** 2016

- **State:** Maryland

- **Case Status:** Dr. Tauraso pleaded guilty in June 2016 in U.S. District Court in Baltimore to health care fraud. He died before he could be sentenced.

- **Description of Scheme:** Dr. Tauraso saw an excessive number of patients at his pain management clinic and prescribed opioids for no legitimate medical reason, defrauding Medicaid and Medicare out of $350,000.

- **Key Facts:**
  - Dr. Tauraso, a longtime pediatrician, opened a pain management practice in 2009.
  - Former employees told investigators that about 80 patients a day visited Dr. Tauraso’s new practice. He prescribed many of them large amounts of oxycodone and OxyContin, often without meeting with the patients.
  - In 2010 alone, Dr. Tauraso deposited more than $821,000 in his bank accounts and transferred about $575,000 of that to a bank in Panama. The same year, some pharmacists stopped filling his prescriptions out of concern that they were not medically necessary.

**Sources:**

1. Press Release, U.S. Att’y Off., Md., Frederick Pediatrician Whose License was Revoked Admits to Prescribing Oxycodone Without a Medical Need (June 8, 2016), https://www.justice.gov/usao-md/pr/frederick-pediatrician-whose-license-was-revoked-admits-prescribing-oxycodone-without.

Case Summary 64: Doctor Keeps Giving Opioids to Patients Already Enrolled in Drug Treatment

- **Defendant(s):** Dr. Mohammad Nassery

- **Case Year:** 2016

- **State:** Massachusetts

- **Case Status:** Dr. Nassery pleaded guilty in March 2016 in Barnstable Superior Court to making false Medicaid claims, illegal prescribing, and larceny. A judge sentenced him to two-and-a-half years in jail, suspended for a probationary period of five years.

- **Description of Scheme:** Dr. Nassery illegally prescribed opioids to drug addicts and defrauded Medicaid for the medication and for office visits.

- **Key Facts:**
  
  - Nassery prescribed oxycodone to patients despite their documented substance abuse, even after learning that some were enrolled in treatment programs or were receiving opioids from other providers.
  
  - Pharmacies unknowingly billed MassHealth, the state’s Medicaid program, for the medication he prescribed. Dr. Nassery also defrauded Medicaid by billing for simple office visits at a higher billing code.
  
  - Investigators found that Dr. Nassery required urine drug screenings and Magnetic Resonance Imaging (MRI) tests before prescribing controlled substances as a cover for his illicit prescription practices.

**Sources:**


Case Summary 65: A Doctor Known as an “Easy Write”

- **Defendant(s):** Dr. Steven Parry

- **Case Year:** 2016

- **State:** New York

- **Case Status:** Prosecutors charged Dr. Parry in February 2016 in U.S. District Court in Central Islip with distribution of a controlled substance without a legitimate medical purpose.

- **Description of Scheme:** Dr. Parry allegedly prescribed large quantities of illicit opioids including to a patient who died of an overdose after Dr. Parry disregarded warnings from Medicaid about the prescriptions.

- **Key Facts:**
  - According to court documents, Dr. Parry wrote prescriptions for large amounts of narcotics to relatively young patients, including more than one individual living in the same household.
  - A confidential source told investigators that Dr. Parry was known on the street as an “easy write”—someone who would prescribe drugs for no medical reason.
  - One of Dr. Parry’s patients, identified only as “Jane Doe,” died in 2014 of a drug overdose after Dr. Parry gave her hundreds of controlled substance prescriptions. Dr. Parry had also learned that Jane Doe was selling her oxycodone and Xanax pills.
  - Prosecutors allege that Dr. Parry ignored a letter from Medicaid warning him that Jane Doe had a history of drug abuse and rehabilitation treatment and that he disregarded a similar warning from Jane Doe’s mother.

**Sources:**
**Case Summary 66: A Medical Clinic that Doubled as an Insurance Scam, Defrauding Medicaid**

- **Defendants:** Dr. Rassan M. Tarabein.

- **Case Year:** 2017

- **State:** Alabama

- **Case Status:** Dr. Tarabein pleaded guilty in August 2017 in U.S. District Court in Mobile to health care fraud and unlawful distribution of a controlled substance. The court scheduled his sentencing for March 2018.

- **Description of Scheme:** Dr. Tarabein ran a clinic that prosecutors called an insurance scam, defrauding Medicaid, Medicare, and private insurers out of millions of dollars for medically unnecessary tests, procedures, and opioid prescriptions.

- **Key Facts:**
  - Dr. Tarabein, a neurologist, induced patients to come to his clinic for medically unnecessary tests such as Magnetic Resonance Imaging (MRI) scans, spent little time with patients, and injected them in places where they were not experiencing pain. His billing records cited procedures that prosecutors said were at times anatomically impossible to perform.
  - Dr. Tarabein singled out Medicaid patients to receive spinal injections and falsely billed Medicaid at higher billing codes for the procedures. From 2010 to 2016, he billed Medicaid more than $3.2 million for steroid injections, the highest amount any neurologist or pain management specialist charged Alabama’s Medicaid program during that period.
  - Overall, Dr. Tarabein overbilled Medicaid, Medicare, and private insurers out of about $13.1 million, and he pocketed $5.4 million in illicit proceeds.
  - Dr. Tarabein prescribed medically unnecessary oxycodone to patients, some of whom had track marks on their arms and hands because of drug use.

**Sources:**


Case Summary 67: Doctor Shopping While Medicaid Pays

- **Defendant(s):** Genora Manning
- **Case Year:** 2015
- **State:** Tennessee
- **Case Status:** Prosecutors in Hamilton County charged Manning in November 2015 with TennCare fraud. In February 2016, prosecutors in Bradley County charged Manning with the same crime. She pleaded guilty, and a judge sentenced her to probation.

- **Description of Scheme:** Manning defrauded TennCare, the state’s Medicaid program, by obtaining painkillers through “doctor shopping,” or visiting multiple health care providers to get multiple prescriptions.

- **Key Facts:**
  - Manning used her Medicaid benefits in Hamilton County to pay for medically unnecessary prescriptions for hydrocodone and tramadol.
  - In Bradley County, Manning doctor-shopped to obtain Medicaid-funded tramadol prescriptions.
  - As he announced Manning’s arrest in Bradley County, Tennessee Inspector General Manny Tyndall affirmed his office’s commitment to rooting out Medicaid fraud involving opioids. “Prescription drug abuse hurts individuals, families and communities, and we’re intent on finding and prosecuting these cases when TennCare is involved,” he said.

**Sources:**
Case Summary 68: A First-Time Offender Accused of Selling Her Opioids and Defrauding Medicaid

- **Defendant(s):** Constance Young
- **Case Year:** 2017
- **State:** Tennessee
- **Case Status:** Young pleaded guilty in March 2017 in Criminal Court for the 9th Judicial District after prosecutors charged her in 2015 with TennCare fraud. A judge sentenced her to judicial diversion, a program in which first-time offenders can have their cases expunged after a period of probation.
- **Description of Scheme:** Young allegedly defrauded TennCare, the state’s Medicaid program, by obtaining prescription opioids and selling the drugs.
- **Key Facts:**
  - Prosecutors said Young used her TennCare benefits to obtain the prescription painkiller hydrocodone.
  - Young then allegedly sold a portion of the hydrocodone to an undercover informant.
  - “Police are clearly committed to eliminating prescription drug abuse, and we’re doing our part to stop abusers who are supporting this lifestyle with TennCare,” Manny Tyn dall, the state inspector general, said as he announced the charges.

**Sources:**
Case Summary 69: Medicaid Recipients Get Opioids after Doctor Sees Them for Only Seconds

- **Defendant(s):** Dr. Harvey Jenkins and five others
- **Case Year:** 2016
- **State:** Oklahoma
- **Case Status:** In March 2016, prosecutors charged Dr. Jenkins and five of his former employees in Oklahoma County District Court with making Medicaid false claims; identity fraud; practicing medicine without a license; and conspiracy to possess, distribute, dispense, and prescribe dangerous controlled substances within 2,000 feet of a public park. Dr. Jenkins has pleaded not guilty and has publicly contested the charges.
- **Description of Scheme:** Authorities accuse Dr. Jenkins of running a “pill mill” in which he prescribed large quantities of opioid painkillers to patients without adequately assessing their medical need for the drugs, defrauding Medicaid.
- **Key Facts:**
  - State prosecutors say Dr. Jenkins saw up to 90 patients a day and prescribed them narcotics after seeing each patient for only 15 to 30 seconds.
  - Dr. Jenkins allegedly allowed his staff members to prescribe opioid painkillers, using pre-signed prescription pads bearing his signature. These staff members did not have licenses to prescribe medication.
  - Hundreds of Dr. Jenkins’s patients were insured through Medicaid.

**Sources:**


Majority Staff Report
Committee on Homeland Security and Governmental Affairs
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128
Case Summary 70: Medicaid Benefits, Illicit Opioids, and a Mercedes-Benz

• Defendant(s): Damrette M. Hawthorne, Charlene Breedlove-Jones, and Denesha Wakefield

• Case Year: 2011

• State: Ohio

• Case Status: In March 2011, all three defendants pleaded guilty in U.S. District Court in Columbus. Hawthorne pleaded guilty to conspiracy to distribute controlled substances, conspiracy to commit health care fraud, submission of fraudulent claims, and aggravated identity theft. A judge sentenced her to 12 years in prison. Breedlove-Jones pleaded guilty to conspiracy to distribute controlled substances, health care false statement, obtaining controlled substances by fraud, attempted distribution of a controlled substance, and aggravated identity theft. A judge sentenced her to 10 years and 10 months in prison. Wakefield pleaded guilty to health care false statements and obtaining a controlled substance by fraud. A judge sentenced her to five years of probation.

• Description of Scheme: Hawthorne owned two pain management clinics that prosecutors said doubled as “pill mills,” distributing large quantities of opioids and fraudulently billing Medicaid for more than $29,000 in illegal prescriptions.

• Key Facts:
  o Hawthorne opened the two clinics in Columbus in 2010 and employed Breedlove-Jones and Wakefield. The clinics attracted patients from Ohio, West Virginia and Kentucky. Many of the patients were Medicaid recipients.
  o The trio charged patients cash for medical visits to obtain opioid prescriptions, which were then billed to Medicaid.
  o Through the clinics, which used basic equipment and employed no full time physicians, investigators said Hawthorne helped distribute more than 11,000 doses of oxycodone.
  o Hawthorne and Breedlove-Jones forged the signatures of real physicians when they lacked a doctor to see patients.
  o Hawthorne, a Medicaid recipient who lived in federally subsidized housing, enriched herself through the scheme and drove a Mercedes-Benz.

Sources:
1. Press Release, FBI, Three Charged with Conspiracy, Making False Statements to Medicaid and Other Crimes in Connection with Two Columbus Pain Management

Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate

Case Summary 71: Using a “Doctor Shopping” Law to Crack Down on Medicaid Abuse Involving Opioids

- **Defendant(s):** Tyniki T. Graham
- **Case Year:** 2014
- **State:** Tennessee
- **Case Status:** Graham pleaded guilty in October 2014 in the Metropolitan Nashville & Davidson County Criminal Court to TennCare fraud.
- **Description of Scheme:** Graham obtained illicit prescriptions for opioid painkillers and defrauded TennCare, the state’s Medicaid program.

**Key Facts:**
- Graham visited multiple doctors in a short period of time, a practice known as “doctor shopping,” to obtain prescriptions for opioids.
- Through these doctor visits, Graham received illicit prescriptions for hydrocodone and tramadol, with Medicaid paying for her prescriptions or clinical visits.
- When prosecutors charged Graham in 2014, Robert White, then the acting Tennessee inspector general, said the state’s doctor shopping law “is a valuable tool in cracking down on people who are abusing” Medicaid through obtaining or selling opioids.

**Sources:**

- **Defendant(s):** Barbara Sue Greer
- **Case Year:** 2014
- **State:** Tennessee
- **Case Status:** State prosecutors charged Greer in August 2014 with TennCare fraud, sale or delivery of oxycodone, sale or delivery of hydrocodone, and sale or delivery of Xanax. She is currently on probation.
- **Description of Scheme:** Ms. Greer allegedly obtained Medicaid-funded opioids and sold them, defunding TennCare, the state’s Medicaid program.
- **Key Facts:***
  - Prosecutors said Greer obtained prescriptions for oxycodone, hydrocodone and Xanax and billed the drugs to Medicaid.
  - Greer then allegedly sold a portion of the prescription drugs on three occasions.
  - As prosecutors brought the charges, acting state inspector general Lawrence S. Saylor, Jr. said: “Local police, providers and citizens are committed to eliminating prescription drug abuse, especially when it involves public dollars.”

**Sources:**
Case Summary 73: “Doctors and Pharmacists Who Use Their Professional Licenses to Turn an Illicit Profit Through Drug Dealing and Medicaid Fraud”

- **Defendant(s):** Dr. Clifton Howell

- **Case Year:** 2011

- **State:** New Jersey

- **Case Status:** Dr. Howell pleaded guilty in July 2011 in Hudson County Superior Court to health care claims fraud. A judge sentenced him to three years in prison and ordered him to pay $101,000 in restitution. At least 33 other defendants pleaded guilty as well.

- **Description of Scheme:** Dr. Howell defrauded Medicaid as part of a larger scheme in which doctors and pharmacists billed Medicaid for pain pills that were diverted to drug dealers, who sold the medications on the street.

- **Key Facts:**
  - Dr. Howell admitted that he submitted false claims to Medicaid for prescription opioids.
  - Pharmacists used Dr. Howell’s prescriptions to dispense the drugs to Medicaid beneficiaries, but not the intended patients.
  - The statewide narcotics ring distributed prescription opioids including oxycodone and Percocet.
  - As Dr. Howell pleaded guilty, Ronald Chillemi, the state’s acting insurance fraud prosecutor, noted: “Too often we uncover doctors and pharmacists who use their professional licenses to turn an illicit profit through drug dealing and Medicaid fraud.”

**Sources:**


Case Summary 74: Opioids for a Doctor's Girlfriend Leads to Medicaid Fraud

- **Defendant(s):** Dr. John Yacoub
- **Case Year:** 2014
- **State:** Maryland
- **Case Status:** Dr. Yacoub pleaded guilty in May 2014 in U.S. District Court in Baltimore to conspiracy to distribute and possess with intent to distribute fentanyl, hydrocodone, oxycodone, morphine, and methadone. A federal judge sentenced him to one year in prison.
- **Description of Scheme:** Dr. Yacoub prescribed medically unnecessary opioid pain medication to his girlfriend and others, defrauding Medicaid.
- **Key Facts:**
  - Between 2012 and 2013, Dr. Yacoub provided prescriptions and pills—including Vicodin, oxycodone, and morphine—to his Nevada-based girlfriend, who was a drug addict.
  - Dr. Yacoub asked two other people, identified only as person A and person B, to help him get additional opioids to his girlfriend in exchange for giving them prescriptions for methadone.
  - Medicaid paid $2,375 for morphine prescriptions obtained by person B for Dr. Yacoub. Patient files for Dr. Yacoub’s girlfriend, person A, and person B showed no medical reasons for any of Dr. Yacoub’s prescriptions.

**Sources:**
Case Summary 75: A ‘Two-Tiered’ Medical Practice, with a Bogus Pain Management Clinic

- **Defendant(s):** Dr. Anand Persaud
- **Case Year:** 2015
- **State:** New York
- **Case Status:** Dr. Persaud pleaded guilty in May 2015 in Nassau County District Court to criminal sale of prescriptions for a controlled substance and criminal tax fraud. A judge sentenced him to six months in prison.
- **Description of Scheme:** Dr. Persaud prescribed medically unnecessary opioid pain medication, which were paid for by Medicaid.
- **Key Facts:**
  - Prosecutors said Dr. Persaud maintained a two-tiered medical practice: seeing medical patients with regular medical issues and running a fraudulent pain management practice. If patients visited Dr. Persaud for so-called pain management, he charged them $250 to $300 per visit. On a number of occasions, Dr. Persaud prescribed patients oxycodone that he knew was medically unnecessary.
  - Dr. Persaud and his wife both also admitted to filing false tax returns because they did not claim income they gained from the “pain management” visits. His wife pleaded guilty in 2015, and a judge sentenced her to five years of probation.
  - Investigators from the New York State Attorney General’s Medicaid Fraud Control Unit raided Dr. Persaud’s offices, leading to his arrest in July 2013.

**Sources:**
Case Summary 76: The Doctor Was Away and Medicaid Got The Bill

- **Defendant(s):** Dr. John Q. A. Webb, Jr. and Karl Mannino
- **Case Year:** 2014
- **State:** Texas
- **Case Status:** Dr. Webb pleaded guilty in December 2014 in U.S. District Court in Beaumont to conspiracy to commit health care fraud. A judge sentenced him to 15 months in prison. Mannino pleaded guilty in February 2014 to conspiracy to commit health care fraud. A judge sentenced her to three years of probation.
- **Description of Scheme:** Dr. Webb and his office manager, Mannino, defrauded Medicaid, Medicare, and private insurers by having unlicensed staff members prescribe opioids.
- **Key Facts:**
  - Dr. Webb allowed unlicensed staff members to prescribe controlled substances, including Suboxone, to patients when he was out of the office and had not treated the patients.
  - Mannino distributed the drugs directly to patients, rather than sending the prescriptions to pharmacies.
  - Mannino then oversaw the submission of false claims to Medicaid and Medicare stating that a licensed physician had provided the health care services.
  - The scheme caused more than $300,000 in losses to Medicaid, Medicare, and private insurance companies.

**Sources:**
Case Summary 77: “When the Indiana Medicaid program is Wrongly Billed for Ineligible Claims... Taxpayers Become Victims As Well.”

- **Defendant(s):** Dr. William Hedrick
- **Case Year:** 2015
- **State:** Indiana
- **Case Status:** Prosecutors charged Dr. Hedrick in January 2015 in Delaware Circuit Court with Medicaid fraud, reckless prescribing, and forgery. He has pleaded not guilty and his trial is scheduled for March 2018.
- **Description of Scheme:** Authorities allege that Dr. Hedrick over-prescribed opioids at dangerous levels, resulting in the deaths of at least eight patients, and that he defrauded Medicaid.
- **Key Facts:**
  - Dr. Hedrick ran pain management clinics where he allegedly saw up to 100 patients a day, prescribing opioids without establishing medical need for the drugs. Investigators observed 326 patients enter and leave his clinics in just three days.
  - Most of Dr. Hedrick’s patients were on Medicaid, and prosecutors accuse him of allowing employees to fraudulently bill Medicaid for procedures and prescriptions using another physician’s information.
  - As authorities announced Dr. Hedrick's arrest, Greg Zoeller, then Indiana’s attorney general, said that “the prescription drug abuse epidemic is fueled by dangerous overprescribing of addictive opioid drugs... when the Indiana Medicaid program is wrongly billed for ineligible claims, as is alleged here, taxpayers become victims as well.”

Sources:
Case Summary 78: Colorado Pill Mill

- **Defendant(s):** Dr. Joel E. Miller

- **Case Year:** 2015

- **State:** Colorado

- **Case Status:** A federal jury in U.S. District Court in Denver convicted Dr. Miller in November 2015 of unlawful distribution of a controlled substance without a legitimate medical purpose, unlawful distribution of a controlled substance without a legitimate medical purpose resulting in death, and providing false information on his DEA registration application. A judge sentenced him to five years in prison.

- **Description of Scheme:** Dr. Miller ran a "pill mill" and prescribed excessive amounts and dangerous combinations of opioids. At least one patient died from the drugs.

- **Key Facts:**
  
  - Dr. Miller prescribed controlled substances, including hydrocodone, without establishing a legitimate medical purpose for the medication.
  
  - Dr. Miller’s prescriptions and dosage levels caused patients to become addicts. He allowed staff members to distribute opioids in his absence and without a doctor’s examination, using a form he had pre-signed.
  
  - Prosecutors said Dr. Miller defrauded Medicaid, Medicare, and private insurers by filing fraudulent claims for medical services and procedures, using a billing code with a higher reimbursement rate.

**Sources:**


Majority Staff Report
Committee on Homeland Security and Governmental Affairs
United States Senate
**Case Summary 79: Fake Prescriptions and False Claims**

- **Defendant(s):** Julia Clymer
- **Case Year:** 2013
- **State:** Illinois
- **Case Status:** Clymer pleaded guilty in September 2013 in U.S. District Court in East St. Louis to health care fraud and obtaining possession of a controlled substance by fraud. A judge sentenced her to five years of probation.
- **Description of Scheme:** Clymer defrauded Medicaid by creating fraudulent opioid prescriptions and filling them at pharmacies.
- **Key Facts:**
  - Through her employer, Clymer authorized the creation of fake prescriptions intended for Medicaid beneficiaries. Authorities did not name the employer.
  - Clymer then diverted the prescriptions for her own use, causing false claims to be submitted to Illinois’s Medicaid program.
  - Clymer obtained 30 pills containing hydrocodone from a pharmacy.

**Sources:**
Case Summary 80: Preying on Medicaid patients

- **Defendant(s):** Dr. David Gierlus
- **Case Year:** 2013
- **State:** Iowa

- **Case Status:** Dr. Gierlus pleaded guilty in March 2013 in U.S. District Court in Davenport to unlawfully prescribing hydrocodone, a Schedule III controlled substance. A judge sentenced him to eight years in prison.

- **Description of Scheme:** Dr. Gierlus prescribed hydrocodone and other controlled substances to a female patient without a legitimate medical need. At the time, he was engaged in an inappropriate sexual relationship with the patient.

- **Key Facts:**
  - Dr. Gierlus was a family practice physician in Muscatine, Iowa for more than 20 years.
  - He began treating the female patient and became involved in a relationship with her by 2012. In February 2012, Dr. Gierlus prescribed Patient A 120 hydrocodone pills for no legitimate medical purpose.
  - At sentencing, U.S. District Judge Stephanie M. Rose called Dr. Gierlus a “sexual predator,” citing court records that said he had sexual contact with 18 victims, including three patients who he injected with drugs before assaulting them. Dr. Gierlus did not dispute the court records.
  - Judge Rose said Dr. Gierlus preyed on “vulnerable” women, many of them Medicaid patients, including one female Medicaid recipient to whom he gave rent money in exchange for sex.

**Sources:**

Case Summary 81: Opioids in Exchange for Sex

- **Defendant(s):** Dr. Tahir Usman Mir
- **Case Year:** 2012
- **State:** Pennsylvania
- **Case Status:** A jury in Indiana County Common Pleas Court convicted Dr. Mir in June 2012 of violating the state’s Controlled Substances Drugs Devices and Cosmetics Act.
- **Description of Scheme:** Dr. Mir wrote unlawful opioid prescriptions to female patients in exchange for sex.
- **Key Facts:**
  - Between December 2008 and October 2011, Dr. Mir provided two women with prescriptions for painkillers, including oxycodone and hydrocodone, in exchange for sexual favors.
  - On October 11, 2011, the state attorney general’s Medicaid Fraud Control Section raided Dr. Mir’s office.
  - Prosecutors said Dr. Mir defrauded Medicaid by accepting cash payments for medication he provided to drug addicts.

Sources:
Case Summary 82: Selling Pain Prescriptions for Millions in Profit

- **Defendant(s):** Dr. David Brizer
- **Case Year:** 2013
- **State:** New York

**Case Status:** Dr. Brizer pleaded guilty in March 2013 in Rockland County Court to criminal sale of a prescription of a controlled substance, criminal possession of a controlled substance, criminal tax fraud, and conspiracy. A judge sentenced him to five years of probation.

**Description of Scheme:** Dr. Brizer sold opioid prescriptions to drug dealers in a scheme that led to Medicaid being defrauded out of thousands of dollars. The dealers then re-sold some of the pills on the street.

**Key Facts:**

- The prescriptions for oxycodone and other pain medications that Dr. Brizer sold from his midtown Manhattan and Rockland County offices were worth millions of dollars in pills.
- Dr. Brizer sold prescriptions in the names of phony patients, charged his customers up to $300 for each sale.
- A reputed drug dealer who purchased Dr. Brizer’s prescriptions allegedly defrauded Medicaid by causing the program to pay thousands of dollars to pharmacies for the illicit narcotics.

**Sources:**


Case Summary 83: Stolen Prescription Paper and Stolen Medicaid Cards Lead to Illicit Opioids

- **Defendant(s):** Suzanne Benizio
- **Case Year:** 2011
- **State:** New York
- **Case Status:** Benizio pleaded guilty in December 2011 in State Supreme Court in Bronx County to forgery. A judge sentenced her to four to eight years in prison and ordered her to repay the New York State Medicaid program more than $200,000.
- **Description of Scheme:** Benizio led a drug ring that distributed $200,000 in illicit opioids in 20 New York counties through forged prescriptions, defrauding Medicaid.
- **Key Facts:**
  - Benizio created more than 250 forged prescriptions for OxyContin and Roxicodone on prescription paper stolen from New York City-area doctors and hospitals. When authorities arrested her, she possessed enough paper for 1,500 more phony prescriptions.
  - Working with co-conspirators, Benizio misappropriated numerous Medicaid cards that she used to create the fake prescriptions in the names of real Medicaid recipients.
  - Pharmacies filled the prescriptions using the Medicaid cards, and the drug ring then re-sold the pills on the street.

Sources:
Case Summary 84: “Basically, he was using the state to subsidize his drug-dealing.”

- **Defendant(s):** Louis Eppinger
- **Case Year:** 2013
- **State:** Ohio
- **Case Status:** Eppinger pleaded guilty in March 2013 in U.S. District Court in Cleveland to health care fraud and conspiracy to possess with intent to distribute oxycodone. A judge sentenced him to 12 years in prison. Six other people pleaded guilty to related crimes.
- **Description of Scheme:** Eppinger masterminded a conspiracy that forged opioid prescriptions and re-sold the illicit drugs on the street, bilking Medicaid.
- **Key Facts:**
  - Eppinger obtained blank prescription paper and the Drug Enforcement Administration (DEA) numbers of various northern Ohio physicians and gave the paper to a co-conspirator, who forged prescriptions for OxyContin and Percocet.
  - Other co-conspirators, known as “walkers,” filled the prescriptions at pharmacies and gave the pills to Eppinger, who sold some of the medication.
  - Eppinger billed the Ohio Medicaid program $21,098 for the illegal painkillers. “Basically, he was using the state to subsidize his drug-dealing,” Steven Dettelbach, then the U.S. attorney, said after a federal grand jury indicted Eppinger.

**Sources:**
**Case Summary 85: Fake Prescriptions, Real Oxycodone**

- **Defendant(s):** Yolanda Rice

- **Case Year:** 2014

- **State:** Illinois

- **Case Status:** Rice pleaded guilty in April 2014 in U.S. District Court in East St. Louis to health care fraud and obtaining possession of a controlled substance by fraud. A judge sentenced her to five years of probation.

- **Description of Scheme:** Rice defrauded Medicaid by obtaining opioids through fraudulent prescriptions.

- **Key Facts:**
  - Rice worked at a doctor’s office in Swansea, Illinois, called Master Medical Care.
  - Through her employer, Rice authorized fake prescriptions ostensibly for Medicaid beneficiaries, then diverted the drugs to herself. The Illinois Medicaid program paid nearly $2,000 in fraudulent claims because of the prescriptions.
  - Through the scheme, Rice obtained 180 illegal oxycodone pills.

**Sources:**
Case Summary 86: When the Doctor’s Away, He Bills Medicaid Anyway

- **Defendant(s):** Dr. Michael A. Taylor
- **Case Year:** 2013
- **State:** Massachusetts
- **Case Status:** Dr. Taylor pleaded guilty in August 2013 in Bristol Superior Court to illegal prescribing of a controlled substance, violating the Medicaid False Claims Act, and larceny. A judge sentenced him to 2 ½ years in jail, suspended for a probationary period of five years, and ordered him to pay more than $9,800 in restitution to MassHealth, the Massachusetts Medicaid program.
- **Description of Scheme:** Dr. Taylor prescribed medically unnecessary opioids, causing pharmacies to falsely bill MassHealth for the narcotics.
- **Key Facts:**
  - Dr. Taylor, who practiced general internal medicine, illegally prescribed oxycodone, Percocet and other oxycodone-based drugs to 15 patients.
  - Dr. Taylor fraudulently billed more than $9,800 to MassHealth for office visits where patients picked up the prescriptions. In reality, the patients didn’t see him during those visits. Sometimes, he was out of state.
  - Martha Coakley, then the Massachusetts attorney general, said the case demonstrates the importance of guarding against Medicaid fraud involving opioids. “Illegally prescribing drugs with a high potential for abuse is a serious offense that puts patients at risk and steals critical funding from MassHealth,” she said upon Dr. Taylor’s guilty plea.

**Sources:**

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Majority Staff Report
Committee on Homeland Security and Governmental Affairs
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Case Summary 87: From Public Housing to Prison

- **Defendant(s):** Eugene Brown

- **Case Year:** 2013

- **State:** New Jersey

- **Case Status:** Brown pleaded guilty in January 2013 in U.S. District Court in Trenton to distribution and possession with intent to distribute oxycodone, and possession of a firearm by a convicted felon. A judge sentenced him to one year in prison. At least five other people were convicted of related crimes.

- **Description of Scheme:** Brown participated in a conspiracy to obtain fraudulent prescriptions for oxycodone-based pain medication and sell the pills on the street.

- **Key Facts:**
  - Brown lived on public assistance in an Atlantic City housing project, his $775 monthly income barely able to cover his rent.
  - In pain from kidney dialysis and other ailments, Brown obtained painkillers from his doctor. Medicaid paid for the drugs.
  - Brown then sold some of his pills for money. A confidential informant told law-enforcement officials that Brown sold him 50 to 100 oxycodone-based pills on 4 to 6 occasions.
  - At sentencing, Brown apologized to the court. "First of all, I'd like to say I'm sorry I got myself into this situation, I can't undo it," he said. "I put myself in this situation."

**Sources:**
Case Summary 88: A Drug Ring Ran Medical Offices, at Medicaid's Expense

- **Defendant(s):** Dr. Zhanna Kanevsky
- **Case Year:** 2013
- **State:** New York
- **Case Status:** Dr. Kanevsky pleaded guilty in 2013 in Manhattan Supreme Court to participating in a prescription drug trafficking ring. A judge sentenced her to five years of probation. Prosecutors charged four other people in the case.
- **Description of Scheme:** Dr. Kanevsky wrote prescriptions for the Brooklyn-based ring, which distributed more than $3.4 million in oxycodone and other prescription drugs through medical offices it controlled. Medicaid paid for some of the illicit prescriptions.
- **Key Facts:**
  - Between 2012 and May 2013, Dr. Kanevsky wrote prescriptions for about 100,000 oxycodone pills and 5,000 Xanax pills, with a combined street value of about $2 million.
  - Dr. Kanevsky issued the prescriptions to what prosecutors called phony patients, whom she did not examine, while working at a Brooklyn medical office that the drug ring established.
  - The ring directed the patients to fill prescriptions written by Kanevsky and others at specified pharmacies, using Medicaid or cash.

Sources:
Case Summary 89: Dentist Becomes Addicted to Opioids, Defrauds Medicaid

- **Defendant(s):** Walter L. Dawkins
- **Case Year:** 2012
- **State:** Illinois
- **Case Status:** Dawkins pleaded guilty in September 2012 in U.S. District Court in Benton to health care fraud and illegal dispensation of a controlled substance. A judge sentenced him to one year in prison.
- **Description of Scheme:** Dawkins, a dentist, wrote hundreds of fraudulent opioid prescriptions, defrauding Medicaid.

**Key Facts:**

- Dawkins, who owned a dental clinic in Fairfield, Illinois, became addicted to hydrocodone and took up to 10 hydrocodone tablets at a time, according to court documents.
- Dawkins wrote hydrocodone prescriptions with no legitimate medical need and arranged for a friend to fill them at various pharmacies. The friend gave some of the pills to Dawkins.
- Some of Dawkins's prescriptions were for false names; others were for Medicaid recipients.
- Medicaid paid $1,242—out of a total $3,597 bill—for 118 prescriptions Dawkins wrote for 6,006 Hydrocodone tablets.

**Sources:**

Case Summary 90: A Drug Ring out of Her Home

- **Defendant(s):** Catherine McIntosh
- **Case Year:** 2011
- **State:** New York
- **Case Status:** McIntosh pleaded guilty in December 2011 in U.S. District Court in Buffalo to possession with intent to distribute controlled substances. A judge sentenced her to three years of probation.
- **Description of Scheme:** McIntosh sold her prescription opioids, which had been funded by Medicaid and Medicare.
- **Key Facts:**
  - A confidential informant told federal agents that McIntosh was selling controlled substances from her residence. Agents then used the informant—outfitted with a digital recorder and concealed body transmitter—to purchase drugs from McIntosh. The drugs included hydrocodone, fentanyl, and Xanax.
  - Medicaid and Medicare paid for the drugs McIntosh sold, which had been prescribed in her name.

**Sources:**
Case Summary 91: An Opioid-Addicted Mother, Medicaid, and a Dead Infant Son

- **Defendant(s):** Tishcena Louise Brown
- **Case Year:** 2014
- **State:** Washington, D.C.
- **Case Status:** Brown pleaded guilty in May 2014 in D.C. Superior Court to insurance fraud and voluntary manslaughter. A judge sentenced her to four years in prison.
- **Description of Scheme:** Brown essentially "hospital-shopped," fraudulently obtaining opioids from multiple hospitals and using Medicaid to pay for the drugs. Her infant son would end up dying from a prescription medication she gave him.

**Key Facts:**

- Brown, who had a history of prescription drug abuse, frequented Washington, D.C.-area hospitals to unlawfully obtain oxycodone, dilaudid, and other drugs.
- At the hospitals, Brown filled prescriptions in her own name, without telling doctors she had obtained the same medications from other doctors and hospitals.
- In a four-month period in 2013, various doctors prescribed Brown more than 1,700 pills. Medicaid paid for the medications.
- In September 2013, Brown's seven-week-old son stopped breathing and died after she gave him Promethazine, a prescription medication that a doctor had prescribed for her. Authorities ruled the death a homicide, caused by a lethal dose of Promethazine.

**Sources:**

Case Summary 92: “I Can Do That. I Will Give You Vicodin and Other Meds.”

- **Defendant(s):** Dr. Basim-Abdulmuti Qandil
- **Case Year:** 2014
- **State:** Michigan
- **Case Status:** A federal judge in U.S. District Court in Detroit convicted Dr. Qandil in April 2014 of illegal drug distribution, health care fraud, and money laundering. He failed to appear for his sentencing, and authorities issued an arrest warrant.
- **Description of Scheme:** Dr. Qandil ran a medical practice that doubled as a pill mill, prescribing millions of opioids and improperly billing Medicaid along with Medicare.
- **Key Facts:**
  - Prosecutors presented evidence at trial showing that Dr. Qandil prescribed 3.7 million dosage units of controlled substances—including oxycodone and Vicodin—between 2011 and 2013. He barely examined some patients, and did not examine others at all.
  - The drugs that Dr. Qandil prescribed were re-sold on the street or by addicted patients. Lines would form at his clinic at 8 a.m. and block entry to a bank next door.
  - Court documents show that agents sent fake patients undercover into the medical clinic, some of whom paid with law enforcement-provided Medicaid cards. One such patient sought opioids for so-called back pain. “I can do that. I will give you Vicodin and other meds,” Dr. Qandil responded, and he then prescribed the drugs with no medical examination.
  - Dr. Qandil transferred more than $1.5 million in illicit proceeds to a bank account in Amman, Jordan.

Sources:
Case Summary 93: “Frankly, You’re Lucky to Be Alive.”

- **Defendant(s):** Dr. Robert Wayne Locklear
- **Case Year:** 2014
- **State:** Tennessee
- **Case Status:** Dr. Locklear pleaded guilty in June 2014 in U.S. District Court in Greeneville to conspiracy to distribute cocaine and conspiracy to commit health care fraud. A judge sentenced him to two years in prison and ordered him to pay $121,958 in restitution to Medicaid and Medicare.
- **Description of Scheme:** Dr. Locklear was a crack cocaine addict who ran a suboxone clinic, prescribing suboxone and other medications without examining patients and defrauding Medicaid and Medicare.
- **Key Facts:**
  - Dr. Locklear admitted in court that he had a $2,500-a-day crack cocaine habit. Evidence showed it impaired his ability to run his medical practice and his substance abuse clinic, which was designed to treat people with opioid addictions.
  - Dr. Locklear went back to his office at night to run the suboxone clinic and admitted that he saw patients while experiencing “a buzz.” In time, he saw patients infrequently and had unlicensed staff members prescribe suboxone to those he had not examined.
  - A federal judge noted at sentencing that Dr. Locklear’s defrauding of Medicaid and Medicare was “in some ways . . . a more serious offense.” Citing Dr. Locklear’s addiction, the judge told him: “Frankly, you’re lucky to be alive.”

Sources:
Case Summary 94: Toilet Paper and Paper Towels in Exchange for Opioids

- **Defendant(s):** Dr. Matthew Bennett
- **Case Year:** 2015
- **State:** New York
- **Case Status:** Dr. Bennett pleaded guilty in April 2015 in U.S. District Court in Buffalo to unlawfully distributing and dispensing oxycodone. A judge sentenced him to three years in prison.
- **Description of Scheme:** Dr. Bennett wrote illegal prescriptions for opioids and other drugs to undercover law enforcement officers. Some of those prescriptions were billed to Medicaid.
- **Key Facts:**
  - Investigators said Dr. Bennett’s clinic often overflowed with patients who used Medicaid and private insurance to purchase painkillers from him.
  - Former patients and employees of Dr. Bennett told authorities he was issuing illegitimate prescriptions for controlled substances, triggering the investigation.
  - Dr. Bennett issued multiple prescriptions on seven occasions for oxymorphone, Roxycodone, and other drugs to undercover officers and informants.
  - Dr. Bennett often handed over the prescriptions in exchange for items such as paper products and a gas grill. In one instance, Dr. Bennett wrote a prescription for oxymorphone in the driveway of his home in exchange for toilet paper and paper towels delivered by an undercover officer.

**Sources:**
Case Summary 95: Opioids in a Medical Clinic Parking Lot

- Defendant(s): Dr. Nolan Denny Crisp
- Case Year: 2013
- State: Missouri
- Case Status: Dr. Crisp pleaded guilty in April 2013 in U.S. District Court in Springfield to illegal distribution and dispensing of controlled substances. A judge sentenced him to two years in prison.
- Description of Scheme: Dr. Crisp handed out excessive opioid prescriptions, including to a patient with whom he was having a sexual relationship. Prosecutors said Medicaid paid for some of the illegal prescriptions.
- Key Facts:
  - Employees at the medical clinic where Dr. Crisp worked expressed concern to authorities about his prescription-writing practices, noting that he met people in the parking lot he had not examined and gave them prescriptions.
  - Once word got out that Dr. Crisp was generous with prescriptions, some patients waited for him across the street in a church parking lot.
  - Dr. Crisp gave a woman with whom he was having a sexual relationship prescriptions for OxyContin and other opioids, even though she had no medical need for the drugs.
  - Prosecutors alleged that Dr. Crisp wrote illegal prescriptions for Medicaid beneficiaries, who filled them at pharmacies that billed Medicaid. Medicaid paid more than $16,000 in claims for these illegal prescriptions and medically unnecessary office visits, according to court records.

Sources:
Case Summary 96: “Money Before Medicine.”

- **Defendant(s):** Dr. Stephen J. Schneider, Linda K. Schneider
- **Case Year:** 2010
- **State:** Kansas
- **Case Status:** A federal jury in U.S. District Court in Wichita convicted both defendants in June 2010 of conspiracy, unlawful distribution of controlled substances, health care fraud, and money laundering. A judge sentenced Dr. Schneider to 30 years in prison and Linda Schneider, his wife, to 33 years in prison.

- **Description of Scheme:** The Schneiders ran an illegal prescription drug distribution ring, defrauding Medicaid and other health insurers out of more than $4 million.

- **Key Facts:**
  - Dr. Schneider saw patients and Linda Schneider, a Licensed Practical Nurse managed the business at the Schneider Medical Clinic.
  - The clinic illegally dispensed prescription opioids, including oxycodone, morphine and hydrocodone. Prosecutors focused their case at trial on 21 of 68 patients who died of drug overdoses connected to the Schneider’s medical care.
  - As part of their Medicaid fraud scheme, the couple falsified insurance claims.
  - Barry Grissom, then the U.S. attorney, said the couple “put money before medicine.”

**Sources:**
Case Summary 97: Massive Amounts of Opioids and a Massive Medicaid Fraud

- **Defendant(s):** Antoine Johnson and Lawanda Johnson

- **Case Year:** 2011

- **State:** Washington

- **Case Status:** A federal jury in U.S. District Court in Tacoma convicted both defendants in November 2011 of health care fraud and filing false income tax returns. Jurors also convicted Antoine Johnson of illegal drug distribution. A judge sentenced Antoine Johnson to 12 years and seven months in prison and his mother, Lawanda Johnson, to seven years and three months in prison.

- **Description of Scheme:** The Johnsons ran four medical clinics in western Washington, giving patients massive amounts of illegitimate opioids and engaging in a systematic scheme to defraud Medicaid.

- **Key Facts:**
  - With Dr. Johnson as the only medical doctor, the Johnson clinics had thousands of patients. The clinics dispensed excessive prescriptions for opioids, including oxycodone and methadone, to patients who Dr. Johnson did not examine.
  - Patients got their opioid prescriptions renewed for months and years at a time and often picked up prescriptions that Dr. Johnson had pre-signed.
  - An audit of the clinic’s Medicaid billing practices triggered the criminal investigation. Prosecutors showed that the Johnsons consistently billed Medicaid for higher levels of service than actually provided, including for patients who were only in the clinic for drug refills.

**Sources:**

Case Summary 98: Strippers, Bartenders, and Bouncers

- **Defendant(s):** Dr. Bruce Layne Baker
- **Case Year:** 2011
- **State:** Missouri
- **Case Status:** Dr. Baker pleaded guilty in January 2011 in U.S. District Court in Kansas City to conspiracy to distribute a controlled substance and health care fraud. A judge sentenced him to six years and three months in prison. Authorities charged eight other defendants in related cases.
- **Description of Scheme:** Dr. Baker participated in a conspiracy to illegally distribute oxycodone and OxyContin, defrauding Medicaid, Medicare, and private insurers out of more than $214,000.
- **Key Facts:**
  - Dr. Baker operated a medical business that made house calls to hotels and businesses, where he provided prescriptions for strippers, bartenders, and bouncers with no medical need for the medication.
  - Dr. Baker issued prescriptions to co-conspirators for oxycodone and OxyContin that had no legitimate medical purpose. The co-conspirators then illegally sold the medications. In total, the conspiracy was responsible for distributing more than $1 million worth of illicit opioids.
  - Dr. Baker submitted fraudulent claims to Medicaid and other insurers for nearly 83,000 pills, with the health care benefit programs paying him more than $214,000.

Sources:
Case Summary 99: Using Opioids Meant for Nursing Home Patients, While Bilking Medicaid

- **Defendant(s):** Diana Van Etten
- **Case Year:** 2012
- **State:** Illinois
- **Case Status:** Van Etten pleaded guilty in June 2012 in U.S. District Court in East St. Louis to health care fraud. A judge sentenced her to two years of probation
- **Description of Scheme:** Van Etten diverted for her own use an opioid painkiller intended for residents of a nursing home, defrauding Medicaid.
- **Key Facts:**
  - Van Etten worked as a nurse at the Caseyville Nursing home in Caseyville, Illinois.
  - From 2010 to 2012, she signed out hydrocodone and claimed she was giving it to residents. Instead, she used the drug herself.
  - Prosecutors said Van Etten caused 11 false claims to be submitted to the Illinois Medicaid program.

Sources:
Case Summary 100: Medicaid, a Swiss Bank Account and “The Candy Shop”

- **Defendant(s):** Dr. Bharat Patel, Dr. Ramil Mansourov
- **Case Year:** 2017
- **State:** Connecticut
- **Case Status:** A federal grand jury in Bridgeport indicted both defendants in July 2017 on charges of conspiracy to distribute controlled substances, health care fraud, and money laundering. Both have pleaded not guilty.
- **Description of Scheme:** Prosecutors allege that Dr. Patel and Dr. Mansourov provided unlawful prescriptions for opioid painkillers to known drug dealers and addicts in exchange for cash. Some of the people paying Dr. Patel, prosecutors say, filled his prescriptions with Medicaid cards and then distributed the drugs.
- **Key Facts:**
  - The doctors are family physicians who ran an urgent care facility in Norwalk, Connecticut. Prosecutors say some drug addicts referred to the practice as “The Candy Shop.”
  - Prosecutors allege that Dr. Mansourov also defrauded Medicaid out of more than $4 million through deceptive billing practices, including billing the program for at least 500 non-existent visits to a single patient.
  - Canadian authorities caught Dr. Mansourov trying to flee the United States after his indictment, and after he reportedly moved some of the stolen funds to a Swiss bank account.

**Sources:**
CONCLUSION

As the abuse of prescription opioids increasingly escalates into a national emergency, it is clear that the problem does not spring from any one cause. Millions who are not on Medicaid have been affected by the epidemic, which reaches into all levels of class, race, and income. People get hooked on opioids for a variety of reasons—it can be something as innocuous as a routine surgery, a fall or a car crash. Medicaid is surely not the opioid epidemic’s sole cause, and this report is not intended to cast blame, especially on the millions of hard-working Medicaid recipients who are trying to forge a better life. Nor does this report question the good intentions of those who argue that expanding Medicaid is essential to stopping the opioid epidemic and treating its victims. Clearly, those who are truly suffering deserve treatment, and our nation must fight the scourge of illicit drugs.

But good intentions do not always lead to good policy. As this staff report highlights, overwhelming evidence shows that Medicaid has inadvertently contributed to the national tragedy that is the opioid epidemic, and has taken a toll that is playing out in courtrooms across the nation. Although this staff report examines only Medicaid in detail, other well-intended government programs, such as Medicare, may provide similar incentives for rational actors to engage in bad behavior with highly addictive opioids. These issues hold major ramifications for public policy, along with the nation’s health. They deserve serious consideration and a sober national debate, one we hope this staff report will help to initiate. The victims of this terrible epidemic deserve no less.

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MEMORANDUM
January 17, 2018

To: Members of the Senate Committee on Homeland Security & Governmental Affairs (HSGAC)
Fr: HSGAC Minority Staff
Re: Additional Information on the Relationship between Medicaid Expansion and the Opioid Epidemic

Medicaid is a federal program jointly funded by states and the federal government that provides health care coverage to low-income adults, children, pregnant women, people with disabilities, and elderly individuals. When enacted, the Affordable Care Act (ACA) required states to offer Medicaid coverage to adults between the ages of 18 and 65 with incomes up to 133% of the federal poverty level. States were required to provide Medicaid to those individuals regardless of health or family status by 2014. The U.S. Supreme Court subsequently held that the ACA’s Medicaid expansion was unconstitutionally coercive, making expansion optional for states. As a result, to date 32 states and the District of Columbia have expanded Medicaid and 18 states have not expanded Medicaid.

Critics of the ACA, including Senator Ron Johnson, Chairman of the U.S. Committee on Homeland Security and Governmental Affairs, have recently alleged that Medicaid expansion may be fueling the opioid epidemic in communities across the country. At the request of Ranking Member Claire McCaskill, this memorandum provides information on Medicaid expansion and the opioid epidemic. Key findings include:

- The opioid epidemic predates Medicaid expansion.
- Recent increases in opioid mortality stem from fentanyl and heroin, not prescription opioids.

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3 Id.
Mortality data indicate there is no statistically significant evidence that Medicaid expansion affects drug-related overdoses.

Empirical research indicates determinants of opioid deaths are demographic characteristics and prescriber behavior.

States that expand Medicaid under the Affordable Care Act are better equipped to address behavioral health care and substance abuse treatment needs.

I. **OPIOID EPIDEMIC PREDATES MEDICAID EXPANSION**

One method to establish causation is to demonstrate that the causes preceded the effects. Historical statistical data indicate that the opioid epidemic predates Medicaid expansion in the ACA. In 1995, Purdue Pharma introduced OxyContin, a controlled-release opioid, and overdoses across the United States increased rapidly. Between 1997 and 2002, OxyContin prescriptions for non-cancer pain grew from 670,000 to 6.2 million.\(^7\) Mortality rates attributed to opioid overdoses doubled between 1999 and 2013.\(^8\)

According to an analysis conducted by Andrew Goodman-Bacon, an assistant professor of economics at Vanderbilt University, a statistical analysis of mortality rates indicate that the upward trend in drug poisoning started in 2010, four years prior to the expansion of Medicaid.\(^9\)

He wrote, in conjunction with his co-author Emma Sandoz:

Figure 1 plots age-adjusted drug-related mortality rates among those aged 25-54 in states that did and did not expand Medicaid under the ACA ... The figure also plots the difference in mortality between expansion and non-expansion states (relative to the difference in 2009; dashed lines are 95-percent confidence intervals based on standard errors clustered by state). Expansion states did have relatively more drug deaths than non-expansion states in 2015, but the upward trend in deaths in expansion states started in 2010, four years before the Medicaid expansion began. The results are the same if we exclude the six early expansion states. By the simplest criterion for causality, that causes must precede effects, these results cannot be taken as evidence of Medicaid expansion causing these deaths.\(^10\)

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\(^8\) Id.

\(^9\) Id.

\(^10\) Id.
II. RECENT INCREASES IN OPIOID MORTALITY STEM FROM FENTANYL AND HEROIN, NOT PRESCRIPTION OPIOIDS

Since 2013, nearly all increases in opioid overdoses are attributable to heroin and heroin substitutes, including fentanyl. Data from the U.S. Centers for Disease Control indicate that although overdose deaths containing any opioid is continuing to increase, recent surges in overdoses result from heroin and other synthetic opioids such as fentanyl, carfentanil, and tramadol.\footnote{\textit{Id.}}\footnote{U.S. Centers for Disease Control and Prevention, \textit{Opioid Data Analysis} (https://www.cdc.gov/drugoverdose/data/analysis.html) (accessed Jan. 16, 2018).}
III. MORTALITY DATA INDICATE THERE IS NO STATISTICALLY SIGNIFICANT EVIDENCE THAT MEDICAID EXPANSION AFFECTS DRUG-RELATED OVERDOSES

In 2017, Brendan Saloner from the Johns Hopkins Bloomberg School of Public Health and Johanna Maclean of Temple University issued a paper on the impact of Medicaid expansion under the Affordable Care Act on substance abuse disorder treatment utilization and financing. In this research, Saloner and Maclean examined data from the National Vital Statistics Mortality Files between 2010 and 2015 and narrowed the data set to deaths classified as alcohol poisonings and drug-related overdoses. They further narrowed the data to poisonings and overdoses among non-elderly adults aged 18 to 64 years and compared deaths within expansion and non-expansion states. The authors found "no statistically significant evidence that Medicaid expansions affected fatal alcohol poisonings or drug-related overdoses."
IV. EMPIRICAL RESEARCH INDICATE DETERMINANTS OF OPIOID DEATHS ARE DEMOGRAPHIC CHARACTERISTICS AND PRESCRIPTOR BEHAVIOR

The American Journal of Public Health published a literature review of empirical research that found: “Opioid-related mortality trends have been marked by considerable sociodemographic differences.” The authors wrote:

We found 22 studies ... that examined the contribution of sociodemographic characteristics, including race/ethnicity, gender, age, socioeconomic status (SES), and rural–urban residence, to increased opioid-related mortality. In general, opioid-related mortality rates have been higher among men, non-Hispanic Whites and American Indian/Alaska Natives, middle-aged individuals, those living in rural areas, and those of lower SES.

The authors also reviewed the empirical data regarding the role of prescriber behavior in increased opioid-related mortality. They found:

- Eight studies providing evidence that increased prescriptions for opioids may have played a role in increased opioid-related mortality;
- Seven studies providing evidence of the contribution of increased dosages to increased opioid-related mortality;
- Seven studies that provided evidence for the contribution of prescription of oxycodone, particularly the long-acting formulation of OxyContin, to increased opioid-related mortality; and
- One study providing evidence that high-volume prescribing may have played a role in increased opioid-related mortality.

V. STATES THAT EXPAND MEDICAID UNDER THE AFFORDABLE CARE ACT ARE BETTER EQUIPPED TO ADDRESS BEHAVIORAL HEALTH CARE AND SUBSTANCE ABUSE TREATMENT NEEDS

The Medicaid program plays a critical role in addressing the opioid epidemic. In 2015, Medicaid provided coverage to three in ten people grappling with opioid addiction in the United States.

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19 Id.
20 Id.
21 Id.
States. Medicaid covers services such as intensive outpatient treatment and inpatient detoxification. The ACA broadened Medicaid coverage to include medication assisted treatment, a recovery program that combines medication (methadone, buprenorphine, or naltrexone) with counseling and other therapies. All Medicaid programs cover at least one of the three required medications, and most states cover all three.

The expansion of Medicaid has been critical to confronting substance abuse disorders. Healthcare economists Richard G. Frank, the Margaret T. Morris Professor of Health Economics in the Department of Health Care Policy at Harvard Medical School, and Dr. Sherry A. Glied, Dean of the Wagner School of Public Service at New York University, have estimated that states that expanded Medicaid have helped 1.3 million additional patients access behavioral health care services. Additionally, recent empirical research has shown that states that expanded Medicaid under the ACA were associated with an increase in prescriptions for one of the required medications for medication assisted treatment.

Additionally, the U.S. Department of Health and Human Services found that “evidence is mounting” that Medicaid expansion enables patients to access care to confront opioid addiction. In an issue brief on the role of the ACA in addressing the opioid epidemic, the findings of the Assistant Secretary for Planning and Evaluation are quoted below:

- Among low-income adults, Medicaid expansion was associated with a 7.5 percent reduction in unmet need for mental health treatment and an 18.3 percent reduction in unmet need for substance use disorder treatment services.

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23 Id.


25 Id.


27 Heci Wen, Ph. D. et al., Impact of Medicaid Expansion on Medicaid-covered Utilization of Buprenorphine for Opioid Use Disorder Treatment, Medical Care: Official Journal of the Medical Care Section, American Public Health Association (Apr. 2017).

Medicaid expansion in Ohio led to especially large improvements in access to care and financial security for expansion enrollees with opioid use disorder. 75 percent reported improved overall access to care, 83 percent reported improved access to prescription medications, and 59 percent reported improved access to mental health care.

Medicaid expansion in Kentucky was linked to a large increase in Kentuckians receiving treatment for substance use disorder. 29

29 Id.
CONTINUING PROGRESS ON THE OPIOID EPIDEMIC:
THE ROLE OF THE AFFORDABLE CARE ACT
January 11, 2017

The United States is experiencing an unprecedented epidemic of opioid use disorder and overdose. In 2015, more than 33,000 Americans died of an overdose involving a prescription or illicit opioid, and more than 2 million individuals had an opioid use disorder. In partnership with state and local governments, healthcare professionals, and other key stakeholders, HHS launched its Opioid Initiative in March 2015 and has taken significant steps to: 1) improve opioid prescribing practices; 2) increase the use of naloxone to reverse opioid overdoses; and 3) expand access to and the provision of medication-assisted treatment with methadone, buprenorphine, or naltrexone – in combination with appropriate psychosocial services. The Department has also continued to prioritize reducing stigma and advancing prevention, treatment, and parity for people needing care for mental health and substance use disorders.

The success of these strategies – especially the third – rests on a base of health insurance coverage. What that means is that our nation’s best shot at reversing the opioid epidemic and providing needed care for opioid use disorders, other substance use disorders, and mental illness depends on the continued success of the Affordable Care Act (ACA).

Key Findings
- The share of hospitalizations for substance use or mental health disorders in which the patient was uninsured fell from 22 percent in the fourth quarter of 2013 (just before the ACA’s major coverage provisions took effect) to about 14 percent by the end of 2014.
  - In states that expanded Medicaid under the ACA, the uninsured share of substance use or mental health disorder hospitalizations fell from about 20 percent in the fourth quarter of 2013 to about 5 percent by mid-2015.
- Between 2010 and 2015, the share of people foregoing mental health care due to cost has fallen by about one-third for people below 400 percent of the federal poverty level.
- The states with the highest drug overdose deaths also are projected to experience dramatic increases in their uninsured rates if the ACA were repealed:
  - The top three – West Virginia, New Hampshire, and Kentucky – would see their uninsured rates nearly or more than triple if the ACA were repealed, as would Massachusetts.
Increasing coverage, access to care

Over 20 million Americans have gained coverage as a result of the ACA, driving the share of Americans without health insurance to the lowest level in history. Among those gaining coverage have been millions of Americans who need treatment for opioid use disorders, other substance use disorders, or other behavioral health conditions.

Evidence suggests this coverage expansion has improved access to care and outcomes for Americans with opioid or other substance use or mental health disorders. For example, hospitalization data provide strong evidence of substantial coverage gains. Figure 1a. shows that, across all states for which data are available, the share of hospitalizations for substance use or mental health disorders in which the patient was uninsured fell from 22 percent just before the ACA’s major coverage provisions took effect in 2014 to about 14 percent by the end of 2014. For the subset of 17 states for which data are available through the third quarter of 2015 (2015-Q3), the uninsured share fell from 21 percent at the end of 2013 to 11 percent in 2015-Q3, as shown in Figure 1b.

These coverage gains were especially pronounced in states that expanded Medicaid under the ACA. Across all Medicaid expansion states for which data are available, the uninsured share of substance use or mental health disorder hospitalizations plummeted from about 20 percent in 2013 to around 6 percent by the end of 2014. For the 10 Medicaid expansion states with data available through the third quarter of 2015, the uninsured share fell from 20 percent at the end of 2013 to about 5 percent in 2015-Q3.
Figure 1a. Adult Uninsured Hospitalizations as a Share of Total Hospitalizations for Substance Abuse/Mental Health Disorders, 2008-2014


Notes: The vertical line indicates the final quarter prior to the January 1, 2014, date on which Marketplace coverage took effect and Medicaid expansion took effect in adopting states. States included here with different expansion dates are: MN (March 2010), CA (November 2010), WA (January 2011), NJ (April 2011), CO (April 2012), MO (July 2012), and MI (April 2014). For each group of states (expansion, non-expansion, and all), the share of uninsured hospitalizations in all hospitalizations was calculated as an average of individual states’ percentages of uninsured hospitalizations. This analysis includes states for which complete data are available through 2014. Included as Medicaid-expansion states are: AR, AZ, CA, CO, HI, IL, IA, KY, MA, MD, MI, MN, NJ, NM, NY, NV, OR, RI, VT, VA, and WV. Included as non-expansion states are: FL, GA, IN, KS, LA, ME, MO, MT, NC, NE, OK, PA, SD, TN, TX, UT, VA, WI, and WV. Data for MT begin in 2009.
Figure 1b. Adult Uninsured Hospitalizations as a Share of Total Hospitalizations for Substance Abuse/Mental Health Disorders, Subset of States with 2008-2015 Q3 Data

Notes: The vertical line indicates the final quarter prior to the January 1, 2014, date on which Marketplace coverage took effect and Medicaid expansion took effect in adopting states. States included here with different expansion dates are: MN (March 2010), CA (November 2010), NJ (April 2011), CO (April 2012), MO (July 2012), and MI (April 2014). For each group of states (expansion, non-expansion, and all), the share of uninsured hospitalizations in all hospitalizations was calculated as an average of individual state’s percentages of uninsured hospitalizations. This analysis includes states for which complete data are available through 2015-Q3. Included as Medicaid-expansion states are: CA, CO, HI, IA, KY, MI, MN, NJ, NY, and OR. Included as non-expansion states are: FL, GA, MO, SD, TX, VA, and WI.

The same trends have occurred in the states that have been most affected by the opioid epidemic (see Appendix). For example, in West Virginia, the state with the highest drug overdose death rate in 2015, according to Centers for Disease Control and Prevention (CDC) data, the uninsured share of substance use and mental health disorder hospitalizations fell from 23 percent at the end of 2013 to 5 percent at the end of 2014.

These data are consistent with other evidence that the ACA’s coverage expansions have been especially important to people with substance use disorders and other behavioral health conditions. For example, ASPE previously estimated that, if additional states chose to expand Medicaid, almost 30 percent of those who could gain coverage have a substance use or mental health disorder. ASPE also recently estimated that mental health disorders are among the most common pre-existing health conditions for which Americans might have been denied coverage or charged more for coverage prior to ACA.

The ACA also ensures that, when people with behavioral health needs gain insurance, their treatment is covered. Prior to the ACA, an estimated 34 percent of individual market policies
did not cover substance use treatment, and an estimated 18 percent did not cover treatment for mental health conditions. Today, all coverage is required to include these essential health benefits. Further, because of the ACA and the Mental Health Parity and Addiction Equity Act (MHPAEA), coverage is required to include substance use or mental health disorder benefits.

How Coverage Affects Treatment for Opioid Use Disorder

Despite ample evidence demonstrating the effectiveness of medication-assisted treatment for people with opioid use disorder, the overwhelming majority of people who need treatment do not get it. Some of the main barriers to treatment are related to costs, insurance coverage, and availability. Over the past several years, HHS has worked with state and local governments and the provider community to expand treatment capacity for opioid and other substance use disorders. In addition, through funding included in the 21st Century Cures Act, HHS will award close to $1 billion dollars over the next two years to substantially expand state and local capacity to provide medication-assisted treatment and other services to support people with opioid use disorders. But even when capacity exists, patients must still be able to afford the treatment they need.

Research shows that health insurance coverage makes care more affordable, secure, and reliable, and people with insurance are more likely to get timely care and have a usual source of care. Nowhere is this more important than for people with an opioid use disorder or other substance use disorder. For these individuals, timely and affordable access to evidence-based treatment, including medication-assisted treatment can be life-saving.

Moreover, a large proportion of people with opioid use disorder are also coping with co-occurring mental illness, most frequently depression and anxiety, as well as with significant physical health needs. Appropriate treatment of these co-occurring conditions is often critical to supporting an individual’s long-term recovery from opioid use disorder.

With the ACA’s Marketplace and Medicaid expansion entering their fourth year, evidence is mounting that they are making a difference in helping people access care, including behavioral health care. For example:

- As shown in Figure 2, the share of people foregoing mental health care due to cost has fallen by 33 percent for people with incomes below 138 percent of the poverty level and by 31 percent for people with incomes above 138 and below 400 percent of the federal poverty level. These populations are eligible for the ACA’s Medicaid expansion or tax credits.
• Among low-income adults, Medicaid expansion was associated with a 7.5 percent\textsuperscript{20} reduction in unmet need for mental health treatment and an 18.3 percent\textsuperscript{21} reduction in unmet need for substance use disorder treatment services.

• Medicaid expansion in Ohio led to especially large improvements\textsuperscript{22} in access to care and financial security for expansion enrollees with opioid use disorder. 75 percent reported improved overall access to care, 83 percent reported improved access to prescription medications, and 59 percent reported improved access to mental health care.

• Medicaid expansion in Kentucky was linked to a large increase\textsuperscript{23} in Kentuckians receiving treatment for substance use disorder.

Parity for mental health and substance use treatment has also resulted in improved access to care. Researchers found that implementation of state-level parity laws prior to the ACA increased the treatment rate for substance use disorders by 9 percent\textsuperscript{24} among all specialty treatment facilities and by 15 percent\textsuperscript{25} among treatment facilities accepting private insurance. Under the ACA, these types of parity protections have been expanded and strengthened.

**Figure 2. Share of People Foregoing Mental Health Care Due to Cost**

![Bar chart showing reduction in people foregoing mental health care due to cost](chart.png)

Source: ASPE analysis of National Health Interview Survey data, 2016.
In addition to directly addressing access and unmet need for patients, insurance expansion is motivating providers to provide treatment. A recent study\textsuperscript{26} found that states that made an early commitment to expand Medicaid and establish insurance Marketplaces had significantly higher growth in the number of physicians with a waiver to prescribe buprenorphine for opioid use disorder treatment. This represents a critical first step to expanding access to MAT for people with opioid use disorders.

A number of states are also building on Medicaid expansion and taking advantage of other opportunities provided by the ACA to create innovative models of coverage and care for people with opioid use disorders. For example, Maryland, Rhode Island, and Vermont are using variations of the Health Home model to provide comprehensive care management, care coordination, health promotion, comprehensive transitional care/follow-up, individual and family support, and referral to community and social support services. These types of care coordination models are feasible and affordable for states that have expanded Medicaid because most low-income adults with behavioral health needs now have access to comprehensive health coverage, thanks to the ACA’s Medicaid expansion. The models, which have now been implemented for several years, are significantly improving access to and coordination of care for people with opioid use disorders, and other substance use and mental health disorders\textsuperscript{27}.

What’s at Stake in the ACA for the Parts of the Country Most Affected by Opioid Use Disorder and Overdoses

While the opioid epidemic has affected all parts of the country, some areas have been hit especially hard. The states that have been hit the hardest include many of the states that would be most affected if the ACA coverage gains were rolled back.

According to Urban Institute estimates\textsuperscript{28}, four states – Massachusetts, West Virginia, Kentucky, and New Hampshire – would see their uninsured rates nearly or more than triple if the ACA were repealed. These four states ranked 7\textsuperscript{th}, 1\textsuperscript{st}, 4\textsuperscript{th}, and 2\textsuperscript{nd} respectively in drug overdose death rates in 2015, according to CDC data\textsuperscript{29}. Among the remaining seven states with drug overdose rates exceeding 22 deaths per 100,000 people, uninsured rates would increase by 155 percent (Ohio), 170 percent (Rhode Island), 134 percent (Pennsylvania), 136 percent (New Mexico), 83 percent (Utah), 79 percent (Tennessee), and 124 percent (Connecticut).

As the maps (Figure 3 and Figure 4) below show, this pattern holds more broadly: many of the states most affected by drug overdose are also among the states with the most to lose if insurance coverage and associated protections under the ACA were rolled back. For the reasons discussed above, large spikes in uninsured rates could substantially worsen the opioid crisis at a time when the emergence of illicitly made fentanyl and other highly potent synthetic opioids linked to large clusters of overdoses is rapidly increasing in communities across the U.S.
Figure 3. Drug Overdose Deaths Per 100,000 Population  
U.S., 2015

Figure 4. Estimated Increase in Uninsured Population,  
from ACA Repeal

Source: Urban Institute, 2016

The opioid epidemic is a public health crisis that will not be reversed overnight. But we are starting to see real progress at all levels of government and among communities across our nation, thanks to a shared commitment to stem the tide of the opioid epidemic. Continued insurance coverage is essential to our ability to be successful, and the crisis is far too urgent to risk undermining our progress.
## APPENDIX: State-Level Changes in Adult Uninsured Hospitalizations for Substance Use and Mental Health Disorders, by Drug Overdose Death Rate

<table>
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<tr>
<th>State</th>
<th>2015 Age-Adjusted Drug Overdose Death Rate (per 100,000)</th>
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Did Medicaid Expansion Cause The Opioid Epidemic? There's Little Evidence That It Did.

Andrew Goodman-Bacon, Emma Sandoe

AUGUST 23, 2017 DOI: 10.1377/hblog20170823.061640
Recent health reform debates have generated a new theory that claims that the Affordable Care Act's (ACA) Medicaid expansion has either caused or exacerbated the opioid epidemic. The logic on its face seems clear: legal prescriptions fuel the opioid epidemic, Medicaid increases access to prescription opioids, hence the Medicaid expansion contributes to, or has even caused the epidemic. Proponents of this view point to a rise in opioid-related deaths in ACA Medicaid expansion states relative to non-expansion states. Political commentators, including some politicians, use this claim to justify their support for federal Medicaid cuts, despite the fact that Medicaid finances a significant amount of treatment for opioid use disorder.
In this post, we argue that evidence for the claim that the ACA’s Medicaid expansion caused or exacerbated the opioid epidemic is not credible. First, trends in opioid deaths nationally and by Medicaid expansion status predate the ACA. Second, counties with the largest coverage gains actually experienced smaller increases in drug-related mortality than counties with smaller coverage gains. Third, the fact that Medicaid recipients fill more opioid prescriptions than non-recipients largely reflects greater levels of disability and chronic illness in the populations that Medicaid serves. While we do not reject the possibility that public policy has played a role in our current prescription abuse crisis, on balance we find little evidence to support the idea that Medicaid caused or worsened the epidemic.

**Existing Evidence on Medicaid and Opioids**

**Comparing Medicaid Recipients to Non-Recipients**

Proponents of the view that Medicaid exacerbates drug abuse often cite the fact that Medicaid recipients are prescribed more opioids than non-recipients. In the early 2000s, for example, Medicaid enrollees in New York and Washington received opioid prescriptions almost twice as often as non-Medicaid patients.

Does this evidence alone mean that Medicaid caused these patients to abuse opioids? No. Medicaid patients, especially those who qualify through a disability and many who do not, are more likely to have chronic conditions and comorbidities that require pain relief. Between 2010 and 2016, 30 percent of
Medicaid recipients ages 25-54 reported having pain most days or every day, compared to 14 percent of non-recipients. A cross-sectional relationship between Medicaid coverage and opioid use does not mean there is necessarily a causal connection (for any outcome).

**National Trends**

Doctors have used opioids to manage acute pain since before the 20th century. In 1995, the American Pain Society labeled pain the “fifth vital sign,” and in 1996, Purdue Pharma developed OxyContin, a controlled-release opioid that they (falsely) claimed would deter addiction. Opioid use, abuse, and mortality increased rapidly thereafter. In just five years from 1997 to 2002, OxyContin prescriptions for non-cancer pain grew from 670,000 to 6.2 million. Drug-related mortality rates doubled between 1999 and 2013. In contrast, most states that expanded Medicaid began offering benefits in January 2014. (Six states expanded early but limited coverage.) The claim that Medicaid expansion is “largely responsible for starting the epidemic in the first place” is clearly false simply given this timeline. The opioid epidemic started decades before Medicaid expanded.

**Divergent Trends Between Expansion and Non-Expansion States**

Another approach is to compare drug-related deaths in states that did and did not adopt the ACA’s Medicaid expansion. Previous analyses have noted that the change in drug-related mortality rates from 2010 to 2015 was higher in expansion
states than in non-expansion states. Did Medicaid cause this divergence?

Figure 1 plots age-adjusted drug-related mortality rates among those aged 25-54 in states that did and did not expand Medicaid under the ACA (similar analysis previously posted here). The figure also plots the difference in mortality between expansion and non-expansion states (relative to the difference in 2009; dashed lines are 95-percent confidence intervals based on standard errors clustered by state). Expansion states did have relatively more drug deaths than non-expansion states in 2015, but the upward trend in deaths in expansion states started in 2010, four years before the Medicaid expansion began. The results are the same if we exclude the six early expansion states. By the simplest criterion for causality, that causes must precede effects, these results cannot be taken as evidence of Medicaid expansion causing these deaths.
Exhibit 1: Age-Adjusted Drug-Poisoning Mortality Rate For Ages 25-54 by Medicaid Expansion Status, 1999–2015
Note: Data from CDC Wonder. Drug-related deaths include ICD-10 underlying cause of death codes X40–X44, X60–X64, X85, and Y10–Y14. Mortality rates are age-adjusted. Medicaid expansion status is here.

Divergent Trends by Pre-ACA Uninsurance Rates

A different test of whether the ACA affected drug-related deaths is to compare areas with different pre-ACA uninsurance rates. Areas that had a higher percentage of people uninsured before the ACA enjoyed greater coverage gains because of Medicaid eligibility expansion, welcome mat effects, and subsidized Marketplace plans. Some have noted that counties with larger post-ACA reductions in uninsurance had higher drug-related
death rates in 2015. Did the ACA lead to these elevated drug-related mortality rates?

We test this using data on the crude drug-related death rates from 716 counties in 2015 and 2010 (age-adjusted rates are preferable, but crude rates are available for more counties). We break up counties in expansion and non-expansion states into 10 groups based on their estimated 2013 uninsurance rates, and plot the average mortality change against the average pre-ACA uninsurance rate in each bin. If the ACA exacerbated the opioid epidemic, we should see larger increases in drug deaths in high-uninsurance areas where its coverage provisions had the most bite.

In fact, Figure 2 shows that drug-related deaths increased at a lower rate in high-uninsurance counties than in low-uninsurance counties. This does not support the notion that the ACA worsened the opioid epidemic. (Neither does it support the idea that the ACA helped to stem the epidemic. Mortality was already falling in high- versus low-uninsurance counties before 2014.)
Exhibit 2: Changes In Country-Level Drug-Related Crude Mortality Rates And Pre-ACA Uninsurance Rates
Note: Data from CDC Wonder. Mortality rates are not age-adjusted. Estimated 2013 uninsurance rates from Enroll America.

Why is the Evidence on Medicaid and Opioids So Weak?

Magnitude of Opioid Abuse Among Medicaid Recipients

Another form of evidence used to support the idea that Medicaid causes opioid abuse is by using examples of Medicaid patients who abuse opioids. But for the ACA Medicaid expansion to have a meaningful effect on aggregate mortality rates, a significant number of recipients must be misusing opioids. One reason why we fail to find strong evidence of a connection between
Medicaid and drug deaths could be that relatively few Medicaid recipients actually misuse their drugs.

**Medicaid Funds Opioid Addiction Treatment**

Medicaid has become a primary payer for medication addiction treatment, covering one in three people with an opioid addiction in 2015, with most of this spending occurring in expansion states. Medicaid covers services such as detoxification, outpatient treatment, and treatment for underlying health conditions, such as chronic pain or mental health issues, which may be the cause of addiction. These care options are complex and costly. In the last year before the ACA expansion, Medicaid spent $9.4 billion on opioid addiction treatment. In fact, in the recent interim report by the White House Commission Combating Drug Addiction and the Opioid Crisis the commission recommended that Medicaid treatment of the epidemic be enhanced through additional treatment sites and drug reversal coverage. Now that the Administration is moving to devote resources and attention to opioid abuse, states may gain flexibilities to provide more coverage to Medicaid beneficiaries, making the program even more critical to fighting the epidemic.

**Medicaid and Drug Substitution**

Health insurance coverage, including Medicaid, can make access to opioids easier in comparison to being uninsured, but in many cases misuse of opioids will occur regardless of who pays. Evidence suggests that when access to opioids is restricted, utilization and overdose deaths switch from legal to
illicit drugs. Medicaid could change patterns of drug use, but not the amount of drug use or its health consequences.

**Other Factors May Have Determined States’ Medicaid Expansion Decisions**

Finally, it may be that other factors, including the opioid epidemic itself, led states to adopt the ACA Medicaid expansion. A state with rapidly rising opioid deaths may have decided to expand Medicaid in order to provide drug treatment to more residents. Several governors made a similar case in their opposition to the Better Care Reconciliation Act. State economic conditions or robustness of medical systems, for example, could also have contributed to both the opioid epidemic and the decision to expand.

**Caveats and Pending Questions**

**Local Effects**

The evidence above, using data from all parts of the country, does not support claims that Medicaid or the ACA worsened the opioid epidemic overall. This does not preclude the possibility that Medicaid had such effects in specific states or local areas, though. This is an important area for future research, because it may clarify how Medicaid interacts with drug abuse differently across the country. In other words, the answer to the question “did Medicaid exacerbate the national opioid crisis?” seems to be “no.” The answer to the question “did Medicaid play a role anywhere?” is unknown.
Detailed Results by Type of Drug and Payer

Our analysis necessarily groups deaths from licit and illicit drugs together. A fuller analysis of Medicaid’s role must distinguish between deaths from legal prescription drugs and deaths due to illegal drugs, such as heroin or fentanyl that Medicaid clearly does not supply. Inferring this from death certificate data, however, is a complex task. Moreover, one cannot ascribe causality to geographic differences in death rates without information on the types and amounts of opioids actually being prescribed by Medicaid compared other payers. This is an important gap in the current evidence on Medicaid and opioids.

Treatment Benefits

Despite the risks, opioids provide clinical benefits to patients in need of pain relief. Policy makers searching for effective ways to address the opioid epidemic must weigh the benefits of proper opioid use against these potential costs. Since we currently have little strong evidence that Medicaid imposes substantial costs in terms of drug-related deaths, large cuts to Medicaid may sacrifice meaningful treatment benefits for little to no change in overdose rates.

Conclusion

Some Medicaid recipients who gained coverage under the ACA may have become addicted to opioids, but we find little evidence that Medicaid expansion caused aggregate drug-related death
rates to increase. Future research on the opioid epidemic should develop approaches that untangle the effects of Medicaid expansion from pre-existing economic trends and the spread of accessible illegal drugs. That said, by addressing the causes of addiction and promoting appropriate treatment, Medicaid could be an important tool for policy makers in the fight against opioid abuse. In January 2016, the Centers for Medicare and Medicaid Services (CMS) outlined broad scale flexibilities already available in the Medicaid program to expand access to medication assisted treatment, community-based therapy, and other services to address the treatment of opioid addiction. States have begun taking up these flexibilities as part of intra-state agency efforts that include the Medicaid program and the Medicaid expansion population. For many opioid users and their families, Medicaid provides the only affordable treatment option and path to recovery. State policy makers must weigh the benefits and costs of expanding addiction treatment through extending Medicaid eligibility to low-income adults and expanding community supports and addiction medication availability. Given the toll of opioid addiction on state budgets for law enforcement, emergency services, and child welfare, expanding Medicaid eligibility and treatment services may prove to be a wise investment.
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B Brown · a month ago
You failed to mention 2 items of importance:

1. Obamacare evaluations are mandatory by all Medicaid patients, these evaluations are forced to be
Impact of Medicaid Expansion on Medicaid-covered Utilization of Buprenorphine for Opioid Use Disorder Treatment

Hefei Wen, PhD,* Jason M. Hockenberry, PhD,† Tyrone F. Borders, PhD,* and Benjamin G. Druss, MD, MPH†

Background: Buprenorphine has been proven effective in treating opioid use disorder. However, the high cost of buprenorphine and the limited prescriber capacity may restrict access to this effective medication-assisted treatment for opioid use disorder.

Objective: To examine whether Medicaid expansion and physician prescribing capacity may have impacted buprenorphine utilization covered by Medicaid.

Research Design: We used a quasi-experimental difference-in-differences design to compare the pre-post changes in Medicaid-covered buprenorphine prescriptions and buprenorphine spending between the 26 states that implemented Medicaid expansions under the Affordable Care Act in 2014 and those that did not.

Subjects: All Medicaid enrollees in the expansion states and the nonexpansion and late-expansion states.


Results: State implementation of Medicaid expansions in 2014 was associated with a 70% increase (P<0.03) in Medicaid-covered buprenorphine prescriptions and a 50% increase (P<0.05) in buprenorphine spending. Physician prescribing capacity was also associated with increased buprenorphine utilization.

Conclusions: Medicaid expansion has the potential to reduce the financial barriers to buprenorphine utilization and improve access to medication-assisted treatment of opioid use disorder. Active physician participation in the provision of buprenorphine is needed for ensuring that Medicaid expansion achieves its full potential in improving treatment access.

Key Words: opioid abuse, Medicaid expansion, access to care, healthcare reform.

In 2014, an estimated 1.9 million Americans had prescription opioid use disorder and 0.6 million had heroin use disorder.1 Opioid overdose mortality has tripled since 2000 and reached a record high of 28,650 deaths in 2014.2 Furthermore, as legitimate channels of prescription opioids become increasingly restricted, many areas have witnessed a surge in heroin use and emergence of synthetic and nonpharmaceutical opioids manufactured in illegal laboratories (eg, illicit fentanyl).3,4 The shifting landscape of the US opioid epidemic underscores the essential role of opioid use disorder treatment in addressing the underlying addictive behavior and curbing the epidemic.5

Buprenorphine (including buprenorphine-naloxone) is the most commonly prescribed medication for opioid use disorder treatment and is effective in managing withdrawal symptoms and reducing the potential for relapse.5-7 Compared with other FDA-approved medications such as methadone and naloxone, buprenorphine has relatively high patient retention and sustained recovery as well as low addition liability and minimum overdose risk.8,9 Furthermore, buprenorphine is the only type of medication-assisted treatment of opioid use disorder that can be prescribed outside traditional stand-alone opioid treatment programs.

Despite the safety and efficacy profiles of buprenorphine and the extension of medication-assisted treatment into mainstream medical settings, at $6000 for a full year treatment course, lack of health insurance coverage poses a barrier to buprenorphine utilization.8,10 Prior to the Affordable Care Act (ACA), most low-income people in need of medication-assisted treatment were ineligible for Medicaid and left untreated.12,13 Starting in 2014, 26 states and District of Columbia expanded Medicaid eligibility to almost all low-income residents with household incomes at or below 138% of the federal poverty level, a group that has a disproportionately high risk of opioid use disorder and sizable untreated treatment needs.14,15 With state implementation of these Medicaid expansions, behavioral health experts and advocates expect Medicaid to play a central role in financing the utilization of buprenorphine for medication-assisted treatment.8,14,15,16 Our
study examines how Medicaid expansion may have impacted Medicaid-covered buprenorphine prescriptions and buprenorphine spending.

A second barrier to medication-assisted treatment of opioid use disorder is system capacity for the prescribing of buprenorphine. The 2000 Drug Addiction Treatment Act (DATA) and the 2006 Office of National Drug Control Policy Relicensing and Reauthorization Act allow qualified office-based physicians to prescribe buprenorphine through a DATA waiver. Under the DATA 2000, an office-based physician who has a board certification in addiction medicine/psychiatry or completes an 8-hour course of buprenorphine prescribing training is qualified to treat up to 30 patients at a time. The 2006 Amendment raised the patient limit from 30 to 100 for a physician who has been authorized under the DATA 2000 for more than a year and who submitted an application conveying his/her need and certifying his/her qualifications. Previous literature documents state variations in the availability of DATA-waived physicians qualified to prescribe buprenorphine. Increasing physicians prescribing capacity features prominently in recent federal actions to address the opioid epidemic. As such, our study also examines the varied capacity for buprenorphine prescribing may affect the extent to which the implementation of Medicaid expansions and the potential increases in treatment trends can translate into the meaningful improvement in buprenorphine utilization.

METHODS

Data and Sample

The primary data sources for this study are the Medicaid Drug Utilization files from the Centers for Medicaid and Medicaid Services. All states are required to report to the Centers for Medicaid and Medicaid Services on prescription activities of all Medicaid-covered outpatient drugs in exchange for federal matching funds. We derived quarterly, state aggregate prescription and spending data from over 100 official reporting files from 2011 through 2014. Washington, DC was excluded because of inconsistency in its managed care data reporting.

Each product in the Medicaid Drug Utilization files is identified by a National Drug Code number which we linked to the FDA Orange Book to identify buprenorphine (including the buprenorphine-zolpidem formulations) for medication-assisted treatment of opioid use disorder. Please see Appendix A1 (Supplemental Digital Content, http://links.lww.com/MLR/B346) for detailed information on the identification of buprenorphine.

Study Variables

The outcome variable is Medicaid-covered buprenorphine utilization measured by quarterly Medicaid prescriptions for, and spending on, buprenorphine both on a per 1,000-state resident basis and on a per 1,000-Medicaid enrollee basis.

One key independent variable of interest is state implementation of Medicaid expansions under the ACA. By the end of 2014, 26 states and District of Columbia had implemented the expansions either in compliance with the ACA Medicaid State Plan Amendment provision or through the Section 1115 waiver. Please see Appendix A2 (Supplemental

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Regarding the per 1000 resident buprenorphine prescriptions (Table 1), we found a pre-post increase of 1.30 prescriptions per 1000 residents per quarter in the expansion states (row 2, column 3: 95% confidence interval (CI), 0.72–1.89), which was significantly larger than the non-expansion and late-expansion states. After adjusting for the state and quarter 2-way fixed effects, as well as the state-level availability of DATA-waived physicians and other covariates, our DID estimate indicated that state implementation of Medicaid expansions in 2014 was associated with an increase in Medicaid-covered buprenorphine prescriptions by 0.69 per 1000 residents per quarter (row 2, column 5: 95% CI, 0.14–1.24). The national average numbers of 100 patient-waived Medicaid-covered buprenorphine prescriptions was 0.99 per 1000 residents per quarter, thus the estimated 0.69 per 1000 residents per quarter increase represents a relative 69.7% increase in Medicaid prescriptions for buprenorphine associated with the implementation of Medicaid expansions.

We also found that every additional 100 patient-waived physician per 1,000,000 residents was associated with an increase in Medicaid-covered buprenorphine prescriptions by 0.20 per 1000 residents per quarter (row 3, column 5: 95% CI, 0.15–0.26), or a relative 20.2%. Given that the national average numbers of 100 patient-waived physicians was 22.34 per
TABLE 1. Effects of Medicaid Expansion and Physician Prescribing Capacity on Medicaid Prescriptions for Buprenorphine

<table>
<thead>
<tr>
<th>No. Buprenorphine Prescriptions Per Quarter Per 1000 Residents</th>
<th>2011-2013</th>
<th>2014</th>
<th>Pre-Post Difference</th>
<th>Difference-in-Differences²</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Medicaid expansion (24 states)</td>
<td>0.64</td>
<td>0.95</td>
<td>0.31</td>
<td>(0.4%)</td>
</tr>
<tr>
<td>Medicaid expansion:</td>
<td>0.91</td>
<td>2.24</td>
<td>[1.20 to 1.30]</td>
<td>[0.72 to 1.89]</td>
</tr>
<tr>
<td>[26 states]</td>
<td>[122.7%]</td>
<td>[112.6%]</td>
<td>[1.20 to 1.26]</td>
<td>[0.69]</td>
</tr>
<tr>
<td>No. 100 patient-waived physicians</td>
<td>0.91</td>
<td>2.24</td>
<td>[1.20 to 1.30]</td>
<td>[0.72 to 1.89]</td>
</tr>
<tr>
<td>Per 1,000,000 residents</td>
<td>0.69</td>
<td>1.69</td>
<td>[0.69]</td>
<td>(0.69)</td>
</tr>
<tr>
<td>No. 30 patient-waived physicians</td>
<td>0.91</td>
<td>2.24</td>
<td>[1.20 to 1.30]</td>
<td>[0.72 to 1.89]</td>
</tr>
<tr>
<td>Per 1,000,000 residents</td>
<td>0.69</td>
<td>1.69</td>
<td>[0.69]</td>
<td>(0.69)</td>
</tr>
</tbody>
</table>

0% confidence intervals in square brackets calculated based on state-centered ES; percent changes in parentheses.
²Adjusted for state and quarter 2-way fixed effects, state unemployment rate, state poverty rate, early adopter indicator for partial implementation of Medicaid expansions. Median number of 100 patient-waived physicians = 22.54 per 1,000,000 residents; expansion states 24.71% vs. non-expansion states 21.64% (P = 0.01).
²State median number of 30 patient-waived physicians = 10.00 per 1,000,000 residents; expansion states 25.29% vs. non-expansion states 25.52%; mean difference, 0.03; (P = 0.01).

1,000,000 residents, our estimate implies that a 10% increase (i.e., 2,234 per 1,000,000 residents) in the number of 100 patient-waived physicians was associated with a 45.1% increase in buprenorphine prescriptions (20.2% to 2.234). Changes in the availability of 30 patient-waived physicians, on the other hand, did not have a statistically discernable effect on Medicaid-covered buprenorphine prescriptions.

Estimated Effects of Medicaid Expansions and Physician Prescribing Capacity on Medicaid-covered Buprenorphine Spending

In addition to the estimated increases in buprenorphine prescriptions, we also found similar patterns in Medicaid spending on buprenorphine (Table 2). Compared with the pre-post spending growth in the nonexpansion and late-expansion states, the expansion states saw a higher growth in Medicaid buprenorphine spending (row 2, columns 5: 0.91, 95% CI, 0.74-1.12, 23.1-211.5). Translating the absolute effect sizes into percentage changes, state implementation of Medicaid expansions in 2014 was associated with a 49.9% growth in Medicaid buprenorphine spending on a per 1000 resident basis, or total Medicaid spending on buprenorphine.

Furthermore, we found that every additional 100 patient-waived physicians per 1,000,000 residents was associated with a spending growth of $3.1 per 1000 residents per quarter (row 3, columns 5: 0.91, 95% CI, 0.74-1.12, 23.1-211.5), or a relative 14.0%. Our estimate implies that a 10% increase in the availability of 100 patient-waived physicians associated with a 31.0% increase in buprenorphine spending on a per 1000 resident basis (4.0% x 2.234). We also found a spending growth of $12.2 per 1000 residents per quarter (row 4, columns 5: 0.91, 95% CI, -0.8 to 25.2) attributable to every additional 30 patient-waived physician per 1,000,000 residents, albeit only significant at the 0.10 level.

DISCUSSION

Our findings provide some of the first empirical evidence concerning the impact of Medicaid expansions under the ACA on the utilization of buprenorphine for medication-assisted treatment of opioid use disorder. We found that state implementation of the expansions was associated with a 70% increase in Medicaid-covered buprenorphine prescriptions, and a 50% increase in Medicaid spending on buprenorphine. The main findings were consistent with those from sensitivity analyses (please see Appendix Tables A7-A9, Supplemental Digital Content, http://links.lww.com/MLR/B346, for the sensitivity analysis results). Similar early effects of the ACA Medicaid expansions on access to substance use disorder treatment have been observed in Medicaid claims data in states such as Kentucky and experienced by physicians in Massachusetts and Maryland.20-23 As many expansion states such as Kentucky, New Hampshire, and New York start to implement legislative initiatives to facilitate access to Medicaid coverage and medication-assisted treatment among low-income people with opioid use disorder,24-27 we expect to see even more significant improvement in buprenorphine utilization in the future.

Our findings also suggest that the availability of DATA-waived physicians, particularly the 100 patient-waived physicians, is also associated with increases in Medicaid-covered buprenorphine prescriptions and spending. It is worth noting that including the availability of DATA-waived physicians into the main analyses reduced the effects of the ACA Medicaid expansions on buprenorphine prescriptions and buprenorphine spending by 36.9% (Appendix A5, Supplemental Digital Content, http://links.lww.com/MLR/B346, row 2; from 1.13 to 0.69 per 1000 residents per quarter) and 20.9% (Appendix A6, Supplemental Digital Content, http://links.lww.com/MLR/B346, row 2; from $167.5 to $117.5 per 1000 residents per quarter). These findings suggest that limited physician prescribing capacity may impose a constraint on the policy impact of Medicaid expansions. In other words, sufficient physician prescribing capacity is necessary for ensuring that Medicaid expansion achieves its full potential in improving buprenorphine utilization. On July 6, 2016, the Department of Health and Human Services released a final
rule, effective on August 8, 2016, to raise the patient limit from 30 to 75 for DATA-woomed physicians. As new enrollees in the expansion states may present Medicaid and healthcare system with additional needs for medication-assisted treatment, active physician participation in the provision of buprenorphine, coupled with an enabling policy environment, will help absorb the potential increase in treatment needs and address the ongoing opioid epidemic. Future research is needed to explore this interaction policy effect of physician prescribing capacity and Medicaid expansions on improving treatment access and reducing opioid use disorder.

In conclusion, our study uses timely, comprehensive Medicaid administrative data and provides some of the first empirical evidence that state implementation of Medicaid expansions may have significantly increased Medicaid-covered buprenorphine prescriptions and buprenorphine spending. Our findings suggest that Medicaid expansion has the potential to reduce the financial barriers to buprenorphine utilization and improve access to medication-assisted treatment of opioid use disorder. In this regard, physicians and policymakers should be mindful of the additional needs for medication-assisted treatment associated with Medicaid expansion and create a supportive environment to translate the potential increase in treatment needs into the meaningful improvement in buprenorphine utilization, which will be crucial in addressing the nation’s opioid epidemic.

REFERENCES

TABLE 2. Effects of Medicaid Expansion and Physician Prescribing Capacity on Medicaid Spending on Buprenorphine

| Table 2. Effects of Medicaid Expansion and Physician Prescribing Capacity on Medicaid Spending on Buprenorphine |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| 2011–2013 (24 states) | 2014 Pre-Post Difference | Difference in Differences |
| Buprenorphine Spending Pre-Quarter Per 1000 Residents ($) | 140.7 | 235.5 | 94.8** | 67.4% | Ref. |
| Medicaid expansion (25 states) | 237.3 | 493.8 | 256.5*** | 108.1% | 167.5* | 71.1% | 137.5* | 69.9% |
| Per 1,000,000 residents | 12.3 | 26.3 | 14.0% | 12.3 | 26.3 | 14.0% | 12.3 | 26.3 | 14.0% |
| Per 1,000,000 residents | 26.3 | 52.5 | 5.2% | 26.3 | 52.5 | 5.2% | 26.3 | 52.5 | 5.2% |

95% confidence intervals in square brackets (calculated based on rate-based claims). **p < 0.01. Reference.
MEDICAID'S ROLE IN ADDRESSING THE OPIOID EPIDEMIC

The opioid epidemic is increasing among Americans, with addiction to heroin, fentanyl, and prescription painkillers, such as oxycodeone and hydrocodeone, contributing to this public health crisis.

Medicaid plays a central role in the nation's efforts to address the opioid epidemic. By covering people who are struggling with opioid addiction and enhancing state capacity to provide access to early interventions and treatment, Medicaid is a key tool in the fight against the epidemic. The Medicaid expansion, with enhanced federal funding, has provided states with additional resources to cover many adults with addictions who were previously excluded from the program.

The Opioid Epidemic Continues to Escalate

Over 1.7 million people have a prescription opioid addiction and 626,000 have a heroin addiction as of 2016.

Opioid-related inpatient stays increased 64%, and opioid related ER visits increased 99% between 2000 and 2014.

Overdose death rates nationwide nearly tripled from 2000 to 2015.

11,917 deaths 2002
33,091 deaths 2015

Opioid overdose death rates are highest among whites and males.

2015
2015

The ACA Broadened Medicaid Coverage for Adults and State Capacity to Address the Opioid Epidemic

Medicaid covers nearly 4 in 10 nonelderly adults with opioid addiction.

States with above-average opioid overdose death rates include both Medicaid expansion and non-expansion states.

States also cover a range of treatment services in their Medicaid programs.

METHADONE
BUPRENORPHINE
NALTIXONE

Medication-assisted treatment combats medication with counseling and other therapies. All state Medicaid programs cover at least 1 of the 3 medications, and most cover all 3.

States also cover a range of treatment services in their Medicaid programs.

METHADONE
BUPRENORPHINE
NALTIXONE

Data sources: National Center for Health Statistics, Centers for Disease Control and Prevention, and Maternal and Child Health Bureau.

Source for this document are available at: https://www.opioidmedicaid.com.status-and-outcome.

Medicaid and the Opioid Epidemic: Enrollment, Spending, and the Implications of Proposed Policy Changes

Katherine Young and Julia Zur

The United States is facing an unprecedented opioid epidemic. In 2015, over 2 million people had a prescription opioid addiction and 591,000 had a heroin addiction. The epidemic has resulted in increased health care services utilization and a surge in opioid overdose deaths throughout the country, particularly in Appalachia and New England.

Medicaid plays an important role in addressing the epidemic, covering 3 in 10 people with opioid addiction in 2015. Medicaid facilitates access to a number of addiction treatment services, including medications delivered as part of medication-assisted treatment, and it allows many people with opioid addiction to obtain treatment for other health conditions. As of July 2017, 32 states have expanded Medicaid, with enhanced federal funding, to cover adults up to 138% of the federal poverty level ($16,642/year for an individual in 2017). This expanded Medicaid coverage has enabled many states to provide addiction treatment and other health services to low-income adults with opioid addiction who were previously ineligible for coverage.

However, the GOP’s Better Care Reconciliation Act (BCRA) proposes to restructure the Medicaid program through a per capita cap or block grant, to phase out the enhanced federal funding for the Medicaid expansion population, and to remove the requirement that Medicaid expansion plans cover addiction treatment. The BCRA also appropriates $4.972 billion each year over 9 years for state grants for substance use disorder and mental health treatment and recovery support services. However, even with the additional grant funding, the reduced federal funding for Medicaid could lead to reductions in Medicaid eligibility and coverage of services, affecting state efforts to address the opioid epidemic.

This issue brief provides information on the number of Medicaid enrollees with opioid addiction, Medicaid spending on these enrollees, and the implications of the BCRA as states work to combat this public health crisis. Drawing on state-level data available for FY 2013, this brief provides insight into Medicaid’s role, but from a time predating the expansion and current focus on the opioid epidemic. Thus effects shown here will undoubtedly underestimate Medicaid’s role today, but provide insight into the scope of Medicaid’s impact on the opioid addiction challenge.
How many Medicaid enrollees have opioid addiction?

In FY 2013, there were 636,000 people enrolled in Medicaid with opioid addiction, amounting to a prevalence of 889 per 100,000 (Table 1 and Figure 1). The number of Medicaid enrollees with opioid addiction ranged from a low in South Dakota of under 300 people to a high in New York of over 114,000 people. The prevalence of opioid addiction within the Medicaid population also varied across states, ranging from fewer than 300 per 100,000 enrollees in Arkansas, South Dakota, Texas, Nebraska, and California to over 3,000 per 100,000 enrollees in Vermont, Connecticut, Maine, and Massachusetts (Table 1). However, these counts are from before Medicaid expansion took effect; since the expansion likely extended coverage to many people with opioid addiction, a larger number of people with this problem are likely now covered by Medicaid in states that expanded their programs.

How much does Medicaid spend on enrollees with opioid addiction?

Medicaid covers a broad range of services for people with opioid addiction, spending $9.4 billion on their care in FY 2013. Medicaid provides both addiction treatment services, such as inpatient detoxification, intensive outpatient treatment, and medication-assisted treatment, as well as other services for health conditions either associated with or independent from opioid addiction. Many of these services are complex and often expensive. Approximately one-third (31.9%) of this spending was for payments to Medicaid managed care organizations. The remaining spending was through fee-for-service (FFS) arrangements and included inpatient treatment (21.4%); outpatient treatment (14.5%); prescription drugs (9.7%); long-term care (8.3%); physician, laboratory, and x-ray services (5.8%); and other FFS acute care services (8.5%) (Figure 2). Because these data are also from before the Medicaid expansion, total Medicaid spending on enrollees with opioid addiction has likely increased since 2013 as more people with the problem gained coverage in recent years.
How would the BCRA affect states' ability to address the opioid epidemic?

Medicaid remains on the front lines for treatment of opioid addiction providing $94 billion in spending for enrollees with opioid addiction in 2013 and undoubtedly more today as the epidemic increases and coverage of the expansion population boosts Medicaid’s role. On July 13th 2017, the Senate released a revised discussion draft of the BCRA, which would change the structure of the Medicaid program substantially. Currently, the federal government matches state Medicaid spending with no pre-set limit. The BCRA would significantly reduce federal spending provided to states for the Medicaid program through a per capita cap, or at the state option, a block grant for expansion adults and other non-elderly non-disabled adults. It would also phase out enhanced federal financing for the Medicaid expansion population and remove the requirement that all Medicaid expansion plans cover addiction treatment. These changes will likely lead to decreases in eligibility, coverage, provider payments, and access to care.

In 2015, 1 out of 5 people with opioid addiction were uninsured, in part because many of these people lived in states that had not expanded Medicaid. Ending the federal enhanced support for the expansion and imposing a per capita cap on Medicaid will not facilitate expanding coverage to the uninsured. The Senate proposed $4.972 billion appropriation per year for 9 years will likely not fill this hole.

In addition to the Medicaid provisions, the BCRA also appropriates $4.972 billion each year from FY 2018 through FY 2026 to provide grants to states for substance use disorder treatment and recovery support services for individuals with substance use disorder or mental illness. The $4.972 billion per year for 9 years is an increase from $2 billion for state grants for FY 2018 alone, as proposed in the original draft of the BCRA released in June 2017. Several senators from states more heavily hit by the opioid epidemic had taken issue with the $2 billion appropriation in the BCRA, saying that it would not meet the amount needed to adequately address this public health crisis. These funds would increase capacity to address the epidemic but will likely fall short of the financing that accompanies increased coverage through Medicaid or other means.

People with opioid addiction often have health issues that abetted in, have been borne from, or are independent from their substance use and misuse. These include heart conditions, hypertension, asthma, hepatitis, sexually transmitted infections, and mental illnesses, such as depression. The $94 billion that Medicaid spent in FY 2013 was for a broad range of services, not solely for addiction treatment, reflecting the complex health profile of a person with opioid addiction. However, state grants from the appropriation are intended only for addressing substance use disorder treatment services and recovery support services for substance use disorders and mental illness, and would most likely be awarded to providers that are unable to address other health issues.

Of particular note, the $94 billion that Medicaid spent on enrollees with opioid addiction in FY 2013 does not include any of the very expensive drugs that effectively cure hepatitis C, such as Sovaldi, Harvoni, and Viekira Pak, as these drugs launched after FY 2013. Because these drugs cost tens of thousands of dollars per treatment per person and because the disease is prevalent among those addicted to opioids, spending on people with opioid addiction is very likely higher in FY 2014 than in FY 2013.
even before taking into account the increase in the number of people with opioid addiction during this period. Hepatitis C is a blood borne virus, most frequently now spread through shared intravenous needles. Although drugs are now on the market that effectively cure hepatitis C, a person can contract the virus again if reintroduced, allowing the virus to continue to spread. As a result, addressing hepatitis C without addressing the opioid epidemic will allow the virus to live on, not only allowing for unfavorable health outcomes, but adding avoidable costs to the entire health care system.

Looking Ahead

The opioid epidemic has led to substantial health complications, increased health care services utilization, and considerable societal costs. Medicaid has played a critical role in addressing the epidemic by facilitating access to addiction treatment services, including medication-assisted treatment. Medicaid has also facilitated access to other health services for enrollees with opioid addiction, many of whom have complex health and psychosocial needs.

However, proposed changes to the Medicaid program in the BCRA could significantly affect states’ ability to combat this issue. In response to decreases to federal Medicaid financing, states may limit Medicaid eligibility, trim benefit packages and remove optional services, or decrease provider payment rates, all of which may limit access to medical, mental health, and addiction treatment services for individuals with opioid addiction. Although the BCRA allot additional funding for addiction treatment and recovery support services, this funding may not adequately compensate for the decreases in Medicaid spending proposed in the bill. As a result, there may be substantial unmet need for treatment among individuals with opioid addiction, further exacerbating this public health crisis.
Methodology

This analysis is based on KFF estimates from the 2013 Medicaid Statistical Information System (MSIS) and Urban Institute estimates from CMS-64 reports. We adjusted MSIS spending to CMS-64 spending to account for MSIS undercounts of spending. Due to differences in the way CMS-64 and MSIS handle spending for managed long-term services and supports (MLTSS) and increased use of MLTSS in Medicaid, we have revised our methodology of adjusting MSIS to CMS-64. As a result, spending in this note are not comparable to previously published KFF analysis of Medicaid spending amounts from the MSIS.

Because FY 2013 MSIS data were unavailable for Rhode Island, and only one quarter was available for Kansas, we used 2012 MSIS for both of these states, aligned to 2013 CMS-64 spending. Data for Colorado were unavailable.

We used the following ICD-9-CM codes in the non-prescription drug claims data to identify beneficiaries diagnosed with opioid addiction: 304.0X (opioid type dependence), 304.7X (combination of opioid type drug with any other drug dependence), 305.5X (nondependent opioid abuse), and 965.0X (poisoning by opiates and related narcotics). Because ICD-9-CM codes identify diagnosed health problems, it is possible that we are undercounting the true number of beneficiaries with opioid addictions. Additionally, although it is possible that we are including beneficiaries with serious opioid use problems who may not be addicted, we included them in this analysis, because we are interested in Medicaid's interaction with the opioid epidemic overall.
<table>
<thead>
<tr>
<th>State</th>
<th>Medicaid Enrolled: Expanded Medicaid</th>
<th>Medicaid Enrolled: Did Not Expand Medicaid</th>
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</thead>
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<tr>
<td>Alaska</td>
<td>1,230</td>
<td>881</td>
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<td>West Virginia</td>
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</table>

**Source:** KFF estimates based on analysis of data from the FY 2013 Medicaid Statistical Information System (MSIS). \[Colonic data were unavailable. 2013 data used for Rhode Island and Kansas. See Methodology for details.\]

Medicaid and the Opioid Epidemic: Enrollment, Spending, and the Implications of Proposed Policy Changes
Endnotes


2. We use the phrase “opiod addiction” in this paper. The medical community also refers to it as “opiod use disorder.”


4. The BCRA does allow the HHS Secretary to exclude up to $5 billion of spending nationally on public health emergencies from the allotted amounts calculated through states’ per capita caps from 2020 through 2024, although the secretary of HHS must declare both the emergency as applicable and the amount excluded as appropriate. This amount is shared among all states and is among all types of public health emergencies.


Keep Obamacare to keep prog on treating opioid disorders or mental illnesses

BY RICHARD D. FRANK AND SHEPPY R. GUIDO. OPINION CONTRIBUTORS: DAVIN CHU AND ANU CHATURVEDI

The only real question left is when.
Kimmel: Low black unemployment should be credited to Obama, an ‘unemployed black guy’
Golf star on playing with Trump: ‘He cheats like hell’
The State of the Union is great again.
Red alert warning: Trump may fire Mueller
Wynn money until outside investigation is complete
Texas Democrat slams border wall, links GOP opponent to Trump in new ad
Sonny Perdue gives some good news in his 2016 farm bill goals

In enacting the Affordable Care Act this past December, Congress took important steps toward promoting access to high quality care for mental and substance use disorders. The Act directs new resources to two long-standing challenges: federal opioid misuse and abuse ($1 billion over two years) and serious mental illnesses (about $200 million in 2017). These new appropriations, secured through a broad bipartisan vote, will fund critical investments in treatment capacity and quality.

But these investments will be squandered if the new Congress rolls back recent gains in the quality and level of substance use and mental health insurance coverage generated by the Affordable Care Act (ACA) of 2010. Building upon the Mental Health Parity and Addictions Equity Act, the ACA gives people suffering from these devastating illnesses the purchasing power that will allow them to use this new treatment capacity.

Without the foundation of that ongoing financial support, those in the eye of the opioid storm and those who live in society’s shadows due to serious mental illnesses will continue to die of untreated illness, and their communities will continue to pay for the jails, prisons and homeless shelters that serve as our de facto service system for many with these conditions.

Repealing the ACA — and its behavioral health provisions — would have stark effects on those with behavioral health illnesses. We estimate that...

http://thehill.com/hfg/healthcare/313672-keep-obamacare-to-keep-prog-on-treating-opioid-disorders
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Keep ObamaCare to keep progress on treating opioid disorders and mental illnesses | The Hill

One impetus for passing the Cures Act was to address an opioid treatment gap of about 420,000 people that reported money or availability of care were key impediments to obtaining substance use treatment — repealing the ACA would increase that gap by over 50 percent with the strokes of a pen.

The impact of repealing ACA provisions related to mental and substance use disorders would have particularly adverse effects on states that have experienced some of the most tragic increases in opioid-related deaths. Many of these states — including Alaska, Kentucky, Maine, Ohio, West Virginia — have seen their adult unmet needs rates drop by more than 5 percentage points since the implementation of the ACA coverage expansions in 2014.

Several states — Kentucky, Massachusetts, Maryland, Ohio and West Virginia — have addressed the opioid overdose problem by promoting use of effective Medication Assisted Treatment (MAT) in the context of their Medicaid expansions. The result is that Medicaid pays for between 50 and 80 percent of all MAT in those states. They would find it much more challenging to maintain these evidence-based programs in the face of a repeal of those expansions.

To put this in dollar terms, repealing the mental and substance use disorder coverage provisions of the ACA would withdraw at least $5.5 billion annually from the treatment of low-income people with mental and substance use disorders. The Cures Act’s two-year, $1 billion increase in treatment capacity would not even serve as much as a bandage if it were coupled with a cut in enrolment spending that is more than five times greater.

The Congress and the American people have come to realize that stemming the tragic toll of opioid misuse and addiction and serious mental illnesses takes funding as well as policy. The Cures Act reflects bipartisan agreement on this point.

It would be a cruel shame for Congress to take an important, but modest, step forward in investing in treatment capacity, while withdrawing funds from the enormous recent progress made in addressing the needs for care of those with mental health and addictive illnesses.

Congress should not backslide on the promise of the Cures Act by repealing the ACA.

Richard G. Frank, Ph.D., is the Margaret T. Morris Professor of Health Economics in the Department of Health Care Policy at Harvard Medical School, and Sherry Glied, Ph.D., is Dean of the Wagner School of Public Service at NYU.

The views of Contributors are their own and are not the views of The Hill
Determinants of Increased Opioid-Related Mortality in the United States and Canada, 1990–2013: A Systematic Review

We review evidence of determinants contributing to increased opioid-related mortality in the United States and Canada between 1990 and 2013. We identified 17 determinants of opioid-related mortality and increased mortality that we classified into 3 categories: prescriber behavior, user behavior and characteristics, and environmental and systemic determinants. These determinants operate independently but interact in complex ways that vary according to geography and population, making generalization from single studies difficult. Researchers in this area face significant methodological difficulties: most of the studies in our review were ecological or observational and lacked control groups or adjustment for confounding factors; thus, causal inference is difficult.

Preventing additional opioid-related mortality will likely require interventions that address multiple determinants and are tailored to specific locations and populations. (Am J Public Health. 2014;104:97-102. doi: 10.2105/AJPH.2013.301896)

Nicholas A. King, PhD; Véronique Fraser, RN, MSc; Constantine Blokos, MSc; Robin Richardson, MPH; and Sam Hasin, PhD

DURING THE PAST 2 DECADES, mortality resulting from unintentional prescription drug overdoses has more than doubled in the United States and Canada and is now widely recognized as a major public health problem. Deaths involving prescription opioid analgesics, including hydrocodone, oxycodone, hydrocodone, and methadone, have surpassed deaths from heroin and cocaine combined. In 2002, the 18th consecutive year in which drug overdose deaths increased, 75% of all prescription overdose deaths involved opioids, and prescription opioid overdoses were involved in 16,851 deaths in the United States, a more than 4-fold increase since 1999.1-4

Although national data are unavailable for Canada, in Ontario, opioid-related mortality doubled between 1991 and 2007. Moreover, in 2004 it was more than double the rate (27 vs 12 per million).5

Although this problem is most acute in North America, it has the potential to affect worldwide access to opioids.6-8 To become a serious global health problem, identifying the determinants of increased mortality is an essential step in reducing opioid-related deaths in the United States and Canada and curbing future increases worldwide. However, although much has been written about this phenomenon, the evidence base is fragmented and complex, and current reviews are unsystematic and idiosyncratic.9-11 and media coverage is often highly sensationalized. Our aim was to systematically identify and review evidence regarding determinants of increased opioid-related mortality in the United States and Canada between 1990 and 2013.

METHODOLOGY

In collaboration with a research librarian, we searched 5 electronic databases—Ovid MEDLINE (1946 through week 4 of September 2013), EMBASE (1988 through week 4 of September 2013), and PreMed Index/INFORMS Complete (1990 through week 4 of September 2013)—for articles published between January 1990 and September 2013 using the following keywords: “painkiller,” “opiates,” “opioid,” and “opioid-related disorders” in combination with “mortality,” “fatal,” “death,” and “inappropriate prescribing.” Also, we hand searched reference lists of relevant articles to identify additional publications omitted in the full search strategy are provided in Appendix 1, available as a supplement to this article at http://www.ajph.org.

We included English-language original research studies that provided quantitative evidence of 1 or more determinants of increased opioid-related mortality in the United States or Canada between January 1990 and September 2013. We excluded case histories, commentaries, editorials, reviews, and articles that did not provide original evidence of determinants of opioid-related mortality. Two of the authors independently assessed all titles and abstracts for inclusion and then assessed the full text of considered studies. All disagreements were resolved through discussion with the first author, who had final say on inclusion.

We developed a standardized data extraction form that was piloted on 10 articles and subsequently revised. Two authors independently extracted the following information from each article: name of first author, geographic setting, declaration of competing interests, prescription opioid drug discussed, and determinants of increased prescription opioid mortality. One of the authors extracted the study type for all articles. Again, disagreements were resolved through discussion with the first author, who had final say on data extraction.

RESULTS

Our initial searches produced 3164 duplicated titles. After title and abstract reviews, 144 articles remained for a full text review. After this review, 47 articles remained for inclusion (Figure 1). 26 time-series articles, 10 case-series articles, 4 case-control articles, 3 cross-sectional articles, 1 case–cohort article, 1 observational cohort article, and 2 mixed-method articles. Table 1...
provides a summary of each study included. We could not identify a competing interest declaration in 21 of the articles, among the remainder, 26 declared none, and 2 declared some competing interest.

Our sample identified evidence for 17 determinants of increased opioid-related mortality in the United States and Canada between 1990 and 2013. For conceptual clarity, we grouped these determinants into 3 broad categories: prescriber behavior, user behavior and characteristics, and environmental and systemic determinants (Table 2).

The most commonly identified determinants were user behavior and characteristics, particularly demographic characteristics and polydrug use, and prescriber behavior, primarily increases in opioid prescriptions and dosages and prescriptions for oxycodone and methadone in particular. Note, however, that a greater number of studies does not imply stronger evidence.

DISCUSSION

We found a complex, multifaceted, and geographically varied web of determinants of increased opioid-related mortality. The number of opioid prescriptions dispensed from US retail pharmacies increased from 174.1 million in 2000 to 255.9 million in 2009. In 2006, Americans consumed 115.272 kilograms of oxycodone, more than twice as much as in 1997. In Canada, prescription opioid consumption doubled between 2000 and 2010. In 2008, a Utah Department of Health survey showed that 21% of adults had been prescribed an opioid in the preceding 12 months. Prescription of opioid analgesics for chronic noncancer pain in particular has increased between 1991 and 2003. US prescriptions of opioids for chronic musculoskeletal pain doubled, and rates for

more potent opioids quadrupled. According to one estimate, 8.6 million to 11.5 million adults were on long-term opioid therapy in the United States during 2003.

We found 8 studies providing evidence that increased prescriptions for opioids may have played a role in increased opioid-related mortality. Canadian studies showed a correlation between mortality and consumption of oxycodone (oral morphine equivalent) in 2 provinces and between opioid prescribing rates and mortality rates across Ontario counties. Similarly, in a study of North Carolina counties, there were correlations between opioid sales, emergency department visits for overdoses, and opioid-related mortality. A US study also demonstrated a state-level association between overall opioid consumption and drug poisoning mortality.

Opioid dosage. An overall opioid prescription has increased, so too have prescribed dosages. For example, a study of workers' compensation claims in the state of Washington showed that the average daily morphine equivalent dose (MLED) of long-acting opioids increased 30% between 1996 and 2002 and exceeded the recommended 'red flag' dose by 2005. We found 7 studies providing evidence of the contribution of increased dosages to increased opioid-related mortality. A study of social assistance recipients in Ontario showed that, between 2003 and 2008, there were increases in the mean daily doses of oxycodone (increase of 27.4%) and fentanyl (increase of 14.2%) dispensed, whereas doses remained flat for other opioids. By 2008, one third of prescriptions for long-acting

FIGURE 1 Flow diagram of systematic review.
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<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Journal</th>
<th>Type of Study</th>
<th>Setting</th>
<th>Sediment Contaminants</th>
<th>Prescription</th>
<th>Use Behavior and Characteristics</th>
<th>Environmental and Socioeconomic Factors</th>
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<td>x</td>
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<td>2009</td>
<td>Morbidity and Mortality Weekly Report</td>
<td>Time series</td>
<td>Utah</td>
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<td>Time series</td>
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Continued
OxyContin use increased clinical guidelines with respect to mean daily dose, and patients receiving higher doses had higher rates of overdose, opioid-related mortality, and all-cause mortality. A study of patients receiving opioids for chronic noncancer pain at a health maintenance organization in Washington State also showed that the risk of overdose increased with increased dosage. It was noted in this study that, although overdose risk was higher at high doses, most overdoses occurred at low to moderate doses because such doses are prescribed more frequently, suggesting that even the most frequently used dose regimen carry some risk.

The importance of increased dosages is supported by evidence suggesting a dose-response relationship between maximum daily prescribed dose and risk of death. However, there does not seem to be an evidence-based threshold for what constitutes a dangerously high dose. Although some clinical guidelines suggest an MDD of 100 milligrams per day as a "watchful dose," studies in our sample showed overdose and mortality increases at doses ranging from 40 to 200 milligrams per day. Prescription of oxycodone, prescription of more potent opioids, particularly methadone and long-acting formulations of oxycodone, has increased most rapidly, with associated increases in mortality. Before 1990, weaker opioids such as codeine and propoxyphene were used more frequently than stronger formulations. Between 1997 and 2006, US retail sales of methadone increased 177%, sales of oxycodone increased 732%, and sales of fentanyl increased 479%, whereas sales of hydrocodone, hydromorphone, and morphine increased between 190% and 274% and sales of cocaine and heroin dropped 23% and 28%, respectively.

Studies of workers' compensation claims in Washington State between 1996 and 2002 showed that whereas overall opioid prescriptions increased 25%, prescriptions for the more potent Schedule II opioids increased by almost 250%, with an accompanying increase in opioid-related mortality. Similarly, a North Carolina study demonstrated significant increases in prescriptions of oxycodone (529%), methadone (607%), and fentanyl (530%) and significant decreases in prescriptions of aspirin and acetaminophen between 1997 and 2003.

We found 7 studies that provided evidence for the contribution of prescription of oxycodone, particularly the long-acting formulation OxyContin, to increased opioid-related mortality. Long-acting opioids such as OxyContin may be particularly dangerous when used recreationally: crushing pills releases high doses of the drug, and repeated use to increase or maintain a narcotic effect may lead to overdose. In addition, recreational users may avoid formulations that include opioids along with acetaminophen because of hepatotoxicity.

A study of patients in the Ontario public drug plan between 2003 and 2006 showed that whereas prescription ratios for long-acting oxycodone more than doubled, rates for all other opioids decreased or remained flat, and opioid-related mortality increased. Another study showed that overall opioid-related mortality rates increased 49%, and oxycodone-related mortality increased 49% after OxyContin was added to the provincial drug formulary and that oxycodone...
TABLE 2—Determinants of Increased Opioid-Related Mortality: United States and Canada, 1990-2013

<table>
<thead>
<tr>
<th>Determinant</th>
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<td>Prescriber behavior</td>
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<td>High-volume prescribing (≥300 prescriptions)</td>
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<td>Opioid prescription or pain</td>
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<tr>
<td>Opioid dosage</td>
<td>7</td>
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<tr>
<td>Prescription of oxycodone or methadone</td>
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<tr>
<td>Prevalence of methadone maintenance program</td>
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<tr>
<td>Opioid use and characteristics</td>
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</tr>
<tr>
<td>History of substance abuse or overdose</td>
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</tr>
<tr>
<td>Deprescription</td>
<td>8</td>
</tr>
<tr>
<td>Doctor or pharmacy dispensing</td>
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<td>Drug utilization</td>
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<tr>
<td>Polypharmacy</td>
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<tr>
<td>Sociodemographic characteristics</td>
<td>22</td>
</tr>
<tr>
<td>Environmental and geographic determinants</td>
<td></td>
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<tr>
<td>Area of residence</td>
<td>8</td>
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<tr>
<td>Socioeconomic status</td>
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<tr>
<td>Geographic area</td>
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<tr>
<td>Behavioral, social, and demographic factors</td>
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<tr>
<td>Interagency</td>
<td>2</td>
</tr>
<tr>
<td>Medical specialty</td>
<td>2</td>
</tr>
<tr>
<td>Prevention drug monitoring programs</td>
<td>2</td>
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</tbody>
</table>

Note: Number of studies in sample reporting evidence supporting statement.

We involved in one third of all opioid-related deaths between 2006 and 2008. We found 14 studies that provided evidence for the contribution of methadone prescriptions to increased opioid-related mortality. Methadone's unusual pharmacology poses particular challenges because of the small difference between therapeutic and toxic doses. There is also some evidence that prescribers may prefer methadone for economic rather than clinical reasons. Buprenorphine is a cheaper, generic drug, private insurers, Medicaid, and individuals with substance use disorders may prefer it over more expensive, patient-preferred alternatives, thus driving increases in methadone prescriptions.

There is evidence that a high proportion of opioid-related deaths have involved methadone. Studies conducted in Washington State, and West Virginia have shown that methadone is involved in a higher number of deaths than any other opioid, and a US study revealed that methadone was involved in twice as many single-drug deaths as any other opioid. A US ecologic study conducted in 2002 suggested that methadone (43%) and oxycodone (40%) explained a large proportion of the geographic variation in opioid-related mortality. Although methadone has traditionally been prescribed to combat substance abuse in methadone maintenance programs, it is increasingly being used for its analgesic properties, pain relief. We found some evidence that the use of methadone for pain relief has played a role in increased mortality. A Vermont study showed that although the percentage of drug overdose deaths that were methadone related increased from 12% to 37% between 2001 and 2006, it was 7% of 7,646 naloxone administrations in a methadone maintenance program.

A Utah study showed that, between 1997 and 2004, when methadone prescription rates increased 727% and opioid-related mortality increased 177%, during this period, rates of heroin abuse and admissions to substance abuse facilities remained unchanged, suggesting that the increased prescriptions and associated mortality resulted primarily from prescriptions for pain. By contrast, a New Mexico study revealed a slight decrease in methadone-related deaths between 1998 and 2002 and a higher proportion of deaths with prescriptions related to methadone maintenance (45%).

High-volume prescribing. The possible contribution of high-volume prescribing to opioid-related mortality has received considerable attention in the medical and scholarly literature. Some recent US studies report problems with so-called "pill mills," which prescribe large quantities of opioids to patients with questionable diagnoses. We found a study providing evidence that high-volume prescribing may have played a role in increased opioid-related mortality. A study of Ontario family physicians showed that the top quintile of physicians issued opioid prescriptions 4.5 times more frequently than the next quintile and were the final opioid prescription in 63% of opioid-related deaths. However, it is still unclear whether high-volume prescribing is a direct driver of increased mortality.

User Behavior and Characteristics

Our review identified 6 ways in which opioid analgesic users may have contributed to increased opioid-related mortality, either through behaviors (e.g., diversion, doctor shopping, poly drug use, or drug substitution) or characteristics (e.g., sociodemographic characteristics or history of substance abuse) that increased their risk of opioid-related death. Although we found evidence that user behaviors and characteristics contribute to the risk of opioid-related mortality, in most cases their exact contribution to increased mortality was unclear.

Sociodemographic characteristics. Opioid-related mortality trends have been linked to considerable sociodemographic differences. We found that in 2000, within the US, non-Hispanic Whites and American Indians/Montana-Native, middle-aged individuals; those living in rural areas, and those of lower SES had higher rates of death. However, we found considerable heterogeneity among these general patterns. For example, studies conducted in Utah, New Mexico, and Oklahoma showed that although men were more likely to overdose, relative increases in opioid-related mortality were greater among women. This trend was also seen nationally. Opioid-related mortality increased 41% among women and 26% among men between 1999 and 2006.

Several studies have noted that demographic trends vary over...
time and according to specific drug. For example, a New York City study revealed that whereas methadone-related deaths were higher among blacks than whites in 1990, this trend had reversed by 2006. The authors suggested that this situation may have reflected the shift in methadone prescriptions from substance abuse treatment to treatment of pain. A Connecticut study showed that individuals who overdosed on illicit drugs or methadone were younger, less likely to be male and white, and less likely to live in rural areas than individuals who overdosed on other prescription opioids.

Polydrug toxicity. Many deaths are found with prescription medications, particularly benzodiazepines and other sedatives-hypnotics, antidepressants, and sleep aids, alcohol, or illicit drugs, along with 1 or more prescription opioids, in their bloodstream. We found 14 studies22,23,24,25,26,27,28,29,30,31,32,33,34 providing evidence that polydrug toxicity may have played a role in increased opioid-related mortality. Evidence suggests that increased opioid-related mortality might be characterized as part of an epidemic of polydrug mortality.

Among methadone-related deaths in western Virginia, 61% died from polydrug toxicity, with an average of 3 substances identified. In Ontario, 32 of 44 methadone-related decedents had other drugs in their systems, including 18 with opioids. A Virginia study of opioid-related deaths revealed that a majority of cases involved more than 1 medication or drug, and 73% involved benzodiazepines or antidepressants. Studies conducted in Washington35 and West Virginia36 also showed that significant proportions of opioid-related deaths involved other drugs, particularly benzodiazepines and antidepressants.

Diversion. There is substantial evidence of diversion—defined as the act of redistributing a drug to individuals for whom it was not prescribed, regardless of the receiving party’s motive—of prescription opioids. Sources of diverted opioids include individuals who have received prescriptions for pain or, less commonly, have been allowed “extra” doses that do not have to be consumed under observation and can be taken home from methadone maintenance programs.

We found 8 studies37,38,39,40,41,42,43,44 providing evidence that diversion may have played a role in increased opioid-related mortality. Diversion is associated with an increased risk of opioid-related mortality, but rates vary according to location, gender, age, and type of drug. Studies in our review demonstrated that 63% of all unintentional drug poisoning deaths in West Virginia42 had a history of methadone-related deaths. In Ontario, the number of methadone-related deaths in Ontario, and 40% of opioid-related deaths in Utah43 showed evidence of diversion. In Ontario study revealed evidence of diversion in only 7% of opioid-related deaths in Utah.44 Because access to a recent prescription does not rule out the possibility that a decedent obtained the opioid dose that contributed to his or her death through diversion, the rate of diversion at the population level is often inferred from a mismatch between the demographic profiles of legitimate patients and decedents. For example, in studies in Utah43 and West Virginia,45 the age profile of methadone-decedents more closely resembled that of individuals with illicit drug overdose as opposed to methadone prescribers.

Similarly, a study of unintentional poisonings in the United States between 1998 and 2002 noted that the gender and age distributions (male and middle aged) of decedents matched those of individuals whose deaths were caused by drugs of abuse rather than individuals who suffered from chronic nonmalignant pain, who tend to be female and older.46 However, although there is evidence that diversion is a determinant of mortality, it is still unclear whether rates of diversion have changed during the past 2 decades and thus are a direct driver of increased mortality.

Doctor or pharmacy shopping. The practice of doctor shopping (visiting multiple physicians to obtain prescriptions) and pharmacy shopping (visiting multiple pharmacies to fill prescriptions) for prescription opioids has received considerable attention.47 We found 5 studies48,49,50,51,52 providing evidence that doctor or pharmacy shopping may have played a role in increased opioid-related mortality. A New Mexico study showed that risk of overdose increased with increasing numbers of prescriptions prescribed, and pharmacies visited, with pharmacies showing the strongest association.49 According to a West Virginia study, the percentage of doctor shoppers (25.2% vs 3.5%) and pharmacy shoppers (17.5% vs 1.3%) were significantly higher among opioid-related decedents than among living recipients of opioid prescriptions.48

Rates of doctor shopping may vary according to location, age, and gender. For example, a study conducted in West Virginia45 revealed evidence of doctor shopping among 21% of decedents and doctor shopping was more common among women aged 35 to 44 years. By contrast, no Oregon study showed evidence of doctor shopping in 2% of decedents.

Although some49,50 worry that the availability of opioids on the Internet might contribute to doctor or pharmacy shopping, we found no evidence that this is a substantial determinant of opioid-related mortality. Surveys have shown that only 0.4% of adults and 1% of young people of high school age in the United States obtain opioids from the Internet.47

History of substance abuse. We found 4 studies providing evidence that a history of substance abuse42,53,54,55 may have played a role in increased opioid-related mortality. A study of methadone-related deaths in West Virginia showed that almost all of the deaths involved individuals who were current or former substance abusers.54,55 A qualitative study of decedents in Utah revealed that a health care provider had expressed concern about abuse of opioids in 3 of the cases, and friends or family had reported substantial rates of overconsumption, recreational use, and self-medication.56

Drug substitutions. Because prescription medications carry a number of safety and legitimacy and lack the stigmatization that accompanies illicit drug use, individuals may be less likely to initiate or experiment with them.57 We found 2 studies providing evidence that substitution therapy may have played a role in increased prescription opioid-related mortality. A Connecticut study showed that between 1997 and 2007, deaths from prescription
epoch increased, whereas deaths from heroin decreased. By contrast, a US study noted that poisoning deaths from prescription opioids and illicit drugs have increased concurrently, although this investigation could not exclude substitution as a possibility.63

Environmental and Systemic Determinants

Our review identified 6 environmental and systemic determinants that may have contributed to changes in opioid-related mortality: guidelines, policies, and consensus statements; area characteristics; SSI; geography; interventions; and prescription drug monitoring programs. We reviewed all 6 determinants and media coverage. In many cases, these determinants may have influenced the health behavior of physicians and users, including behaviors identified in previous reviews.64

Guidelines, policies, and consensus statements. Many articles have emphasized the impact of changes in pain management philosophy and practices on physicians and patients. The use of guidelines to prescriber stronger analgesics for chronic nonmalignant pain has decreased. Since the late 1990s, patient advocacy groups and professional organizations have issued a number of guidelines for the treatment of chronic pain, which has led to the implementation of guidelines, policies, and consensus statements endorsing expanded prescription of opioids.65 In 1997, the American Academy of Pain Medicine and the American Pain Society issued a joint consensus statement,66 and the American Society of Anesthesiologists issued practice guidelines,67 endorsing use of opioids for chronic pain. In the following decade, US consumption of methadone, oxycodone, and hydrocodone increased 13.9% and 4-fold, respectively.68

We found 5 studies51,53,54,69-71 providing evidence that guideline, policy, and consensus statements may have played a role in increased opioid-related mortality. An Indiana study showed increases in the number of calls to a poison control center involving adolescents and opioids, as well as the number of medical complications and deaths related to opioids, during the years after the release of the 2000 Joint Commission on Accreditation of Healthcare Organizations pain standards, which made adequate pain management a clinical performance measure. Of 10 deaths in the study occurred after the release of these standards.69

A study of workers' compensation claims in Washington State revealed a shift from Schedule II to Schedule III opioids, an increased average dose of hydromorphone, and increased opioid-related mortality during the 6 years after the 1996 release of guidelines that received the state policy limiting use of opioids for chronic pain. A follow-up study showed declines in total numbers of prescriptions, the proportion of patients receiving opioids, diagnoses, and eventually opioid-related mortality following the introduction of new guidelines in 2007 that included a "yellow flag" warning for doses of 120 milligrams per day.61

More recently, a US study provided evidence suggesting that federal regulations may have affected the country's methadone-related mortality trends.61 In November 2006, the Food and Drug Administration issued warnings about the careful prescribing of methadone and revised the interval for the recommended starting dose, in addition, in January 2009, at the request of the Drug Enforcement Administration, manufacturers limited distribution of the largest methadone formulation (40 mg) to 507 in 2007 and further decreased in 2008 and 2009, paralleling the decrease in the amount of methadone distributed.61

Area characteristics and socioeconomic status. We found 5 studies51,53,54,69-71 providing evidence that area urbanization or SSI may have played a role in increased opioid-related mortality. A US study showed substantial variation and change over time in the spatial gathering of opioid-related mortality: in 1996, large central metropolitan areas had the highest opioid-related mortality rates, and noncore areas had the lowest rates. By 2009, noncore areas had the highest rates and had seen the largest relative increase during this time period.70

A spatial analysis in New York City also showed that clustering of opioid-related mortality changed over time and varied according to type of drug. Although methadone-related fatalities were concentrated in neighborhoods with high income inequality, high poverty rates, and lower median incomes from 1990 to 2008, the clustering of other opioid-related fatalities shifted during this period and, by 2009, was more concentrated in neighborhoods with high income inequality but lower poverty rates.71 A spatial analysis of North Carolina counties in 2010 revealed that opioid sales and overdoses were more frequent in rural than urban counties.72 Geography. We found 2 studies71,73 providing evidence that geographic factors may have played a role in increased opioid-related mortality. A US study showed that drug poisoning mortality rates varied 6-fold between states, as did opioid consumption (methadone: 13.9-fold; oxycodone: 4-fold; overall: 4-fold).71 Another study showed that prescription opioid sales ranged from 3.7 (Oklahoma) to 12.5 (Florida) kilograms per 10,000 population, and opioid-related mortality rates ranged from 5.5 (Nebraska) to 27.2 (New Mexico) per 100,000 population.72 The exact causes of these geographic variations are unclear. Interventions. Recently, several jurisdictions have implemented interventions targeted to reducing opioid-related mortality. We found 2 studies74,75 providing evidence that interventions may have played a role in opioid-related mortality trends. A Massachusetts study showed that implementation of overdose education and naloxone distribution programs in communities significantly reduced fatal overdose rates while having no effect on nonfatal overdoses.75 Another study in Utah noted that, in the 3 years following implementation of the state's Prescription Pain Medication Program (which consisted of a media campaign and revised clinical guidelines), there was a 54% decrease in opioid-related deaths, although this evidence was suggestive rather than definitive.76

Prescription drug monitoring programs. Beginning in 2002, many states implemented prescription drug monitoring programs, which collect prescription and dispensation information for controlled substances.77 We found 2 studies78,79 providing evidence that PDMPs may have played a role in opioid-related mortality trends. In theory, PDMPs should reduce the overall
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availability of opioids by discouraging doctor shopping and high-volume prescribing. However, the evidence is mixed. One study suggested that New York State’s lower opioid mortality relative to that of Pennsylvania might be due to a stricter and better-funded PMP.33 However, a national observational study revealed no correlation between PMPs and mortality or prescription rates.34 An additional study noted that, given the minimal amount of evidence of doctor shopping for opioids, PMPs may be of limited use for predicting risk of overdose.35

Media coverage. The increase in opioid-related mortality has received considerable media coverage, which may in turn have had an impact on mortality rates. We found 1 study35 providing evidence that media coverage may have played a role in increased opioid-related mortality. A time-series analysis showed that increased media coverage of opioids preceded increased rates of opioid poisoning mortality by 2 to 6 months and accounted for 22% of the variation in mortality.36 The authors speculated that coverage often amounted to “misleading endorsements of prescription drug abuse,” thus increasing the popularity of opioids. Several studies have also speculated that increased media coverage may lead to “diagnostic suspicion bias,” as medical examiners and coroners screen more carefully for opioids as a cause of death or report poisoning at lower blood levels.37,38,39,40,41 Although another study reported little evidence of such practice,50

Quality of Evidence and Methodological Challenges

The majority of studies in our review were ecological or observational and lacked control groups or adjustment for confounding factors, making inference of causation between determinants and opioid mortality difficult. We found few investigations with a study design adequate to identify specific causes of opioid-related mortality increases in any geographic region. In our sample, only 6 of the 47 studies42,43,44,45,46,47,48 were explicitly designed to provide quantitative evidence that a particular determinant was associated with increases in opioid-related mortality. We found many more studies that, although framed by discussion of mortality increases, examined determinants of mortality rather than mortality increases and suggested possible causes of such increases. Further research on the exact causes of opioid-related mortality increases is needed.

Researchers have tested a number of other methodological challenges. Determining exact cause of death is often difficult, particularly in cases involving polydrug use.49 Prescription data are proprietary, and data on adverse events are held privately.37 There is some inconsistency in international classification of drug deaths, as medical examiners and coroners screen more carefully for opioids as a cause of death or report poisoning at lower blood levels.40,41 Although another study reported little evidence of such practice,50

Conclusions

To our knowledge, this is the first systematic review of the determinants of opioid-related mortality in North America. Our review identified a diverse and regionally variable set of determinants of increased opioid-related mortality in the United States and Canada during the past 2 decades, including prescriber behaviors, user behaviors and characteristics, and environmental and systematic determinants. These determinants operate independently but interact in complex ways that vary according to time, geography, and population.

A number of commentaries, editorials, and reviews have argued that findings were not discussed in the review, including prescribing errors and lack of training,60,61,62 postmarketing surveillance failures,63,64 and patient education and nonadherence.65,66,67

Our study had several limitations. First, we did not perform a formal quality assessment of the articles. Second, conducting a search with different search terms or similar terms in different databases can yield a different sample of articles. Consultation with a reference librarian improved our ability to capture relevant studies, but it is possible that some articles were missed. Third, we used broad inclusion and exclusion criteria to capture the largest possible number of studies, allowing substantial discretion in judgment. Our title review and extraction of data in duplicate reduced, but did not entirely mitigate, this potential bias. As with any review, limitations of the review methodology should be considered when interpreting the results.
Our review identified significant limitations in the evidence base for determinants of increased opioid-related mortality. Researchers in this area face substantial methodological hurdles. Few studies in our sample had a study design adequate for robust causal inference and tested the sensitivity of their results to methodological choices, and most studies focused on small populations or geographic areas. Researchers and decision makers should conduct deeper causal inference and test the validity of their results to methodological choices. Our review found that few studies were available in more than 150 countries, but, when they are available, they often cost more in low- and middle-income countries. As an estimated 5.5 billion people live in countries with little or no access to opioids, and global opioid production would increase without a cost if all countries had adequate access.

Global opioid use is often seen as a right to access to effective pain management, particularly for chronic pain. However, residual mental health, many have called for increased worldwide access to effective pain management, particularly for chronic nonmalignant pain, could be in some cases lead to increased opioid-related mortality. Given the evidence of the role of diversion in opioid-related mortality, we might expect some proportion of these deaths to occur as "collateral damage" among individuals without legitimate prescriptions. We encourage clinicians, public health officials, and policymakers to consider evidence-based prevention efforts, tailored to different populations and geographic areas, as a complement to increased access to opioids.

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Conflict of Interest

The authors have no conflicts of interest to disclose.

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Human Participant Protection

Human participants were not required because it was a review of the existing literature.

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The Effect of Public Insurance Expansions on Substance Use Disorder Treatment: Evidence from the Affordable Care Act
Johanna Catherine Maclean and Brendan Saloner
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ABSTRACT

We examine Medicaid expansion under the Affordable Care Act (ACA) on substance use disorder (SUD) treatment utilization and financing. We couple administrative data on admissions to specialty SUD treatment and prescriptions for medications used to treat SUDs with a differences-in-differences design, comparing expanding and non-expanding states. Post-expansion, admissions did not significantly change in expanding states relative to non-expanding states. We find that in expanding states Medicaid insurance and use of Medicaid to pay for treatment increased by 13.9 percentage points (71%) and 12.9 percentage points (75%) following the expansion. Post expansion, Medicaid-reimbursed prescriptions for medications used to treat SUDs in outpatient settings increased by 43% in expanding states relative to non-expanding states. We find no statistically significant evidence that Medicaid expansions affected fatal alcohol poisonings or drug-related overdoses. Overall, our findings imply that ACA Medicaid expansion had a large impact on the financing of SUD treatment and medication receipt.

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1. Introduction

This study explores the effect of state Medicaid expansions under the Affordable Care Act (ACA) on substance use disorder (SUD) treatment utilization and financing among low-income adults. This population has historically had little access to insurance but has elevated prevalence of SUDs (Busch, Mean et al. 2013). Medicaid is a publicly-funded insurance program for low-income individuals in the United States, but prior to the ACA many low-income adults were not eligible for the program. The ACA allocated funds for states to expand Medicaid to adults below 138% of the federal poverty level, but the decision to expand Medicaid was left optional for states. We leverage variation in Medicaid eligibility generated by U.S. states’ decisions to expand Medicaid to these adults between 2010 and 2015 in our study.

Problems related to substance use are a major public health concern in the U.S. and other developed countries (World Health Organization 2017). In 2015, over 20 million individuals in the U.S. met diagnostic criteria for an SUD (Center for Behavioral Health Statistics and Quality 2015). Studying factors related to SUD treatment is of critical policy importance as the U.S. is the midst of an alarming and unprecedented drug overdose epidemic, largely related to opioids. Indeed, each day 91 U.S. residents die from an opioid overdose, a quadrupling of the death rate since 1999 (Centers for Disease Control and Prevention 2016).

SUDs are characterized by clinically significant impairment related to the use of alcohol or psychoactive drugs. Symptoms of impairment can include engaging in unintended risky behaviors, experiencing trouble in work or family settings due to substance use, and experiencing physical and psychological symptoms of withdrawal during periods of nonuse (Hasin, O’Brien et al. 2013). Furthermore, millions of Americans who do not meet diagnostic criteria for SUDs engage in high-risk behaviors such as binge and/or heavy drinking, or
nonmedical use of prescription drugs (Center for Behavioral Health Statistics and Quality 2016). Indeed, recent research suggests that the harms related to substance may contribute to declining life expectancy among middle aged white Americans (Case and Deaton 2015).

In addition to personal costs borne by the affected individual, substance use also contributes to a wide range of expensive social problems including elevated healthcare utilization (Balsa, French et al. 2009, French, Fang et al. 2011, Mark, Yee et al. 2016), crime and violence (Markowitz and Grossman 2000, Carpenter 2005), increased use of social services (Jayakody, Dunziger et al. 2000), traffic accidents (Anderson, Hansen et al. 2013), and reduced productivity in the labor market (Terza 2002). Indeed, the annual social costs of alcohol and drug use on the U.S. economy are estimated at $519B (Caulkins, Kasunic et al. 2014).

While the effectiveness and cost-effectiveness of SUD treatment is well-established (Rajkumar and French 1997, Lu and McGuire 2002, National Institute on Drug Abuse 2012, Popovic and French 2013, Swensen 2015), only one-tenth of individuals who meet the diagnostic criteria for SUDs receive treatment in any year (Center for Behavioral Health Statistics and Quality 2016). Although there are myriad reasons for failure to receive treatment, key barriers to receiving treatment include lack of insurance coverage and inability to pay (Center for Behavioral Health Statistics and Quality 2016).

The ACA provides an opportunity to increase treatment use among individuals with SUDs and to alter the financing of such treatment; in particular to better integrate the historically

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1 Heavy drinking is defined by the U.S. Centers for Disease Control and Prevention as five (four) or more drinks in one drinking session for men (women). This organization defines heavy drinking as two (one) or more drinks per day among men (women) [https://www.cdc.gov/alcohol](https://www.cdc.gov/alcohol); accessed February 22nd, 2017. Non-medical use of prescription drugs is defined as the use of these medications without a prescription from a healthcare provider, use in a manner other than as directed (e.g., taking a higher dosage than prescribed), or use only for the medication’s psychotropic experience (e.g., euphoria, sedation) (United Nations Office on Drugs and Crime 2011).

2 This estimate is inflated by the authors from the original estimate of $481B (with $253B attributable to alcohol and $228B attributable to psychoactive drugs) in 2011 dollars to 2017 dollars using the Consumer Price Index.
isolated SUD treatment delivery system into insurance payment. Medicaid expansion provides millions of previously uninsured adults with coverage, and SUD treatment is a required benefit in expansion plans (Beronio, Glied et al. 2014). Due in large part to the substantial increases in the number of covered individuals and services, healthcare scholars argue that ‘no illness will be more affected than substance use disorders’ by the ACA (McLellan and Woodworth 2014).

We study the effects of Medicaid expansion under the ACA on treatment utilization and use of Medicaid as source of payment for such treatment. We leverage administrative data drawn from the Treatment Episodes Data Set (TEDS) between 2010 and 2015, and the Medicaid State Drug Utilization Data (SDUD) between 2011 and 2015. TEDS includes over ten million admissions to specialty SUD treatment facilities while SDUD captures all prescriptions for medications purchased at retail and online pharmacies used to treat SUDs in outpatient settings for which Medicaid is a third-party payer. We couple these administrative data sets with differences-in-differences regression models.

Our findings suggest that states expanding Medicaid experienced no change in admissions to specialty SUD treatment post-expansion relative to non-expanding states. Among patients receiving specialty treatment, Medicaid insurance coverage increased 13.2 percentage points (71%) and use of Medicaid as a form of payment increased by 12.9 percentage points (75%) in expanding states relative to non-expanding states, post expansion. Our relative effect size estimates are large as Medicaid played a modest role in the financing of SUD treatment prior to the ACA: in expansion states only 19% of patients had Medicaid coverage and just 17% used Medicaid to pay for treatment in the pre-expansion period. Medicaid coverage increases were almost entirely offset by reductions in the uninsured rate among patients receiving specialty care,
and Medicaid payment largely offset payments made by state and local governments. Thus, our analysis does not suggest that Medicaid expansions led to large crowd out of private insurance.

Post-expansion, prescriptions for medications used to treat SUDs in outpatient settings financed by Medicaid increased by 43% in expanding states relative to non-expanding states. In a supplementary analysis, we examine changes in fatal alcohol poisonings and drug-related overdoses from 2010 to 2015. We do not find any statistically significant evidence of changes in such deaths within expansion states relative to non-expansion states in the post-expansion period.

2. The Medicaid program, a conceptual framework, and prior research

We next discuss the Medicaid program within the context of the ACA, review a conceptual framework that motivates an economic study of public insurance expansions on demand for SUD treatment, and briefly review the related literature on Medicaid expansions.

2.1 Medicaid expansion under the ACA

The ACA expanded Medicaid eligibility to virtually all individuals with incomes below 138% of the poverty level. Before the ACA, Medicaid was only available to specific categories of low-income individuals and state income eligibility criteria varied widely. As a result, many low-income individuals with substantial health needs were not eligible for Medicaid (Decker, Kostova et al. 2013). Pre-ACA simulations indicated that the prevalence of SUDs was substantially higher in the population targeted by Medicaid expansions and that unmet need was higher within this group than populations previously eligible (Busch, Meara et al. 2013).

The ACA Medicaid expansion was designed as a national program that would provide enhanced federal funding for all states to cover the newly eligible populations (French, Homer et al. 2016). However, the 2012 Supreme Court decision on the ACA left Medicaid expansions
optional to the state.\textsuperscript{3} Just half the states and DC initially participated in the Medicaid expansion in 2014, although by 2017, 32 states (including DC) had expanded their program.

2.2 Conceptual framework

Insurance, by lowering the out-of-pocket price faced by consumers, is predicted to increase the quantity of healthcare services demanded. Correspondingly, the Medicaid expansions we study should, all else equal, increase the quantity of SUD treatment demanded. However, there are several factors unique to the patients potentially seeking SUD treatment and the providers delivering such care that may modify the predicted increases in quantity demanded.

On the demand side, individuals may delay seeking, or choose not to seek, SUD treatment for reasons other than insurance coverage and ability to pay for treatment. Unlike most healthcare services, a large amount of SUD treatment is received under legal coercion, for example, treatment ordered by a judge as an alternative to jail time (Substance Abuse and Mental Health Services Administration 2016). Legally coerced treatment is less likely to be driven by insurance coverage than by non-economic factors such as the criminal justice system. Additionally, SUD treatment has historically been heavily supported by state and local government funding grants, allowing patients with limited financial resources to receive care for free or at a heavy discount. In 2009 (thus in advance of ACA implementation), 52% of specialty SUD treatment facilities reported offering free treatment to patients who could not pay and 62% offered sliding scale discounts (Substance Abuse and Mental Health Services Administration 2010).\textsuperscript{4} This form of charity care can act as substitute for paid care (Lo Sasso and Meyer 2006) and may mute the effect of Medicaid expansions.

Having insurance could increase an individual’s propensity to engage in substance use. One hypothesis is that insurance insulates people from the full costs of substance use, thereby potentially encouraging such behavior (i.e., \textit{ex ante} moral hazard). However, to the best of our knowledge, there is no evidence of \textit{ex ante} moral hazard following the ACA-related Medicaid expansions (Courtemanche, Marton et al. 2017a, Simon, Soni et al. 2017). Gaining insurance could also increase substance use due through income effects and/or easier access to lower-cost addictive medications such as opioids, stimulants, and benzodiazepines.

On the supply side, capacity and financial constraints within the specialty SUD treatment delivery system (Andrews, Abraham et al. 2015) may limit the ability of providers to meet the increases in the quantity of care demanded, at least in the short run. That is, many SUD treatment facilities may not have any open slots to which they can admit patients (McLellan and Meyers 2004, Carr, Xu et al. 2008, Jones, Camppiano et al. 2015). Gaining access to SUD treatment in a private doctor’s office may also be challenging for those who gain Medicaid coverage. While the number of primary care physicians willing to see Medicaid patients has grown under the ACA, Medicaid acceptance continues to lag behind private insurance among such providers (Polsky, Candon et al. 2017).

Based on the preceding considerations, we test the following hypotheses in our analysis. Following Medicaid expansion we expect:

\textit{H1:} More individuals will receive treatment (both specialty treatment and prescriptions used in outpatient settings) in expanding states relative to non-expanding states.

\textit{H2:} More patients in specialty SUD treatment will have Medicaid insurance and use Medicaid to pay for treatment in expanding states relative to non-expanding states.
While we expect these changes to occur in response to Medicaid expansion, the magnitude of these effects is an open question.

2.3. Prior literature

A growing literature examines the effects of the ACA-related Medicaid expansions on insurance coverage, general healthcare use, and health outcomes (Antonisse, Garfield et al. 2016, French, Homer et al. 2016, Courtemanche, Marton et al. 2017b). For example, Wherry and Miller (2016) show that, post-expansion, Medicaid coverage increased by 10.5 percentage points (34%) among U.S. residents 19-64 years of age with family incomes below 138% of the federal poverty level while uninsurance declined 7.4 percentage points (22%).

Several studies document that ACA-related Medicaid expansion is associated with improvements in access to general healthcare services such as primary care visits among low-income adults in expanding states versus non-expanding states (Kirby and Vistnes 2016, Muleaby, Eibner et al. 2016, Sommers, Blendon et al. 2016b, Wherry and Miller 2016, Miller and Wherry 2017, Simon, Soni et al. 2017). There is less definitive evidence as to whether the ACA-related Medicaid expansion improved health status. Two studies suggest improvements in some measures of health (Sommers, Blendon et al. 2016a, Simon, Soni et al. 2017) while a third suggests that these expansions had no substantial effect (Courtemanche, Marton et al. 2017a).

The literature on the ACA-related Medicaid expansions and receipt of SUD treatment is small. To our knowledge, only two prior clinical studies have examined changes in SUD treatment following the ACA Medicaid expansion. Saloner, Bandara et al. (2017), using the National Survey on Drug Use and Health, find no change in SUD treatment between 2010-2013 (pre-expansion) and 2014 (post-expansion), but do find that Medicaid paid for a larger share of treatment in 2014. While this is the first study to consider a broad array of SUD-related
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treatment outcomes, it is purely descriptive in nature and cannot establish the contribution of Medicaid expansion to changes in use observed after 2014. Wen, Hockenberry et al. (2017) use the Medicaid State Drug Utilization Data (SDUD) – the same dataset we examine in our prescription drug analysis – to test changes in use of buprenorphine between expansion and non-expansion states through 2014. The authors find a 70% increase in the volume of buprenorphine prescriptions reimbursed by Medicaid in expansion states compared to non-expansion states. While the Wen et al study is clearly important, it focuses on a single substance of abuse (opioids) and a single treatment modality (buprenorphine received in an outpatient setting).

3. Data, variables, and methods

3.1. Data on specialty SUD treatment: Treatment Episode Data Set (TEDS)

We use the Treatment Episode Data Set (TEDS) to study specialty SUD treatment. TEDS is an administrative database compiled annually by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) in collaboration with state substance abuse agencies. SAMHSA defines a specialty SUD treatment facility as a hospital, a residential SUD facility, an outpatient SUD treatment facility, or other facility with an SUD treatment program that offers: (i) outpatient, inpatient, or residential/rehabilitation SUD treatment; (ii) detoxification treatment; (iii) opioid treatment; or (iv) halfway-house services that include SUD treatment.

TEDS is one component of a broader data inventory maintained by SAMHSA to track the quantity and quality of specialty SUD treatment within the U.S. The TEDS includes information

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5 The potential impact of the ACA Medicaid expansions may also be gleaned from prior state-level expansions of Medicaid eligibility. In the decade prior to the ACA, several states sought federal waivers to provide Medicaid to otherwise ineligible low-income adults (Radowitz, Ariga et al. 2014). These expansions generally restricted eligibility to very low-income individuals and some expansions covered only a limited set of benefits (Bouchery, Harwood et al. 2012). Overall, these expansions did not result in widespread reductions in the uninsured rate. In two studies, Wen and colleagues (Wen, Hockenberry et al. 2014, Wen, Druss et al. 2015) examine the impact of pre-ACA Medicaid eligibility under these waiver-based expansions. The authors find that expansions decreased unmet need for SUD treatment and increased specialty SUD treatment admissions.
on approximately two million admissions to specialty SUD treatment each year, and contains
nearly the universe of specialty SUD treatment facilities that receive financing from the state or
federal government, are certified by the state to provide specialty SUD treatment, or are tracked
for some other reason. Thus, TEDS reflect admissions financed by multiple payers (e.g., self-
payment, private insurance, Medicaid, Medicare). TEDS is commonly employed within the
policy literature to study SUD treatment (Anderson 2010, Dave and Mukerjee 2011, Pacula,
Powell et al. 2015, Powell, Pacula et al. 2015) and is used by the Federal government to estimate
the costs of SUD treatment to the U.S. economy (Office of National Drug Control Policy 2012).

While TEDS is not a national probability sample, patients receiving treatment in TEDS-
tacked facilities are representative of the broader specialty SUD treatment-receiving population.
For example, demographics of patients in TEDS-tracked facilities are comparable to samples of
individuals who report past year SUD treatment in the NSDUH (Gfroerer, Bose et al. 2014).

We exclude admissions for which the patient is less than 18 years of age as such
admissions are not directly affected by the Medicaid expansions we study, which target adults.7
A limitation of the TEDS is that not all states report data in each year. Appendix Table 1 reports
the states not providing data to TEDS in each year 2010-2015. This number ranges from one to
five states, thus the TEDS captures the vast majority of states in all years of our study.8

3.2 Data on prescription medications: State Drug Utilization Data (SDUD)

An objective of the ACA is to facilitate integration of SUD treatment into general
healthcare, for example, providing outpatient treatment in physicians’ offices (McLellan and

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6 TEDS does not include treatment received in private physician’s offices, facilities that do not receive any public
funding, emergency departments, and self-help groups.
7 The oldest age category in TEDS is 55 years and above. Thus, we cannot exclude those patients over 64 years who
are not directly targeted by the expansions that we study here. However, admissions among those 55 years and
older represent less than 5% of the TEDS admissions.
8 We re-estimated our regression models on the unbalanced sample of states. Results are not appreciably different
from results based on the unbalanced panel. Please see Supplementary Tables 1A, 1B, and 1C.
Woodworth 2014). Such care is not captured in the TEDS, which includes specialty care only. To provide broader insight into the effect of Medicaid expansions on SUD treatment utilization that may occur in office-based settings, we turn to the SDUD. Studying medication treatment prescribed by outpatient physicians may also allow us to measure the extent to which newly insured individuals who have SUDs are forming relationships with healthcare providers and becoming integrated with the general healthcare delivery system. Given the historical segregation of SUD treatment from general healthcare (Buck 2011), such integration is important for treating overall health and, in turn, patient wellbeing. Finally, demand response may be stronger for treatment offered in primary care settings such as physician offices, where prescription medications are generally obtained, and outside the specialty system that we capture in TEDS. Primary care settings are often thought to be more appealing to patients who are reluctant to seek specialty SUD treatment, but may be willing to receive care in a mainstream primary care setting (Boone, Brown et al. 2004).

The SDUD includes all states’ data for outpatient prescription medications covered under the Medicaid Drug Rebate Program (U.S. Department of Health and Human Services 2012). Since 1992, state Medicaid programs have been compelled to submit data on the number and type of prescriptions filled each quarter to the Centers for Medicare & Medicaid Services (CMS) in exchange for federal matching funds. We use data from 2011 to 2015 in our study and aggregate the SDUD to the state-year level.9

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9 SDUD includes the universe of prescriptions purchased in retail and online pharmacies for which Medicaid, at least partially, financed the prescription in the Medicaid fee-for-service (FFS) program beginning in 1992. Beginning in March 2010, Medicaid managed care (MC) program prescriptions were included in the database following implementation of the Medicaid Prescription Drug Rebate Equalization Act of 2009. Therefore, we exclude years prior to 2011 as we have incomplete information on MC prescriptions. However, we have included 2010 in supplementary analyses (see Supplementary Table 2). We have also excluded five states (AZ, HI, OH, RI, and VA) that display odd missing data patterns (see Supplementary Table 3). Finally, we have analyzed the SDUD data at the annual, rather than quarter, level (see Supplementary Table 4). These changes do not alter our results.
We focus on medications approved by the Food and Drug Administration (FDA) for the treatment of SUDs: buprenorphine, naltrexone, acamprosate, disulfiram, and topiramate.\textsuperscript{10} We do not include methadone, a standard treatment for opioid use disorder, as methadone purchased through a pharmacy is typically utilized to treat chronic pain (Office of the Inspector General Commonwealth of Massachusetts 2016). We also exclude buprenorphine formulations that are indicated for pain management rather than opioid use disorder (Wen, Hockenberry et al. 2017).

3.3 Medicaid expansion data

We rely on data from the Kaiser Family Foundation\textsuperscript{11} and Sommers, Armtson et al. (2013) to construct our Medicaid expansion variables. Table 1 reports expanding states and the associated expansion date. The majority of expanding states implemented their expansion on January 1\textsuperscript{st}, 2014, coinciding with the availability of enhanced federal funding under the ACA. Six states (California, Connecticut, DC, New Jersey, Minnesota, and Washington) expanded under ACA provisions prior to 2014; we refer to these states as ‘early expanding states’.\textsuperscript{12} Two states expanded Medicaid later in 2014 (Michigan and New Hampshire). In addition, five states expanded in 2015 or 2016 (Alaska, Indiana, Louisiana, Montana, and Pennsylvania); we refer to these states as ‘late expanding states’. States that expanded Medicaid after December 31\textsuperscript{st}, 2015 do not offer variation in our empirical models.

\textsuperscript{10} We explored whether Medicaid expansion predicted the probability of the above-noted missing data pattern and we found no evidence of any relationship. See Supplementary Table 5.
\textsuperscript{11} https://www.drugabuse.gov/publications/drgfacts/treatment-approaches-drug-addiction (accessed February 17\textsuperscript{th}, 2017). We also consider branded versions of these generic drugs.
\textsuperscript{12} Under the ACA statute, the federal government would provide 100% of the matching funds beginning in 2014 to states expanding Medicaid (this amount gradually decreases in subsequent years). The early expansion states received the full federal match in 2014, but for years prior to 2014 had to contribute their state’s typical match rate. http://kff.org/medicaid/issue-brief/understanding-how-states-access-the-aca-enhanced-medicaid-match-rates/ (accessed March 4\textsuperscript{th}, 2017).
TEDS provides data annually and the specific date on which an admission occurred is unknown to researchers. For Medicaid expansions that occur within a year, we assign the expansion to a state based on the share of the year for which the expansion is in place. In the SDUD, which are provided at the state-quarter-level, we match expansions to the closest quarter.

3.4 Outcome variables

We consider several outcome variables in our analysis of the effect of state Medicaid expansions on SUD treatment utilization and financing. These variables necessarily differ across our two datasets. First, we consider the number of admissions to specialty SUD treatment in the TEDS. To construct the admissions measure, we convert the number of admissions to the rate per 100,000 persons in a state age 18 to 64 years (the population targeted by the expansions to newly eligible adults that we study here, see Frean, Gruber et al. (2017)) using population data from the American Community Survey (ACS) (Flood, King et al. 2017) and the University of Kentucky Center for Poverty Research Center (2016). Second, we consider the patient’s source of insurance in the TEDS: private insurance, Medicaid insurance, other insurance (e.g., Medicare, Veteran’s Health Administration), and uninsured. Third, regardless of what insurance the patient may have, we consider the source of payment that is expected to finance the majority of a patient’s treatment in the TEDS: private insurance, Medicaid insurance, self-payments, or states and localities (this source also includes care provided for free and ‘other’ payment). This final payment captures safety net programs that are paid for outside of insurance and patients

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11 We have also applied alternative coding schemes: (i) using a coding scheme proposed by Maclean, Pesko et al. (2017) and (ii) excluding DC, DE, MA, NY, and VT from the analysis sample following Wherry and Miller (2016); these states that covered adults below 100% of the federal poverty level before the ACA. Results are not appreciably different from those reported in the manuscript. See Supplementary Tables 6A, 6B, 5C, and 6D.

14 The term ‘admission’ is used in the TEDS to broadly refer to the initiation of any new treatment in a particular setting. Admissions in the TEDS thus encompass services received in both inpatient and outpatient settings (where treatment is sometimes referred to as an ‘encounter’ rather than an ‘admission’).

13 We first construct the share of the population that is 18 to 64 years from the ACS and second we multiply this number by a state’s total population.
paying out of pocket. Facilities can receive more than one type of payment; the TEDS defines the primary payer as whichever entity supports the greatest share of the cost of treatment.\(^{16}\) As noted earlier in the manuscript, many SUD treatment providers do not accept insurance of any type. Thus, examining whether newly acquired insurance can be used to pay for SUD treatment by patients is important to understanding whether or not expansions in fact reduce the costs of treatment for patients (Saloner, Akosa Antwi et al. 2017).

Both the patient insurance status and payment source variables that we study are only available for a subset of states (Substance Abuse and Mental Health Services Administration 2017). Moreover, several states have substantial missing data in these variables. We retain only states that have less than 25% missing data in all years of the analysis period (2010-2015) to form our insurance and payment analysis samples (results are robust to alternative thresholds for missing data, e.g., 15%).\(^{17}\) After applying this exclusion criterion, we have 29 states in our insurance state sample and 25 states in our payment state sample. The specific states in these samples are listed in Appendix Table 2.

A concern with our analyses of these samples is that they may not reflect the experiences of the full set of U.S. states, thus calling to question the generalizability of our findings. To explore this issue to some extent, we compare demographics from the ACS for (i) admission sample states, (ii) insurance sample states, and (iii) payment sample states. Results are reported

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\(^{16}\) Payer source is documented in the TEDS with the following item: ‘Identifies the primary source of payment for this treatment episode. Guidelines: States operating under a split payment fee arrangement between multiple payment sources are to default to the payment source with the largest percentage. When payment percentages are equal, the State can select either source.’ This variable does not allow us to capture payment source with ideal accuracy. For example, we are unable to measure patients who use multiple payment sources to pay for treatment. We note our inability to accurately study the use of multiple payments as a limitation of this study.

\(^{17}\) See Supplementary Tables 7A and 7B.
in Appendix Table 3 and suggest that, at least across these observable characteristics, the insurance and payment states samples are similar to states in admission states sample.  

In terms of prescription medications used to treat SUDs in outpatient settings that are measured in the SDUD, we consider the number of prescriptions each year per 100,000 persons in a state among residents to 64 years of age.

3.5 Control variables

SUD treatment utilization is determined by myriad factors. Ideally, we would like to include variables in our regression models that are plausibly linked with both our outcomes and to the probability that a state expands its Medicaid program with the ACA, and therefore reduce omitted variable bias in our coefficient estimates. To this end, we merge state-level information from several sources into the TEDS and SDUD.

Specifically, we merge in annual state-level data on demographics from the ACS: average age, sex, race and Hispanic ethnicity, educational attainment, marital status, urbanicity, disabled, and foreign born. We also merge in the annual unemployment rate from the Bureau of Labor Statistics Local Area Unemployment Database from the University of Kentucky Center for Poverty Research Center (2016).

We control for social policies that may reflect state attitudes toward the welfare of lower income populations (maximum monthly benefit for a family of four for the Supplemental...

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18 An additional, and perhaps more concerning issue from a bias standpoint, is that the Medicaid expansions that we study may have influenced whether a state reported insurance or payment information to SAMHSA and/or the number of missingness in these variables. Either of these scenarios could lead to conditional-on-positive bias in our regression coefficient estimates (Angrist and Pischke 2009). To explore this possibility, we regress the probability that a state has more than 25% missing in any given year in the insurance variable and the payment variable. Results do not suggest that the Medicaid expansions affected these variables, which provides some evidence that our analyses of the insurance and payment variables are not vulnerable to conditional-on-positive bias. See Supplementary Table 8.

19 More specifically, a cognitive, ambulatory, independent living, self-care, vision, and/or hearing disability. This variable proxies for a state’s underlying health status.
Nutrition Assistance Program and Temporary Aid for Needy Families) and an indicator for whether the Governor is a Democrat (University of Kentucky Center for Poverty Research Center 2016). Finally, we link state population 18 to 64 years of age (we do not control for population in the rate regressions as population is in the denominator of our outcome variables).

3.6 Empirical model

We estimate the differences-in-differences (DD) regression outlined in Equation (1):

\[ SUD_{st} = \alpha_0 + \alpha_1 \text{Expand}_{st} + \alpha_2 X_{st} + S_t + \tau_s + \epsilon_{st} \]

\( SUD_{st} \) is an SUD treatment outcome in state \( s \) in time \( t \). \( \text{Expand}_{st} \) is an indicator for whether or not a state has expanded its Medicaid program. \( X_{st} \) is a vector of state level characteristics. \( S_t \) and \( \tau_s \) are vectors of state and year fixed effects. Inclusion of state fixed effects allows us to control for time-invariant state-level factors that are unobservable (to the econometrician) and implies that our regression models are identified off within-state variation in Medicaid expansions. Year fixed effects control for secular trends in SUD treatment utilization and financing that affect the nation as a whole. \( \epsilon_{st} \) is the error term. Because the SDUD is provided by CMS at the quarterly level, we replace year fixed effects with quarter-year (‘period’) fixed effects in our analyses of this data set.

We estimate regression models using unweighted OLS.\(^{21}\) We cluster standard errors around the state (Bertrand, Duflo et al. 2004). However, we applied the wild cluster bootstrap (Cameron and Miller 2015) in our insurance and payment regressions, as we have just 29 clusters in the insurance state sample and 25 clusters in the payment state sample. Results are comparable to our main analysis.\(^{22}\)

\(^{20}\) We treat the mayor of DC as the de facto Governor of this jurisdiction following Maclean and Saloner (2017).

\(^{21}\) When our outcome is binary, this model is a linear probability model.

\(^{22}\) See Supplementary Tables 9A and 9B.
3.7 Validity of the research design

A necessary assumption for the DD model to recover causal estimates is that the treatment (i.e., states expanding Medicaid) and the comparison (i.e., states not expanding Medicaid) groups would follow the same trend in the post-treatment period, had the treatment states not been treated. However, this assumption is inherently untestable since the counterfactual trend is not observed for the treatment group. We instead attempt to provide suggestive evidence on this assumption. To this end, we proceed in two ways.

First, we examine unadjusted trends in the pre-treatment period in our outcome variables for the treatment and comparison groups. If we find that the outcomes appear to trend similarly in the pre-treatment period across these groups, such trends provide suggestive evidence that our TEDS and SDUD data satisfy the parallel trends assumption. Second, using the pre-treatment data only, we estimate regression models similar to Equation (1), except that we replace the DD variable with an interaction between the treatment group and a linear time trend (Akosa Antwi, Moriya et al. 2013). This regression model is outlined in Equation (2):

\[ SUD_{it} = \gamma_0 + \gamma_1 \text{Treat}_i \times \text{Time}_t + \gamma_2 X_{it} + \tau_t + \mu_{it} \]

If we cannot reject the null hypothesis that \( \gamma_1 \) is zero, then this finding provides further support that our datasets satisfy the parallel trends assumption. We exclude early expanding states.

4. Results for specialty SUD treatment in the Treatment Episode Data Set

4.1 Summary statistics: TEDS

Table 2 reports summary statistics for expanding states in their pre-expansion years (Table 1) and non-expanding states 2010-2013. The mean number of annual admissions per 100,000 adults 18 to 64 years was 1,062 in expanding states and $41 in non-expanding states. Among patients receiving specialty SUD treatment in expanding states, 11.4% held private
insurance, 18.6% Medicaid, 10.9% other insurance (e.g., Medicare), and 59.1% held no insurance (i.e., uninsured) at admission to treatment. For individuals in non-expanding states, the same percentages were 6.3%, 15.7%, 7.7%, and 70.3%, respectively.

In terms of the forms of primary payment patients receiving specialty SUD treatment used to finance care, 8.7% and 17.3% used private insurance and Medicaid insurance, while 21.8% self-paid and 52.1% relied on state and local governments, respectively. In non-expansion states the share with each source of payment was: 3.6% private insurance, 8.3% Medicaid insurance, 18.9% self-pay, and 69.2% state and local governments. Thus, as expected, both holding insurance and having insurance pay for treatment was relatively uncommon among patients receiving treatment in TEDS-tracked facilities pre-Medicaid expansion.

State-level characteristics are also reported in Table 2. Expanding and non-expanding states were broadly comparable across these characteristics pre-expansion.²³ We nevertheless control for all of these factors in our regression models.

4.2 Validity of the research design: TEDS

Figures 1, 2, and 3 report trends in outcomes for treatment and comparison groups in admissions, insurance status, and payment source. Trends between the two groups of states appear to move in parallel in the pre-period, 2010-2013, for the majority of our outcomes; one exception to this pattern is the self-payment variable where the trend is more ambiguous.

In terms of the post-period we observe a steeper decline in the number of admissions to treatment in non-expanding states than expanding states. In addition, we see larger increases in Medicaid insurance and Medicaid as a source of payment in expanding states in 2015 relative to non-expanding states. There were large declines in the share of patients with uninsured status in

²³ We note that our research design, differences-in-differences, requires common trends, not levels, for identification.
both groups of states (but a larger decrease in expansion states) and declines in state and localities as a source of payment for treatment.

Results from regression-based testing of the parallel trends assumption are reported in Tables 3A (admissions), 3B (insurance status), and 3C (payment source). We cannot reject the hypothesis that $\gamma_1 = 0$ in eight of the nine regressions we estimate. The exception to this pattern is the use of states and localities as the source of payment: we find that expanding states experienced a 3.7 percentage point (7.1%; $p=0.05$) increase in this payment form per year relative to non-expanding states. We return to this issue when interpreting our estimates generated in DD models. Overall, we note that standard error estimates are somewhat large and limit our ability to rule out non-trivial violations of the parallel trends assumption. Reassuringly, the coefficient estimates are small in magnitude in all regressions and, as we report later in the manuscript, our findings are largely insensitive to the inclusion of state-specific time trends.

4.3 DD regression results: TEDS

Our core TEDS findings generated in the DD model outlined in Equation (1) are reported in Tables 4A (admissions), 4B (insurance status), and 4C (payment source).

We estimate a modest, but not statistically significant, increase in admissions to specialty SUD treatment after Medicaid expansion. Specifically, we find an annual increase of 83 additional admissions per 100,000 non-elderly adults in expansion states relative to non-expansion states; a 7.8% increase over mean in the expansion state sample pre-expansion.

When we look at insurance status among patients in treatment, we find that, following a state expansion, the probability that a patient held Medicaid insurance coverage increased by 13.2 percentage points while the probability that a patient was uninsured declined by 16.6 percentage points (Table 4B). This pattern of results implies that virtually all the individuals in
treatment gaining Medicaid post expansion were previously uninsured, and, while not definitive, suggests that extensive crowd-out did not occur.

The magnitude of these estimated effects is substantial: they imply a 71% increase in Medicaid coverage and a 28% decline in uninsurance relative to the pre-expansion mean for the expansion states. These substantial relative effect sizes are in line with large-scale changes in private insurance coverage documented among young adults with SUDs under the ACA dependent coverage mandate (Saloner, Akosa Antwi et al. 2017). Moreover, our baseline proportion for Medicaid coverage is low (see Table 2) which leads to large relative changes.

Our payment source findings largely mirror the insurance estimates (Table 4C). In particular, we find that following a state Medicaid expansion, patients in expanding states were 12.9 percentage points more likely to have Medicaid as a primary source of payment for treatment – a 75% increase over the pre-expansion baseline proportion in expanding states. Such patients were also 11.5 percentage points less likely to have states and localities pay for treatment – a 22% decrease over the pre-expansion baseline proportion in expanding states. The similarity in magnitude (but opposing sign) of the coefficient estimates is in line with the hypothesis that facilities were able to offset treatment that had previously been financed by state and local grant funding with Medicaid payments. As in the insurance results, Medicaid payment was modest in the pre-expansion period (see Table 2), which leads to the large percent increase.

We find in Table 3C that expanding states experienced an increase in the use of funding from states and localities to pay for specialty SUD treatment in the pre-expansion period relative to non-expanding states. Our DD estimates suggest that expanding states also experienced a decrease in this source of payment post-expansion relative to non-expanding states. Combining
these two findings suggests that our DD estimates may in fact understate the effects of the Medicaid expansions on the use of states and localities to pay for treatment.

More specifically, we can “subtract off” the pre-treatment trend in this variable and correct our estimate of the Medicaid effect: (-0.115-0.037)\approx-0.152. This corrected estimate suggests that this source of payment declined by 29%. In unreported analyses, we bootstrap standard error for the “corrected” DD estimate for this payment source and find that this estimate is statistically different from zero at the 1% level.\textsuperscript{24}

5. Results for prescription medication use in the State Drug Utilization Database

5.1 Summary statistics: SDUD

Table 5 reports summary statistics for the pre-expansion period for expanding states and 2010-2013 for non-expanding states using the SDUD data. The mean quarterly prescription rate for outpatient SUD medications financed by Medicaid per 100,000 adults 18 to 64 years was 806 in expanding states pre-expansion and 421 in the non-expanding states 2011-2013.

5.2 Validity of the research design: SDUD

Figure 4 documents similar patterns in prescription outcomes over the 2011 to 2013 period for expanding and non-expanding states, followed by an increase in prescription rates in expanding states relative to non-expanding states 2014 to 2015.

Table 6 reports regression-based parallel trends testing of the SDUD: we estimate Equation (2) in these data. We are most interested in the coefficient estimate on the interaction between the treatment group indicator and the linear time trend (\hat{\beta}_1). We find that prescription medications used to treat SUDs in outpatient settings increased by 12 prescriptions per 100,000 non-elderly adults each quarter (or 1.4%) in expansion states relative to non-expansion states.

\textsuperscript{24} More specifically, we applied a non-parametric bootstrap using 500 repetitions to the difference. More details are available on request from the corresponding author.
5.3 DD regression results: SDUD

Our DD estimates for the effect of the ACA Medicaid expansions on prescriptions for medications used to treat SUDs in outpatient settings are reported in Table 6. We find that expanding states experienced an increase of 356 prescriptions per 100,000 adults 18 to 64 years per quarter post expansion, relative to non-expanding states. This estimate represents a 44% increase over the pre-expansion mean in expanding states. To account for differences in pre-expansion trends we identified for expansion and non-expansion states, we subtract our estimate of the pre-treatment trend from the DD estimate and divide that number by the baseline: \((356-12)/806\). This correction implies that, post-expansion, prescriptions for medications used to treat SUDs in outpatient settings increased 43% in expanding states relative to non-expanding states. We bootstrap this corrected estimate and find that it is statistically significant at the 1% level.

6. Extensions and robustness checks

6.1 ACA-related Medicaid expansion, and fatal alcohol poisonings and drug-related overdoses

We have explored the effect of ACA-related Medicaid expansions on SUD treatment use. Since these expansions are ultimately aimed at improving health, understanding whether they affected key health outcomes is important in assessing the value of Medicaid expansion. To provide some evidence on relevant health outcomes, we next estimate the effect of Medicaid

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25 SDUD contains information on the total, Medicaid, and non-Medicaid reimbursement for each prescription. This information allows us to explore whether Medicaid or patients (through cost-sharing) were responsible for financing use of these medications. In unreported analyses we regressed total, Medicaid, and non-Medicaid reimbursements on the expansion indicator using Equation (1). Broadly, total reimbursement increased among expansion states relative to non-expansion states in the post-expansion period, and Medicaid financed the vast majority of the prescriptions (the coefficient estimates in the total and Medicaid reimbursement regressions are very similar in magnitude while the coefficient estimate in the non-Medicaid regression carries a negative sign; we note that this final coefficient estimate is imprecise). This finding is perhaps not surprising as cost-sharing is low in the Medicaid program, but nonetheless the finding implies that Medicaid patients did not bear the full financial burden of increased utilization of medications used to treat SUDs. See Supplementary Table 10.

26 More specifically, we applied a non-parametric bootstrap using 500 repetitions to the difference. More details are available on request from the corresponding author.
expansions on proxies for harmful substance use within the population: fatal alcohol poisonings and drug-related overdoses.

We examine data from the National Vital Statistics Mortality Files (NVSM) between 2010 and 2015. NVSM tracks all-cause mortality in the U.S. and therefore provides us with the universe of deaths classified as alcohol poisoning and drug-related overdose. We construct the number of fatal alcohol poisonings and drug-related overdoses.\textsuperscript{27} We use data on fatal alcohol poisonings and drug-related overdoses among non-elderly adults: 18 to 64 years. We convert deaths to the rate per 100,000 non-elderly adults per quarter. We use the same procedure to link Medicaid expansion dates to the NVSM data as we do for the SDUD.\textsuperscript{28}

We estimate Equation (1) in the NVSM data. Results are reported in Appendix Table 4. We also report regression-based parallel trends testing, which supports the hypothesis that the NVSM data are able to satisfy the parallel trends assumption. Our findings do not suggest that the Medicaid expansions we study led to changes in fatal alcohol poisonings and drug-related overdoses: the regression coefficient estimate, while it carries a negative sign and thus is suggestive of a decline in these deaths, is small relative to the baseline mean and is not statistically different from zero.

6.2 Policy endogeneity: TEDS and SDUD

A perennial concern in analyses of health and healthcare policies, such as the Medicaid expansions we investigate here, is that state legislatures concerned with deteriorating health or underutilization of healthcare services within the population may implement policies to address

\textsuperscript{27}Specifically, we use the public use Underlying Cause of Death files for deaths attributable to alcohol and drugs from the Centers for Disease Control and Prevention. There were no suppressed cells in the data.

\textsuperscript{28} We aggregate the NVSM to the quarter level. More details available on request.
these problematic trends. In such a scenario, outcomes may lead to changes in policies rather than policies leading to changes in outcomes (i.e., state-level reverse causality).

To explore this possibility, we estimate an event study (Autor 2003). We estimate a modification of Equation (1) in which we include a series of policy leads and lags in the regression model. We exclude early expanding states from this analysis. In TEDS, our leads and lags consist of interactions between year indicators for 2010-2012 and 2014-2015, and an indicator for expanding states (i.e., those states that expanded by 2015, the final year of our study period). 2013 is the omitted year. Because the SDUD is provided at the quarter level, we estimate a slightly different specification that takes advantage of the finer unit of aggregation (i.e., quarter and not year) in constructing leads/lags and our omitted period is Q4 2013.

If we find evidence that the leads are statistically different from zero, this pattern in the data might suggest that our data is subject to policy endogeneity. However, after we condition for such endogeneity through the inclusion of policy leads, we can minimize concerns regarding reverse causality bias and recover causal estimates for the lags (our primary objects of interest).

Results generated in the event study are reported in Appendix Table 5A (admissions), 5B (insurance status), 5C (payment source), and 5D (medications). We find little evidence of policy endogeneity: the coefficient estimates on the leads are generally statistically indistinguishable from zero and F-tests of lead joint significance lead to the same conclusion. Moreover, across our event study specifications we find evidence expansion effects increased over time.

6.3 Controlling for between-state differences

Although we cannot reject the null hypothesis that the treatment and comparison groups trended similarly in the pre-treatment period, the standard errors on the interaction between the treatment group and the linear time trend in Equation (2) are large and prevent us from ruling out
non-trivial differences in pre-treatment trends for some outcomes. Indeed, we find evidence of different pre-treatment trends for two outcomes (the use of funds from states and localities to pay for treatment and prescription medications) in expanding and non-expanding states.

To explore the extent to which our findings may be driven by differences in pre-treatment trends between the treatment and comparison groups, we re-estimate Equation (1) including state-specific linear time trends. Including these state trends allows each state to follow a separate, albeit linear, trend in the outcome variables and thus allows us to control for trend differences. A concern is that some of our time-varying state controls may themselves be influenced by the Medicaid expansions we study, leading to over-controlling bias (Angrist and Pischke 2009). To explore the extent of any such bias on our regression coefficients, we re-estimate Equation (1) excluding time-varying state-level controls.

Results from these analyses are reported in Tables 6A (admissions), 6B (insurance status), 6C (payment source), and 6D (prescriptions). Overall, our findings are broadly robust to the inclusion of state-specific linear time trends. However, as these models are data intensive and we have a relatively small amount of variation in the data (see Table 1), we not surprisingly find that our results are in some specifications less precisely estimated when trends are included. For example, the coefficient estimate in the use of Medicaid to pay for treatment is no longer precise. Reassuringly, the coefficients are quite stable in terms of sign and magnitude (although somewhat smaller in some regressions) vis-à-vis our core findings. We find that the coefficient estimate in the SDUD is substantially smaller when the state trends are included: a 17% decline in the model with trends vs. a 43% decline in the model without trends post-expansion. However, the 95% confidence intervals (available on request) for the coefficient estimates overlap, preventing us from ruling out similar effect sizes across specifications. Additionally,
the estimated coefficients are not appreciably altered when the time-varying state-level controls are excluded from the regression model.

6.4 Population weighting

Our regressions are unweighted. However, there is some controversy within the economics literature as to whether weights should be applied in economic analyses seeking to estimate causal effects (Angrist and Pischke 2009, Solon, Haider et al. 2015). To explore the robustness of our findings, we re-estimate our regressions using population weights (i.e., the state population ages 18 to 64 serve as our weights). Results from these weighted analyses are reported in Appendix Table 7A (admissions), 7B (insurance status), 7C (payment source), and 7D (prescription medications).

Our findings are broadly robust to weighting. However, we also find that holding private insurance and using private insurance to pay for treatment increased in expanding states relative to non-expanding states in the post-expansion period. We are uncertain why more individuals in expansion states would also use private insurance after expansion – one potential explanation is that Medicaid expansion could induce greater acceptance of insurance overall, leading to a positive spillover on privately insured individuals (Glied and Zivin 2002, Finkelstein 2007).29

6.5 Referral source

A common referral source to SUD treatment is the criminal justice system. Indeed, over one third of the admissions in our TEDS analysis data set are referred through this system. As noted earlier in the manuscript, legally coerced admissions may be less responsive to changes in price attributable to a public insurance expansion than other admissions. We next exclude all admissions referred through the criminal justice system and re-estimate our analysis of the TEDS

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29 The coefficient estimates, while imprecise, in the unweighted regressions also carried a positive sign.
(we are not able to make such an exclusion in the SDUD). Results – reported in Appendix Tables 8A (admissions), 8B (insurance), and 8C (payment) – are not appreciably different from results reported in the manuscript.

6.6 Additional extensions and robustness checks

We explore whether there are changes in the composition of patients receiving treatment in TEDS-tracked facilities. Compositional changes are important to test because, among other things, they can provide some indication of either changes in provider behavior, e.g., differential acceptance of specific populations (Sloan, Mitchell et al. 1978), or choices patients may make regarding where to seek treatment.30

We construct indicator variables for sex (male vs. female), age (18 to 34 years vs. 35 years and older), race/ethnicity (white, African American, other race, and Hispanic), primary substance targeted for treatment (alcohol vs. drugs; we also separately consider opioids: heroin, non-prescription methadone, oxycodone, and other opioids and synthetics), prior treatment (no prior treatment vs. any prior treatment), and referral source (criminal justice system vs. all other referral sources). We find some evidence that post-expansion patients admitted to treatment programs in expansion states are relatively less likely to be white and less likely to be in treatment for their first time, relative to the trend in non-expansion states.31

Patients gaining access to Medicaid may be able access specialty treatment in settings that may not have been available when they were uninsured. To explore this issue, we estimated a series of regressions in which we model specialty SUD treatment setting – detoxification, non-intensive outpatient, intensive outpatient, and inpatient – on Medicaid expansions in Equation (1)

30 Our data will not allow us to shed light on whether this phenomenon is driven by providers or patients, however.
31 See Supplementary Tables 11A and 11B.
using TEDS. We find no evidence that these expansions altered the setting in which patients receive care.\textsuperscript{32}

Finally, we have estimated the TEDS specialty admission rate and SDUD prescription medication rate regressions in the insurance and payment state samples. Results are analogous to our main admissions findings (Table 4A), although the specialty treatment admission rate coefficient estimated in the payment sample of states is precise.\textsuperscript{33}

7. Discussion

In this study we investigated the effects of recent state-level Medicaid expansions that occurred under the 2010 Affordable Care Act on substance use disorder (SUD) treatment utilization. By 2017, 32 states (including DC) expanded income eligibility for Medicaid up to 138\% of the federal poverty level, with the majority of states expanding in January 2014. These expansions targeted populations that previously had little access to insurance in the United States: low-income, non-elderly childless adults. Moreover, a generous set of SUD services was a required benefit under these expansions (Beronia, Glied et al. 2014). These services may hold particular value for the group of individuals that gained insurance coverage through these expansions as such individuals have elevated SUD prevalence (Busch, Meara et al. 2013).

Although we estimate a moderate size increase in admissions to specialty SUD treatment after states expanded Medicaid, the coefficient was not statistically significant. Larger changes in use of these SUD services may also take time because of existing capacity constraints within the specialty SUD treatment delivery system (Carr, Xu et al. 2008, Buck 2011): meaning that providers may initially lack the space to allow additional patients into treatment (Saloner 2017).

\textsuperscript{32} See Supplementary Table 12.

\textsuperscript{33} See Supplementary Tables 13A and 13B.
We find that the ACA-related Medicaid expansions substantially changed the insurance status of treated populations and the financial burden of treatment. Specifically, Medicaid as a source of insurance increased 13.2 percentage points or 71% (offset mainly by a reduction in the uninsured) and Medicaid as a source of payment increased 12.9 percentage points or 75% (offset mainly by reduced spending by states and localities which captures charity care). The reduced spending by states and localities on safety net treatment can also increase resources available within constrained public health budgets to address other public health priorities. For patients, increasing payment by Medicaid can also reduce out-of-pocket spending burden – i.e., a potential financial relief. Recent research on the ACA Medicaid expansion finds that expansions improved financial wellbeing and reduced debt in expansion states (Hu, Kaestner et al. 2016, Sojourner and Golberstein 2017), which is in line with our finding for payment source.

Our TEDS findings can also be compared to other recent studies that have examined how the coverage and sources of payment changed after Medicaid expansion in other low-income and safety net settings. Among individuals 19-64 with family incomes less than 138% of the federal poverty level, post-expansion Medicaid insurance increased by 10.2 percentage points (34%) while uninsurance declined by 7.4 percentage points (22%) in expanding states relative to non-expanding states (Wherry and Miller 2016). The share of Medicaid insured patients treated at community health centers increased by 11.8 percentage points (30%) in 2014 in expansion states compared to non-expansion states (Cole, Galarraga et al. 2017). Moreover, inpatient hospital discharges covered by Medicaid increased by 6.2 percentage points (18%) in expansion states (Nikpay, Buchmueller et al. 2016). While our estimated absolute effect sizes (i.e., percentage points) are broadly in line with previous studies examining insurance and use of other healthcare services, our estimated relative effect sizes (i.e., percent) are larger in magnitude. We suspect
that the larger magnitude of our estimated relative effects is due to the comparatively modest role Medicaid played in the financing of specialty SUD treatment pre-expansion vs. other healthcare settings. In expansion states just 19% of patients admitted to specialty SUD treatment held Medicaid and 17% used Medicaid to pay for treatment in the pre-expansion period (2010-2013).

We find that the volume of prescriptions for medications approved by the Food and Drug Administration to treat SUDs in outpatient settings reimbursed by Medicaid increased by 43% in expanding states after the expansion relative to non-expanding states.

The fact that our study find such large increases in Medicaid-reimbursed prescription drugs could suggest that individuals enrolling under ACA provisions were better able to (or more willing to) access treatment through a private physician’s office than through specialty treatment setting. Moreover, these findings suggest that newly enrolled with SUD are able to form relationships with healthcare providers as the medications that we study require a prescription from a provider in order to be filled.

Our study is not without limitations. First, because most of the Medicaid expansions occurred between 2014 and 2016, we are relying on only two years of post-expansion data for all but the early expanding states. This feature is not unique to our study and instead is a limitation to all current studies of which we are aware examining Medicaid expansion effects. Second, our insurance and payment analysis of TEDS relies on just over half the states. Third, while we study two important forms of SUD treatment (specialty treatment and prescription medications obtained in outpatient settings), we do not capture all dimensions of SUD treatment. Fourth, the SDUD allows us to study just one payer (i.e., Medicaid).

Additionally our study, like many other investigations into the effects of ACA-related Medicaid expansions, does not address other ACA-related changes that may have driven
enrollment increases. For example, Frean, Gruber et al. (2017) find that ‘woodwork effects’
(previously eligible individuals taking up Medicaid) may have increased Medicaid enrollment
due to greater outreach efforts. Another change occurring under the ACA in all states (not just
expansion states) was a switch to the Modified Adjusted Gross Income (MAGI) criteria, which
may have resulted in more individuals becoming eligible for coverage under pre-ACA eligibility
categories. If these, or other, changes differentially affected Medicaid enrollment across
expansion and non-expansion states, then our estimates will confute these effects.

Our findings are both timely and important. While the Trump Administration and many
members of Congress have expressed concern about capacity to treat individuals with SUD
amidst the opioid epidemic, there have also been serious efforts to repeal core provisions of the
ACA including the Medicaid expansions we study. Proposed repeals of Medicaid expansion
would increase the uninsured rate (Congressional Budget Office 2017b, Congressional Budget
Office 2017a) and individuals with SUDs would be particularly hard hit (Frank and Glied 2017).
Our findings suggest that curtailing Medicaid coverage would impede access to SUD treatment
in specialty settings and in physician offices. Policymakers considering the effects of repealing
or restructuring Medicaid should consider the effects on availability of low-cost SUD treatment.
Our findings also speak to the relevance of Medicaid in state and local budgets—especially since
SUD services are a major expenditure for states and localities. Further evaluation can indicate
whether expanded Medicaid coverage and funding had positive impacts on the health of
populations in SUD treatment, and on the communities in which they reside.

Table 1. State Affordable Care Act (2010) related Medicaid expansions: 2010-2017

<table>
<thead>
<tr>
<th>State</th>
<th>Expansion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early expanding states</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>7/1/2011</td>
</tr>
<tr>
<td>Connecticut</td>
<td>4/1/2010</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>7/1/2010</td>
</tr>
<tr>
<td>Minnesota</td>
<td>3/1/2011</td>
</tr>
<tr>
<td>New Jersey</td>
<td>4/14/2011</td>
</tr>
<tr>
<td>Washington</td>
<td>1/3/2011</td>
</tr>
<tr>
<td>States expanding in 2014</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Arkansas</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Colorado</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Delaware</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Illinois</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Iowa</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Maryland</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Michigan</td>
<td>4/1/2014</td>
</tr>
<tr>
<td>Nevada</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>8/15/2014</td>
</tr>
<tr>
<td>New Mexico</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>New York</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>North Dakota</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Ohio</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Oregon</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Vermont</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1/1/2014</td>
</tr>
<tr>
<td>Late expanding states</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>9/1/2015</td>
</tr>
<tr>
<td>Indiana</td>
<td>2/1/2015</td>
</tr>
<tr>
<td>Montana</td>
<td>1/1/2016</td>
</tr>
<tr>
<td>Louisiana</td>
<td>7/1/2016</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1/1/2015</td>
</tr>
</tbody>
</table>

Notes: Medicaid expansion dates derived from Kaiser Family Foundation and Sommers et al (2013).
<table>
<thead>
<tr>
<th>Table 2. Summary statistics for expansion and non-expansion states: TEDS 2010-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample:</td>
</tr>
<tr>
<td>Expansion states</td>
</tr>
<tr>
<td>Admissions per 100,000 non-elderly adults</td>
</tr>
<tr>
<td><strong>Insurance status (N=66 in expansion states, N=44 in non-expansion states)</strong></td>
</tr>
<tr>
<td>Private insurance</td>
</tr>
<tr>
<td>Medicaid insurance</td>
</tr>
<tr>
<td>Other insurance</td>
</tr>
<tr>
<td>Uninsured</td>
</tr>
<tr>
<td><strong>Payment source (N=55 in expansion states, N=39 in non-expansion states)</strong></td>
</tr>
<tr>
<td>Private insurance</td>
</tr>
<tr>
<td>Medicaid insurance</td>
</tr>
<tr>
<td>Self-pay</td>
</tr>
<tr>
<td>State and local government</td>
</tr>
<tr>
<td><strong>State characteristics</strong></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Other race</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Foreign born</td>
</tr>
<tr>
<td>Less high school</td>
</tr>
<tr>
<td>High school</td>
</tr>
<tr>
<td>Some college</td>
</tr>
<tr>
<td>College degree</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
</tr>
<tr>
<td>Never married</td>
</tr>
<tr>
<td>Urban</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>Disabled</td>
</tr>
<tr>
<td>Family income ($)</td>
</tr>
<tr>
<td>Unemployment rate</td>
</tr>
<tr>
<td>Poverty rate</td>
</tr>
<tr>
<td>Maximum monthly SNAP benefit for a family of 4 ($)</td>
</tr>
<tr>
<td>Maximum monthly TANF benefit for a family of 4 ($)</td>
</tr>
<tr>
<td>Democratic governor</td>
</tr>
<tr>
<td>Prescription drug monitoring program</td>
</tr>
<tr>
<td>Population</td>
</tr>
</tbody>
</table>

N = 103

Notes: Data are aggregated to the state-year level. The pre-treatment period for early adopting states includes the years between 2010 and the expanding year.

*States contributing data on insurance status includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT.

**States contributing sample on payment includes the following states: AK, AR, CO, DC, DE, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT.
Table 3A. Parallel trends testing for admissions per 100,000 non-elderly adults: TEDS 2010-2013

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1062</td>
</tr>
<tr>
<td>Treat*time</td>
<td>-8.935</td>
</tr>
<tr>
<td></td>
<td>(23.105)</td>
</tr>
</tbody>
</table>

N = 179

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. Early expanding states excluded from the sample.

***, ***, * = statistically different from zero at the 1%, 5%, 10% level.

Table 3B. Parallel trends testing for insurance status: TEDS 2010-2013

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.114</td>
<td>0.186</td>
<td>0.109</td>
<td>0.591</td>
</tr>
<tr>
<td>Treat*time</td>
<td>0.001</td>
<td>0.004</td>
<td>0.001</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.008)</td>
<td>(0.007)</td>
<td>(0.011)</td>
</tr>
</tbody>
</table>

N = 108 108 108 108

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. Early expanding states excluded from the sample.

***, ***, * = statistically different from zero at the 1%, 5%, 10% level.

Table 3C. Parallel trends testing for payment source: TEDS 2010-2013

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.087</td>
<td>0.173</td>
<td>0.109</td>
<td>0.521</td>
</tr>
<tr>
<td>Treat*time</td>
<td>-0.003</td>
<td>-0.010</td>
<td>-0.024</td>
<td>0.037***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.007)</td>
<td>(0.016)</td>
<td>(0.017)</td>
</tr>
</tbody>
</table>

N = 91 91 91 91

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. Early expanding states excluded from the sample.

***, ***, * = statistically different from zero at the 1%, 5%, 10% level.
Table 4A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1062</td>
</tr>
<tr>
<td>DD</td>
<td>83.454</td>
</tr>
<tr>
<td>(54.081)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>299</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,***=statistically different from zero at the 1%,5%,10% level.

Table 4B. Effect of ACA Medicaid expansions on insurance status: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.114</td>
<td>0.186</td>
<td>0.109</td>
<td>0.591</td>
</tr>
<tr>
<td>DD</td>
<td>0.026</td>
<td>0.132***</td>
<td>0.009</td>
<td>-0.166***</td>
</tr>
<tr>
<td>(0.016)</td>
<td>(0.048)</td>
<td>(0.013)</td>
<td>(0.034)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. ***,***=statistically different from zero at the 1%,5%,10% level.

Table 4C. Effect of ACA Medicaid expansions on payment source: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and locales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.087</td>
<td>0.172</td>
<td>0.109</td>
<td>0.521</td>
</tr>
<tr>
<td>DD</td>
<td>0.015</td>
<td>0.129***</td>
<td>-0.029</td>
<td>-0.115**</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.036)</td>
<td>(0.025)</td>
<td>(0.045)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>145</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, DE, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. ***,***=statistically different from zero at the 1%,5%,10% level.
Table 5. Summary statistics for expansion and non-expansion states in the pre-expansion period: SDUD 2011-2013

<table>
<thead>
<tr>
<th>Sample characteristics</th>
<th>Expansion states</th>
<th>Non-expansion states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescriptions per 100,000 non-elderly adults</td>
<td>806</td>
<td>421</td>
</tr>
<tr>
<td>Age</td>
<td>38.31</td>
<td>37.56</td>
</tr>
<tr>
<td>Female</td>
<td>0.506</td>
<td>0.507</td>
</tr>
<tr>
<td>Male</td>
<td>0.494</td>
<td>0.493</td>
</tr>
<tr>
<td>White</td>
<td>0.717</td>
<td>0.719</td>
</tr>
<tr>
<td>African American</td>
<td>0.081</td>
<td>0.133</td>
</tr>
<tr>
<td>Other race</td>
<td>0.091</td>
<td>0.058</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.111</td>
<td>0.090</td>
</tr>
<tr>
<td>Foreign born</td>
<td>0.103</td>
<td>0.075</td>
</tr>
<tr>
<td>Less high school</td>
<td>0.307</td>
<td>0.324</td>
</tr>
<tr>
<td>High school</td>
<td>0.299</td>
<td>0.295</td>
</tr>
<tr>
<td>Some college</td>
<td>0.191</td>
<td>0.196</td>
</tr>
<tr>
<td>College degree</td>
<td>0.203</td>
<td>0.184</td>
</tr>
<tr>
<td>Married</td>
<td>0.393</td>
<td>0.399</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
<td>0.195</td>
<td>0.196</td>
</tr>
<tr>
<td>Never married</td>
<td>0.404</td>
<td>0.442</td>
</tr>
<tr>
<td>Urban</td>
<td>0.648</td>
<td>0.564</td>
</tr>
<tr>
<td>Rural</td>
<td>0.352</td>
<td>0.436</td>
</tr>
<tr>
<td>Disabled</td>
<td>0.134</td>
<td>0.137</td>
</tr>
<tr>
<td>Family income ($)</td>
<td>78037</td>
<td>70618</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>7.503</td>
<td>7.033</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>13.83</td>
<td>14.85</td>
</tr>
<tr>
<td>Maximum monthly SNAP benefit for a family of 4 ($)</td>
<td>714.6</td>
<td>698.9</td>
</tr>
<tr>
<td>Maximum monthly TANF benefit for a family of 4 ($)</td>
<td>596.6</td>
<td>422.8</td>
</tr>
<tr>
<td>Democrat governor</td>
<td>0.514</td>
<td>0.127</td>
</tr>
<tr>
<td>Prescription drug monitoring program</td>
<td>0.892</td>
<td>0.873</td>
</tr>
<tr>
<td>Population</td>
<td>3355265</td>
<td>3717024</td>
</tr>
<tr>
<td>N</td>
<td>296</td>
<td>252</td>
</tr>
</tbody>
</table>

Notes: Data are aggregated to the state-quarter level. The pre-treatment period for early adopting states includes the years between 2011 and the expanding year.

Table 6. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Coefficient estimate:</th>
<th>Parallel trends (Treat*time+)</th>
<th>DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>806</td>
<td>806</td>
</tr>
<tr>
<td>DD</td>
<td>11.66***</td>
<td>355.98***</td>
</tr>
<tr>
<td>(5.135)</td>
<td>(109.328)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>536</td>
<td>1016</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and controlled for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses. +Early expanding states dropped from the analysis sample. 
***,**,*=statistically different from zero at the 1%,5%,10% level.
Figure 1. Trends in admissions per 100,000 non-elderly adults: TEDS 2010-2015

Notes: Early expanding states excluded from the sample.

Figure 2. Trends in insurance status: TEDS 2010-2015

Notes: Outcomes include: private, Medicaid, other insurance, and no insurance. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Early expanding states excluded from the sample.
Figure 3. Trends in payment source: TEDS 2010-2015

Notes: Outcomes include: private, Medicaid, self-pay, and states and localities. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Early expanding states excluded from the sample.

Figure 4. Trends in prescription medications financed by Medicaid per 100,000 non-elderly adults: SDUD 2011-2015

Notes: Early expanding states excluded from the sample.
### Appendix Table 1. States missing from TEDS by year 2010-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>MS</td>
</tr>
<tr>
<td>2011</td>
<td>--</td>
</tr>
<tr>
<td>2012</td>
<td>--</td>
</tr>
<tr>
<td>2013</td>
<td>--</td>
</tr>
<tr>
<td>2014</td>
<td>SC</td>
</tr>
<tr>
<td>2015</td>
<td>GA, KS, OR, PA, and SC</td>
</tr>
</tbody>
</table>

### Appendix Table 2. TEDS states by sample

#### Sample
- Insurance sample: N=29
- Payment sample: N=25

<table>
<thead>
<tr>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT</td>
</tr>
<tr>
<td>AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT</td>
</tr>
</tbody>
</table>

Notes: All states appear in the admissions sample.

### Appendix Table 3. TEDS sample characteristics by sample

<table>
<thead>
<tr>
<th>Sample:</th>
<th>Admissions sample</th>
<th>Insurance sample</th>
<th>Payment sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>38.03</td>
<td>37.89</td>
<td>37.74</td>
</tr>
<tr>
<td>Female</td>
<td>0.507</td>
<td>0.506</td>
<td>0.504</td>
</tr>
<tr>
<td>Male</td>
<td>0.493</td>
<td>0.494</td>
<td>0.496</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.393</td>
<td>0.394</td>
<td>0.395</td>
</tr>
<tr>
<td>White</td>
<td>0.194</td>
<td>0.192</td>
<td>0.190</td>
</tr>
<tr>
<td>African American</td>
<td>0.451</td>
<td>0.452</td>
<td>0.453</td>
</tr>
<tr>
<td>Other race</td>
<td>0.111</td>
<td>0.097</td>
<td>0.097</td>
</tr>
<tr>
<td>Foreign born</td>
<td>0.698</td>
<td>0.707</td>
<td>0.718</td>
</tr>
<tr>
<td>Less high school</td>
<td>0.107</td>
<td>0.105</td>
<td>0.091</td>
</tr>
<tr>
<td>High school</td>
<td>0.083</td>
<td>0.091</td>
<td>0.094</td>
</tr>
<tr>
<td>Some college</td>
<td>0.103</td>
<td>0.098</td>
<td>0.092</td>
</tr>
<tr>
<td>College degree</td>
<td>0.311</td>
<td>0.308</td>
<td>0.309</td>
</tr>
<tr>
<td>Married</td>
<td>0.292</td>
<td>0.291</td>
<td>0.290</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
<td>0.192</td>
<td>0.191</td>
<td>0.194</td>
</tr>
<tr>
<td>Never married</td>
<td>0.205</td>
<td>0.210</td>
<td>0.206</td>
</tr>
<tr>
<td>Urban</td>
<td>0.642</td>
<td>0.637</td>
<td>0.581</td>
</tr>
<tr>
<td>Rural</td>
<td>0.358</td>
<td>0.363</td>
<td>0.419</td>
</tr>
<tr>
<td>Disabled</td>
<td>0.133</td>
<td>0.131</td>
<td>0.131</td>
</tr>
<tr>
<td>Family income ($)</td>
<td>78037</td>
<td>79557</td>
<td>77921</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>6.999</td>
<td>6.759</td>
<td>6.600</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>13.93</td>
<td>13.36</td>
<td>13.45</td>
</tr>
<tr>
<td>Maximum monthly SNAP benefit for a family of 4 ($)</td>
<td>694.9</td>
<td>702.5</td>
<td>704.9</td>
</tr>
<tr>
<td>Maximum monthly TANF benefit for a family of 4 ($)</td>
<td>533.2</td>
<td>516.5</td>
<td>542.2</td>
</tr>
<tr>
<td>Democratic governor</td>
<td>0.428</td>
<td>0.450</td>
<td>0.386</td>
</tr>
<tr>
<td>Prescription drug monitoring program</td>
<td>0.866</td>
<td>0.811</td>
<td>0.821</td>
</tr>
<tr>
<td>Population</td>
<td>3877958</td>
<td>3025529</td>
<td>2697994</td>
</tr>
</tbody>
</table>

Notes: Data are aggregated to the state-year level. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT.
Appendix Table 4. Effect of ACA Medicaid expansions on alcohol poisoning and drug-related overdose deaths per 100,000 non-elderly adults: NVSH 2010-2015

<table>
<thead>
<tr>
<th>Coefficient estimate</th>
<th>Parallel trends (treat*time+)</th>
<th>DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.037 (0.058)</td>
<td>-0.335 (0.518)</td>
</tr>
<tr>
<td>DD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>720</td>
<td>1224</td>
</tr>
</tbody>
</table>

Note: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses. *Early expanding states dropped from the analysis sample. **, *** statistically different from zero at the 1%, 5%, 10% level.
Appendix Table 5A. Event study for admissions per 100,000 non-elderly adults: T E D S 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1062</td>
</tr>
<tr>
<td>2010*treat</td>
<td>-7.429</td>
</tr>
<tr>
<td>(7.793)</td>
<td></td>
</tr>
<tr>
<td>2011*treat</td>
<td>-10.706</td>
</tr>
<tr>
<td>(58.941)</td>
<td></td>
</tr>
<tr>
<td>2012*treat</td>
<td>-26.256</td>
</tr>
<tr>
<td>(51.902)</td>
<td></td>
</tr>
<tr>
<td>2014*treat</td>
<td>55.039</td>
</tr>
<tr>
<td>(51.539)</td>
<td></td>
</tr>
<tr>
<td>2015*treat</td>
<td>114.827</td>
</tr>
<tr>
<td>(72.923)</td>
<td></td>
</tr>
<tr>
<td>F-test of joint significance of policy leads (p-value)</td>
<td>0.8578</td>
</tr>
<tr>
<td>N</td>
<td>263</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. The omitted year is 2013. Early expanding states excluded from the sample.

***, **, *-statistically different from zero at the 1%, 5%, 10% level.

Appendix Table 5B. Event study for insurance status: T E D S 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.114</td>
<td>0.186</td>
<td>0.109</td>
<td>0.091</td>
</tr>
<tr>
<td>2010*treat</td>
<td>-0.011</td>
<td>-0.032</td>
<td>-0.002</td>
<td>0.045</td>
</tr>
<tr>
<td>(0.014)</td>
<td>(0.038)</td>
<td>(0.020)</td>
<td>(0.035)</td>
<td></td>
</tr>
<tr>
<td>2011*treat</td>
<td>-0.008</td>
<td>-0.031</td>
<td>-0.004</td>
<td>0.043</td>
</tr>
<tr>
<td>(0.014)</td>
<td>(0.031)</td>
<td>(0.021)</td>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>2012*treat</td>
<td>0.001</td>
<td>-0.015</td>
<td>-0.006</td>
<td>0.019</td>
</tr>
<tr>
<td>(0.013)</td>
<td>(0.017)</td>
<td>(0.011)</td>
<td>(0.021)</td>
<td></td>
</tr>
<tr>
<td>2014*treat</td>
<td>0.023</td>
<td>0.076</td>
<td>0.018</td>
<td>-0.117**</td>
</tr>
<tr>
<td>(0.018)</td>
<td>(0.048)</td>
<td>(0.012)</td>
<td>(0.037)</td>
<td></td>
</tr>
<tr>
<td>2015*treat</td>
<td>-0.017</td>
<td>0.165**</td>
<td>0.032</td>
<td>-0.180***</td>
</tr>
<tr>
<td>(0.026)</td>
<td>(0.065)</td>
<td>(0.034)</td>
<td>(0.054)</td>
<td></td>
</tr>
<tr>
<td>F-test of joint significance of policy leads (p-value)</td>
<td>0.6515</td>
<td>0.7124</td>
<td>0.9154</td>
<td>0.4860</td>
</tr>
<tr>
<td>N</td>
<td>157</td>
<td>157</td>
<td>157</td>
<td>157</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OH, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. The omitted year is 2013. Early expanding states excluded from the sample.

***, **, *-statistically different from zero at the 1%, 5%, 10% level.
Appendix Table SC. Event study for payment source: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.087</td>
<td>0.173</td>
<td>0.109</td>
<td>0.521</td>
</tr>
<tr>
<td>2010*treat</td>
<td>0.013</td>
<td>0.005</td>
<td>0.063</td>
<td>-0.082</td>
</tr>
<tr>
<td>(0.013)</td>
<td>(0.032)</td>
<td>(0.042)</td>
<td>(0.054)</td>
<td></td>
</tr>
<tr>
<td>2011*treat</td>
<td>0.019</td>
<td>-0.005</td>
<td>0.036</td>
<td>-0.050</td>
</tr>
<tr>
<td>(0.013)</td>
<td>(0.034)</td>
<td>(0.037)</td>
<td>(0.062)</td>
<td></td>
</tr>
<tr>
<td>2012*treat</td>
<td>0.009</td>
<td>0.017</td>
<td>0.023</td>
<td>-0.049</td>
</tr>
<tr>
<td>(0.009)</td>
<td>(0.030)</td>
<td>(0.023)</td>
<td>(0.041)</td>
<td></td>
</tr>
<tr>
<td>2014*treat</td>
<td>0.013</td>
<td>0.076</td>
<td>0.005</td>
<td>-0.093</td>
</tr>
<tr>
<td>(0.010)</td>
<td>(0.048)</td>
<td>(0.028)</td>
<td>(0.057)</td>
<td></td>
</tr>
<tr>
<td>2015*treat</td>
<td>0.006</td>
<td>0.154**</td>
<td>-0.012</td>
<td>-0.147**</td>
</tr>
<tr>
<td>(0.016)</td>
<td>(0.062)</td>
<td>(0.054)</td>
<td>(0.066)</td>
<td></td>
</tr>
<tr>
<td>F-test of joint significance of policy leads (p-value)</td>
<td>0.325</td>
<td>0.864</td>
<td>0.4576</td>
<td>0.3115</td>
</tr>
<tr>
<td>N</td>
<td>133</td>
<td>133</td>
<td>133</td>
<td>133</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. The omitted year is 2013. Early expanding states excluded from the sample.

***, **, * = statistically different from zero at the 1%, 5%, 10% level.
### Appendix Table 5D. Event study for prescription medications financed by Medicaid: ND/ID 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions per 100,000 non-elderly adults</th>
<th>SD 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treat *2011 Q1</td>
<td>23.260</td>
<td>(98.965)</td>
</tr>
<tr>
<td>Treat *2011 Q2</td>
<td>57.486</td>
<td>(111.705)</td>
</tr>
<tr>
<td>Treat *2011 Q3</td>
<td>13.170</td>
<td>(109.795)</td>
</tr>
<tr>
<td>Treat *2011 Q4</td>
<td>24.571</td>
<td>(97.958)</td>
</tr>
<tr>
<td>Treat *2012 Q1</td>
<td>-36.105</td>
<td>(62.803)</td>
</tr>
<tr>
<td>Treat *2012 Q2</td>
<td>-14.334</td>
<td>(69.293)</td>
</tr>
<tr>
<td>Treat *2012 Q3</td>
<td>-16.088</td>
<td>(75.558)</td>
</tr>
<tr>
<td>Treat *2012 Q4</td>
<td>8.701</td>
<td>(72.854)</td>
</tr>
<tr>
<td>Treat *2013 Q1</td>
<td>41.583</td>
<td>(40.678)</td>
</tr>
<tr>
<td>Treat *2013 Q2</td>
<td>76.230</td>
<td>(48.118)</td>
</tr>
<tr>
<td>Treat *2013 Q3</td>
<td>14.219</td>
<td>(22.267)</td>
</tr>
<tr>
<td>Treat *2014 Q1</td>
<td>156.076*</td>
<td>(80.427)</td>
</tr>
<tr>
<td>Treat *2014 Q2</td>
<td>306.145*</td>
<td>(152.557)</td>
</tr>
<tr>
<td>Treat *2014 Q3</td>
<td>499.133***</td>
<td>(165.357)</td>
</tr>
<tr>
<td>Treat *2014 Q4</td>
<td>393.790***</td>
<td>(111.150)</td>
</tr>
<tr>
<td>Treat *2015 Q1</td>
<td>618.059***</td>
<td>(128.960)</td>
</tr>
<tr>
<td>Treat *2015 Q2</td>
<td>618.525***</td>
<td>(175.015)</td>
</tr>
<tr>
<td>Treat *2015 Q3</td>
<td>618.154***</td>
<td>(164.769)</td>
</tr>
<tr>
<td>Treat *2015 Q4</td>
<td>761.336***</td>
<td>(193.799)</td>
</tr>
</tbody>
</table>

*p-test of joint significance of policy leads (p-value) 0.2824

N 896

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses. The omitted period is 2013 Q4. Early expanding states excluded from the sample.

***, ** = statistically different from zero at the 1%, 5%, 10% level.
### Appendix 6A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults using alternative controls for between state heterogeneity: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1062</td>
</tr>
<tr>
<td>Model (1)</td>
<td>83.454</td>
</tr>
<tr>
<td></td>
<td>(54.081)</td>
</tr>
<tr>
<td>Model (2)</td>
<td>88.942</td>
</tr>
<tr>
<td></td>
<td>(58.583)</td>
</tr>
<tr>
<td>Model (3)</td>
<td>101.872**</td>
</tr>
<tr>
<td></td>
<td>(57.340)</td>
</tr>
<tr>
<td>N</td>
<td>299</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS. Standard errors are clustered at the state level and are reported in parentheses. Model (1) controls for state demographics, state fixed effects, and period fixed effects (baseline model). Model (2) controls for state demographics, state-specific linear time trends, state fixed effects, and year fixed effects. Model (3) controls for state and year fixed effects. ***,**,**,**—statistically different from zero at the 1%, 5%, 10% level.

### Appendix 6B. Effect of ACA Medicaid expansions on insurance status using alternative controls for between state heterogeneity: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.114</td>
<td>0.186</td>
<td>0.109</td>
<td>0.591</td>
</tr>
<tr>
<td>Model (1)</td>
<td>0.026</td>
<td>0.132**</td>
<td>0.009</td>
<td>-0.166***</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.048)</td>
<td>(0.013)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Model (2)</td>
<td>0.021</td>
<td>0.085</td>
<td>0.023</td>
<td>-0.128***</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.055)</td>
<td>(0.016)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Model (3)</td>
<td>0.009</td>
<td>0.142***</td>
<td>0.008</td>
<td>-0.159***</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.045)</td>
<td>(0.012)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS. Standard errors are clustered at the state level and are reported in parentheses. Model (1) controls for state demographics, state fixed effects, and period fixed effects (baseline model). Model (2) controls for state demographics, state-specific linear time trends, state fixed effects, and year fixed effects. Model (3) controls for state and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. ++++,**,**,**,**,**,**,**,**—statistically different from zero at the 1%, 5%, 10% level.
Appendix Table 6C. Effect of ACA Medicaid expansions on payment source using alternative controls for between state heterogeneity: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.087</td>
<td>0.173</td>
<td>0.109</td>
<td>0.521</td>
</tr>
<tr>
<td>Model (1)</td>
<td>0.015</td>
<td>0.129***</td>
<td>-0.029</td>
<td>-0.115**</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.026)</td>
<td>(0.025)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Model (2)</td>
<td>0.012</td>
<td>0.117***</td>
<td>-0.021</td>
<td>-0.108*</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.036)</td>
<td>(0.018)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Model (3)</td>
<td>0.012</td>
<td>0.114**</td>
<td>-0.045</td>
<td>-0.081</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.049)</td>
<td>(0.035)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>N</td>
<td>145</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS. Standard errors are clustered at the state level and are reported in parentheses. Model (1) controls for state demographics, state fixed effects, and period fixed effects (baseline model). Model (2) controls for state demographics, state-specific linear time trends, state fixed effects, and year fixed effects. Model (3) controls for state and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NY, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses.

***, **, * = statistically different from zero at the 1%, 5%, 10% level.

Appendix Table 6D. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid using alternative controls for between state heterogeneity: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions per 100,000 non-elderly adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>806</td>
</tr>
<tr>
<td>Model (1)</td>
<td>355.984***</td>
</tr>
<tr>
<td></td>
<td>(109.328)</td>
</tr>
<tr>
<td>Model (2)</td>
<td>137.266***</td>
</tr>
<tr>
<td></td>
<td>(44.641)</td>
</tr>
<tr>
<td>Model (3)</td>
<td>354.220**</td>
</tr>
<tr>
<td></td>
<td>(139.027)</td>
</tr>
<tr>
<td>N</td>
<td>1016</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS. Standard errors are clustered at the state level and are reported in parentheses. Model (1) controls for state demographics, state fixed effects, and period fixed effects (baseline model). Model (2) controls for state demographics, state-specific linear time trends, state fixed effects, and period fixed effects. Model (3) controls for state and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses.

***, **, * = statistically different from zero at the 1%, 5%, 10% level.
Appendix Table 7A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults using population weights: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion weighted mean in the expansion state group</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>1126</td>
</tr>
<tr>
<td></td>
<td>23.563</td>
</tr>
<tr>
<td></td>
<td>(4.4785)</td>
</tr>
<tr>
<td>N</td>
<td>299</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Regressions are weighted by the state non-elderly adult population. Standard errors are clustered at the state level and are reported in parentheses.

***,**,*=statistically different from zero at the 1%,5%,10% level.

Appendix Table 7B. Effect of ACA Medicaid expansions on insurance status using population weights: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion weighted proportion in the expansion state group</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>0.049**</td>
<td>0.093*</td>
<td>0.009</td>
<td>-0.150***</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.046)</td>
<td>(0.018)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Regressions are weighted by the state non-elderly adult population. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses.

***,**,*=statistically different from zero at the 1%,5%,10% level.

Appendix Table 7C. Effect of ACA Medicaid expansions on payment source using population weights: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion weighted proportion in the expansion state group</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>0.086</td>
<td>0.157</td>
<td>0.149</td>
<td>0.628</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.035)</td>
<td>(0.022)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>N</td>
<td>145</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Regressions are weighted by the state non-elderly adult population. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses.

***,**,*=statistically different from zero at the 1%,5%,10% level.
Appendix Table 7D. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid using population weights: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions per 100,000 non-elderly adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion weighted mean in the expansion state group</td>
<td>684</td>
</tr>
<tr>
<td>DD</td>
<td>216.381***</td>
</tr>
<tr>
<td>N</td>
<td>1016</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS and control for state demographics, state-specific linear time trends, state fixed effects, and period fixed effects. Regressions are weighted by the state non-elderly adult population. Standard errors are clustered at the state level and are reported in parentheses. ***,**,*** = statistically different from zero at the 1%, 5%, 10% level.

Appendix Table 8A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults excluding criminal justice system referrals: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>502</td>
</tr>
<tr>
<td>DD</td>
<td>62.437</td>
</tr>
<tr>
<td>N</td>
<td>299</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,**,*** = statistically different from zero at the 1%, 5%, 10% level.

Appendix Table 8B. Effect of ACA Medicaid expansions on insurance status excluding criminal justice system referrals: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.111</td>
<td>0.208</td>
<td>0.115</td>
<td>0.556</td>
</tr>
<tr>
<td>DD</td>
<td>0.036*</td>
<td>0.136**</td>
<td>-0.004</td>
<td>-0.169***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.053)</td>
<td>(0.017)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, ID, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. ***,**,*** = statistically different from zero at the 1%, 5%, 10% level.

Appendix Table 8C. Effect of ACA Medicaid expansions on payment source excluding criminal justice system referrals: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.0975</td>
<td>0.191</td>
<td>0.190</td>
<td>0.522</td>
</tr>
<tr>
<td>DD</td>
<td>0.020</td>
<td>0.146***</td>
<td>-0.033</td>
<td>-0.123***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.039)</td>
<td>(0.023)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>N</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
</tbody>
</table>

**Notes:** All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, DE, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. ***,**,*** = statistically different from zero at the 1%, 5%, 10% level.
References:


Center for Behavioral Health Statistics and Quality (2016). Key substance use and mental health indicators in the United States: Results from the 2015 national survey on drug use and health. Rockville, MD, Key substance use and mental health indicators in the United States: Results from the 2015 national survey on drug use and health.


50


Substance Abuse and Mental Health Services Administration (2016). Characteristics of criminal justice system referrals discharged from substance abuse treatment and facilities with specialty designed criminal justice programs. Rockville, MD, Substance Abuse and Mental Health Services Administration.


### Supplementary Table 1A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults using the balanced panel of states: TDES 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1058</td>
</tr>
<tr>
<td>DD</td>
<td>104.411*</td>
</tr>
<tr>
<td></td>
<td>(53.615)</td>
</tr>
<tr>
<td>N</td>
<td>270</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Excluded states include: GA, MS, OR, PA, and SC. Standard errors are clustered at the state level and are reported in parentheses. 

***, **, * = statistically different from zero at the 1%, 5%, 10% level.

### Supplementary Table 1B. Effect of ACA Medicaid expansions on insurance status using the balanced panel of states: TDES 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.116</td>
<td>0.200</td>
<td>0.081</td>
<td>0.602</td>
</tr>
<tr>
<td>DD</td>
<td>0.027**</td>
<td>0.113**</td>
<td>0.018</td>
<td>-0.158***</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.048)</td>
<td>(0.012)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Excluded states include: GA, MS, OR, PA, and SC. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. 

***, **, * = statistically different from zero at the 1%, 5%, 10% level.

### Supplementary Table 1C. Effect of ACA Medicaid expansions on payment source using the balanced panel of states: TDES 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.089</td>
<td>0.171</td>
<td>0.237</td>
<td>0.503</td>
</tr>
<tr>
<td>DD</td>
<td>0.010</td>
<td>0.135***</td>
<td>-0.028</td>
<td>-0.118***</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.033)</td>
<td>(0.029)</td>
<td>(0.048)</td>
</tr>
<tr>
<td>N</td>
<td>126</td>
<td>126</td>
<td>126</td>
<td>126</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Excluded states include: GA, MS, OR, PA, and SC. Payment source state sample includes the following states: AK, AR, CO, DC, DE, HI, IA, ID, KS, KY, MO, MT, ND, NE, NH, NJ, NV, OH, RI, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. 

***, **, * = statistically different from zero at the 1%, 5%, 10% level.
Supplementary Table 2. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults: SEDU 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>346.213***</td>
</tr>
<tr>
<td>DD</td>
<td>(102.640)</td>
</tr>
<tr>
<td>N</td>
<td>1220</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses.
*** = statistically different from zero at the 1%,5%,10% level.

Supplementary Table 3. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults excluding five states with odd missing data patterns: SEDU 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>414.056***</td>
</tr>
<tr>
<td>DD</td>
<td>(115.276)</td>
</tr>
<tr>
<td>N</td>
<td>920</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. States with odd missing data patterns include: AZ, HI, OH, RI, and VA. Standard errors are clustered at the state level and are reported in parentheses.
*** = statistically different from zero at the 1%,5%,10% level.

Supplementary Table 4. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults aggregating the data to the annual level: SEDU 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>3222</td>
</tr>
<tr>
<td>DD</td>
<td>1559.263***</td>
</tr>
<tr>
<td>N</td>
<td>(549.162)</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses.
*** = statistically different from zero at the 1%,5%,10% level.

Supplementary Table 5. Effect of ACA Medicaid expansions on the probability of missing data: SEDU 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prob(missing data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.133</td>
</tr>
<tr>
<td>Expansion state</td>
<td>0.263</td>
</tr>
<tr>
<td>N</td>
<td>51</td>
</tr>
</tbody>
</table>

Notes: States with odd missing data patterns include: AZ, HI, OH, RI, and VA. Data are aggregated to the state-level (outcome is fixed within state over the study period). All models estimated with OLS and control for state demographics. Standard errors are clustered at the state level and are reported in parentheses.
*** = statistically different from zero at the 1%,5%,10% level.
Supplementary Table 6A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults using alternative expansion coding schemes: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1011</td>
</tr>
<tr>
<td>Maclean et al (2017)</td>
<td>69.238 (58.601)</td>
</tr>
<tr>
<td>N</td>
<td>209</td>
</tr>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>912</td>
</tr>
<tr>
<td>Wherry &amp; Miller (2016) exclusions +</td>
<td>49.724 (56.831)</td>
</tr>
<tr>
<td>N</td>
<td>260</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. +Excluded states include: DC, DE, MA, NY, and VT. ***,**,*--statistically different from zero at the 1%,5%,10% level.

Supplementary Table 6B. Effect of ACA Medicaid expansions on insurance status using alternative expansion coding schemes: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.127</td>
<td>0.164</td>
<td>0.096</td>
<td>0.612</td>
</tr>
<tr>
<td>Maclean et al (2017)</td>
<td>0.017</td>
<td>0.168***</td>
<td>0.006</td>
<td>-0.191***</td>
</tr>
<tr>
<td>(0.017)</td>
<td>(0.042)</td>
<td>(0.013)</td>
<td>(0.032)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>159</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.119</td>
<td>0.161</td>
<td>0.116</td>
<td>0.604</td>
</tr>
<tr>
<td>Wherry &amp; Miller (2016) exclusions +</td>
<td>0.035*</td>
<td>0.140**</td>
<td>0.012</td>
<td>-0.187***</td>
</tr>
<tr>
<td>(0.018)</td>
<td>(0.050)</td>
<td>(0.013)</td>
<td>(0.036)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Standard errors are clustered at the state level and are reported in parentheses. +Excluded states include: DC, DE, MA, NY, and VT. ***,**,*--statistically different from zero at the 1%,5%,10% level.
Supplementary Table 6C. Effect of ACA Medicaid expansions on payment source using alternative expansion coding schemes: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private Mean (t-stat)</th>
<th>Medicaid Mean (t-stat)</th>
<th>Self-pay Mean (t-stat)</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.087 (0.011)</td>
<td>0.129*** (0.041)</td>
<td>-0.033 (0.028)</td>
<td>-0.103** (0.066)</td>
</tr>
<tr>
<td>N</td>
<td>145</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.082</td>
<td>0.137</td>
<td>0.232</td>
<td>0.548</td>
</tr>
<tr>
<td>Wherry &amp; Miller (2016)</td>
<td>0.026** (0.010)</td>
<td>0.140*** (0.037)</td>
<td>-0.026 (0.027)</td>
<td>-0.141*** (0.046)</td>
</tr>
<tr>
<td>Exclusions +</td>
<td>133</td>
<td>133</td>
<td>133</td>
<td>133</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses.

*Excluded states include: DC, DE, MA, NY, and VT.

**,**,**=statistically different from zero at the 1%,5%,10% level.

Supplementary Table 6D. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults using alternative expansion coding schemes: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Prescriptions Mean (t-stat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>539</td>
</tr>
<tr>
<td>Maclean et al (2017)</td>
<td>257.462** (118.055)</td>
</tr>
<tr>
<td>N</td>
<td>1016</td>
</tr>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>558</td>
</tr>
<tr>
<td>Wherry &amp; Miller (2016)</td>
<td>306.951*** (103.793)</td>
</tr>
<tr>
<td>N</td>
<td>916</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses.

*Excluded states include: DC, DE, MA, NY, and VT.

**,**,**,**=statistically different from zero at the 1%,5%,10% level.
### Supplementary Table 7A. Effect of ACA Medicaid expansions on insurance status using alternative missingness thresholds: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.119</td>
<td>0.195</td>
<td>0.111</td>
<td>0.574</td>
</tr>
<tr>
<td>No more than 15% missing in any year</td>
<td>0.007***</td>
<td>0.188***</td>
<td>0.006</td>
<td>-0.202***</td>
</tr>
<tr>
<td>N</td>
<td>133</td>
<td>133</td>
<td>133</td>
<td>133</td>
</tr>
</tbody>
</table>

### Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,***=statistically different from zero at the 1%,5%,10% level.

### Supplementary Table 7B. Effect of ACA Medicaid expansions on payment source using alternative missingness thresholds: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion proportion in the expansion state group</td>
<td>0.087</td>
<td>0.173</td>
<td>0.218</td>
<td>0.521</td>
</tr>
<tr>
<td>No more than 15% missing in any year</td>
<td>0.014***</td>
<td>0.134***</td>
<td>-0.034</td>
<td>-0.114**</td>
</tr>
<tr>
<td>N</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
</tbody>
</table>

### Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,***=statistically different from zero at the 1%,5%,10% level.
Supplementary Table 8. Conditional-on-positive analysis for insurance status and payment source: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion proportion in the expansion state group</th>
<th>Missing ≤ 25% insurance status</th>
<th>Missing ≤ 25% payment source</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>0.053</td>
<td>0.027</td>
</tr>
<tr>
<td>(0.059)</td>
<td>(0.035)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>299</td>
<td>299</td>
</tr>
</tbody>
</table>

*Notes: Outcome is indicator variable coded one if a state has ≥ 25% missing information in a given year, zero otherwise. We have also estimated comparable models in which the outcome is the share missing insurance and payment information. Results are similar and available on request. All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses.***,**,* = statistically different from zero at the 1%, 5%, 10% level.

Supplementary Table 9A. Effect of ACA Medicaid expansions on insurance status using the wild-cluster bootstrap for inference: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion proportion in the expansion state group</th>
<th>Private</th>
<th>Medicaid</th>
<th>Other insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>0.114</td>
<td>0.186</td>
<td>0.169</td>
<td>0.591</td>
</tr>
<tr>
<td>(1.459)</td>
<td>(3.141)</td>
<td>(1.840)</td>
<td>(4.197)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

*Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. * = statistics are calculated using a wild cluster bootstrap following Cameron et al. (2015) and are reported in parentheses.***,**,* = statistically different from zero at the 1%, 5%, 10% level.

Supplementary Table 9B. Effect of ACA Medicaid expansions on payment source using the wild-cluster bootstrap for inference: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome: Pre-expansion proportion in the expansion state group</th>
<th>Private</th>
<th>Medicaid</th>
<th>Self-pay</th>
<th>States and localities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>0.087</td>
<td>0.173</td>
<td>0.109</td>
<td>0.521</td>
</tr>
<tr>
<td>(2.573)</td>
<td>(2.836)</td>
<td>(-0.494)</td>
<td>(-2.700)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>145</td>
<td>145</td>
<td>145</td>
<td>145</td>
</tr>
</tbody>
</table>

*Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. * = statistics are calculated using a wild cluster bootstrap following Cameron et al. (2015) and are reported in parentheses.***,**,* = statistically different from zero at the 1%, 5%, 10% level.
Supplementary Table 10. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid reimbursements per 100,000 non-elderly adults: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Total reimbursements</th>
<th>Medicaid reimbursements</th>
<th>Non-Medicaid reimbursements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>$109,861</td>
<td>$168,348</td>
<td>$1,513</td>
</tr>
<tr>
<td>DD</td>
<td>$38,369***</td>
<td>$38,568***</td>
<td>-$199,013</td>
</tr>
<tr>
<td>(13940,659)</td>
<td>(13916,664)</td>
<td>(168,124)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,**,* = statistically different from zero at the 1%, 5%, 10% level.

Supplementary Table 11A. Effect of ACA Medicaid expansions on exogenous patient characteristics: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Male</th>
<th>35+ years</th>
<th>White</th>
<th>African American</th>
<th>Other race</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.646</td>
<td>0.448</td>
<td>0.676</td>
<td>0.123</td>
<td>0.103</td>
<td>0.100</td>
</tr>
<tr>
<td>DD</td>
<td>0.005</td>
<td>0.003</td>
<td>-0.016**</td>
<td>0.003</td>
<td>0.009</td>
<td>0.004</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,**,* = statistically different from zero at the 1%, 5%, 10% level.

Supplementary Table 11B. Effect of ACA Medicaid expansions on endogenous patient characteristics: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Drug primary substance</th>
<th>Opioid primary substance</th>
<th>No prior admission</th>
<th>Criminal justice system referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.576</td>
<td>0.289</td>
<td>0.387</td>
<td>0.357</td>
</tr>
<tr>
<td>DD</td>
<td>-0.001</td>
<td>0.009</td>
<td>-0.031**</td>
<td>0.002</td>
</tr>
<tr>
<td>(0.011)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.013)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: All models control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. **† There is some missing data for the referral source item, thus we have a smaller sample size for this outcome. ***,**,* = statistically different from zero at the 1%, 5%, 10% level.
Supplementary Table 12. Effect of ACA Medicaid expansions on treatment setting: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Detoxification</th>
<th>Non-intensive outpatient</th>
<th>Intensive outpatient</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>0.192</td>
<td>0.544</td>
<td>0.122</td>
<td>0.143</td>
</tr>
<tr>
<td>DD</td>
<td>-0.013</td>
<td>-0.009</td>
<td>0.009</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.020)</td>
<td>(0.012)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Observations</td>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
</tr>
</tbody>
</table>

Notes: All models control for state demographics, state fixed effects, and year fixed effects. Standard errors are clustered at the state level and are reported in parentheses. ***,** = statistically different from zero at the 1%, 5%, 10% level.
Supplementary Table 13A. Effect of ACA Medicaid expansions on admissions per 100,000 non-elderly adults using the TEDS insurance and payment samples of states: TEDS 2010-2015

<table>
<thead>
<tr>
<th>Sample:</th>
<th>Insurance states</th>
<th>Payment states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>1028</td>
<td>1045</td>
</tr>
<tr>
<td>DD</td>
<td>94.746 (87.953)</td>
<td>192.067**</td>
</tr>
<tr>
<td>N</td>
<td>169</td>
<td>145</td>
</tr>
</tbody>
</table>

Notes: The outcome variable is the number of admissions per 100,000 non-elderly adults. All models estimated with OLS and control for state demographics, state fixed effects, and year fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MS, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. ***,** = statistically different from zero at the 1%, 5%, 10% level.

Supplementary Table 13B. Effect of ACA Medicaid expansions on prescription medications financed by Medicaid per 100,000 non-elderly adults using the TEDS insurance and payment samples of states: SDUD 2011-2015

<table>
<thead>
<tr>
<th>Sample:</th>
<th>Insurance states</th>
<th>Payment states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-expansion mean in the expansion state group</td>
<td>572</td>
<td>839</td>
</tr>
<tr>
<td>DD</td>
<td>255.108** (105.003)</td>
<td>384.816** (147.904)</td>
</tr>
<tr>
<td>N</td>
<td>576</td>
<td>496</td>
</tr>
</tbody>
</table>

Notes: All models estimated with OLS and control for state demographics, state fixed effects, and period fixed effects. Insurance state sample includes the following states: AK, AL, AR, CO, DC, DE, HI, IA, IL, IN, KS, KY, MA, MD, ME, MO, MT, ND, NE, NH, NJ, NV, OR, PA, SC, SD, TN, TX, and UT. Payment source state sample includes the following states: AK, AR, CO, DC, HI, IA, ID, KS, KY, MO, MS, MT, ND, NE, NH, NJ, NV, OH, PA, RI, SC, SD, TX, UT, and VT. Standard errors are clustered at the state level and are reported in parentheses. ***,** = statistically different from zero at the 1%, 5%, 10% level.
Has Medicaid’s expansion fueled the opioid epidemic? New GOP theory is challenged

By Associated Press

August 31, 2017

WASHINGTON — An intriguing new theory is gaining traction among conservative foes of the Obama-era health law: Its Medicaid expansion to low-income adults may be fueling the opioid epidemic.1

If true, that would represent a shocking outcome for the Affordable Care Act. But there’s no evidence to suggest that’s happening, say university researchers who study the drug problem and are puzzled by such claims. Some even say Medicaid may be helping mitigate the consequences of the epidemic.
Circulating in conservative media, the Medicaid theory is bolstered by a private analysis produced by the Health and Human Services Department for Sen. Ron Johnson (R-Wis.) The analysis says the overdose death rate rose nearly twice as much in states that expanded Medicaid compared with states that didn’t.

Independent experts say the analysis misses some crucial facts and skips standard steps that researchers use to rule out coincidences.

Johnson has asked the agency’s internal watchdog to investigate, suggesting that unscrupulous individuals may be using their new Medicaid cards to obtain large quantities of prescription painkillers and diverting the pills to street sales for profit. Diversion of pharmacy drugs has been a long-standing concern of law enforcement.

“These data appear to point to a larger problem,” Johnson wrote. “Medicaid expansion may be fueling the opioid epidemic in communities across the country.” He stopped just short of fingerling Medicaid, saying more research is needed.
But if anything, university researchers say Medicaid seems to be doing the opposite of what conservatives allege.

“Medicaid is doing its job” by increasing treatment for opioid addiction, said Temple University economist Catherine Maclean, who recently published a paper on Medicaid expansion and drug treatment. “As more time passes, we may see a decline in overdoses in expansion states relative to nonexpansion states.”

Johnson is a conservative opponent of Obamacare who backed GOP efforts to curtail the Medicaid expansion. Wisconsin officials have urged him to push for changes in the health law to ensure the state wouldn’t be penalized for rejecting federal dollars to expand Medicaid.
Trump administration officials, including Health Secretary Tom Price and Seema Verma, head of the Centers for Medicare and Medicaid Services, have strongly criticized Medicaid, saying the program doesn’t deliver acceptable results.

Price’s agency would not answer questions about the analysis for Johnson, and released a statement instead.

“Correlation does not necessarily prove causation, and additional research is required before any conclusions can be made,” the statement said.

Translation: Just because something happens around the same time as something else, you can’t assume cause and effect. The statement said the administration is committed to fighting the opioid crisis.

Medicaid is a federal-state program that covers more than 70 million low-income people, from newborns to elderly nursing home residents and the disabled. Thirty-one states have expanded Medicaid to serve able-bodied adults, while 19 have not. The expansion went into effect in January, 2014, and the most recent national overdose death numbers are for 2015.

That leaves researchers with just a small slice of data. Both sides agree more research is needed.

Still, some patterns are emerging.

Prescriptions for medications used to treat opioid addiction in outpatient settings increased by 43 percent in Medicaid expansion states compared with states that didn’t expand, according to Maclean’s research with Brendan Saloner of Johns Hopkins Bloomberg School of Public Health. That indicates Medicaid is paying for treatment.

Maclean and Saloner also found another piece of the puzzle: Overdose death rates were higher to begin with in states that expanded Medicaid.
That’s important because it suggests that drug problems may have contributed to state decisions to expand Medicaid. States such as Ohio with high overdose rates might have wanted to leverage more federal money to help fight addiction.

Maclean and Saloner looked at deaths from overdoses and fatal alcohol poisoning from 2010-2015, starting well before the Medicaid expansion. The HHS analysis for Sen. Johnson missed that underlying trend because it started with 2013 data.

When Gov. John Kasich (R-Ohio) talks about why he expanded Medicaid, “it has a lot to do with mental health and substance use disorders,” said Republican labor economist Craig Garthwaite of Northwestern University’s Kellogg School of Management. Garthwaite finds the claim that Medicaid expansion fueled drug deaths “fundamentally flawed.”

Still another problem with the Medicaid theory is that it lumps all drug overdoses together. But illicit drugs — heroin and fentanyl — have been driving surges in deaths since 2010. A Medicaid card doesn’t provide access to illegal drugs.

“It’s worrisome because this is the type of numerical evidence that’s used to propose bad policy,” Garthwaite said. Maclean, who reviewed the HHS analysis, said it seemed to rely on raw numbers without controlling for a range of differences among states, a standard technique.

Some researchers see hints that Medicaid expansion may be helping to mitigate the overdose epidemic.

Vanderbilt University economist Andrew Goodman-Bacon and Harvard’s Emma Sandoe drilled down to the county level in an informal analysis. From 2010 through 2015, counties with the largest insurance coverage gains experienced smaller increases in drug-related deaths than counties with smaller coverage gains.
More research is needed to provide conclusive evidence.

Relying on faulty research is “dangerous,” said Maclean. “It can lead to bad policies and people’s lives are at stake here.”

— Carla K. Johnson and Ricardo Alonso-Zaldivar

About the Author

Associated Press

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January 10, 2018

To: Interested Parties

From: Center on Budget and Policy Priorities

RE: Medicaid Expansion Helps People With Substance Use Disorders Get Treatment; Research Shows No Causal Link Between Addiction and Medicaid Expansion

The Senate Homeland Security & Governmental Affairs Committee will hold a hearing on Wednesday, January 17, 2018, titled “Unintended Consequences: Medicaid and the Opioids Epidemic.” Several Republican members of Congress, including Chairman Ron Johnson, have suggested that Medicaid expansion is fueling the opioid epidemic by giving newly eligible adults access to prescription opioid medications. There is no evidence to support this claim. To the contrary, Medicaid expansion is a critical lifeline for people with substance use disorders, research shows. As Ohio Governor John Kasich noted, “Thank God we expanded Medicaid because that Medicaid money is helping to rehab people.”

Research Shows No Link Between Medicaid Expansion and Increased Opioid Addiction

Proponents of the view that expansion increased opioid addiction point to a rise in opioid-related deaths in states that expanded Medicaid relative to non-expansion states. However, while opioid deaths have increased nationally in recent years, these trends predate the ACA. In fact, the counties with the largest Medicaid expansion coverage gains actually experienced smaller increases in drug-related mortality than counties with smaller coverage gains. Moreover, while Medicaid beneficiaries do fill more opioid prescriptions than the general population, this reflects Medicaid beneficiaries’ higher levels of disability and chronic illness.

In 2008, Oregon expanded Medicaid to adults who had previously been ineligible for coverage. However, the state didn’t have enough funding to fully expand coverage, so they selected a limited group of individuals through a random lottery. This expansion allowed for a randomized controlled trial to compare the use of opioids between the newly covered group and a comparable group of uninsured adults. This rigorous study found a near-zero effect of Medicaid expansion on use of opioids, demonstrating that Medicaid coverage did not cause an increase in opioid use. However, the authors found a positive and nearly statistically significant effect of Medicaid on use of opioid treatment. The study also found that Medicaid coverage essentially eliminated the misuse of prescription medications that were originally prescribed to someone else, which can pose serious safety risks.


Contrary to conservative claims, the main drivers of recent spikes of overdose deaths are non-prescription opioids, such as heroin and fentanyl, not the prescription drugs that Medicaid covers. Deaths due to prescription opioids have actually leveled off since 2011, national Centers for Disease Control and Prevention data show. Across the nation, the number of hospitalizations related to prescription opioid overdoses fell between 2011 and 2014, preliminary research shows. Meanwhile, heroin overdose-related hospitalizations rose in all regions.

It’s true that Medicaid beneficiaries, like people with private insurance, sometimes use their coverage fraudulently to obtain and distribute opioids. That’s why state Medicaid programs have databases to track opioid prescriptions to combat fraud and abuse. The ACA also included built-in safeguards, such as the requirement that Medicaid payments be immediately suspended when there is a credible allegation of fraud against a provider. Providers who are terminated by Medicare can also be terminated from Medicaid and the Children’s Health Insurance Program.

Medicaid Expansion Has Expanded Access to Needed Substance Use Disorder Treatment

Rather than increasing opioid use, Medicaid expansion has significantly expanded access to substance use disorder (SUD) treatment. Expansion states have reduced the unmet need for the treatment of substance use disorders by 18 percent. All state Medicaid programs cover at least one medication assisted treatment (MAT), and the Medicaid expansion has provided health coverage to an estimated 99,000 people with an opioid use disorder.

A recent Government Accountability Office (GAO) report looking at four expansion states—West Virginia, Iowa, New York, and Washington—found that expansion has been critically important for low-income adults. In particular, GAO found that a large share of newly enrolled beneficiaries used mental health or substance use disorder treatment in 2014. Between 20 and 34

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percent of Medicaid expansion beneficiaries used behavioral health services in the four states, including psychotherapy, diagnostic services, and prescription drugs to treat a mental health or substance use disorder.

State officials interviewed by GAO credited the expansion with increased access to behavioral health treatment. Officials in West Virginia, Iowa, and Washington said that expansion beneficiaries likely had greater access to care after enrolling in Medicaid. (New York covered poor and low-income adults before 2014 and, therefore, saw less of a change in access to care.) West Virginia officials reported a higher use of MAT for substance use disorders among newly eligible beneficiaries, noting that the state's charity care program on which uninsured residents relied before the expansion doesn't pay for behavioral health prescription drugs. Uninsured individuals may have “relied on family members or may have sold personal belongings to afford their medications” prior to expansion, West Virginia officials said.

The GAO report underscores the importance of comprehensive coverage for people with behavioral health conditions. Between 42 and 57 percent of expansion enrollees with a behavioral health diagnosis had an emergency room visit, compared to 13 to 32 percent of enrollees without such a diagnosis. However, the vast majority (between 81 and 92 percent) of visits were not mainly due to their mental health or substance use disorder. That's likely because people with behavioral health conditions also tend to have other complex health needs. Medicaid's comprehensive coverage provides treatment and care management, and many states have heightened their efforts to coordinate care for people with multiple physical and behavioral health conditions, in contrast to the patchwork of uncoordinated care typically available to the uninsured.
Causality, Stories, Medicaid, and Opioids
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Executive Summary

The Homeland Security and Governmental Affairs (HSGAC) Committee’s majority report, “Drugs for Dollars: How Medicaid Helps Fuel the Opioid Epidemic", claims that Medicaid causes its recipients to commit fraud in order to obtain opioids and drives up drug-related mortality rates. The majority points out that drug deaths have grown more quickly in expansion states than non-expansion states and that, out of 298 cases of opioid-related Medicaid fraud, most occurred in expansion states and since the expansion date, 2014. We argue that this evidence fails to support the claim that Medicaid expansion itself causes these problems.

Recent changes in drug-related mortality have been due to the wrong drugs, have come at the wrong time, and have been in the wrong places to be due to the expansion of Medicaid.

1. Opioid addiction increasingly begins with non-prescription drugs such as heroin, and recent increases in drug deaths are almost entirely due to non-prescription opioids. Medicaid does not supply these drugs.
2. Drug deaths began increasing in expansion states in 2010, four years before the expansion started, which cannot be due to Medicaid expansion.
3. Drug deaths have risen the most in the areas least affected by the Medicaid expansion.
4. An experiment in Oregon in which adults were randomly granted Medicaid eligibility showed no increase in opioid prescription rates.

Medicaid fraud has grown because Medicaid has grown, not because fraud is a large problem.

1. Most Medicaid fraud cases occur in expansion states because most Medicaid recipients live in expansion states, and most Medicaid fraud cases have occurred since expansion because the number of Medicaid recipients has grown since 2014.
2. In 2016, just one percent of one percent of adult Medicaid beneficiaries were convicted of fraud—less than half the rate for the average adult in Wisconsin.
3. Medicaid fraud rates did not change after the Affordable Care Act’s Medicaid expansion.

Despite the majority report’s acknowledgement that “there are many causes to the opioid epidemic", it makes strong claims about Medicaid’s role in causing opioid abuse. Strong claims require strong evidence. The report, however, fails to support the claims that Medicaid caused the opioid epidemic.

Nevertheless, Medicaid can play a central role in combating the opioid epidemic. Future discussions should focus on ways that Medicaid’s existing infrastructure can improve prescribing, and connect recipients to evidence-based treatments for opioid addiction. Medicaid serves many Americans suffering from or at risk of opioid abuse, and it holds the potential to stem this costly and devastating health crisis.
Statement for the Record

We are two researchers who study the Medicaid program and how it affects its recipients. Given recent claims that Medicaid causes opioid abuse we sought to review the evidence and data. We are writing today to offer our expert opinions on these issues.

What does the majority’s report ask?

The majority report and prepared remarks clearly assert that Medicaid causes opioid abuse.¹ Senator Johnson claimed in his opening remarks that Medicaid is, “certainly a contributing factor that maybe enables something that shouldn’t be enabled”, warned that “we must not ignore the growing evidence that one of the contributing causes appears to be connected to federal spending itself.” The executive summary reiterates these claims, arguing that, “new data suggest that the ACA Medicaid expansion may be making the opioid epidemic even worse” (pg. 2) and concluding that, “expanding the program—particularly to people most susceptible to abuse—could worsen the problem” (pg. 4).

What evidence does the majority’s report present?

Senator Johnson’s past investigations and this committee’s majority report present two main types of evidence to support the claim that Medicaid causes opioid abuse. First, Senator Johnson’s July 2017 letter to Inspector General Daniel R. Levinson shows that between 2013 and 2015, drug-related mortality rates rose faster in states that expanded Medicaid than those that did not.² Second, the majority presents evidence from a search of court records documenting almost instances between 2010 and 2017 in which patients or doctors used Medicaid to obtain opioids fraudulently. The testimony of two prosecutors—Otto Schalk, the prosecuting attorney in Harrison County, Indiana, and Emmanuel Tyndall, the Inspector General of Tennessee—provided additional insight this type of fraud. The basic facts, then, are that there is a large divergence in drug-related mortality between expansion and non-expansion states, and that patients and primarily doctors fraudulently prescribe or obtain opioids and, in some cases, resell them.

In light of our comments below, we want to clarify that these kinds of analyses are exactly the right way to begin examining the question of what is driving the opioid epidemic that is facing our country. Looking at states with high or low drug mortality, for example, can easily confuse the huge differences in population health, demographics, behavior, and norms that exist in different areas of the county (Adolphsen 2017). Looking at changes in states over time goes a long way to narrowing the question of what causes increases to mortality. Moreover, we admire the work of the majority staff to gather information from court records by hand and organize it in this way. This provides a useful new resource for understanding how existing Medicaid fraud works.

That said, demonstrating that Medicaid (or the Affordable Care Act’s Medicaid expansion) causes opioid abuse, requires quite a bit more evidence. Building this kind of case is

¹ It carefully notes that this is different than the assertion that “federal spending is the primary cause of overdose deaths,” and the report “is not meant to suggest that Medicaid, or any other federal program, is the only factor contributing to the opioid epidemic.”
skin to detective work. We must lay out the claims clearly and then think hard about what we would expect observe or, just as importantly, not observe, in data if they were true. If these pieces do not line up, the underlying claims of this report of the link between Medicaid expansion and the opioid epidemic become harder to believe. We agree with Senator Johnson about how important it is to understand whether Medicaid causes opioid abuse, and do not reject this story out of hand. It is precisely because it matters so much, that we must apply rigorous standards of evidence. While this majority report takes important steps toward this understanding, it ultimately falls very far short of demonstrating a causal connection between Medicaid and opioid abuse.

The Limits of Anecdotal Evidence

This hearing presents many stories. Senator Johnson has stated that his interest in this topic arose from the evocative first-hand accounts of Medicaid and opioid abuse in the book Dreamland by investigative journalist Sam Quinones. The majority report outlines 100 cases of Medicaid fraud and opioid abuse. Finally, Mr. Schalk shared his extensive on-the-ground experience with these kinds of cases as a prosecutor and documentary film maker.

We do not doubt the validity of these stories. Yet, for each story presented here there are stories about Medicaid’s role as a primary funder of life-saving overdose interventions and addiction therapy. A recent profile of a California woman, Heather Menzel, outlines her path through Medicaid-funded opioid addiction treatment. She has since remained clean for two years, had a healthy daughter named Bella, has recently enrolled in community college, and hopes to work to help others struggling from addiction.

In light of powerful, yet starkly different accounts, which story should guide policy—the narrative that Medicaid causes opioid abuse or the narrative that Medicaid treats opioid abuse? Anecdotal evidence cannot be the only way that policymakers weigh these two potential roles for Medicaid. Rather, to understand what stories mean for policy they must be paired with statistical analyses that can, hopefully, separate the case-by-case experience of individuals from the experiences of the whole population that would be affected by legislative or regulatory action. When comparing the anecdotes against the available data on Medicaid and opioids, the majority report’s narrative largely breaks down. The rest of this statement explains why.

Empirical Evidence: Medicaid Expansion and Mortality Rates

We recently coauthored a Health Affairs blog post evaluating the evidence for the claim that the Affordable Care Act’s Medicaid expansion increased opioid mortality. We found little support for this interpretation, and here we reiterate our points.

Recent developments in the opioid epidemic cannot be due to Medicaid

Prescription opioid abuse took off in the 1990s and early 2000s after the introduction of extended release (ER) analgesics such as OxyContin led to rampant abuse. The introduction of abuse-

\(^3\) https://www.statnews.com/2017/08/10/opioid-treatment-desert/
\(^4\) https://www.healthaffairs.org/do/10.1377/hblog20170823.061640/full/
deterrent formulations of drugs like OxyContin (late 2010) and Opana (2012) and a reclassification of hydrocodone from a class III drug to a class II drug, led to reductions in rates of prescription abuse, and a stabilization of deaths attributable to these kinds of drugs (Hedegaard, Warner, and Miniño 2017). The share of people with opioid addiction seeking treatment who started with prescription opioids fell dramatically from 84.7 percent in 2005 to 51.9 percent in 2015 (Cicero, Ellis, and Kasper 2017).

The slow-down in the prescription opioid epidemic since 2010 stands in stark contrast to the explosion in the overall epidemic, which is now much worse than ever before. The price and potency of illegal opioids helps explain why. DEA data show that the price per pure gram of heroin fell from about $3,000 in 1980 to about $500 in 2012 (Evans, Lieber, and Power 2017)—cheaper than many prescription opioids (Severtson, Bucher-Bartelson, et al.). Moreover, Mexican cartels have increased purity, expanded geographic availability, and made it significantly easier to purchase heroin (Quinones 2016). Compounding the rapid move toward cheaper, purer, more convenient heroin, was the development of extremely powerful, illicitly produced synthetic opioids like fentanyl and carfentanil. Almost all of the growth in opioid-related mortality since 2010 has come from either heroin or synthetic opioids like fentanyl, and one-third of people seeking treatment in 2015 started with heroin (Cicero, Ellis, and Kasper 2017).

This history matters for the majority’s argument because Medicaid does not provide these drugs, and cannot be responsible for their distribution.

Mortality changes began before the Affordable Care Act

Senator Johnson points out that drug-related mortality rates grew faster in states that expanded Medicaid than those that did not. To believe that Medicaid was the cause, we need to be sure that expansion and non-expansion states are comparable in terms of the other factors behind the changes in the opioid epidemic.

One important factor is the trajectory of the epidemic itself in the years before expansion began. In fact, we see a very large divergence in drug-related deaths rates between expansion and non-expansion states several years before 2014. Figure 1 shows that drug-related mortality rates began rising in expansion states relative to non-expansion states four years before the Medicaid expansion began. Since Medicaid enrollment was not growing differently in the two groups of states before 2014, any divergence in the development of the opioid epidemic during this period must signal that something else (unrelated to Medicaid enrollment) was driving drug-related

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6 Severtson et al. (2016; table 1) show that in 2009, the ratio of abuse incidents to prescriptions of OxyContin, for example, was 5-10 times higher than for other opioids. http://www.drugabuseandscholdependence.com/article/581776-8716(16)30925-5/fulltext
7 https://www.ncbi.nlm.nih.gov/pubmed/25765692
10 http://www.ipain.org/article/51525-580612001143-5/fulltext
mortality across these state groups.\textsuperscript{11} Knowing this, one cannot attribute ongoing mortality differences to the Affordable Care Act’s Medicaid expansion.

**Figure 1. Age-Adjusted Drug-Poisoning Mortality Rate by Medicaid Expansion Status, Ages 25-54, 1999–2016**

*Drug-related mortality grew most in counties least affected by the Affordable Care Act*

The Affordable Care Act’s coverage provisions had drastically different impacts in different local areas, but drug-related mortality actually grew most in the areas where the Affordable Care Act had the smallest effects on coverage. In Maryland, for example, 6 percent of people in wealthy Howard County were uninsured in 2013, compared to about 16 percent of people in relatively poor Wicomico County. In 2016, however, after the ACA’s coverage provisions—including Maryland’s Medicaid expansion—were in effect, uninsured rates fell to 2 percent in Howard County and all the way to 6 percent in Wicomico County.\textsuperscript{12} Despite experiencing more than double the coverage gains, however, Wicomico’s drug mortality fell by 1.4 deaths per 100,000, while Howard County’s drug mortality rate rose by 8.5 deaths.

\textsuperscript{11} Simon, Soni, and Cawley (2017) (Figure 1) shows no divergence in adult insurance rates between expansion and non-expansion states from 2010 and 2013 using data from the Behavioral Risk Factor Surveillance System. Duggan, Goda, and Jackson (2017) (Figure 9) show no divergence in adult insurance rates between local areas with higher versus lower eligibility for the ACA Medicaid expansion from 2010 to 2013 using American Community Survey data. Ghosh, Simon, and Sommers (2017) (Figure 1) shows no divergence between expansion and non-expansion states in Medicaid-funded prescription rates across the quarters of 2013 using proprietary data from a large, nationally representative, all-payer pharmacy transactions database. Maclean and Saloner (2017) (Figure 4) shows no divergence between expansion and non-expansion states in Medicaid-funded prescription rates between 2013 and 2013 using Treatment Episodes Dataset.

\textsuperscript{12} https://www.census.gov/quickfacts/fact/table/williamsoncountytennessee,cartercountytennessee/PST045216
Our post shows that this relationship—larger increases in drug-related mortality in areas with smaller increases in insurance coverage—holds nationwide. In expansion states, the top 10 percent of counties according to 2013 uninsured rates gained about 14 percentage points of insurance coverage and saw increases in drug-related death rates of about 2 deaths per 100,000. The bottom 10 percent of counties, on the other hand, had smaller growth in insurance coverage (4 percentage points), but four times the increase in drug-related death rates (8.5 deaths). This is the opposite of what we would see if Medicaid (or health insurance) increased drug mortality.

Medicaid Expansion and Opioid-Related Drug Charges

Much of the new evidence in this report involves data gathered by the majority staff on Medicaid fraud charges related to opioids. While we applaud the committee for their work in collecting such detailed information on Medicaid opioid fraud cases, the interpretation of this information in the majority report is quite misleading.

The majority finds that “more than 80 percent of the 298 separate Medicaid-opioids cases identified were filed in Medicaid expansion states.” The 2015 American Community Survey shows that 70 percent of adult Medicaid recipients reside in expansion states (Raggles et al. 2010). It is not a surprise that most Medicaid-related fraud occurs in the states with the most Medicaid recipients.

The majority also finds that “the number of criminal cases increased 55 percent in the first four years after Medicaid expansion.” The number of adult Medicaid recipients grew by 50 percent during this period. It is not a surprise that Medicaid-related fraud cases grew at essentially the same rate as the number of people in the adult Medicaid population.

Despite these limitations, we agree that criminal justice data are an important resource for generating evidence on any Medicaid and opioid abuse connection. Here we present several different pieces of evidence that use such data.

Opioid-related Medicaid fraud is rare

Mr. Schalk claimed that the “true number of those that are abusing the system would likely be staggering”, although he was not able to quantify the amount of abuse. The majority report also argues that its compilation of 298 cases is a “conservative estimate”. Criminal justice data, however, do not point to opioid-related Medicaid fraud as a “large” problem.

To supplement the majority’s analysis, we collected official statistics on the activities of Medicaid Fraud Control Units (MFCUs) from the Office of the Inspector General (OIG). These include the total number of investigations, indictments, and charges by state measured separately for fraud and abuse/neglect. There were almost 19,000 MFCU investigations in 2016, about 16,000 of which were for fraud. The number of convictions, however, is much smaller: 1,564 convictions in 2016, 1,160 of which were for fraud, only a fraction of which would have been for opioid-related crimes.

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13 The committee describes its search-based fraud data as “thorough” but “not scientific or comprehensive” (pg. 17).
14 https://oig.hhs.gov/oei/publications/oig-mfcu-index.asp
As a share of all adult Medicaid recipients, fraud is rare.\textsuperscript{15} Even if we assume that all fraud investigations are initiated against recipients (which as the committee noted is not the case), less than 0.05 percent of adult Medicaid recipients are investigated for fraud in any year, and less than 0.01 percent are convicted. For comparison, we calculated an opioid conviction rate for the average adult in Wisconsin. Out of about 3.6 million adults (18-64) in Wisconsin, 998 people were admitted to prison in 2016 on opioid-related drug charges.\textsuperscript{16} This yields an opioid conviction rate among adult Wisconsinites of 0.028 percent—more than double the already inflated fraud conviction rates (ie, not only opioid fraud, and not only fraud committed by recipients) among adult Medicaid recipients.

Actually, the fraud cases summarized in the majority report show that in about half of criminal cases (48 out of 100) the defendant is a doctor. Because the number of actively licensed physicians in the United States (950,000\textsuperscript{17}) is just a fraction of the number of Medicaid recipients, this suggests that physicians commit opioid-related crimes at significantly higher rates than recipients do.

\textit{Medicaid expansion is unrelated to changes rates of fraud per Medicaid recipient}

The Affordable Care Act’s Medicaid expansion serves about 15 million people\textsuperscript{18} and has increased the share of adults on the program in expansion states by 5.5 percentage point compared to non-expansion states. The majority report argues that the Medicaid expansion covered the “people most susceptible to abuse” (pg. 4), which implies that the expansion population, which accounts for about one-third of adult recipients in expansion states, commits more opioid fraud than the pre-expansion Medicaid population. How would we expect the rate of fraud investigations among Medicaid recipients to change if the majority report’s claims were true? Suppose, for example, that these adults were investigated for fraud at twice the rate of the pre-expansion population: 0.1 percent. This implies that the rate of fraud investigations should have grown to 0.067 percent after 2014 and only in expansion states.\textsuperscript{19}

In contrast to this implication, the OIG data show no evidence of relative increases in fraud rates across states. Figure 2 plots Medicaid fraud rates over time in expansion and non-expansion states. Expansion states had a lower fraud rate in every year, and this difference (plotted in red) remained constant from 2010-2016. The raw number of fraud investigations did increase more in expansion states (4,638) than non-expansion states (1,161) after 2014, which shows that MFCUs had the capacity to prosecute more fraud cases and that they did so at essentially the same rate as before expansion.

From this we draw two conclusions. First, changes in the number of opioid-related Medicaid fraud cases come from changes in eligibility. Second, the expansion population is no

\textsuperscript{15} We calculated the number of adult Medicaid recipients using the American Community Survey (Ruggles et al. 2010).


\textsuperscript{17} https://www.pib.org/nfohok/PDF/Census/2016census.pdf

\textsuperscript{18} https://www.kff.org/health-reform/state-indicator/medicaid-expansion-enrollment/?currentTimeframe=0&sortModel=%7B%22sort1%22:%22%22%22Location%22%22sort2%22:asc%22%22%22%7D

\textsuperscript{19} This is because two-thirds of adult Medicaid recipients would have a fraud investigation rate of 0.05%, while one-third—the expansion group—would have a fraud investigation rate of 0.1% and $2/3^{*}0.05+1/3^{*}1 = 0.67$. 
more (or less) likely to commit fraud than the pre-Affordable Care Act adult Medicaid population. The report cites an article by Nicholas Eberstadt suggesting that as many as half on non-working childless adult men use Medicaid to obtain and abuse opioids (Eberstadt 2017). The evidence from the OIG, on the other hand, shows that expanding Medicaid to millions of such men did not affect the rate at which Medicaid recipients were investigated for or charged with fraud.

Figure 2. Medicaid Fraud Investigations per Adult Medicaid Recipient by Medicaid Expansion Status, 2010-2016

Medicaid expansion is unrelated to changes drug offense rates in the population

One criticism of this OIG analysis and of the majority’s court records search is that by only measuring crimes connected to Medicaid, both our analysis and the majority’s report fail to capture any crime-increasing effects of moving people onto Medicaid. In other words, crime rates among Medicaid recipients could remain unchanged, but aggregate drug crime rates could increase if more people move onto Medicaid.

To address this, we gathered state-level information on drug crimes from the FBI’s National Incident-Based Reporting System (NIBRS). The NIBRS covers part of 35 states and about one-third of the population, and has reported detailed crime statistics by state since 2011.20 We divided the total number of drug offenses by the covered population of each state and year to calculate drug offense rates not limited to Medicaid recipients. If Medicaid expansion

“incentivizes” opioid abuse, then we would expect to see a relative increase in the rate of drug offenses in states that added millions of new Medicaid recipients.21

Figure 6 plots the drug offense rate in expansion and non-expansion states and, again, shows no evidence that Medicaid expansion led to more drug crimes. Expansion states had a lower drug offense rate in every year, and the difference (plotted in red) slightly widened from 2011-2016. This provides no evidence that the historically large changes in Medicaid eligibility brought on by the Affordable Care Act had any effect on drug crimes.

Figure 3. Drug Offenses per Person by Medicaid Expansion Status, 2011-2016

Some research finds that Medicaid expansions to low-income adults authorized under Bush-era Medicaid waivers were associated with reduced crime (Wen, Hockenberry, and Cummings 2017). Fifteen states were granted such waivers, eight of which implemented broad adult eligibility expansions. These eligibility expansions immediately led to increased admissions rates into substance abuse treatment and reductions in both violent and property crime.

That Medicaid would have this effect makes sense given what we know about substance abuse treatment. Providing supportive housing to people with addiction has been shown consistently to reduce costs to the prison system and other associated criminal justice services

21 Because expansion recipients make up about 5.5 percent of the population in expansion states, they would have to commit a lot of crimes in order to change the overall drug crime rate. This is relevant, however, since high-crime rates among the expansion population is exactly what the committee report alleges, and diversion of opioids could create a pool of people potentially arrested for drug possession that is much larger than the expansion population alone.
Providing evidence-based treatment services, through medication assisted treatments like naltrexone or methadone, to people with opioid addiction has been associated with reduced criminal behavior (Deck et al. 2009). Medicaid pays for many of these treatments. It is then logical that providing Medicaid coverage to people with addiction can reduce crime more broadly, save the state money in the criminal justice system, and potentially reduce fraud in the Medicaid program.

### Appropriate Use of Opioids

We argued in our *Health Affairs* piece that much of the difference in opioid prescribing rates between Medicaid and other insurers can be explained by the population that Medicaid covers. Medicaid patients—the elderly, disabled, or people who have high medical expenses—often have greater need for pain management than the population at large. As we argued in the *Health Affairs* blog the traditional Medicaid population report pain at a rate that approximately equals their greater use of opioid medications compared to the general population. The fact that these patients use opioids does not necessarily mean that they engage in fraud or abuse of prescription drugs, it may largely reflect the appropriate use of pain relief medication.

In the committee hearing, Senator Paul argued that doctors can prescribe alternative forms of pain relief, and it is true that in the last few decades, doctors have been overprescribing narcotics for pain. However, it is a leap in the evidence reported here and elsewhere that physicians make different prescribing decisions based only on health insurance status.

### Experimental evidence shows no effect of Medicaid on opioid use

In 2008, the state of Oregon randomly offered Medicaid eligibility to thousands of applicants on the waiting list for an auxiliary program for adults. A team of researchers has since used this Medicaid lottery to evaluate the effects of Medicaid on a range of outcomes by comparing lottery winners to losers in a way that mimics a true randomized experiment—the gold standard for understanding whether we can attribute causality, rather than correlation. Concerns about underlying differences in demographics, behaviors, health systems, or illicit drug markets are fully controlled in such an analysis.22

The most recent analysis of OHIE data fails to find any effect of Medicaid eligibility on opioid prescription rates (Baicker et al. 2017). Adults chosen at random from the pool of applicants to receive Medicaid eligibility were no more likely to fill opioid prescriptions than an essentially identical group who did not gain Medicaid eligibility. This fails to support the majority report’s claim that Medicaid “fuels” the opioid epidemic.

The authors do note that the opioid epidemic has changed since their study period, although we note that these changes imply a smaller role for Medicaid expansion and Medicaid fraud. The street price per milligram of prescription opioids has fallen since 2010 (Severtson, Ellis, et al.), both because ADF formulations are harder to abuse (and command lower prices)

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22 HSGAC has already heard from one of the lead authors, Dr. Kate Baicker whose testimony on September 6, 2017 included several citations to her work on the Oregon Health Insurance Experiment (OHIE).
and because heroin has become cheaper.\textsuperscript{22} The value of diverted opioids was therefore much higher when this study took place than today, yet adults who were randomly offered potentially lucrative Medicaid coverage were no more likely to fill opioid prescriptions.

**Summary of evidence**

Drug-related mortality rates have recently risen faster in states that took up the Affordable Care Act’s Medicaid expansion than states that did not. The majority report also documents a range of cases in which Medicaid recipients commit fraud to obtain opioids, and points out that many of these cases have occurred in expansion states since 2014. The major claim of this report is that Medicaid or the Affordable Care Act’s Medicaid expansion causes these behaviors. A more systematic analysis shows that these claims are unsupported.

The most important developments in the opioid epidemic since 2010 involve illicit opioids, not the kinds of prescription opioids that Medicaid provides. In fact, rates of prescription abuse and mortality have fallen along with the street price of these drugs. These developments also appear to have begun in expansion states long before the Medicaid expansion began, and so cannot be attributed to the expansion itself. Furthermore, drug-related deaths have grown fastest in the areas least affected by the ACA’s coverage provisions.

Importantly, these conclusions are supported by recent experimental evidence showing that Medicaid eligibility does not increase opioid prescription rates, but may increase mental health treatment (including substance abuse treatment).

Moreover, rates of fraud among Medicaid recipients are low and did not change after the Affordable Care Act extended coverage to 15 million new adults. Rates of overall drug crime have also remained relatively constant in both expansion and non-expansion states since 2010. Neither of these patterns are consistent with a large effect of Medicaid on opioid-related fraud.

**Conclusion: What is Medicaid doing and what more can it do to combat opioid abuse?**

Our statement focuses on the quality of evidence for claims made by the committee’s majority report, by Senator Johnson, and others, regarding the effect of Medicaid on the opioid epidemic. A much more productive direction for congressional deliberation on this issue relates to ways that Medicaid can help curb opioid abuse and its consequences as we move forward. Medicaid’s reach and target population uniquely position it to be a leader in combating the opioid epidemic by reducing overprescribing and increasing access to evidence-based treatment.

States can take steps to ensure that Medicaid does not pay for suspect prescriptions and ensure the prescriptions are given only to people who need them. The hearing touched on issues such as the role of physician drug monitoring programs (PDMPs) which, when structured to ensure that physicians use them, can succeed in curtailing overprescribing and abuse (Buchmueller and Carey forthcoming). In both fee-for-service Medicaid and Medicaid managed care, states have begun to adopt other policies to curtail abuse, including preferred drug lists; prior authorization, and limits on the amount of opioids that can be dispensed in general or

\textsuperscript{22} One unique and valuable data source on the price of diverted drugs is streets.com, which collects user self-reports on drug types and prices.
specifically for high-risk patients (patient review).24 Since most Medicaid beneficiaries are covered by managed care organizations, there is an opportunity for these groups to develop better ways to manage pain as well as connect patients with addiction to treatment. Medicaid’s role as a major payer is central to its ability to influence provider behavior, because blanket warnings from the FDA, or even targeted ones from CMS, seem not to work (Sacanay et al. 2016).

Limits on the supply of prescription opioids will not be enough. These policies may be effective at curbing some new addictions, but they carry the very real risk of leading currently addicted patients to substitute toward riskier drugs (Alpert, Powell, and Pacula 2017). Therefore, limits on Medicaid eligibility or opioid supply alone could make things worse. To complement efforts that take aim at the supply of opioids, Medicaid must work to connect more people currently suffering from addiction to effective treatments. Evidence shows that access to evidence-based treatment programs improves adherence to addiction therapy, which can reduce mortality, increase employment, and reduce crime.

Medicaid may also stand to save money if it can more effectively address opioid addiction. For example, in 2009, the average infant born with neonatal abstinence syndrome cost $53,540, and total costs were $720 million. Medicaid paid for 77.6 percent of these costs (Patrick et al. 2012). Opioid abuse can have costly spillovers in many other areas of care, too, such as HIV or hepatitis C.

The opioid addiction battle will not be resolved with a silver bullet and there are many ways that Medicaid can play a leading role going forward. Medicaid can be a leader in both improving responsible prescribing and treatment of opioid addiction. We urge the committee to turn its attention to problems and policies supported by evidence, providing treatment while balancing the role of treating pain.

Citations


The following are my comments to the Senate Homeland Security and Governmental Affairs Committee in response to some of the testimony given at the hearing held on January 17, 2018. Thank you for the opportunity to submit comments.

My office sees the opioid epidemic in every aspect of our work — from child protection and child support matters to medical examiner’s cases, prosecution of traffickers, murderers, health care crimes and pharmaceutical diversion by medical professionals.

The Maine facts:

Maine did not expand its Medicaid program during the time period in which many states did. In fact, it drastically reduced coverage beginning in 2012.

Just recently, Maine voters made our state the first in the nation to approve Medicaid expansion at the ballot box.

Opponents who argue that Medicaid or expansion is fueling the opioid epidemic by giving people unfettered access to prescription opioid medication are attempting to draw a causation argument that simply does not bear out. While Medicaid may have been a part of the past national trend of overprescribing opioids – there is no evidence to suggest it was unlike any other insurance type at the time.

Maine went in the opposite direction of expansion and dropped people from Medicaid coverage, decreasing their access to health care. At the same time as the state was reducing coverage, the opiate overdose deaths increased at an alarming rate.

Kaiser’s state data shows Maine’s opioid death rate exceeded the national average in 2013, 2014 and 2015, the last year for which it has reported numbers.

In 2015, Maine’s overdose death rate per 100,000 population was 19.3 percent, an increase of 41 percent from the prior year. In 2014, the rate was 13.7 percent, which was an increase of 38 percent over the prior year. In 2013 the rate was 9.9 percent, up 25 percent from the prior year.

Prior to 2013 and during this increasing spike in overdose deaths, three groups of Maine people lost their Medicaid coverage:
• Childless adults (non-categoricals): Enrollment began to decline from approximately 18,000 members when the state budget first froze enrollment in January 2012 and then terminated this coverage completely in January 2014.
• Parents with incomes between 151-200 percent of poverty level: This group was phased out completely by June 2013.
• Parents with incomes between 101-150 percent of poverty level: This group was phased out between January 2014 and June 2015.

Many people in both of these low-income parent groups received “transitional Medicaid” for up to 12 months if they were working, and most of them were in fact working.

Maine is experiencing the full force of this opiate epidemic with many of its citizens unable to access medication assisted treatment due to lack of Medicaid coverage.

In 2015 an estimated 15,000 people received treatment for substance-use disorder in Maine, while another 25,000 could not get treatment because of a lack of capacity or lack of insurance.

More alarmingly, in 2017, 952 drug-affected infants were born in Maine, according to the Department of Health and Human Services. In the last decade, 7,708 babies were born affected by drugs, 1,024 in 2016 alone, representing approximately 8 percent of all live births in Maine.

Any Maine policy maker here during the early years of Governor LePage’s administration knows that it was Medicaid funding that garnered impressive results in helping people get off of opiate medications through alternative therapies and limiting prescriptions of painkillers.

One of the reasons Maine voters supported Medicaid expansion last year is that more substance abuse treatment options are needed, not fewer. One of the surest ways out of this epidemic is treatment. Medicaid must be a part of the solution.

There is no silver bullet to this complex problem, which is not simply a public safety or law enforcement matter, but a full-blown public health crisis that leaves thousands of children without a parent, communities devastated, employers without a healthy workforce, and families torn apart.

The shrinking of Medicaid coverage in our state from 2012 to 2016 only exacerbated the opiate problem in Maine. Expanding Medicaid in the coming years unquestionably will keep more people healthy and help us address this devastating epidemic.

Janet Mills is the Maine Attorney General and a member of the Task Force to Address the Opioid Crisis in the State of Maine and the Maine Opiate Collaborative.
January 17, 2018
United States Senate Homeland Security and Governmental Affairs Committee

Hearing Entitled “Unintended Consequences: Medicaid and the Opioid Epidemic”

Statement for the Record Submitted by Planned Parenthood Federation of America

Planned Parenthood Federation of America is pleased to submit testimony regarding the critical role the Medicaid program plays in addressing the nation’s opioid epidemic.

Planned Parenthood is the nation’s leading provider and advocate of high-quality, affordable health care for women, men, and young people, as well as the nation’s largest provider of sex education. With more than 600 health centers across the country, Planned Parenthood health centers provide affordable birth control, lifesaving cancer screenings, testing and treatments for STDs and other essential care to nearly three million patients every year. Nearly 75% of Planned Parenthood patients have incomes at or below 150 percent of the federal poverty level, and are among the most vulnerable, facing limited access to reliable and affordable health care.

First, it is important to note that Medicaid is a women’s health program. Having access to health care, including birth control and other family planning services, makes it easier for women to find and keep jobs, which in turn benefits their children and families. Women are the majority of Medicaid enrollees and Medicaid covers one in five women of reproductive age (15-44). Due to racism and other systemic barriers that have contributed to income inequality, women of color disproportionately comprise the Medicaid population. For example, 30 percent of African-American women and 24 percent of Hispanic women are enrolled in Medicaid, compared to only 14 percent of white women. Additionally, Medicaid is the largest payer of reproductive health care. In fact, for nearly half of women going birth, Medicaid is the source of coverage for essential care, including prenatal and delivery care. And 75 percent of publicly-funded family planning services are covered by Medicaid.

The opioid epidemic has significantly impacted women. The number of women hospitalized with opioid-related conditions grew 75 percent from 2005 to 2014, compared to 55 percent for men. The number of women dying from overdose of prescription drugs rose 471 percent between 1999 and 2015, compared to 218 percent in men. Heroin deaths among women increased at more than twice the rate than among men. In rural areas, where the opioid crisis has hit hardest, pregnant women and women experiencing partner violence are among populations with higher...
prevalence of misuse of prescription pain relievers. In addition, adolescent women are more likely than adolescent men to misuse prescription drugs.

Attacks on Medicaid would limit substance abuse treatment at a time when this country is in the middle of this crisis. Under the ACA, millions more women were able to enroll in Medicaid, which is considered central to addressing the opioid crisis; after enactment of the ACA’s Medicaid expansion, hundreds of thousands of Americans with substance use disorders gained health insurance coverage for the first time. In fact, Kentucky saw a 700 percent increase in Medicaid enrollees taking advantage of substance use treatment, while a national study found that Medicaid expansion reduced the unmet need for substance use treatment by 18.3 percent. Attacks on the ACA last year would have caused many of these people, including women, to become uninsured by cutting benefits, ending Medicaid expansion and imposing drastic funding cuts to Medicaid.

Medicaid enrollees disproportionately comprise the population with OUDs and have a higher risk of opioid overdose. Yet, Medicaid enrollees are also more likely than privately insured individuals to seek treatment for OUD. Medicaid covers the vast majority of costs to treat neonatal abstinence syndrome (NAS), a condition that can result from opioid use during pregnancy. In 2012, Medicaid paid for 81 percent of the $1.5 billion in hospital charges to treat NAS. With the AHCA’s severe funding cuts, state efforts to treat NAS could come to standstill. Data from the Centers for Disease Control and Prevention (CDC) and several state Medicaid programs have found that people with opioid use disorder incur health care costs that range between $11,000 and $12,000 per year. Cuts or weakening protections under Medicaid would likely force states to roll back coverage and cut benefits, including mental health and substance abuse treatment, such as counseling, detox, in-patient treatments and medication-assisted treatment (MAT). Loss of Medicaid coverage will only further exacerbate the nation’s growing opioid crisis.
Statement for the Record
Brendan Saloner, Assistant Professor
Johns Hopkins Bloomberg School of Public Health
February 1, 2018

Dear Chairman Johnson and Ranking Member McCaskill,

I am pleased to have the opportunity to submit a statement for the record in response to the January 17, 2018 Senate Homeland Security and Governmental Affairs Committee hearing entitled "Unintended Consequences: Medicaid and the Opioid Epidemic." I am a health services researcher at the Johns Hopkins Bloomberg School of Public Health. I have published over 50 peer-reviewed articles on issues related to health care policy for vulnerable populations, with a particular focus on Medicaid policy, health reform, and opioid use disorder.

The opioid crisis is an unprecedented public health challenge. Drug overdose is now the leading cause of injury death in the United States, and more people now die of overdose than died of HIV/AIDS at the height of that epidemic in the mid 1990s. It is heartening that leaders in Congress are paying attention to this issue, as Medicaid can provide a vital lifeline to services for those most directly impacted by this epidemic. I want to highlight three issues that frame the state of the public health evidence on Medicaid and the opioid crisis:

**No credible research establishes a causal relationship between Medicaid expansion and prescription opioid misuse**

- Senator Johnson has made the argument that rates of drug overdose increased more rapidly between 2013 and 2015 in Medicaid expansion states versus non-expansion states, apparently implying that Medicaid expansion accelerated the recent overdose crisis. This analysis was flawed in several fundamental respects. Most notably, while overdose deaths did rise faster in expansion states during this time period, this trend preceded the Affordable Care Act. Other analyses that have accounted for the pre-expansion trend (as is standard in natural experimental designs) finds no evidence that overdose rates accelerated after Medicaid expansion in expansion states.

- Medicaid provides health coverage to some of the poorest and most medically vulnerable Americans. Medicaid enrollees use prescription opioids at a higher rate than

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other groups in the population, but these elevated rates of opioid use are likely to reflect multiple factors including the higher prevalence of chronic pain among Medicaid enrollees.

- Several witnesses called by Senator Johnson claimed that prescription opioid diversion and abuse are uniquely high among Medicaid enrollees. However, I have not seen any credible evidence that quantifies the opioid diversion rate in Medicaid, or credibly compares diversion rates in Medicaid to other public and private insurance programs.
- All insurance programs should take steps to carefully manage the prescription of opioid pain relievers, ensuring that patients with appropriate pain needs have access to these medications while reducing their use in groups that may be more safely and effectively treated with non-opioid alternatives. Fortunately, state Medicaid programs are increasing their use of prescription management tools and exploring broadened coverage for pain therapies that may provide safer alternatives to opioids (e.g., physical therapy).

Credible research does establish a causal relationship between Medicaid expansion and treatments for opioid use disorder

- Opioid use disorder is a chronic illness, but it can effectively managed with medication-assisted treatments and counseling. All states now cover at least one of the FDA-approved medication-assisted treatments through their Medicaid programs.
- Before Medicaid expansion, many states were providing treatment to low-income adults using a patchwork of state and local funding. My coauthor and I find that Medicaid expansion has provided financial relief to state and local governments treating people with substance use disorders. After Medicaid expansion, reliance on state and local funding in Medicaid expansion states decreased by more than 50% compared to non-expansion states. This financial relief has bolstered the resource base to enable states to continue to invest in treatment programs, expanding the array of services available to people with opioid use disorder.
- Likewise, a recent study found that Medicaid-reimbursed buprenorphine (one of the main medications that treats opioid use disorder) increased by 70% in expansion states after the 2014 Medicaid expansion, relative to non-expansion states.
- The growing role of Medicaid financing for opioid use disorder treatment provides a foundation for continue improvements in access and quality of care. Scaling up treatment has an important societal payoff: when more people are treated, harmful

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substance use decreases, fewer people overdose, and crime and social services spending decrease.\textsuperscript{12,13}

Medicaid can be an important tool for aiding populations affected by the rapidly changing opioid crisis

- The opioid epidemic is rapidly changing. Addressing the prescription opioid issue is important, but it is also important to recognize that the majority of overdose victims are now dying from heroin and synthetic opioids like illicit fentanyl.
- Medicaid can play a role in multiple facets of the opioid crisis. The public health evidence base strongly supports the effectiveness of a multipronged strategy that includes addressing the high rates of trauma and adverse childhood experiences among people with opioid use disorder, expanded access to naloxone (the medication that reverses the overdoses), the use of peer recovery counselors to link individuals to treatment, efforts to more closely link treatment programs with law enforcement and programs for individuals leaving jails and prisons, and enhanced supports for family members of individuals with opioid use disorder (e.g., early intervention programs for children) in order to promote family stability and aid in the recovery of parents.
- Medicaid funding is increasingly being used for these innovative programs, and further support for states seeking flexibility with Medicaid funds to pursue these goals is likely to be beneficial.

In closing, the opioid crisis defies easy solutions, but there is a strong public health evidence base that supports the effectiveness of treatments like those currently reimbursed by all state Medicaid programs. Further progress can be made by linking treatment to multiple service systems to increase the safety of people with opioid use disorder and to provide linkages to supportive resources. State Medicaid programs will continue to rise to this challenge using their existing tools to monitor appropriate prescribing of opioid pain relievers while ensuring individuals who need help gain access to evidence-based treatments and social services.

Sincerely,

Brendan Saloner, PhD
Assistant Professor of Health Policy and Management
Johns Hopkins Bloomberg School of Public Health

The views expressed in this letter are my own, and do not necessarily represent those of Johns Hopkins University


June 22, 2018

By Email

The Hon. Claire McCaskill
c/o Laura Kilbride, Chief Clerk
Committee on Homeland Security and Governmental Affairs
U.S. Senate
Washington, DC 20510-6250
Email: laura_kilbride@hhsgac.senate.gov

Re: Additional Questions for the Record

Dear Senator McCaskill:

Thank you for the opportunity to supplement my testimony at the recent hearing entitled “Unintended Consequences: Medicaid and the Opioid Epidemic.” Enclosed please find my additional testimony for the hearing record in response to your questions.

Please do not hesitate to contact me with further questions. Your focus on these important issues is critical to understanding the country’s opioid addiction epidemic and to bringing the crisis under control.

Sincerely,

Andrew Kolodny, M.D.
Director, Opioid Policy Research Collaborative
Co-Founder, Physicians for Responsible Opioid Prescribing

Enclosure
Supplemental Testimony of Dr. Andrew Kolodny
Responding to Additional Questions for the Record From
Senator Claire McCaskill

1. Please explain how the Medicaid expansion has helped people with behavioral health conditions access the care they need.

Our nation’s opioid addiction epidemic has had a devastating impact on people at every socioeconomic level. Unlike past drug crises, like the crack cocaine epidemic of the 1980s, the current opioid crisis has hit low-, middle- and high-income families alike.

That said, low-income people who struggle with behavioral health conditions, including substance use disorders, encounter unique barriers to health care — not least of which is the inability to pay for the care they need.

Medicaid expansion has made it easier for low-income people to access the healthcare system. Improved access is critically important because, with affordable access to treatment, people with behavioral health conditions may get relief from their symptoms, see improvement in function, and achieve a higher quality of life.

This is particularly true in the case of the life-threatening disease of opioid addiction. Opioid addiction can be treated with medication. The prescription medication buprenorphine (Suboxone) is highly effective, and people with an opioid use disorder who are treated with buprenorphine can regain control of their lives, succeed in life and at work, and contribute to their families and communities.

Low-income people in states that have expanded Medicaid, in theory, have greater access to medication-assisted treatment for opioid addiction. I say “in theory” because, unfortunately, few healthcare providers offer buprenorphine treatment, and those who do often do not accept Medicaid for the office visit.

In practical terms, this means that low-income people in states that have expanded Medicaid may have a greater ability to pay for medicine to treat their opioid use disorder. But this benefit remains illusory for many people because they cannot find a doctor who prescribes the medicine, or when they do, they will still need to pay out-of-pocket for the office visits.

These practical barriers to access are harmful to Medicaid beneficiaries, but they are not unique to Medicaid. The lack of clinicians who prescribe buprenorphine prevents people at all income levels from accessing treatment. Moreover, clinicians who do prescribe buprenorphine frequently do not accept Medicaid or private health insurance. So even patients with private insurance often must pay out-of-pocket for the office visits.

Medicaid expansion is a necessary step to improve access to treatment for people with opioid use disorder, but Medicaid expansion alone is not sufficient. If we hope to bring our opioid epidemic
under control, we also must address the lack of clinicians who provide treatment for opioid use disorder, as well as the lack of clinicians who accept Medicaid and private health insurance for this potentially life-saving treatment.

2. In your experience as a physician, what are the factors most likely to help someone struggling with addiction succeed?

In my experience as a physician, people struggling with opioid addiction most often seek treatment when using opioids becomes too expensive, burdensome, and time-consuming. A typical patient will say, “I’m broke, exhausted and miserable. I can’t do this anymore, and I need help.”

The key factor in helping people with opioid addiction is ensuring that affordable medication-based treatment is easier to access than opioid analgesics, heroin, and fentanyl. Most people with opioid addiction will not recover if they are treated using an abstinence-only based approach. Counseling alone also does not work for most people. However, treatments that include medication—specifically, an opioid-agonist medication such as buprenorphine—can be highly effective and offer people with opioid addiction the best chance of recovery and prolonged remission.

3. Are people struggling with addiction more likely to regain their health, engage in their communities, and hold a job if they have access to health care?

Absolutely. Access to health care, particularly medication-based treatments for opioid addiction, is essential to bringing our nation’s opioid crisis under control.

When they have access to effective treatment, people struggling with opioid addiction can and very often do become fully functional. Indeed, in my 15 years of experience treating opioid addiction, I have helped many patients return to full-time employment, graduate college, get married, start families and become productive members of the communities.

4. Please explain what caused the trending increase in opioid related deaths nationally and whether this trend predates the ACA and whether the main driver of recent spikes of overdose deaths are non-prescription opioids, such as heroin and fentanyl, and not the prescription drugs that Medicaid covers?

The rapid increase in deaths from opioids began in the 1990s. As the Centers for Disease Control has explained, that rapid increase in overdose deaths was the direct result of a sharp increase in prescribing of opioid medications by the medical community.

The sharp increase in prescribing in the 1990s was caused by a multi-faceted advertising campaign—created and disseminated, directly and indirectly, by opioid manufacturers—that overstated the benefits of opioid medications and vastly understated their risks. In response to this brilliant campaign, the medical community began prescribing opioids more aggressively, leading to a rise in opioid addiction and overdose deaths.

The more recent increase in opioid overdose deaths has nothing whatsoever to do with the ACA or Medicaid coverage for prescription drugs. However, the actual cause for the increase in
deaths requires some explanation.

Since the 1990s, when the crisis began, people who become addicted to opioid medications often switch to heroin if they live in regions of the country where heroin is available and less expensive than prescription opioids. This “switching” from prescription opioids to heroin is not a new phenomenon, and in fact, there is no evidence that the rate of switching increased suddenly.

What has changed is the deadliness of the heroin supply. In recent years, the nation’s heroin supply has become much more lethal because of fentanyl. Fentanyl, which drug dealers often mix with heroin or actually misrepresent as heroin, is far more potent than heroin and even miniscule amounts of the drug can be fatal. Consequently, even though the rate of people switching from prescription opioids to heroin has been fairly constant, overdose deaths resulting from such switching has increased because fentanyl has made the heroin supply more deadly.

5. Why is having access to a full range of health care services, as well as reducing the misuse of prescription medications, important to prevent substance use disorders such as opioid addiction?

Access to health care is important to treating people who suffer from opioid addiction, but improving access to healthcare is unlikely to prevent opioid addiction. Rather, to prevent opioid addiction, the medical community must prescribe opioid medication much more cautiously.

6. During your time in New York City, you worked with Medicaid beneficiaries and also served as a Medicaid provider at one point. Can you help us understand why Medicaid patients, particularly individuals who qualify through disability, are routinely prescribed more opioids than the general public?

I am not convinced that Medicaid beneficiaries are more likely to receive an opioid prescription. In fact, data indicate that older adults are the population in the United States most likely to be prescribed an opioid, and older adults more often are insured by Medicare, not Medicaid.

What is true is that opioid use can prolong or even increase disability. For example, patients who qualify for Medicaid due to a disabling injury or chronic pain are less likely to return to work if they are treated with an opioid medication than patients who receive non-opioid medications or non-pharmacological therapies such as physical therapy.

7. Do you believe that because Medicaid beneficiaries are prescribed more opioids than the general public, that Medicaid expansion is fueling the opioid epidemic?

I do not believe that Medicaid expansion is fueling the opioid epidemic. What is fueling the opioid epidemic is aggressive prescribing by the medical community, and there is no evidence that the prescribing practices of doctors and dentists are different for Medicaid patients. Indeed, if anything, I believe that Medicare beneficiaries are prescribed the most opioid medications.

8. Please explain how the pharmaceutical industry created and legitimized a public education campaign to help doctors overcome their “opiophobia”?
Our opioid addiction epidemic — now the worst drug epidemic in U.S. history — was caused by a significant change in the way the medical community prescribes opioid analgesics.

Specifically, in the mid-1990s, we in the medical community began prescribing opioids at increasingly higher rates, and we began prescribing these medicines for more conditions. No longer were opioid medications reserved for short-term, painful conditions like pain after major surgery or to ease suffering at the end of life. Physicians began prescribing opioid medications for common moderately painful conditions such as low-back pain, arthritis and fibromyalgia.

Opioid medications are highly addictive. Consequently, as the number of prescriptions for opioid medications skyrocketed, we saw parallel increases in the number of people suffering from opioid addiction, opioid overdoses, and deaths.

The medical community became more aggressive in our use of opioids because we were responding to a multi-faceted marketing campaign. Enlightened medical providers, we were told, should not allow patients to suffer needlessly. We should recognize pain as a “fifth vital sign” and think of opioids as a “gift from mother nature” to deliver compassionate care. Moreover, the marketing campaign portrayed doctors and dentists who were reluctant to prescribe opioids as uncompassionate and uninformed “opiophobia.”

Today, we know that this brilliant marketing campaign—designed and executed by opioid manufacturers—exaggerated the benefits of opioids and minimized the risks of long-term use, especially the risk of addiction.

Of course, we in the medical community might have been less gullible if we had only heard these messages from advertisements or pharmaceutical sales representatives. But we also heard these messages from physicians eminent in the field of pain medicine, from the Joint Commission, and even from state medical boards. What the public is learning now—but has yet to be fully uncovered—is the role that opioid manufacturers played in duping these authorities in their campaign to increase opioid prescribing.