

**REDUCING HEALTH CARE COSTS:
ELIMINATING EXCESS HEALTH CARE
SPENDING AND IMPROVING QUALITY
AND VALUE FOR PATIENTS**

HEARING
OF THE
**COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS**
UNITED STATES SENATE
ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

ON

EXAMINING REDUCING HEALTH CARE COSTS, FOCUSING ON ELIMI-
NATING EXCESS HEALTH CARE SPENDING AND IMPROVING QUALITY
AND VALUE FOR PATIENTS

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JULY 17, 2018
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**REDUCING HEALTH CARE COSTS:
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Tuesday, July 17, 2018

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The Committee met, pursuant to notice, at 10:05 a.m. in Room SD-430, Dirksen Senate Office Building, Hon. Lamar Alexander, Chairman of the Committee, presiding.

Present: Senators Alexander [presiding], Collins, Cassidy, Young, Scott, Murray, Bennet, Baldwin, Warren, Hassan, Kaine, and Smith.

OPENING STATEMENT OF SENATOR ALEXANDER

The CHAIRMAN. The Senate Committee on Health, Education, Labor, and Pensions will please come to order.

Senator Murray and I will each have an opening statement, and then I will introduce the witnesses. We welcome each of you and we would ask you to summarize your remarks in 5 minutes, and then we will have a 5-minute round of questions from Senators.

A retired engineer in Tennessee, who suffers from a number of health problems—diabetes, high blood pressure, depression, and chronic pancreatitis—visited Vanderbilt University Medical Center’s emergency room 11 times last year and had to be admitted to the hospital 3 times.

At Vanderbilt, a pattern like that is a flag for Vanderbilt’s Familiar Faces program started in 2017 to identify patients with chronic diseases, who make frequent visits to the emergency room and clinics, often resulting in hospital stays.

Emergency room visits and hospital stays are expensive for patients and the health care systems as a whole. So the Familiar Faces program works to help those patients reduce the amount of time they spend in the hospital by developing a plan to help patients better manage their chronic conditions by receiving regular care and treatment.

After participating in the Vanderbilt Familiar Faces program since September 2017, the retired engineer has been able to avoid the emergency room completely, instead only visiting an outpatient clinic twice.

This is the second in a series of hearings to look at how to reduce health care costs as they continue to increase for families, taxpayers, and employers.

Our focus today is on reducing wasted health care spending, which is important given the estimated amount we spend on unnecessary services, such as the visits to Vanderbilt's emergency room I just described, excessive administrative costs, fraud, and other problems. It is a great, big number \$750 billion in 2009 or as much as 30 percent of our total health care spending according to the National Academies.

At today's hearing, we will discuss two of these categories of wasteful spending:

One, unnecessary spending. This is spending that does not actually help patients get better or was spent on unnecessary medical tests, services, procedures, or medications.

Two, lack of preventive care. This results in spending money on health care services that could have been avoided if the patient had received care earlier.

Unnecessary spending is a burden on the health care system, and on the patients who undergo tests and procedures that may not be medically necessary who are then stuck with the bill.

We need to find ways to improve care and maximize the quality of the health care patients do receive by looking at what medical tests, services, procedures, or medications are really necessary. Or, are there more cost-effective alternatives?

Here is an example of a more cost-effective alternative:

If Sue has minor back pain, instead of her doctor ordering a CT scan or an MRI, which are expensive, Sue would likely be better off taking over-the-counter medicine, using heat, and exercising according to the American Academy of Family Physicians.

Another example is educating a patient on the cost difference between a hip replacement surgery at a hospital where the procedure will cost a lot more than if the patient had the same procedure, even with the same surgeon, at an outpatient clinic.

Wasted health care spending can also come from not spending enough on preventive care. The Cleveland Clinic has said that if you achieve at least four of six normal measures of good health in two behaviors, you will avoid chronic disease about 80 percent of the time.

The six indicators are: blood pressure, cholesterol level, blood sugar, Body Mass Index, smoking status, and the ability to fulfill the physical requirements of your job.

The two behaviors are: seeing your primary care physician regularly and keeping immunizations up to date.

This is important because we spend more than 84 percent of our health care costs, or \$2.6 trillion, treating chronic diseases, according to Dr. Roizen at the Cleveland Clinic, who testified before our Committee last year.

However, according to the Organization of Economic Cooperation and Development, the U.S. has the highest obesity rate in the world at 38 percent. So it seems we are not doing a very good of taking care of ourselves.

At this second hearing, I hope to learn from our witnesses specific recommendations on how to start investing more in preventive

care, how to stop spending money on unnecessary medical tests, services, procedures, or medications.

We have four distinguished witnesses today who are implementing innovative strategies to encourage better care, as opposed to just more care, and to encourage patients to live healthier lives. I look forward to their testimony.

Senator Murray.

OPENING STATEMENT OF SENATOR MURRAY

Senator MURRAY. Thank you, Mr. Chairman.

Before I begin, I do want to emphasize how important it is that we all continue to hold the Trump administration accountable for the chaos and heartbreak it has caused thousands of children it has cruelly and needlessly separated from their parents.

We have gotten some updates, but there are still a lot of questions that have not been answered, a lot of families that have not been reunited, and therefore a lot of work that has to be done fast.

I am absolutely not going to let up on holding the Trump administration accountable on this. I am going to keep asking questions, and demanding answers, and fighting to make sure those kids and their families are being treated fairly and humanely.

Now today, as we continue our discussion on health care costs I, too, have heard from families across my State of Washington, who feel overwhelmed by the burden of skyrocketing prescription drug costs, rising premiums, and surprise medical bills that they were not expecting. I know families across the country feel the same way.

Unfortunately, the President has utterly failed to address the problem of rising health care costs. While drug companies have raised prices sky high, President Trump has not taken any meaningful action.

Instead, he has enabled the industry's bad behavior by touting a drug pricing blueprint so empty it sent pharmaceutical stocks soaring, and pretending Pfizer's decision to temporarily delay a price hike is the same as a price cut.

In fact, we confirmed last week that some of the policies in his blueprint were actually proposed by the pharmaceutical industry. That is not reform. That is an inside job, and patients around the country struggling to pay for their prescriptions know the difference.

When it comes to helping people afford the care that they need, President Trump's record is worse. Since day one, President Trump has never wavered in trying to undermine families' health care and raise their costs.

After families across the country stood up and rejected the Trumpcare bills that would have spiked premiums and gutted Medicaid, and put families back at the mercy of the big insurance companies—who could have priced people with preexisting conditions out of care—he decided to do everything he could to sabotage families' health care from the Oval Office by:

Championing tax cuts that benefitted massive insurers and drug companies, but were paid for by policies that even his former Health Secretary admitted would increase premiums for families;

Slashing investments in helping people understand their health care options and get covered;

Handing control back to insurance companies, making it easier for them to sell junk plans that ignore patient protections—like those for people with preexisting conditions, women, and seniors—leaving them unable to afford care.

After Justice Kennedy announced his retirement from the Supreme Court, President Trump took one of the most concerning steps yet to sabotage health care for families.

As a candidate, President Trump promised he would pick Supreme Court nominees who would support his efforts to rollback preexisting condition protections. And last week he picked Judge Kavanaugh, someone who was vetted by far-right groups to do just that.

President Trump clearly does not doubt Judge Kavanaugh would strike down protections for people with preexisting conditions, so we should not doubt it either.

For patients across the country, the future of the Supreme Court is not a matter of partisan politics. It is a matter of life and death.

So I hope Republicans are listening to the people across the country speaking out about their concerns. I also hope they will listen to families who want us to work together to reduce health care costs.

Previously in this Committee, we actually made some promising progress. We sat down and hammered out a bipartisan compromise that would have helped bring down health costs for patients and families facing higher premiums this year. I was deeply disappointed that Republican leaders blocked our bipartisan legislation.

But I want you to know, Democrats still are at the table. We are still interested in finding commonsense solutions to help reverse some of the damage of President Trump's health care sabotage, and reduce these skyrocketing costs families across the country are struggling to pay.

In addition to resuming that bipartisan work to address those rising health care premiums, I am hopeful we can start working to find common ground on other challenges families face when it comes to health care costs.

At our last hearing on this issue, the Chairman and I both shared stories from patients in our home states who had struggled with unexpected health care costs due to surprise balance-billing. Patients who had insurance, but were caught off guard by large charges from out-of-network care providers, even if they went to an in-network hospital.

I know other Members of the Committee are interested in addressing this as well. I am eager to hear their ideas.

Thank you, Mr. Chairman, and thank you to all of our witnesses for joining us today. I look forward to hearing from all of you.

The CHAIRMAN. Thank you, Senator Murray.

Thanks to the witnesses for coming.

The first witness we will hear from—and we will go from right to left, from our right to left—is Dr. Jeff Balsler, President and Chief Executive of Vanderbilt University Medical Center and Dean of the Vanderbilt University School of Medicine.

Under his leadership, Vanderbilt Medical Center has reduced spending on unnecessary health care, including a \$230 million cost reduction from 2013 to 2014.

Next, we will hear from Dr. Steven Safyer. He is President and Chief Executive Officer of Montefiore Health System in New York.

Previously, he held a number of other leadership roles at the Health System including Senior Vice President and Chief Medical Officer.

Next, we will hear from Dr. David Lansky. He is President and Chief Executive Officer of the Pacific Business Group on Health in California. That is a coalition of 60 private and public organizations that are looking at ways to promote high quality and more affordable health care.

Finally, Dr. Brent James, Clinical Professor in the Department of Medicine at the Stanford University School of Medicine in California. He is a Member of the National Academy of Medicine and their Institute of Medicine where he helped with a 2013 report on how to provide better care at lower cost.

Welcome to each of you.

Dr. Balsler, let us begin with you and go down the line.

STATEMENT OF JEFFREY R. BALSER, M.D., PH.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER, VANDERBILT UNIVERSITY MEDICAL CENTER, DEAN, VANDERBILT UNIVERSITY SCHOOL OF MEDICINE, NASHVILLE, TENNESSEE

Dr. BALSER. Chairman Alexander, Ranking Member Murray, and Members of the Committee.

Thank you for the opportunity to speak with you today about how we can reduce unnecessary health care spending.

My comments are informed by experiences leading the Vanderbilt University Medicine Center, a large academic health center with the honor of serving people nationwide in research, through training and, of course, clinical care.

We see over 2 million patient visits per year in our hospitals and over 140 clinics throughout Tennessee and the surrounding five state region. We impact the care of many more people in that region through an affiliated health care network that we have built with over 5,000 clinicians in 60-plus hospitals.

As Senator Alexander mentioned in his comments, the trillion dollars of annual waste in health care has many causes, but an aspect I will highlight today is our inability to get the right information to clinicians so they can provide the care that is not only safe, but value-driven; meaning, informed by both quality and cost.

We are well aware of the challenges related to escalating drug costs from generics, like epinephrine, to the new cutting edge precision therapies. The National Institutes of Health's All of Us Research Program, with its research and data center based at Vanderbilt, is certain to reveal even more ways to leverage vital information in our DNA sequences to save lives, making it all the more important that we become much better at managing the cost of therapy.

While the escalation in drug costs is remarkable, it is also true that on the whole, health care delivery has not systematically managed which drugs we administer to patients to optimize value.

I am not suggesting that the drugs doctors generally order are wrong or bad for patients. However, there are many choices and too often we fail to systematically provide timely information to help clinicians make value-based choices.

Even in the simplest situation, such as a common infection, the offending organism may be sensitive to as many as ten antibiotics that are all effective, yet the range of prices for those drugs could differ by a factor of 10 or even 100. The health care team often will have little information on those details.

At Vanderbilt, our pioneering effort to develop one of the first health information systems capable of delivering this kind of information to the bedside dates to the late 1990's. However, we learned early on that technology alone is not sufficient to change practice.

Over the years, we have also engaged our clinicians to help us formulate the best practice, guided by a clinician-led pharmacy and therapeutics committee. Importantly, our clinicians can override the electronic decision support based on their view of the clinical situation.

Does it work? Since 2010, inpatient drug expense, even corrected for discharge volume and disease severity, has more than doubled across teaching hospitals in America that, as a group, perform the Nation's most complex care. Over this time, Vanderbilt has managed to hold costs well below the national median, saving about \$35 million a year.

Given this success, we have begun to expand the same practice to diagnostic test ordering, an even larger opportunity. In one example, genetic testing, we have already estimated that \$1 million in annual costs can be saved and we are just getting started.

My second example focuses on a different kind of waste. Studies estimate that approximately 5 percent of patients account for roughly half of U.S. health care spending. These exceptionally high utilizers of health care resources are patients that require distinctive strategies.

For example, children with complex, chronic conditions require the care of numerous subspecialists. As a result, the care is often fragmented, lacking an overarching plan. About 1 percent of pediatric patients are considered medically complex and account for as much as one-third of total child health care spending.

We have developed a medical home model dedicated to these patients and their families, ensuring they have a "quarterback" to help them coordinate care across different specialties. The impact has been extraordinary.

For over two years, patients saw an 89 percent reduction in inpatient hospital days and a 63 percent reduction in emergency room visits.

For a perspective, according to a 2014 analysis in "Health Affairs," a nationwide reduction in pediatric inpatient hospital days of only 10 percent would free up \$2.9 billion in costs to Medicaid. A similar program, that Senator Alexander mentioned, focuses on adult patients called our Familiar Faces program and is showing comparable benefits.

Given the magnitude of the cost savings, we should consider payment models that encourage care coordination. Notably, the ACE Kids Act has been introduced to address some of these challenges

health systems face including obtaining reimbursement across state lines for children with complex chronic conditions.

Thank you, again, for the opportunity to appear before you today, and I look forward to the Committee's questions.

[The prepared statement of Dr. Balsler follows:]

PREPARED STATEMENT OF JEFFREY R. BALSER

Chairman Alexander, Ranking Member Murray, and Members of the Committee, thank you for affording me the opportunity to speak with you today to share thoughts on how we collectively might make inroads in reducing unnecessary and wasteful spending within our nation's healthcare system. I applaud the Chairman and this Committee for embarking on hearings aimed at exploring the drivers of healthcare cost growth and potential remedies to curtail this growth—for everyone from patients to payers and provider systems.

My comments are informed by experiences leading the Vanderbilt University Medical Center (VUMC) as its President and CEO. VUMC, in its 4 campus hospitals, over 140 clinics, and its affiliated clinical network of over 5000 clinicians and 60 plus hospitals stretching across 5 states, functions as the largest, provider-led, health resource to patients in the Southeastern portion of the U.S. Based in Nashville TN, we serve patients locally and nationwide through research, training, and of course clinical care. In several disease areas, particularly those requiring high complexity care such as pediatric heart transplantation, or CAR T-cell therapy, a novel, effective, but incredibly expensive anti-cancer therapy, we play a unique role as the essential resource for people living in the mid-southern region of the US. This regional distinctiveness, and the similar role many other academic health centers play in their regions, will inform some of my comments today around allocation of resources for cost effectiveness. I am also informed by experiences leading large-scale initiatives at Vanderbilt involving the application of health information technology. For example, VUMC has taken a leading role in driving nationwide advances in the integration of health information technology with genomic medicine, culminating in the decision by the National Institutes of Health to locate the Data and Research Center for the All of Us Precision Medicine Initiative at our center.

Nearly all analyses have shown that amid myriad causes for the rising cost of healthcare, from accelerating technology to inflated pricing, by far the largest single issue is waste. Most sources, including Consumer's Union and PricewaterhouseCoopers, find that waste of all forms consumes about 1 out of every 3 healthcare dollars, or roughly \$1 Trillion of the \$3 Trillion the U.S. spends on healthcare. The waste has many causes. Certainly, the dizzying complexity of our healthcare payment system, with its administrative—or so-called “frictional” expenses—is being addressed in other sessions, and I will not attempt to address that issue today. The largest sources of waste are euphemistically termed “unnecessary services,” and frankly, in most other industries would be less generously labeled “sloppiness.” The root causes are predominantly system failures in our ability to effectively communicate – not only in transmitting the key information about our patients and the care they are receiving, but also shortcomings in the decision support that clinicians need to provide care that is timely and cost-effective – within and across our healthcare systems. The examples are legendary and range from failure to share simple laboratory or radiological test information between doctors working across states, across town or even within the same institution, to utilizing drugs or tests that could be replaced with less expensive and equally effective alternatives, or in some cases, eliminated entirely, with no impact on patient outcomes.

I have focused my prepared testimony on highlighting examples that fall into two buckets: (1) strategies that reduce the variability, volume and cost of drug and diagnostic test ordering, leveraging health IT and clinical decision support protocols; and (2) patient-centered care models focused on the needs of our most complex patients, who consume a vastly disproportionate amount of healthcare resources. I will also briefly touch on the potential for us as a society to improve the dialogue around healthcare choices for individuals and families at the end of life.

Reducing Variability, Volume, and Cost of Drug and Diagnostic Ordering

We are all well aware of the challenges related to escalating drug costs. These issues transcend drug class – we've seen it for the generic drugs we've used for decades, such as epinephrine, as well as for the new cutting-edge therapies such as the biologics showing remarkable success in diseases ranging from cancer to common immune disorders such as inflammatory bowel disease. The FDA approvals for new

molecular entities and new biologic licenses have more than doubled over the past decade. As efforts to better target therapies to our individual molecular makeup progress, the cost challenge with new therapies has the potential to amplify. At VUMC, like the rest of the country, we've experienced remarkable increases in our cost to purchase the drugs we administer to patients in our facilities, growing by as much as 10 percent per year over the last decade.

While the escalation in how much our drugs cost is remarkable, if we are honest with ourselves, we must also admit that in most healthcare systems, unlike most businesses, we do not systematically try to manage what tests we order, and which drugs we administer to patients in a manner that has the potential to optimize quality and cost. I am not suggesting that the drugs and tests doctors are generally ordering are wrong or bad for patients; however, there are often many alternatives in healthcare, and our system fails to systematically provide timely information to help clinicians make value-based choices that consider cost and quality. In even the simplest situation, such as a common infection, the offending organism may be sensitive to as many as five or even 10 antibiotics that will all have acceptable efficacy, yet the range of prices for those drugs could differ by a factor of 10 – or even 100, and the healthcare team often will have little or no information on those important details.

Moreover, the recommendations from studies being published showing that drug A is actually better than drug B in a given clinical scenario, and the factors impacting the cost of drugs A and B in the marketplace – both important to optimizing quality and cost – are changing weekly, and sometimes daily. This kind of information is not practical for our doctors to access as they care for patients, and even if it were, the evidence suggests that the number of facts that clinicians need to consider to make the best possible decision in every situation already is exceeding human cognitive capacity (William Stead, *Academic Medicine*, August 2010).

My point is that we are not providing the best options to our clinicians in a *systematic and useful* way, as they order literally thousands of tests and drugs each year. As such, we are allowing one of the most expensive features of healthcare practice to proceed at the discretion of many thousands of qualified individual experts, without any reasonable systemic feedback or other methods that could allow us to manage what we know is tremendous variability. While nearly all hospitals have a “drug formulary committee” that determines which drugs can be accessed by clinicians for patients admitted to the facility, few such committees have the resources necessary to determine in real time what the most cost-effective choices are in a wide range of specific clinical settings, and even fewer have the ability to provide that information in a useful way to clinicians. Only very large comprehensive health systems, typically the major academic medical centers and teaching hospitals, employ the large cohorts of specialist physicians capable of making these determinations in a manner that approaches “real time.” Further, most health systems in the U.S. do not employ their clinicians and are therefore far less able to influence their care decisions. Some of the institutions making the most visible progress in this arena, such as VUMC, Mayo, The Cleveland Clinic, and Geisinger do employ most of the clinicians working in their hospitals, but this remains the exception. As such, health systems struggle to effectively engage clinicians, particularly those they do not employ, in ways that are conducive to alignment and consistency in clinical practice.

At VUMC, implementation of clinical decision support systems to guide physicians when choosing certain tests or drugs has been a two decade-long organizational management journey. Our efforts to develop one of the first state-of-the-art health information technology systems capable of effecting this kind of clinical decision support at the bedside dates to the late 1990s, and was a necessary innovation to allow us to project evidence-based recommendations to many hundreds of clinicians in daily practice. However, technology alone has by no means been sufficient to changing practice. Over the years, we have engaged our clinicians extensively, asking them to help us formulate “best practice” for patient orders discipline-by-discipline, guided by an active and dynamic clinician-led pharmacy and therapeutics committee. Importantly, we make it a practice to allow our clinicians to override the “recommended option” from electronic decision support, based on their view of the clinical situation. We find this approach greatly improves adoption by our clinicians for reasons that are intuitive. The vast majority of the waste in drug and test ordering is not conscious variability – in other words, clinicians are often not driven by scientific evidence to use drug A over drug B, but instead make these choices from habit or earlier training. As such, the majority of the variability we see in drug and test ordering, like many facets of healthcare, is unconscious and unsupported by evi-

dence. Our goal with electronic clinical decision support is to eliminate unconscious variability, leaving conscious decisions to specify care to the clinician's discretion.

Does it work? We could provide a number of examples, but perhaps the most compelling data is our trend at VUMC for the drug expenditures we can most readily control from a process perspective, those related to inpatients admitted to our adult and children's hospitals. Since 2010, inpatient drug expense per weighted discharge (accounting for the severity of illness) has more than doubled across teaching hospitals performing the nation's most complex care, not surprising given the trends already discussed in drug costs (see Figure). Over the same period, at VUMC we've managed to hold costs far below this level – at well below half of the median national trend. Our cost increase from 2010–2016 was 50 percent, versus a median of 134 percent—saving VUMC approximately \$30–35 Million per year compared to the median teaching hospital.



Given the success of this approach to drug ordering, we've begun to expand the practice to manage variability and expense in diagnostic test ordering. In fact, we've renamed our "Pharmacy and Therapeutics Committee," the standard in nearly every hospital in the country, to the "Pharmacy, Therapeutics, and Diagnostics Committee," and have included key experts in laboratory medicine from our Pathology Department in the program. In one example, genetic testing, we have eliminated approximately \$1 million in costs annually by altering orders for tests that could be streamlined, reduced, or eliminated by requiring either on-line or verbal expert consultation prior to completing the test order. While an even greater departure from standard practice than decision-supported drug ordering, the potential for cost savings with diagnostic testing, especially when including imaging, is vast and very likely exceeds the potential with drug ordering. A study by PricewaterhouseCoopers almost a decade ago (2009) estimated waste due to unnecessary testing approached \$210 Billion per year.

To dramatically reduce this kind of waste, we need health systems and the clinicians working inside these systems to be aligned. As we work to solve technical challenges with implementing higher quality clinical decision support, and to overcome the equally challenging technical barriers to interoperability between vendor-supplied systems between medical centers, there remain regulatory and legal barriers to achieving fundamental alignment. At present, under the anti-kickback and Stark laws, health systems are largely prohibited from creating financial incentives that would cause physicians, particularly ones they do not employ, to order drugs or tests differently, even if those incentives are in the public's best interest. These laws and related regulations were established to prevent abuse, and protect the public treasury from paying for unnecessary care. However, they were not designed for the current era, where hospitals and clinicians must increasingly develop and use systems of care. Financial incentives that support more defined networks of clinicians who agree to deploy the best and most cost-effective clinical practices will support the effectiveness of our developing systems of care. Without modernization, these legal constraints will be an impediment to achieving clinical alignment that can avoid ineffective or unnecessary care.

Improved Management and Care Coordination of High Utilizers of Healthcare

Waste related to overconsumption of healthcare is widely disproportionate – studies estimate that approximately 5 percent of individuals account for roughly half of

U.S. health care spending. While the models just described that reduce variability in diagnostic test or drug ordering are effective approaches to address overutilization in most patients, distinctive strategies are required for patients who are exceptionally high utilizers of healthcare resources.

The causes of exceptionally high utilization inform distinctive approaches. Overutilization of healthcare services due to behavioral or mental health conditions, or due to social and economic circumstances such as homelessness, are situations we could discuss in the Q&A period, as they do respond to focused programs tailored to these patient populations. However, the largest group of patients consuming an exceptional number of costly resources have complex, and often chronic medical conditions.

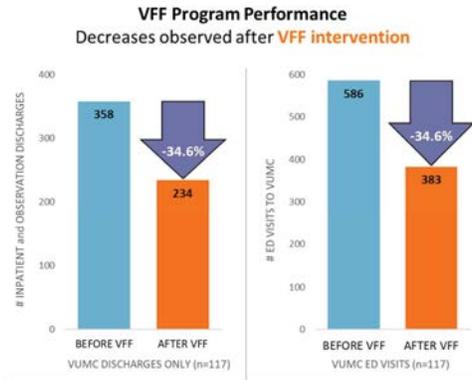
Medical Homes for Medically Complex Children

Children with medically complex, chronic conditions that affect multiple organ systems are invariably expensive patients to treat and require the care of numerous subspecialists. As a result, care is often highly fragmented, as individual clinicians, including primary care physicians, struggle to provide the holistic care these children require. This leads not only to low quality outcomes, but increased utilization of acute services. About 1 percent of pediatric patients are considered medically complex, but they account for as much as one third of total child healthcare spending, one fourth of all hospital inpatient days and 40 percent of all pediatric hospital deaths.

At the Monroe Carell Jr. Children’s Hospital at Vanderbilt, we have developed a medical home model dedicated to these patients and their families, ensuring they have a “quarterback” to help them navigate through the health care system and coordinate care across different clinicians and subspecialties. The impact of this approach has been extraordinary. After two years, patients followed in the medical home saw an 89 percent reduction in inpatient hospital days, a 75 percent reduction in early readmissions and a 63 percent reduction in ED visits. For perspective, a nationwide reduction in inpatient hospital days of only 10 percent would free-up \$2.9 Billion in cost to Medicaid programs, according to an analysis published in Health Affairs in December of 2014. Program aspects include ensuring continuity of care, coordination of care, shared decision making with parents, and follow up care by team members between visits to the hospital. Similar models are being deployed at other children’s hospitals around the nation. However, the implementation cost for these programs is substantial, a challenge to scaling these models to their full potential without support from payers. Federal legislation, the ACE Kids Act, has been introduced to address some of the challenges health systems face with obtaining reimbursement across state lines for these children with complex, chronic conditions. Given the magnitude of the cost-savings associated with these programs, it would also seem prudent to consider payment models through Medicaid appropriately tailored to the unique needs of this patient population, including support for care coordination.

Adults with Chronic Disease

The Vanderbilt Familiar Faces (VFF) program is an analogous patient-centered medical home model for adults with chronic disease, piloted using a multidisciplinary team approach to provide intensive case management. A feature of care for adults with complex disease is the varied settings where patients interact with the healthcare system (versus the potential for a more controlled setting in a children’s hospital). The VFF team identifies high utilizers with complex, chronic disease, and creates a holistic care plan that incorporates strategies for managing all touch points where these patients interact with our health system, from the Emergency Department (ED), to the many inpatient and outpatient venues these patient utilize, engaging them in each setting with targeted interventions. As such, extensive use of the electronic health record for both communication across settings, as well as establishing and adhering to an individual care-plan for each patient, is essential. In the first 6 months, hospital discharges and ED visits for this patient population dropped by nearly 35 percent. VUMC is now working with TN state officials to explore scaling this model in the Medicaid population.



DECREASED NUMBER OF TOUCHES TO VUMC SYSTEM BY ACTIVE VFF PATIENTS FOR THE 6 MONTHS AFTER VFF INTERVENTION COMPARED TO 6 MONTHS PRIOR (*updated 05/09/2018*)

Addressing End-of-Life Care

Finally, I would be remiss if I did not recommend one additional topic deserving of our attention—the tremendous overutilization of healthcare resources at the end of life. Both clinicians and health systems unquestionably have an obligation to help effect positive change, and there are constructive ways we could support clinicians and hospitals on this journey in constructive ways without impacting patient rights.

In the U.S., more than 40 percent of patients who die from cancer are admitted to an ICU in the last six months of life (Bekelman et al., JAMA, 2016). A Kaiser Family Foundation analysis on end-of-life spending found that Medicare per capita spending in 2014 was nearly four times higher for those dying the same year, at \$34,529 per patient, compared to survivors, at \$9,121 per patient. In fact, more than 30 percent of Medicare spending goes toward the five percent of beneficiaries who die each year, and one-third of that cost—billions of dollars annually—occurs in the last month of life. It seems clear that this massive expense, among the highest of any developed country in the world, is a significant factor fueling health care cost growth. As of 2014, 80 percent of Americans who died were insured by Medicare, and “baby-boomer” aging will continue to expand the percentage of our population over age 65.

A 2017 report by the National Academy of Medicine found that while outcomes for patients in hospice consistently show better quality of life, not only for the person with serious illness but also for their family, there remain huge geographic variations in the use of and access to hospice care in the U.S. Moreover, a 2015 Kaiser Family Foundation survey found that 89 percent of adults say physicians and patients should discuss end-of-life issues, yet only 17 percent of survey respondents said they have had such a discussion with their healthcare provider. Consequently, 44.5 percent of Medicare beneficiaries see 10 or more different physicians during the last six months of life.

At VUMC, we are working across a number of fronts to support more compassionate and effective care for patients and their families at the end of life.

Among the most compelling and common-sense approaches is to educate all clinicians and patients, to ensure we systematically initiate the discussions necessary to understand and document end-of-life preferences from patients, early in the patient encounter. Pilot studies at our center indicate that earlier discussion of end-of-life issues in selected ambulatory settings, such as cancer clinics, can help redirect preterminal care from the hospital to less expensive care settings. Here again, the electronic medical record plays an essential role, not only as a vehicle to record this information, but in making it visible and easy for the clinician to interpret, to support the wishes of patients and family members at a time we all know can be extraordinarily difficult. As we consider the vast array of incentives CMS now provides to health systems related to the care of Medicare patients, we should consider including incentives to discuss and document patient preferences for end-of-life care as a

straightforward means to vastly improve the quality and value of care for all Americans.

[SUMMARY STATEMENT OF JEFFERY R. BALSER]

By most estimates, the cost of waste of all forms in US healthcare exceeds \$1 trillion, roughly one third of total healthcare spending. While these estimates include the cost of overly complex and inefficient administrative and payment systems, a sizeable opportunity also rests in “unnecessary services” or overutilization. While widespread, usable and interoperable health information technology is the essential scaffold to addressing this issue, sustainable improvements also require better alignment of clinician and health system incentives, as well as improved decision support at the point of care driving both quality and value.

Reducing Variability, Volume, and Cost of Drug and Diagnostic Ordering

VUMC has achieved sizeable savings in inpatient drug costs—approximately \$30 or \$35 million a year—through strategies targeted at reducing the variability, volume and cost of drug and diagnostic test ordering. Based on this success, similar efforts have been extended to support diagnostic test ordering, where the potential for cost savings is even greater. The programs leverage electronic medical records and clinical decision support protocols, and are driven by a dynamic physician-led drug and diagnostic formulary committee, informed by advanced pharmacy support and clinician expertise from broad clinical specialty areas to guide evidence-based and cost-effective practice at the point of care.

Improved Management and Care Coordination of High Utilizers

Studies suggest that the 5 percent of individuals requiring the most complex care account for roughly half of all healthcare spending nationally. Dr. Balsler describes examples of patient-centered care models for highly complex patients, often with chronic disease, who consume disproportionate amounts of healthcare resources. A model at Vanderbilt’s children’s hospital ensures medical complex children and their families have a “clinical quarterback” to help navigate through the healthcare system and coordinate care across a multitude of clinical specialists. After two years, patients managed through this intensive, high-touch approach saw an 89 percent reduction in inpatient hospital days, a 75 percent reduction in early hospital readmissions, and a 63 percent reduction in ED visits. Dr. Balsler’s testimony concludes with a brief discussion of high resource utilization associated with care at the end of life, costs which are markedly higher in the U.S. than other nations.

The CHAIRMAN. Thank you, Dr. Balsler.
Dr. Safyer, welcome.

STATEMENT OF STEVEN M. SAFYER, M.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER, MONTEFIORE HEALTH SYSTEM, BRONX, NEW YORK

Dr. SAFYER. Chairman Alexander, and Ranking Member Murray, and Members of the Committee.

Thank you for the opportunity to discuss Montefiore’s model for improving quality and managing cost.

Dr. Steven Safyer, I am the President and Chief Executive Officer of the Montefiore Health System and the Albert Einstein College of Medicine located in the Bronx, New York.

We serve the Bronx, Westchester, Rockland, and Orange counties in the State of New York. That geography has just short of 4 million individuals. The Bronx being more towards challenged economically and poor, moving up into an arena where there is more commercial insurance and a better sort of standard of living.

We are an integrated system that includes 11 hospitals, 250 ambulatory care centers, a nursing home, homecare, and more. As the ninth largest teaching program in the country, we teach the most

complicated medicine and we do it within an environment of value-based care teaching young physicians population health management, which is what we are going to address today.

We are unique as an academic medical center, but not alone. With a high percentage of Medicaid and Medicare patients—85 percent of our patients are either in Medicare, Medicaid, or both which is unusual for an academic medical center—we make the most of every single health care dollar by aligning financial incentives with payers.

When patients do well, we succeed financially by sharing in the savings. I believe that is the secret, which is, we are in sync with the payer, whoever they may be.

In 1995, Montefiore began to negotiate value-based contracts with health plans before the term was widely used. We employed a population health management approach identifying and stratifying at-risk populations.

As a pioneer ACO, Montefiore generated more than \$73 million in savings over five years. We began with 21 institutions. We ended with 7. In that period of time, our quality went to the 95 percentile and our spend was significantly important, \$73 million, which we got to share with the Federal Government.

The pioneer ACO program was a catalyst for expansion of our value-based contracts. We now have over 400,000 lives in risk that has upside and downside components to it.

We now have over 55,000 Medicare beneficiaries in a legacy program with the Federal Government, which is called Next Generation ACO, and we are moving forward with that.

Our ACO network now extends beyond the Montefiore Health System. The network comprises more than 3,800 physicians, almost 30 percent of whom are in private practice in their communities. We worked hard to recruit non-employed providers as partners in the ACO.

Over the years, we have learned that to be successful, an ACO must promote primary care and efficiently use scarce financial resources. We shifted many services, like blood transfusions that traditionally involve several days in the hospital, to being outpatient procedures.

I like Familiar Faces. We call it diabetes prevention programs, but these are patients that are identified, most of them are obese, Type 2 diabetes. By the way, over 50 percent of the Bronx is obese.

We provide for them a program that goes on for a number of months, and then we follow them later where we teach them how to eat, how to exercise, how to think about their health care, and really take a whole new view. These are not in our program necessarily. They were just patients that live in our community that we reach out to.

We have done similar things with congestive heart failure, End Stage Renal Disease, and all the other big targets that we need to do better and spend less.

Patients with substance use disorder also have high costs, about 90 percent more, and we have worked very hard with that group to support them extensively.

I just have to say, it is important for you all to look at 42 CFR Part 2 regulations to align with the HIPAA standards because drug

use disorders now are segregated in the record, and you cannot even find it sometimes.

While we have learned a lot over the past 20-plus years taking risks, stability is the key of success for providers and patients. The government needs stability in its spending. Providers need stability in reimbursement.

As a provider that runs on low margins because of our governmental payer mix, we depend on the programs that account for caring for low income patients like Disproportionate Share funding, like 340B, and we depend on Graduate Medical Education to fund our training programs, which is our pipeline to the future.

We are confident that learning from our pioneer ACO success will strengthen the future of health care. In addition, we believe that organizations such as Montefiore, who care for a preponderance of Medicaid and Medicare beneficiaries, were successful in containing costs through value-based programs should have a different payment structure.

So I will end there and I am looking forward to the dialogue. Thank you.

[The prepared statement of Dr. Safyer follows:]

PREPARED STATEMENT OF STEVEN M. SAFYER

Chairman Alexander, Ranking Member Murray, and Members of the Committee, thank you for the opportunity to discuss Montefiore's model for improving quality and value and eliminating excess health care spending.

My name is Dr. Steven Safyer, and I am the President and Chief Executive Officer of Montefiore Medicine, the umbrella organization for Montefiore Health System, one of New York's premier academic health systems, and Albert Einstein College of Medicine (Einstein), one of the top medical schools in the country with \$175 million annually in NIH funding. We are the health care anchors in the Bronx, Westchester, Rockland and Orange counties, a region of close to 4 million people. We combine nationally recognized clinical excellence with expertise in accountable, value-based care settings that focus on optimizing patients' health and well-being, as well as the health of their families and the community.

Montefiore's mission is to heal, to teach, to discover and to advance the health of the communities we serve, and this mission continues a commitment that began over 130 years ago to provide equitable and socially-just care to all whom we serve. Throughout our history, Montefiore has modeled its services and research agenda in partnership with our communities, to address both the underlying socioeconomic factors that affect health and specific public health challenges: from the tuberculosis epidemic in the late 19th century, to infant mortality; from lead poisoning, to the HIV/AIDS epidemic in the 1980s; from the substance abuse epidemic that has never left the Bronx, to more recently, the high prevalence of diabetes, obesity and asthma. The majority of the communities for which Montefiore cares are under-resourced, and have high rates of chronic diseases, influenced by myriad socioeconomic factors and are significantly hit by the recent opioid crisis. Montefiore is responsive to both the health and socioeconomic challenges faced by the communities and serves as an anchor institution, providing economic stability and serving as the largest employer in the regions where we are located.

We are unique among safety-net hospitals in that Montefiore provides its patients the full spectrum of care—from comprehensive primary and ambulatory specialty care, to the most complex, quaternary life-saving care. We are an integrated academic health system that includes 11 hospitals, our innovative Hutchinson Campus (a hospital without beds), 250 ambulatory centers, 25 school-based health centers, a nursing home and a home care agency. Several years ago, we integrated medical and mental health care at all outpatient sites, including our pediatric clinics. We have a large mental health and substance abuse program in all our communities.

We are also the 9th largest teaching program in the country, with 1,500 residents and fellows in training, we study and teach the most complicated medicine in the country and we do it with a unique view into underserve populations, their needs and their challenges. And we do it within an environment of value-based care,

teaching young physicians to be leaders and innovators in population health. We also value the role of primary care and have one of the preeminent social medicine programs in the country.

We are also unique as an integrated academic health system with a high percentage of Medicaid and Medicare patients in our care. Montefiore is one of the largest providers of Medicaid and Medicare services in New York State, with 1.3 million Medicaid and 433,000 Medicare beneficiaries living in the four counties we serve. Indeed, Montefiore provided over 2.5 million primary and specialty care visits to Medicaid recipients in 2016 alone. Fifty-five percent of our outpatient visits are Medicaid, and an additional 10 percent are the uninsured. With 85 percent of patients enrolled in either Medicare, Medicaid or both, we make the most of every single health care dollar by aligning financial incentives with payers.

For over 2 decades, Montefiore has led the healthcare industry in rewarding providers based on quality, rather than quantity of care. As early as 1995, Montefiore's leadership recognized the need for transformational change in a healthcare delivery system serving a preponderance of government program beneficiaries and formed the Montefiore Independent Practice Association (MIPA) to enable it to negotiate value-based contracts with health plans. An IPA is similar to an ACO. It is an organized group of providers, with its own governing body, that come together as an integrated network focused on improving the quality of care for individuals and a population while lowering costs. Montefiore Care Management (CMO) was formed to provide the infrastructure to manage the care of the patients covered by those contracts. Before the term was widely used, we employed a population health management approach, focusing on identifying and stratifying the at-risk population—primarily those with chronic conditions—and engaging them with targeted care management interventions.

Montefiore was one of ten organizations that participated in NCQA's beta testing of its accountable care organization accreditation standards and processes, and we eagerly applied to become a Pioneer ACO when that initiative was announced by CMS in 2011. As New York State's only Pioneer Accountable Care Organization (ACO), we refined our core capabilities in managing the health of beneficiaries.

Montefiore generated over \$73 million in savings to Medicare as an ACO over the 5 years of the program. In its final year, Montefiore's Pioneer ACO had more than 3,400 providers responsible for almost 54,000 Medicare beneficiaries. Montefiore had an Overall Quality Score of 95.16 percent in the final year, and performed above the mean Pioneer ACO scores for the way clinicians communicate. It also received top scores for the way patients rated their providers. Significant gains were also seen in key measurements such as body mass index and high blood pressure screening, as well as flu and pneumococcal vaccinations. Our physician network comprises more than 3,800 primary care and specialty physicians, almost 30 percent of whom are in private practices in their communities. We worked hard to recruit non-employed (private-practicing) providers as partners in the ACO. While expanding our model was a goal, many were not experienced in quality reporting and did not initially have electronic medical records. We invested enormous resources in helping them be successful. The quality scores by the private practicing MDs, of note, improved by 50 percent attaining a level on par with our employed physicians.

The Pioneer ACO program was a catalyst for the expansion of ACO and risk-based programs. It also allowed us to create aggregate-level population health interventions for the Medicare fee-for-service population. We are now participating in the Next Generation ACO program with 55,000 beneficiaries, and we are optimistic that we will continue to achieve savings for Medicare and reinvest our share of those savings in our delivery system.

When we applied to become a Pioneer ACO, Montefiore was a four-hospital system serving primarily Bronx County, one of the nation's poorest and most disproportionately disease-burdened counties. Today, the Montefiore ACO's network includes both Montefiore and non-Montefiore sites with 13 hospitals, scores of primary, specialty and mental health outpatient sites, including federally qualified health centers in New York City, Westchester, Rockland, Orange, and Sullivan counties.

We have learned that to be successful an ACO has to build an arsenal of interventions and incentives that promote primary and preventive care to efficiently use scarce financial resources. We focus on the early identification of illnesses and where possible shift care to lower-cost settings. We shifted many services, such as blood transfusions, that traditionally involved a hospital stay to being outpatient procedures when possible. We have increased our focus on the socioeconomic determinants of health; partnerships with government agencies, community organizations and businesses to provide the full range of services our patients require; and

special arrangements with providers such as skilled nursing facilities to ensure that our patients are ensured the highest quality, most cost-effective care across the continuum of care.

We reach out to our highest risk patients who have multiple chronic and acute care problems to conduct comprehensive health assessments that cover both medical and behavioral problems and socioeconomic challenges including housing, employment, nutrition and access to health care. If you have any doubts about the importance of managing chronic disease for the health of the patients— as well as the nation's health system— consider this: In our experience 5 percent of the more than 400,000 individuals covered by Montefiore's value-based contracts, including the 55,000 Medicare beneficiaries currently attributed to our NextGen ACO, account for 65 percent of the total cost of care—and that is largely because of chronic conditions.

We support all physicians and other providers in our ACO to develop with them a comprehensive care plan and to help them coordinate care. Montefiore has care management teams with expertise in diabetes, chronic kidney disease, cancer, heart disease, asthma and COPD, and behavioral health as well as one team that specialize in helping patients and their families with care transitions and one composed of pharmacists that assists patients with understanding and adhering to their medication regimens. The Montefiore's quality improvement and provider relations staff assist physician practices on quality improvement and data reporting and transformation of practices into Patient Centered Medical Homes (PCMHs).

We appreciate that our patients need access to high quality providers, who understand their language and culture, are available when needed and are willing to coordinate with the other providers our patients see. Our patients need information about their conditions, help in learning self-management skills and linkages to community and government sponsored social service agencies to resolve their socioeconomic challenges. If we don't accommodate these needs, we cannot succeed in accountable care.

For example, we greatly improved management of patients with End Stage Renal Disease (ESRD). To do so, we partnered with all providers involved – Nephrology, Dialysis, Interventional Radiologists, and Device Manufactures. Early identification is crucial to help prevent unnecessary inpatient utilization. We leveraged technology solutions to create a registry of ESRD patients in the electronic health record in order to more easily identify patients upon presentation to the emergency department. This also included notifications to the entire care team, the attending nephrologist, and the patient's dialysis center upon patient presentation to the emergency department. This resulted in improvement of ESRD spend by 3.9 percent.

Patients with substance use disorder also have disproportionately high costs. Based on our experience, patients with substance abuse disorder have 89 percent higher costs. This represented the most prominent indicator for increased costs to the system. If a provider is to be held accountable for the health outcomes of its patients, we must have access to information about substance abuse. Hence, we support revising the privacy protections included in SAMHSA's 42 CFR Part 2 regulations to align the standards for all personal health information with HIPAA standards, in particular for those operating in predominantly accountable care models.

While we've learned much over our twenty-plus years of taking risk, perhaps the most important lesson is that stability is the key to success when you are taking risk. Patients need stability in insurance coverage and access to care. For example, mental health clinics and school-based health centers are absolutely crucial yet run at a loss and are constantly at risk due to financial instability.

Providers need stability in reimbursement (with accountability built in) and prescription drug costs. As a provider that runs on low margins, we depend on the payments that account for financial implications of caring for the uninsured, Medicaid patients, and dual-eligibles (disproportionate share funding and the 340B program) and the losses that come as a teaching hospital that takes all patients regardless of ability to pay (direct and indirect graduate medical education funding). These needs are real.

The government (federal and states) need stability in health care costs. I believe we can enable greater stability if providers have more autonomy to thoughtfully deploy resources to patients, with aligned financial incentives and a high bar for quality and health outcomes. Accountable care is not a panacea for every market, but it works in some, and we are proof.

We are confident that learning from Pioneer successes in improving quality and value and re-deploying health care resources will strengthen the future of healthcare. In addition, we believe that organizations such as Montefiore, who care

for a preponderance of Medicaid and Medicare beneficiaries and who are successful in containing costs through value-based programs, should have a different payment structure. This is becoming especially important with the loss of DSH payments. On behalf of the Montefiore, I look forward to working with you to achieve our shared goal of a better health system for all Americans.

Thank you. I will be happy to answer any questions you have.

[SUMMARY STATEMENT OF STEVEN M. SAFYER]

Montefiore Medicine, the umbrella organization for Montefiore Health System, one of New York's premier academic health systems, and Albert Einstein College of Medicine (Einstein), one of the top medical schools in the country. We serve the nearly 4 million people living in the Bronx, Westchester, Orange, and Rockland counties of New York, a combination of rural, urban, and suburban communities. Approximately eighty-five percent of the patients discharged from our hospitals are enrolled in Medicare, Medicaid, both programs, or are uninsured. Einstein is among the top medical schools in the country, with \$175 million annually in NIH funding.

We are now one of the largest health systems in the country, and we have more than 400,000 patients in risk arrangements across Medicare, Medicaid, and commercial insurance. We do this because getting higher on the premium stream and flexibly deploying those dollars allows us to deliver the right care to the right patient in the right setting.

For over 2 decades, Montefiore has led the healthcare industry in rewarding providers based on quality, rather than quantity of care. Montefiore began its journey into accountable care in 1995, when it established some of the critical infrastructure necessary to take risk—first, an Integrated Provider Network, and second, a Care Management Organization. Both entities have since grown to encompass much of the administrative and governance backbone of our accountable care contracting arrangements, including the federal ACO programs. We have learned that to be successful an ACO has to build an arsenal of interventions and incentives that promote primary and preventive care to efficiently use scarce financial resources.

The Pioneer ACO program, of which we were proud to be a part, remains a bright part of our journey. Montefiore generated more than \$73 million in savings to Medicare over the 5 years of the program while delivering quality care to patients. In its final year, Montefiore's Pioneer ACO had more than 3,400 providers responsible for almost 54,000 Medicare beneficiaries. Montefiore had an Overall Quality Score of 95.16 percent in the final year. Significant gains were also seen in key measurements such as body mass index and high blood pressure screening, as well as flu and pneumococcal vaccinations.

Pioneer (and the subsequent broader ACO program) led the way for commercial health plans to develop ACO and shared savings opportunities. This increased our value-based opportunities and helped us acclimate providers to quality reporting and use of electronic medical records.

We are confident that learning from Pioneer successes in improving quality and value and re-deploying health care resources will strengthen the future of healthcare. In addition, we believe that organizations such as Montefiore, who care for a preponderance of Medicaid and Medicare beneficiaries and who are successful in containing costs through value-based programs, should have a different payment structure. This is becoming especially important with the loss of DSH payments.

The CHAIRMAN. Thank you, Dr. Safyer.
Dr. Lansky, welcome.

STATEMENT OF DAVID LANSKY, PH.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER, PACIFIC BUSINESS GROUP ON HEALTH, SAN FRANCISCO, CALIFORNIA

Dr. LANSKY. Thank you, Chairman Alexander, Ranking Member Murray, and Members of the Committee.

Thank you for the opportunity to share the experience of the large purchasers of health care who are seeking to improve quality and reduce health care costs as well.

I actually want to begin by sharing one of my personal experiences over the years. I have been working on reducing costs and

improving quality for about 30 years, and I have been fortunate to work with three of the great leaders in this field over that time. There is a common thread that runs through all those experiences that I have had.

In the 1980's, I worked with Dr. Albert Starr, who invented the first successful artificial heart valve in 1959, actually. When he did that, he began a commitment to contact every patient every year until they died so that he would know the outcomes of his surgery and be able to continuously improve what he did. He thought it was part of his professional obligation to keep track of his patients over time.

In the 1990's, I worked with Paul Ellwood, who was one of the founders of the Jackson Hole Group and he understood that he could shape a policy strategy, which we came to call managed competition, around having health care plans accountable for the outcomes of care, as well as the total cost of care.

In the last five or six years, I have been working with Dr. Michael Porter at Harvard Business School, one of our leading thinkers on strategy and competitiveness, who has argued that we should move to a model of bundled payments in which the payment is tied to achieving health outcomes at a known cost.

All three of these leaders have carried forward a thread of focusing on health outcomes as the goal of our health system and how we should structure our payment models.

So to your question today of how do we reduce costs in the American health care system, I say begin by measuring outcomes, making that data transparent to the public, and insisting that providers compete on how well they do at achieving health outcomes for their patients.

As you know, today I lead an organization of health care purchasers. Together, they spend about \$100 billion a year. They cover about 12 million people. Health care costs are a huge tax on the productivity and competitiveness of the American business community. Much of the money comes out of the pockets of working people, who have not seen wage growth in 20 years.

Despite the growth in costs in health care, our members are not seeing evidence that their employees are getting better health care. They are not getting reliable, high quality health care across the country.

We are not seeing improvements in innovation, or in quality, or service that we see in other parts of the economy. Instead, we are finding inertia and resistance to the kind of transformation that most sectors of our economy have undergone.

Like Drs. Starr, Ellwood, and Porter, our members believe that we can have an innovative and cost effective health system if purchasers and individuals are able to choose their treatments and their providers based on meaningful information about outcomes and cost.

Our members have tried many strategies to promote higher value, and they have made very significant investments to improve the cost and the quality of care. It is actually, to me, extraordinary and admirable that these companies, whose main day job is making airplanes and telecommunications equipment, have actually spent so much time and money trying to improve the health care system

that all of us participate in. They are trying to reduce costs by improving quality. I will give you a couple of examples.

Boeing, Intel, Qualcomm, and the Washington State Health Care Authority in Senator Murray's state, have all engaged in long term, direct contracts with physicians and hospital networks under arrangements similar to those in the Medicare ACO program. These arrangements have significantly improved quality and patient experience, and also now produce significant cost savings for both employees and companies.

Wal-Mart and the Lowe's Companies, Lowe's stores, support a Center of Excellence bundled payment program for employees who need orthopedic surgery, back surgery, and bariatric surgery. In this program, patients have zero cost sharing. They pay nothing if they choose to go to a National Center of Excellence like Johns Hopkins or Virginia Mason Medical Center.

These centers make sure that:

The surgery is appropriate; that helps save costs.

They agree to collect outcomes data.

They agree to work with each other to identify best practices and continuously improve.

Most important, because they do superior surgery the first time through, there are very few complications, very few admissions to skilled nursing facilities. High quality at the beginning produces cost savings down the road.

CalPERS and Pacific Gas and Electric Company supported adoption of a model originally piloted by Boeing in Seattle to provide advanced primary care for patients with multiple chronic conditions. These are the same high utilizers we just heard about that often cost as much as \$20,000 per year to care for.

By paying a care management fee to primary care practices, and integrating social and health services into primary care, patients and families reported an increased ability to care for themselves. They reduced their depression symptoms. They reduced their emergency room use. They improved their chronic disease status and they saved about 20 percent in total spending.

So we take a few key lessons from our members' efforts to reduce costs:

Excellent care is out there;

Value-based payment models can work;

A strong foundation of primary care is key; and,

Consumer incentives can be helpful.

These are all positive signals, but they come with cautions. I would suggest several steps for you to consider on behalf of Congress.

First, the Nation needs to embrace a philosophy of transparency. Markets cannot work with hidden prices, rebates, gag clauses, and the like.

Second, we need a substantial national effort to produce and publicize standardized outcomes data for all major conditions and procedures.

Third, public and private purchasers must work together to demand excellence, transparency, and financial stewardship.

Finally, the Federal Government must lead. The buy side is highly fragmented and lacks the scale or the tools to compel changes

in the behavior of increasingly large health systems, insurers, and suppliers. Federal policy and purchasing are vital levers of transformation.

I hope you will continue to stimulate innovation through programs such as CMMI and value-based purchasing.

Thank you for the opportunity to testify.

[The prepared statement of Dr. Lansky follows:]

PREPARED STATEMENT OF DAVID LANSKY

Chairman Alexander, Ranking Member Murray, and Members of the Senate HELP Committee, thank you for the opportunity to share the experiences of large purchasers of health care in seeking to reduce health care costs. It is an honor to have been invited to participate in today's discussion.

My name is David Lansky. I am the President and CEO of the Pacific Business Group on Health, a coalition of large public and private purchasers of health care. Together our members spend \$100 billion each year to sponsor health care coverage for about 12 million Americans. They expect – reasonably – that this enormous investment will assure that their employees and their families receive high quality, appropriate and effective care that enables the workforce to be healthy and productive. Unfortunately, the data needed to judge whether services are being delivered efficiently and whether optimal health outcomes are achieved are not available. As a result, neither consumers nor purchasers can identify and reward high quality care, and healthcare providers and suppliers are given little incentive to compete or continuously improve their performance. We believe that the techniques of value purchasing could drive the evolution of a more efficient and effective health system, but that these approaches will not be fully effective until we have meaningful transparency of cost and outcomes data. Government action will be needed first to create that information infrastructure and second to use federal purchasing power to drive value-based competition.

Employers' Understanding of the Problem

Our members share the commitment of Congress and the Administration to address the cost of health care, in part by accelerating the shift to value-based health care based on meaningful, transparent outcomes and pricing information. Because private employers and their employees pay for about half of US health care, and public programs pay for half, it is imperative that policymakers collaborate with public and private purchasers to deploy value of Excellence Network (ECEN) program, employees of Wal-Mart and Lowes stores, for example, face zero cost-sharing if they choose to go to a carefully selected, high quality hospital for surgery. About 25 percent of qualifying patients choose to use these high performing centers. Employees covered by Safeway stores and CalPERS face financial disincentives meant to discourage use of low-value providers: if they choose the high cost provider, they must pay the full cost of care above a market-set reference price. CalPERS found that 21 percent of employees switched to a lower cost hospital when the reference price approach was introduced.¹ Purchasers believe there is an appropriate balance of roles between the employer and the patient: the employer has the expertise to identify high performing programs and offer modest incentives for their use, and the patient should have the information and incentives to make the right decision for themselves. We believe that similar principles could apply to many public programs.

- **Transparency and Performance Information.** Most PBGH members have provided cost and quality transparency information to their employees, particularly in programs that include high deductible health plans. There remain significant concerns about the usefulness of these tools and the level of consumer engagement, however. To be valuable, such information needs to fully reflect the cost that the employee will ultimately face, taking into account such complexities as their own employer's benefit design, the formulary deployed by their Pharmacy Benefit Manager, the possibility of out-of-network charges, and the aggregation of costs across a complex episode of care. The commonly available tools do not capture all of this information. Patients also want to know what outcomes they can expect from care, and whether outcomes vary across providers. We are

¹ James C. Robinson and Timothy T. Brown. Increases In Consumer Cost Sharing Redirect Patient Volumes

strong advocates for the adoption of patient reported outcome measures across full markets. To demonstrate the value of this approach, PBGH led the creation of the California Joint Replacement Registry (now part of the American Joint Replacement Registry), which captured patients' pain, functioning and health status following knee and hip surgery for 41 hospitals. PBGH is now collaborating with the International Consortium of Health Outcomes Measurement to implement standard outcome measures throughout Michigan. In short, purchasers want to see meaningful price transparency that reflects total cost of care and the complexities of our payment and cost-sharing systems, and they want to see widespread availability of meaningful outcome measures.

- **Implementation of care improvement models:** For many years, purchasers subscribed to the “managed competition” model, which held that the purchaser’s role was to hold the health plan or provider system accountable for outcomes and total cost of care for a population, and then allow providers to compete for business against those standard metrics. Most of the contracting approaches described above reflect that approach: it is not the employer’s business to tell the providers how to deliver care. But this view has changed in recent years. Many of our members now engage quite vigorously with their provider partners to ensure conformity to evidence based guidelines, or even to offer training and improvement support to the providers. For both large health systems and small physician practices, we have learned that the expertise to analyze data, identify opportunities for improvement, and bring in the necessary training and collaboration resources are often lacking. As a result, individual employers like Intel and multi-employer collaboratives are now more prescriptive about improvement priorities, methods, and measures. PBGH operates the California Quality Collaborative for this purpose, and has led implementation of a CMMI-sponsored practice transformation initiative for 5,000 physicians in California; our colleagues at the Health Transformation Alliance have recommended specific diabetes and orthopedics protocols to their contracted providers; in our centers of excellence network, we convene all participating hospitals and their surgeons annually to compare best practices across the network. Our recognition that purchasers need to engage actively with their provider partners to ensure that best clinical practices are adopted has a corollary in federal programs. It will be important to tie together the federal investments in payment reform, quality metrics, and improvement support if we want to see significant transformation in quality, efficiency and accountability.

In addition, I will mention purchasers’ increasing interest in encouraging federal programs to observe and adopt best practices from successful private sector efforts. Employers and public purchasers have learned that they are too fragmented and lack the scale to compel changes in the nation’s approach to health care payment or measurement. They share a vision of a health system in which providers compete for our business by succeeding at providing high quality care while making efficient use of resources. But the continuing prevalence of volume-based payments coupled with a chaotic and burdensome measurement environment, as well as the persistence of a regulatory regime originally designed to manage a traditional medical indemnity system makes it impossible to achieve meaningful competition and the likely price discipline that could result. For that reason, employers are enthusiastic about aligning strategies with large state and federal health care purchasers. PBGH supports a significant public policy effort, which includes programs to bring employers to Washington to share lessons learned about emergent purchasing strategies, a collaborative effort between employers, consumer and patient organizations to respond to proposed innovation models and rulemaking, and active participation on advisory bodies at the Congressional Budget Office, National Quality Forum and similar programs.

Purchasers’ Recommendations for Policy Action

We encourage your attention to three main policy approaches that provide significant opportunities to reduce costs and improve quality: transparency of health outcomes, strengthening the ACO and bundled payment programs, and encouraging centers of excellence in Medicare. Employers also encourage Congress to consider several additional measures to accelerate the shift to value, addressing primary care, high drug costs, and competitive markets.

1. Require outcomes-oriented quality measures for priority conditions: CMS has taken tentative steps towards reducing the burden of quality measurement by increasing the use of outcomes measures, but such efforts must be dramatically increased and accelerated. The federal government can act quickly in three ways:

- a. Develop the national infrastructure for measurement of outcomes across all major conditions
- b. Simplify the quality reporting requirements under MACRA to emphasize standardized outcome measures for each condition
- c. Require the adoption and publication of outcomes data for all federal payment programs.

2. Strengthen the ACO and bundled payment programs to increase provider risk for total cost of care: Although accountable care organizations (ACOs) were initially introduced in the Medicare program, large employers have aggressively promoted advanced ACO models. For example, the Boeing Company is contracting directly with accountable care organizations through its “Preferred Partnership” program. Launched in 2015, Boeing offers direct employer-to-ACO contracts to more than 60,000 employees and their families in California², Missouri, South Carolina, and Washington.³ All of these arrangements feature two-sided financial risk with shared savings for reduced costs and improved quality and downside risk if total costs exceed the targeted trend. Additionally, Boeing negotiates performance standards for a priority set of metrics, including clinical quality, member experience and access to care. Furthermore, Boeing expects the ACOs to offer an intensive outpatient care (IOCP) program to manage the care for medically complex patients. The experience from ACOs led by large employers provides lessons that can be applied to Medicare ACOs:

- a. Patients should be given the opportunity to actively enroll in ACOs, rather than being passively “attributed” to health systems.
- b. The most successful ACO models include “two-sided risk”—that is, they give providers the opportunity to share in savings if costs go down, as well as the risk of having to cover costs if total costs go up
- c. ACOs should be held accountable to a robust, standardized and publicly reported set of outcomes-oriented quality measures that enable consumers to make an informed choice when choosing to enroll.

3. Enable Medicare beneficiaries to identify and seek care from high performing centers: In recent years, centers of excellence (CoE) have become a common feature of commercial insurance and private purchaser medical care networks. Nearly 90 percent of large employers expect to use such centers to improve quality of care and predictability of cost for their employees.⁴ Commercial CoE programs have primarily been used for common elective procedures and certain medical conditions with high costs and variability in quality and price, including hip and knee replacements, spine care, heart surgery, bariatric surgery, and some oncology services.⁵

The Employers Centers of Excellence Network (ECEN)—managed by PBGH on behalf of our members—has shown significant improvements in health outcomes and costs.⁶ The ECEN program results demonstrate that it is possible to save money by reducing unnecessary services, while improving outcomes and patient experience. Even when factoring in travel expenses and waived co-pays, negotiated bundled payments for surgical procedures performed by CoEs cost considerably less, on average, than what members currently pay for these services. The cost equation improves even further, since these high quality procedures produce quality outcomes that can mitigate costly revisions and infections. Much of the cost reduction comes

² Boeing and MemorialCare Partner on Boeing’s First California Customized Health Plan Option Offering Better Benefits and Lower Costs for Boeing Employees and Their Families. Press Release, June 21, 2016. <https://www.memorialcare.org/about/pressroom/news/boeing-and-memorialcare-partner-boeing-first-californiacustomized-health-plan>.

³ M. Stempniak, Will Boeing Change Health Care? (Hospitals & Health Networks magazine, December 10, 2015) <https://www.hhnmag.com/articles/6709-will-boeing-change-health-care>.

⁴ National Business Group on Health, Large Employers’ 2018 Health Care Strategy and Plan Design Survey <https://www.businessgrouphealth.org/news/nbgh-news/press-releases/press-release-details/?ID=334>

⁵ The NBGH survey cited above reports 77 percent of employers using (47 percent) or considering COE for orthopedics; 77 percent for bariatric; 62 percent for cardiac; 56 percent for cancer.

⁶ Slotkin, Jonathan R., MD, et al. “Why GE, Boeing, Lowe’s, and Wal-Mart Are Directly Buying Health Care for Employees”, Harvard Business Review, June 8, 2017. Accessed online 10/9/17 at <https://hbr.org/2017/06/why-ge-boeing-lowes-and-walmart-are-directly-buying-health-care-for-employees>.

from avoiding unnecessary procedures, with top-performing surgeons using evidence-based medicine to determine surgical appropriateness. Furthermore, 98 percent of patients recommend the ECEN program.

We believe that a well-designed CoE program within traditional Medicare would offer:

- Better health outcomes than typically achieved by FFS providers
- Lower beneficiary expenses through reduced cost-sharing
- Program cost savings through more appropriate and higher quality care
- System-wide quality and affordability improvements due to provider competition. Furthermore, the procedures and conditions that are most commonly included in CoEs—orthopedics, cardiac care, cancer care, and diabetes—are among those that affect many Medicare beneficiaries and constitute a large proportion of Medicare spending.

For a CoE program to be introduced in Medicare, however, several regulatory, administrative, and political obstacles need to be addressed. To address these issues, CMMI should consider development of a voluntary CoE pilot with an appropriate evaluation design to determine the benefits of CoEs for Medicare beneficiaries. A CoE pilot would enable CMMI to test bundled payment models as part of a comprehensive quality improvement program rather than a standalone test of a new provider payment model. Furthermore, the voluntary nature of a CoE pilot (for providers as well as beneficiaries) would address CMMI's concerns about "mandatory" bundled payment models. The use of benefit design under Medicare to reward patients who choose high performing providers would set an important precedent and be a disruptive force in the health care system. By setting a high bar and stimulating healthy competition among providers, a CoE program would be a catalyst for change that would eventually "lift all boats" by improving quality and affordability system-wide.

These three policy initiatives would send a profound signal to health care providers, suppliers, and payers. They should be designed in close alignment with state and private purchasers. Employers also encourage Congress to consider several additional measures to accelerate the shift to value, addressing primary care, high drug costs, and market consolidation.

4. Primary Care

The decisions made in primary care practices have outsized influence on downstream medical care. A Stanford University study published last year showed that high value primary care for a commercially insured population can lead to spending that is 28 percent lower than average value primary care. The savings are clustered in four areas: unnecessary surgical and other specialty procedures (41 percent), low value prescribing (26 percent), avoidable hospitalizations and ED visits (17 percent), and unnecessary testing (8 percent). The high value primary care practices did see their patients more often, resulting in higher spending on office visits, but only by 2 percent. Rebalancing spending away from specialists and the hospital setting and towards primary care in the community is important. Employers encourage their employees and dependents to affiliate with effective primary care practices, but we are concerned that the national imbalance between primary and specialty care can only be corrected with strong signals from the Medicare program. Three policy changes would significantly strengthen the primary care foundation of our health care system:

- 1. Develop and implement alternative payment models that support advanced primary care delivery. For example, the American Academy of Family Physicians (AAFP) has proposed a payment model for comprehensive care management and coordination, including payments for services not traditionally covered by Medicare (e.g., non-face-to-face services), with financial accountability for quality outcomes and total cost of care.
- 2. Increase payment rates for advanced primary care models that achieve high quality outcomes and reduce total cost of care. The Medicare Payment Advisory Committee (MedPAC) and other experts have observed that certain procedures and specialty services are overpriced, based on the relative value units (RVUs) used to calculate payment rates to physicians. It appears that the Centers for Medicare and Medicaid Services (CMS) has relied too heavily on recommendations from the AMA/Specialty Society Relative Value Scale Update Committee (RUC), resulting in underpayment for critical primary care services. Congress and CMS should consider structural and process changes to correct this imbalance.

- 3. Promote the uptake of direct primary care (DPC), which would allow patients to use their HSA dollars to pay the fixed fees charged by DPC practices. Several bill under consideration in Congress, including S. 1358—Primary Care Enhancement Act, would address this need.

5. Drug Costs

The cost of drugs is an increasingly serious problem for employers and their employees. Growth in drug spending is expected to exceed the growth in total health care spending in future years, driven largely by increases in prices for specialty drugs.⁷

Large employers are struggling with this cost burden, and they are in a weak position to negotiate prices with drug manufacturers and pharmacy benefit managers (PBMs). They recognize that public policy changes are needed to address the fundamental problems driving high drug prices, and they support policies that would improve transparency, increase healthy market competition, and make use of value-based payment models.

One serious problem that employers are trying to address is the distortion introduced by rebates. Rebates distort the market by encouraging drug companies to increase list prices to allow for higher rebates for PBM/PDPs. Because patient cost sharing is typically calculated based on the list price, a higher list price causes patient cost sharing to increase. Because drugs with higher list prices generate higher rebates for PBMs, they are likely to include them on the formularies in a favorable tier. One example of this waste is having a branded, expensive drug on the formulary when there are cheaper generics available. Rebates may also provide an incentive for the PBM to favor less clinically effective branded drugs over competitors with lower rebates. Finally, the rebates encourage more drug use because the rebates are based on volume. We can see these inefficiencies by looking at the existing formularies and seeing that nearly all PBM/PDPs include branded drugs on their formularies when generics are available. We estimate that a “waste free” formulary—based on clinical evidence and rigorous benefit/cost analysis—would reduce drug spending by between 8 percent and 15 percent with no adverse effects on patient outcomes. Large employers are beginning to develop and test the use of a “waste-free” formulary, and the lessons from these initiatives will be relevant to Medicare drug pricing policy.

A second approach to address the problem is being initiated by large employers: inclusion of drug costs in accountable care arrangements. Instead of financing drug benefits separately from other health care services, these arrangements integrate drug cost management into the comprehensive quality and cost management of health care. Specifically, this means that the health systems and provider groups accept responsibility and accountability for the total cost of care—including drugs—as well as quality outcomes. The provider systems are in a better position to evaluate the benefits of drugs and make the appropriate decisions regarding drug treatment vs. other treatments. This puts the accountability for clinical and cost decisions in the right place, and it is more likely to result in lower overall costs and improved quality. Applying this approach in Medicare is challenging due to the separation of Part D from Parts A and B, but we encourage CMS to experiment with integrated payment arrangements, which may point the way for legislative changes to integrate drugs with other health benefits under Medicare.

6. Competitive Markets

In addition to these four specific areas, there is a systemic problem that needs to be addressed the effect of market consolidation on prices. We know the following:

- Market power has enabled providers, drug companies and others to raise prices, and it is largely the result of market concentration. According to a recent paper, “Hospital prices are positively associated with indicators of hospital market power. Even after conditioning on many demand and cost factors, hospital prices in monopoly markets are 15.3 percent higher than those in markets with four or more hospitals.”⁸ A recent Kaiser

⁷ Kaiser Family Foundation analysis of National Health Expenditure (NHE) Historical (1960-2016) and Projected (2017-2026) data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. <https://www.healthsystemtracker.org/chart-collection/recent-forecasted-trends-prescriptiondrug-spending/?sf=s=recent+trends#item-growth-prescription-spending-slowed-2016-increasing-rapidly-20142015-2016> (accessed 7/14/18).

⁸ Zack Cooper, Stuart V. Craig, Martin Gaynor, John Van Reenen, “The Price Ain’t Right? Hospital Prices and Health Spending on the Privately Insured”. NBER Working Paper No. 21815. Issues in December 2015, Revised in May 2018. <http://www.nber.org/papers/w21815>

Health News article commented specifically on the problem of high hospital prices in California.⁹

- Market concentration has been growing in recent years. Most hospital markets are already highly concentrated, and hospitals have also been buying up physician practices. The trends in consolidation are documented in a recent Health Affairs article.¹⁰

Most employers believe that the best way to improve value (improved quality and patient experience, at lower cost) is through market forces, i.e., healthy competition among providers, but real competition no longer exists in many markets. Government action may be needed to ensure that competition works in a way that benefits consumers and purchasers. Anti-trust enforcement is one policy lever, but its effectiveness is limited, especially in addressing markets that are already concentrated. Other actions to address anti-competitive practices are needed. Several recent articles and reports describe potential policy solutions.^{11,12,13,14} Among the potential policy steps, the following appear to be the most promising and feasible.

- Site-neutral payments
- Transparency and standardized provider performance reporting
- Promotion of entry of new competitors/reduction of barriers to entry
- Prohibition of anti-competitive practices, e.g., anti-tiering, anti-steering, and gag clauses.

[SUMMARY STATEMENT OF DAVID LANSKY]

The Pacific Business Group on Health represents over 60 large health care purchasers who collectively spend \$100 billion each year to provide health coverage for 12 million Americans. Our members—large employers and public agencies—are deeply concerned about the growth in health care costs. Purchasers believe that aggressive implementation of value based purchasing approaches by both public and private sectors would both reduce health care spending and improve quality. Meaningful, accessible information about prices and health outcomes would provide the foundation for real competition between providers and allow patients and employers to make informed decisions about where to seek care. We look forward to constructive competition between provider organizations based on common, transparent definitions of episodes of care and accountability for population health, so that providers are motivated to continuously seek better ways to use technology, workforce, and expensive care resources to achieve health outcomes.

The Congress and Federal agencies must lead this process by accelerating the adoption of the necessary standards, infrastructure, and purchasing models. Key actions include:

1. Develop the national infrastructure for measurement of outcomes across all major conditions
2. Simplify the quality reporting requirements under MACRA to emphasize standardized outcome measures for each condition
3. Require the adoption and publication of outcomes data for all federal payment programs
4. Strengthen the ACO and bundled payment programs to increase provider risk for total cost of care

⁹ Chad Terhune, “As Hospital Chains Grow, So Do Their Prices for Care”, Kaiser Health News, June 13, 2016. <https://khn.org/news/as-hospital-chains-grow-so-do-their-prices-for-care/>

¹⁰ Brent Fulton, “Health Care Market Concentration Trends in the United States: Evidence and Policy Responses”. Health Affairs 36, no.9 (2017):1530-1538. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.0556>

¹¹ Thomas L. Greaney, “Coping With Concentration”, Health Affairs 36, no.9 (2017):1564-1571. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.0558>

¹² National Academy of Social Insurance, “Addressing Pricing Power in Health Care Markets: Principles and Policy Options to Strengthen and Shape Markets”, April 2015. <https://www.nasi.org/sites/default/files/research/Addressing—Pricing—Power—in—Health—Care—Markets.pdf>

¹³ Leemore S. Dafny and Thomas H. Lee, MD., “Health Care Needs Real Competition”, Harvard Business Review, December 2016, pp. 76-87. <https://hbr.org/2016/12/health-care-needs-real-competition>

¹⁴ Martin Gaynor, Farzad Mostashari, and Paul Ginsburg, “Making health care markets work: Competition policy for health care.” Brookings Institution, April 13, 2017. <https://www.brookings.edu/research/making-health-caremarkets-work-competition-policy-for-health-care/>

5. Enable Medicare beneficiaries to identify and seek care from high performing centers.

The Medicare, state Medicaid and employee programs, and private purchasers must act in concert to convey a consistent expectation to providers and suppliers. Together they can deploy a portfolio of high-leverage tools that can reduce health care spending while also assuring that more Americans receive high quality care. Implementation of these and other methods will take time and inflict some pain on important stakeholders. Yet the vitality of our economy, the solvency of our treasury, and the welfare of all Americans depend upon our aligned efforts.

The CHAIRMAN. Thank you, Dr. Lansky.
Dr. James.

STATEMENT OF BRENT JAMES, M.D., M.STAT., CLINICAL PROFESSOR, DEPARTMENT OF MEDICINE, STANFORD UNIVERSITY SCHOOL OF MEDICINE; MEMBER, NATIONAL ACADEMY OF MEDICINE, STANFORD, CALIFORNIA

Dr. JAMES. Thank you, Senator Alexander, Senator Murray, and Members of the Committee.

Dr. W. Edwards Deming was the father of quality improvement theory. Quality improvement is the science of process management that applies to any productive human activity whatsoever. It also supplies a set of tools that very broadly identify waste. The value opportunity is to reduce total cost by improving quality of finished outputs.

In 2010, the Institute of Medicine convened a large panel of experts around this topic to identify and categorize waste in health care delivery. Our actual conclusion was that a minimum of 30 percent, and probably over 50 percent, of all spending in the United States on health care delivery is waste on value adding from a patient's perspective.

Now, I plan this field a bit when I model it. I get somewhere north of 60 percent waste estimates, credible, actionable areas. I think your estimates are low, Senator Alexander.

This year, we will spend approaching \$3.6 trillion as a country on health care delivery in total. At a midpoint of 50 percent, I make about a \$1.8 trillion waste opportunity in that particular bucket.

Now, any time you are talking about costs, it breaks into two pieces and that is a fairly critical distinction.

Imagine I wanted to run a program to put a chicken in every pot and I wanted to be able to fund it. Well, with two pieces, I need to know what I am going to spend per chicken; we call that unit costing. But I also have to know how many chickens; that is called utilization rates.

These models give us the ability to assign categories of waste. The thing you need to know when analyzing health care waste, about 95 percent of value recovery opportunity links back to utilization rates, not to unit costing.

Now, 5 percent of \$1.8 trillion is \$90 billion a year. That is real money. But if you are not attacking utilization rates, very explicitly, you are nibbling around the edges. So it is something to think about. In fact, as I listened to the colleagues on the panel, they were all talking about utilization rates down the line. Just as a thought.

The primary cause of the waste, we now know, is complexity. Fraud and abuse makes, say, a relatively small contribution, almost trivially small, frankly.

Stanford's Dr. David Eddy invented the term evidence based medicine some years ago, first published in 1990, and he developed most of the formal methods we use for performing that body of science. He says it this way, "The complexity of modern medicine exceeds the capacity of the unaided expert mind." I put examples of that too from the other peoples' testimony.

The problem gets worse every day. The rate of medical evidence production is increasing exponentially, a challenge not just for today, but for tomorrow.

Now, most successful waste elimination strategies have worked by addressing complexity down at the level where physicians, nurses, and other health professional interact with patients on a daily basis. It is a common thread that runs through these activities. In fact, two separate IOM committees addressed exactly this.

We produced a far more effective definition of transparency, transparency down at the level of a physician interacting with a patient. That is where the rubber hits the road, if you are interested in taking waste out of the system.

You need to know these approaches work. For many examples, I worked in a system in Utah, a relatively small system, 22 hospitals, about 200 outpatient clinics. We set a goal to keep our health care cost increases at less than the Consumer Price Index, inflation plus 1 percent, in terms of total cost. We wanted our care to be affordable to the people that we served in our state.

Five big Q.I. projects across four years reduced our total costs of operations by 13 percent. We are small. It was only about \$700 million across that time. You have heard from others here, too. This is not at all unique to Utah. This stuff works. It works by taking waste out of the system.

Now, I say 13 percent. I really believe that the waste opportunity is somewhere north of 60 percent and 13 percent is a good start. We have not begun to tap out what is available.

Here is the funny thing, though. From a financial perspective, opportunities for waste elimination dramatically exceed other opportunities for traditional revenue enhancement that most health care delivery systems rely upon for their financial well-being, orders of magnitude more opportunity.

You would think that in a health care market, people would be going after that value vigorously. Why not? Why do we have to hold hearings on it? Why are we having these conversations? Two primary causes.

The first is traditional methods. It is often baked-in to management systems, the way we have thought about it in the past.

The second is more profound. It turns out that waste elimination is not financially aligned in most instances. If I am paid in a fee for service system, well, there is always an investment. You have to make an investment to take the waste out, investment in your systems, investment in change strategies.

The trouble is, is when I make the investment that investment nearly always happens down at the level of a care delivery group. Most often, the waste savings do not go to the care delivery group

who made the investment. It goes to someone else, a payer, to David and his people, for example, you see.

That misalignment means that it is a paved road to financial disaster. Even if you are committed to it philosophically, you do not have the resources to do the next project that comes up.

If I expand it from fee for service, the financial alignment expands to about 55 percent. But if I want the whole pie, if I want to pick up that last 45 percent, I have to have provider or financial risk, financial arrangements.

This has actually been a topic that came up as part of the ACA, the Center for Medicare and Medicaid Intervention focused on what we call pay for value, a shift in payment modes to align financial incentives. The current Administration has been following it as well.

I think from a policy standpoint, it is a very important idea.

Thank you, sir.

[The prepared statement of Dr. James follows:]

PREPARED STATEMENT OF BRENT JAMES

A. Health care delivery “waste” describes any consumption of resources that does not provide optimal benefit to a patient.

Dr. W. Edwards Deming is the father of quality improvement theory. Quality improvement is the science of process management. Deming based his work on 3 foundational principles. The first 2 of Deming’s 3 premises were:

- (1) Premise 1—All productive human work, of any sort whatsoever, can be described as a process. The definition of a process: “A series of linked steps, usually but not always sequential, designed to create a product, transform an input into and output, produce an experience, generate information, or in some other way add value.”

On that foundation, Deming argued that any enterprise should organize literally everything around “value-added front line work processes,” where “value-added” is defined by a customer.

- (2) Premise 2—Every process produces 3 parallel classes of outcomes:

- a. A “physical outcome” is the product or service that the process was designed to create. In clinical care delivery, we call these medical or clinical outcomes.
- b. A “service outcome” describes the interaction that takes place between the producer of a product or service and the consumer of that product or service, as the transaction takes place, as experienced by the consumer. This is patient satisfaction—the care delivery experience.
- c. A “cost outcome” represents the resources consumed to operate the process. Treating cost as the outcome of a process, rather than as an input, made Deming’s approach unique. It fundamentally redefined the concept of value, defined as the ratio of the quality of a product divided by its cost.

The term “quality” describes the relative attributes of any outcome. Thus people speak of “clinical outcome quality” or “service quality.” From a theoretic perspective, it is similarly appropriate to consider the “quality” of cost outcomes.

The fact that every process always produces all 3 categories of outcomes means that the 3 classes of outcomes are intertwined. It is impossible to functionally separate them, from an operational perspective. For example, a physician may make a change to a treatment process with an aim to improve a clinical outcome. That will, by definition, also change the process’s cost outcomes. Alternatively, an administrator may change that same process with an aim reduce costs. That will, unavoidably, change the process’s clinical outcomes.

Deming next began to explore the interactive relationships between physical and cost outcomes. A surprising finding emerged: The linkages between physical and cost outcomes were not always negative. To that point, everyone had always assumed that higher quality always meant higher cost. Deming showed that some

major classes of process changes, when introduced to improve physical outcome quality, caused costs to fall. He identified 3 causal mechanisms by which physical and cost outcomes interact. The first 2 interactions form the basis for all quality-based definitions of “waste” (James, 1989):

a. Quality waste—A step in a process fails. Some proportion of the time (it doesn’t have to be 100 percent), that process failure causes a physical outcome failure—a “quality” failure. When that occurs, the process operator has only 2 options:

1. The process operator can repair the low quality product. This is called “rework” in quality theory. The problem: Rework—repairing the failed product—always involves additional time and resources. In other words, it always costs more.

When a process operator detects a failure, the best response is to “move upstream” into the process, figure out where and how it failed, then fix the process so that it will not fail again. It is always cheaper to “do it right the first time” than to “fail then repair.”

For example, Reiss- Brennan et al. created a 3rd generation primary care medical home called Team-Based Care (TBC) (Brennan et al., 2016). They deployed chronic disease management, mental health integration, and care coordinators into primary care practices. As patients received better clinical management in a primary care setting, specialty visit rates fell by 21 percent, and hospitalization rates fell by 22 percent. Overall, deploying TBC cost \$22 per person per year (a not-insignificant investment), but total medical expense fell by \$115 per person per year (a five-times savings, compared to the investment). Seen through the lens of quality improvement, specialty referrals and hospitalizations represented failures of upstream primary care processes.

Similarly, preventable care-associated patient injuries (patient safety) represent quality waste. It is nearly always much cheaper to avoid patient injuries from the start, than to treat them after they occur.

2. If the failed outcome does not involve a human life, then the process operator could simply discard it. This is called “scrap” in quality theory. Obviously, all of the time and resources consumed to create the scrapped product are wasted.

For example, a hospital clerk runs and prints a large report, only to discover that the date range used in the report was wrong. That wastes not just the discarded paper, but the human and computer time consumed to produce the report.

b. Inefficiency waste—2 parallel processes produce identical outputs. One of those processes use significantly more resources to achieve that goal. The unnecessary use of resources represents waste.

In the late 1980s, clinical research teams at Intermountain Healthcare examined treatment details for common conditions routinely managed in hospitals (transurethral prostatectomy (TURP), cholecystectomy (gallbladder removal), total hip arthroplasty (artificial hip joint implantation), coronary artery bypass graft surgery (CABG), community-acquired pneumonia, and implantation of permanent cardiac pacemakers) (James, 1995). For statistically identical patients with statistically identical clinical outcomes, they found about

a 2-fold difference in resources consumed. For example, when performing a TURP on a standard patient, one urologic surgeon consumed on average 1184 hospital dollars to achieve a good outcome (these were 1986 dollars—medical inflation has greatly increased those numbers across the years). Another surgeon in the same hospital averaged \$2233 for an equivalent patient with the same good clinical outcome.

For both quality waste and inefficiency waste, process management offered an opportunity to reduce operating costs by producing better physical outcomes. Deming proved that better quality could drive lower costs.

There is a third way in which physical and cost outcomes interact, that fall outside Deming’s “waste” mechanisms:

c. Cost effectiveness—In some circumstances, clinicians find a treatment process that produces better outcomes, but the new process appropriately consumes more resources to produce that result. When that happens, those who both stand to benefit and to compensate the required higher resource consumption face a choice: Does the amount of quality gained by using the

new process justify its additional expenses. Obviously, this is a choice that health care consumers must ultimately make.

Under Deming's quality improvement theory, higher quality can eliminate waste and reduce costs. This defines "value"—the best quality result at the lowest necessary cost. Deming's theories initially transformed manufacturing around the world. Any company that could not master his process management methods to produce higher value—better quality at lower costs—could not compete with companies that could. It became a litmus test for survival in many industries, and produced a maxim: Do Deming or die.

Starting in the late 1980s, clinical investigators demonstrated that Deming's theories apply in health care delivery. They realized that Deming's approach took concepts found in preventive medicine, and generalized them.

Clinical quality improvement's prevention-based approach raises 2 questions:

- How much quality and inefficiency waste exists in health care delivery?
- While theory is useful, it does not always accurately reflect implementable reality. Do these principles apply and produce expected results in real care delivery experience?

B. In 2010, an Institute of Medicine (IOM) expert panel conducted an evidence review (IOM 2010). They estimated that **a minimum of 30 percent, and probably over 50 percent, of all money spent on health care delivery is waste recoverable through higher quality. Some analyses suggest that waste levels may be much higher.**

C. In 2018, total expenditures on health care delivery in the United States will approach \$3.6 trillion. Midpoint estimates suggest as much as **\$1.8 trillion in recoverable waste.** More than half of health care spending, and associated waste, is funded through government.

D. Most research on health care waste comes from the United States. However, evidence from other countries (e.g., Canada, Australia, and European democracies) suggests that **health care waste levels are similar across the world.**

The 2010 IOM report is currently the best published citation for waste in health care delivery. Subsequent reports derive from it. It started with Deming's ideas of quality waste and inefficiency waste, then catalogued specific examples of care delivery waste that various researchers had documented.

Outside the U.S., most countries lack the detailed financial data that make direct waste estimates possible. However, care delivery systems in other countries have studied clinical process failures and generated estimates of failure rates. That is the basis for asserting that financial waste rates in other countries mirror those seen in the United States. The waste results from the process failures. While the U.S. invests much more heavily in health services research than other countries, there is sufficient evidence to support the conclusion that care delivery process performance, and process failures, are similar.

Several years later, James & Poulsen published a financial model that aligns Deming's waste categories to health care delivery operations (James & Poulsen, 2016). That approach included additional categories of waste that did not appear in the 2010 IOM report, and so produced higher estimates of the amount of waste that currently exists in care delivery operations.

The James/Poulsen financial model has 3 tiers:

Tier 1 waste (the base)—A "unit of care" is any granular service or supply provided to a patient during a care delivery encounter. Examples of "units of care" include things like a single dose of a specific medication; a single specific type of imaging exam; a lab test; an acuity-adjusted hour of nursing time; a 6-minute block of physician time, adjusted by specialty; an acuity-adjusted minute in a procedure room (such as an operating theater); a bedpan; a box of tissue (Kleenex). U.S. hospitals maintain master lists of all possible "units of care" that they could possibly supply to a patient. Depending on other internal features, these lists are called "charge masters" or "cost masters." As a patient receives care during a clinical encounter, the treating facility records each unit of care consumed. Mapped through the charge or cost master, this allows the treating facility to create a detailed bill for all services provided during a clinical encounter.

One can usefully think of a care facility as a business that obtains, creates, maintains, and supplies these "units of care." In Tier 1, "waste" refers to any costs associated with any "unit of care" in excess of an absolute necessary minimum. The associated organizational function is called "supply chain." It is that part of a care deliv-

ery organization that obtains, assembles, and supplies to the point of actual care delivery all necessary supplies, including equipment and personnel.

Figure 1 labels Tier 1 “**Efficiency** (cost per unit of care)”.

Tier 2 waste—During a clinical encounter physicians, nurses, and other clinicians select and apply different units of care, including their own time, to address patients’ health care needs. “**Within-case utilization**” refers to the specific type and number of “units of care” used during a care delivery episode. Detailed studies of variation in care delivery typically focus at this level. Such studies identify cohorts of similar patients being treated for the same clinical problem, then track the type and number of units of care used. They break total health care costs into two parts: The type and number of units of care consumed (utilization), and the true cost of acquisition of each unit of care (cost per unit).

Tier 3 waste pushes the idea of utilization a level higher. “**Case-rate utilization**” describes how often specific treatments are used in defined population.

	Waste rate within category (1 percent of all cases)	Percentage of total health care costs to which this category applies	Percentage of total cost recoverable w/in category	Remaining value (Percent)
3. Case-rate utilization (# of cases within a population)				100.0
Inappropriate care	20 percent	100 percent	100 percent	80.0
Care patients would not have selected if given a fair choice	40 percent	15 percent	100 percent	75.2
Avoidable care	15 percent	100 percent	80 percent	65.6
2. Within case utilization (# & type of units per case)				
Initial misdiagnosis, delayed diagnosis	15 percent	100 percent	25 percent	63.1
Avoidable care-associated patient injuries	26 percent	10 percent	70 percent	62.0
Variation in care delivery not driven by patient need	33 percent	100 percent	80 percent	45.6
Operational inefficiency for health professionals	35 percent	40 percent	50 percent	42.4
Avoidable administrative overhead	30 percent	15 percent	50 percent	41.5
Excess insurance company profits	50 percent	20 percent	70 percent	38.6
1. Efficiency (cost per unit of care)	5 percent	60 percent	100 percent	37.4
Proportion waste in care delivery:				62.6

Figure 1. Breakdown of total health care delivery costs into 3 tiers, that build one on top of another.

Figure 1 adds specific subcategories within each tier, cataloguing known classes of waste in health care delivery. The columns to the right summarize data from the published literature regarding measured within-class rates of waste; the proportion of total health care costs to which that category of waste apply; and estimates of how much of that waste should be amenable to extraction using current technologies. The table correctly adjusts—for example, it applies waste savings that could be obtained by eliminating “within case utilization” only after all inappropriate care and avoidable care have been removed. Many of the estimates in the table are just that—the author’s own estimates—and will be modified as better data and expert opinion become available.

Figure 1 adds one important category that other studies of health care waste did not include. Wallace and Savitz adapted Toyota Production System (TPS) Lean Observation to a health care setting (Wallace & Savitz, 2008). They tracked work performed within more than 60 different health profession roles, such as pharmacists, nurses of various specialties, hospitalist physicians, and central supply staff workers. They directly assessed those roles in 4 integrated care delivery systems (Intermountain Healthcare, Providence Health Systems, University of North Carolina Health Care, and University of Virginia). Every task performed was classified as “value adding” or “non-value adding” (waste) by expert observers, in real time.

The proportion of health worker’s time judged “waste” ranged from 20 percent to over 70 percent. Overall, non-value adding activities—waste—comprised on average more than 35 percent of all health professional work time. Extrapolating to the entire health care workforce, their findings are summarized as “Operational inefficiency for health professionals” in Figure 1. By way of illustration, waste levels were placed at 35 percent (column 1), as estimated in the study. Worker salaries are esti-

mated to comprise about 40 percent of all health care costs (column 2). Based on experience gained while addressing associated processes, the model estimates that 50 percent of such waste could be recovered with current technologies.

This model, while extending beyond those included in the 2010 IOM report, still leaves some sources of waste unaccounted. For example, it does not include estimates of clinician inefficiencies that track back to the structure of current electronic medical record (EMR) systems (Sinsky et al. found that physicians spend about 2 hours performing EMR-based administrative tasks for every hour they spend with patients—Sinsky et al. 2016).

This model and associated argument is the source, in conclusion (B) above, of the statement that “some analyses suggest that waste levels may be much higher”

E. The primary drivers of waste are (1) care delivery execution that still relies primarily on **personal expertise and human memory** (the “craft of medicine”); (2) in the face of high and rapidly increasing complexity of clinical practice, that “exceeds the capacity of the unaided expert mind”; framed within (3) legal structures, cultural expectations, and **payment methods that actively encourage utilization**. Waste estimates include healthcare fraud and abuse. However, these factors are small compared to other sources.

Arguments supporting this assertion are beyond the scope of this testimony. The author refers interested parties to James & Savitz, 2011 and James & Lazar, 2007; or invites those parties to contact the author directly.

F. A series of at-scale projects have shown that **quality-based waste recovery is achievable using available tools**. For example, one Utah-based health system improved patient outcomes and thus reduced total operating costs 13 percent across 4 years (\$688 million, through 2015). Other examples abound.

A great many examples of clinical projects that show lower costs associated with better clinical quality are present available in the peer-reviewed medical literature. For purposes of this testimony, however, a recently published experience at Intermountain Healthcare provides a solid “at scale” example (James & Poulsen, 2016—op. cit.):

Intermountain Healthcare is a non-profit system of 22 hospitals, more than 190 outpatient clinics, and an associated HMO-model health plan. It supplies more than half of all health care services in Utah and some areas in surrounding states.

In 2010, Intermountain’s Chief Financial Officer set a goal: In order to keep health services affordable, and thus accessible, to the patients Intermountain served, he asked the care delivery system to limit total health care costs increases to consumer price index inflation plus 1 percent (CPI+1). Intermountain’s Finance department modeled that goal using “best estimates” of prior consumer price index inflation and health care total cost growth rates. Their estimates are shown in Figure 2. It required that Intermountain reduce its total operating costs by 13 percent across the next 5 years, through the end of 2016.

To achieve that goal, Intermountain’s clinical leadership launched 5 major quality improvement projects, with an aim to control health care costs through better clinical outcomes. The heavy green line shows results for the first 4 years of the project. Across those 4 years, operating costs fell by \$688 million—a 13 percent reduction in the system’s expected total operating costs.

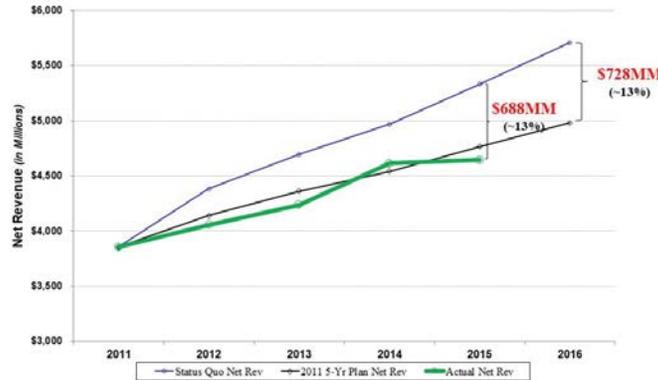


Figure 2. Financial consequences of waste elimination at Intermountain Healthcare from 2011 to 2015, achieved through clinical quality improvement. The solid blue line shows expected total health care costs for Intermountain’s service population, taking into account general population growth, aging of the population and other population-based epidemics (e.g., Baby Boom entering chronic disease years, the obesity epidemic), and introduction of new treatment technologies. The solid black line shows ‘allowable’ growth in health care costs needed to achieve CPI+1—a 13 percent reduction in total operating costs through 2016. The green line shows actual total costs.

These results echo findings of waste elimination and cost savings demonstrated by a long list of other projects, at Intermountain and many other U.S.-based care delivery systems. They demonstrate, using current tools, it should be possible to dramatically reduce growth rates in health care costs.

G. Waste elimination through higher quality offers health care providers financial opportunities that dramatically exceed other sources. However, most care providers are not actively pursuing broad quality-based waste elimination. That is primarily because **payment mechanisms create misaligned financial incentives.**

As noted above, this year the U.S. will spend almost \$3.6 trillion on health care delivery services. A midpoint estimate that about 50 percent of that spending is waste suggests a value opportunity of about \$1.6 trillion. That dwarfs, by at least a factor of 100, any other opportunities for health care provider income growth. Return on investment for waste elimination projects are typically significantly larger than those for traditional service expansion approaches, as well (as above, the details of this analysis are left for another settings). Why, then, do such levels of waste continue? Why aren’t health care markets driving care providers to very vigorously address and remove waste in the health care delivery system?

The reason: Financial incentives for waste elimination do not align. Figure 3 shows how the tiered classes of health care waste, defined in Figure 1, align with payment mechanisms.

Figure 3. Association of tiered waste categories with payment mechanisms. “FFS” stands for “fee for service” payment—still the most common method used to reimburse care delivery. Waste elimination always requires substantial investment, nearly always by care providers. The triangles in the table show who gets the savings when a waste-elimination project succeeds. Red triangles indicate that the savings go to payers, leaving those who must invest—the care providers—with no recompense for their initial investment.

Improving quality to eliminate waste always requires that care delivery groups invest in new systems and change leadership. Under current payment mechanisms, the resulting waste savings often go to someone other than those who must make that investment. That can leave care delivery groups under financial stress, without resources to fund future projects. Under fee-for-service (FFS) payment only about 5 percent of quality-based waste elimination generates compensatory savings back to the care delivery group that must invest and make the change. Adding per case payment (DRGs) increases alignment to about 55 percent. The final 45 percent of

potential savings requires that care providers bear financial risk—various forms of shared savings or directly capitated compensation.

Figure 3 also summarizes the waste tiers in Figure 1, noting the total proportion of all waste opportunities associated with each tier. For example, about 45 percent of cost reduction opportunities function at the level of population health (Tier 3). Another 50 percent aligns to addressing variation in clinical practice, improving patient safety, and eliminating administrative overhead (Tier 2). Figure 3 assigns only 5 percent of total waste elimination opportunities to unit costs (Tier 1).

Health care delivery in the United States costs significantly more per person, and consumes more of total national wealth (as measured by percentage of Gross Domestic Product), than does health care delivery in other modern democracies. Papanicolas, Woskie, & Jha (Papanicolas, 2018) correctly note that unit costs, by themselves, explain the 2-fold difference health care spending seen in the United States as compared to other countries.

The reason that Figure 3 assigns only 5 percent of total waste elimination opportunities to unit costs (Tier 1) is because so many of the elements that drive higher unit costs are outside of the control of health care providers. We arrived at the 5 percent estimate based on observations of the gains achieved by successful supply chain operations in leading care delivery systems. We also note that, given the size of the U.S. health system, even a 5 gain is consequential.

H. One person's waste is another person's income. Thus, **health care waste vigorously defends itself**—through traditional health management methods and, often, through political mechanisms.

This argument, too, is left for further discussion beyond this document.

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[SUMMARY STATEMENT OF BRENT JAMES]

- **Health care delivery “waste” describes any consumption of resources that does not provide optimal benefit to a patient.** Under Deming's quality improvement theory, **higher quality eliminates waste.** This defines “value”—the best quality result at the lowest necessary cost. Deming's theories initially

transformed manufacturing around the world. Starting in the late 1980s, clinical investigators demonstrated that Deming's theories apply in health care delivery.

- In 2010, an Institute of Medicine (IOM) expert panel conducted an evidence review. They estimated that a **minimum of 30 percent, and probably over 50 percent, of all money spent on health care delivery is waste recoverable through higher quality. Some analyses suggest that waste levels may be much higher.**
- This year, total expenditures on health care delivery in the United States will approach \$3.6 trillion. Midpoint estimates suggest as much as **\$1.8 trillion in recoverable waste. More than half of health care spending, and associated waste, is funded through government.**
- Most research on health care waste comes from the United States. However, evidence from other countries (e.g., Canada, Australia, and European democracies) suggests that **health care waste levels are similar across the world.**
- **The primary drivers of waste are** (1) care delivery execution that still relies primarily on **personal expertise and human memory** (the "craft of medicine"); (2) in the face of high and rapidly increasing **complexity** of clinical practice, that "exceeds the capacity of the unaided expert mind"; framed within (3) legal structures, cultural expectations, and **payment methods that actively encourage utilization.** Waste estimates include healthcare fraud and abuse. However, these factors are small compared to other sources.
- A series of at-scale projects have shown that **quality-based waste recovery is achievable using available tools.** For example, one Utah-based health system improved patient outcomes and thus reduced total operating costs 13 percent across 4 years (\$688 million, through 2015). Other examples abound.
- Waste elimination through higher quality offers health care providers financial opportunities that dramatically exceed other sources. However, most care providers are not actively pursuing broad quality-based waste elimination. That is primarily because **payment mechanisms create misaligned financial incentives.**

Improving quality to eliminate waste always requires that care delivery groups invest in new systems and change leadership. Under current payment mechanisms, the resulting waste savings often go to someone else. That can place the care delivery group under financial stress and leave them without resources for future projects. Under fee-for-service (FFS) payment only about 5 percent of quality-based waste elimination generates compensatory savings back to the care delivery group that must invest and make the change. Adding per case payment (DRGs) increases alignment to about 55 percent. The final 45 percent of potential savings requires that care providers bear financial risk—various forms of shared savings or directly capitated compensation.

- One person's waste is another person's income. Thus, **health care waste vigorously defends itself**—through traditional health management methods and, often, through political mechanisms.

The CHAIRMAN. Thank you, Dr. James.

Well, this is fascinating and thanks to each of you. We will now begin a 5 minute round of questions.

This is a bipartisan hearing, which means Senator Murray and I have agreed on the witnesses and the subject, and I hope to devote most of the time to looking ahead to the subject she talked about.

Senator Murray raised the issue of health insurance. Everyone knows my respect for her and how well we have worked together on most issues to get a result. I have a little different view than she does, which I think I have to state.

If you are looking for why health insurance costs are so high in our state, I would suggest to my Democratic friends, they need to look in the mirror because they voted for Obamacare, and prices are up 158 percent since then.

Number two, so far as a Trump administration sabotage, if there was one, apparently it did not work because the predicted prices for 2019 are down by 10 percent.

Three, it could have been down by 40 percent if we could have agreed on the Alexander-Murray negotiation that we had in which Democrats pulled the rug out from under it at the last minute by refusing to vote for the Hyde Amendment compromise that they voted for a hundred times in the same bill, and have voted for every since 1976.

So each has our different points of view on that, and I did not one to be mentioned without the other.

Let me go to looking ahead now at health care costs.

Dr. James, that is an astonishing testimony. According to some estimates, 18 percent of our Gross Domestic Product in the United States goes to health care. And, of course, our Gross Domestic Product is almost one-fourth of the world's gross domestic product. That is a massive amount of money. You are suggesting that half of that is wasted.

Let us say you are right, even though it is an astonishing number, and you were a United States Senator, where would you start to bring that number down? What would Step 1 and 2 be?

Dr. JAMES. My first step would be to align financial incentives. There is so much detail in it, that you cannot do it from a central planning function.

The CHAIRMAN. Now, boil that down a little bit more.

Dr. JAMES. Continue to shift payment for health care to a pay for value.

The CHAIRMAN. Which we are beginning to do, right?

Dr. JAMES. That is correct. We need to continue that initiative vigorously.

At the extreme is capitated care, frankly. There are seven or eight different models for doing it, but as we shift those financial incentives, I think, the science is back behind it. What you will see is the whole industry stepping up, then, to help us solve this problem.

The CHAIRMAN. What would be Step 1 or 2 to deal with complexity, which you say is the number one cause of all this?

Dr. JAMES. I personally believe that the current crop of Electronic Medical Records is intellectually dead. They are very poorly structured for dealing with complexity in health care. There are a batch of new ones that are just nascent, starting to form that offer wonderful opportunities.

I think that we, as a country, leading the world need to start to think about a new generation of health I.T. that is focused on what is called "clinical decision support" rather than primarily financial performance.

The CHAIRMAN. Dr. Balser, you mentioned that Vanderbilt has an electronic support system to make the provision of medications more effective. I visited with your Electronic Medical Records team.

What do you think about what Dr. James said about Electronic Medical Records? What about your experience with prescribing medications in a more effective and cheaper way?

Two different questions, really.

Dr. BALSER. Yes, so I agree with what Dr. James said. I would emphasize, though, that providing the information at the point of care that doctors need is both people and process, as well as technology.

What most health care in the United States does not have, that some of the large academic centers do have, is a very robust interaction between the physicians—particularly the specialists who are capable of deciding on any given week what is the best antibiotic based on the evidence, and which one is the cheapest based on the market—and having that transmit to the doctors through the Electronic Health Record and through the decision support.

I agree the technology needs to improve, but having those really robust processes inside health systems that connect the doctors and their best evidence to what is happening out on the line is key.

The CHAIRMAN. But your folks at Vanderbilt experienced the complexity of Meaningful Use 3. They said one was helpful, two was okay, and three was terrifying.

Dr. BALSER. Yes, I agree with that.

The CHAIRMAN. They have been looking at it for years.

Dr. BALSER. Yes, so I certainly would love to see some of the things we are talking about around supporting on the line decision support in Meaningful Use 3, propelling the right kind of information to the clinicians, as opposed to some of the things that were originally conceived in Meaningful Use 3.

The CHAIRMAN. Dr. Lansky, do you agree that 30, 40, 50 percent of what we spend on health care is wasted? And if so, what would be the one or two things Senator Murray or I could do about it?

Dr. LANSKY. These estimates are very sound and we certainly see it directly.

Senator Murray's state, Washington Health Alliance, did a study of low cost services in Washington, and I think 46 percent of them were considered unnecessary, which is a huge amount of spending and burden for the patient. So I think those numbers are right.

In terms of what to do about it, obviously, I would emphasize the importance of simplifying the measurement environment to focus on outcomes.

As Brent said, moving toward value-based payment much more rapidly than we are. So that health care organizations like these have the responsibility to manage within a budget, essentially, and root out costs that they can by giving attention to the waste that exists in their systems.

I think standardizing the products, if you like, so that when we say "a knee replacement" or "an episode of diabetes care," we have a standard concept that we can begin to have competition around it. Right now, we really do not have competition for performance, and therefore, we are not having any pressure to reduce waste.

The CHAIRMAN. I would like to hear what Dr. Safyer said, but I am out of time, so we will get back to you.

Senator Murray.

Senator MURRAY. Thank you very much, Mr. Chairman.

Thank you all for your testimony today. Dr. Lansky, let me start with you.

One of the problems you talked about in your testimony is the high and rising cost of prescription drugs. Yesterday, we saw a

data release by Bloomberg that shows that prices for 40 of the most commonly used drugs to treat diabetes, cancer, HIV, M.S., asthma, rheumatoid arthritis, and others have been increasing.

I released a similar report today showing that list prices for many of the most prescribed and most expensive drugs continue to rise.

You proposed one solution, Dr. Lansky, including the cost of drugs and payment reforms like Accountable Care Organizations.

How would that proposal help control spending on prescription drugs?

Dr. LANSKY. Well, I think we, as employers, are fairly far downstream from the pricing strategy of the drug companies and the P.B.M.'s. So we tend to look at solutions we can execute within our purview as a purchaser.

One of those is to say the accountability for total spending is in the hands of an accountable organization like one of these organizations.

If they have the responsibility for total cost of care, including the cost of drugs, then they will be very thoughtful about designing a formulary or selecting from alternative medications based on the ultimate cost of administering those medications.

I know in one of Senator Cassidy's proposals, he refers to some "me too" drugs where we see a lot of drugs being created now, which are actually combinations of fairly inexpensive drugs which become expensive when they are combined.

Those formularies are then constructed to reward intermediaries who make money by the use of those unnecessarily expensive drugs.

An Accountable Care Organization would be very aggressive in understanding how they can choose medications to minimize cost and maximize clinical benefit.

Senator MURRAY. One of your recommendations is to strengthen the Accountable Care Organization and bundled payment programs run by Medicare.

Medicare's programs to improve the way we pay for health care complements similar reforms you referred to in your testimony like Boeing's Accountable Care Organization that is working well.

Until recently, these Medicare reforms were contributing to the Obama administration's objective to move at least half of Medicare payments away from traditional volume-based payments by 2018. Traditional volume-based payments create incentives for providers to give more care instead of the right care.

At our last hearing, witnesses said these types of overarching objectives build momentum towards a health care system that delivers more efficient, better quality care for patients.

I was disappointed the Trump administration backed away from that commitment and I was disappointed that CMS ended the requirement to bundle payments for joint replacements and cardiac rehab at certain facilities.

I wanted to ask you. Why are these Medicare reforms important? How do they help large employers enact similar reforms in the private sector that bring down costs for our workers?

Dr. LANSKY. Thank you. Our purchaser members are very much committed to the same strategies you just summarized. However, they are relatively small.

Even a very large organization like Comcast or Wal-Mart may have one million employees with covered lives, but they are scattered across every state. They do not have the influence to alter the behavior of their provider organizations, and their markets, and their communities.

Frankly, the Federal Government and the state governments have the biggest buying power and if they do not act in concert with the strategies of a value-based payment, then providers will have conflicting and mixed incentives.

Typically, what we are seeing now in the market is many hospitals, for example, are going back to pursuing fee for service reimbursement because it is a very successful model for them and they know how to do it.

The momentum toward transformation that you described is beginning to slow because they are not getting a consistent economic signal.

Senator MURRAY. Dr. Safyer, your organization, is it Montefiore?

Dr. SAFYER. Yes.

Senator MURRAY. Is managing to save Medicare money and improve quality, and that is despite the many challenges that your patient population faces.

You noted that many of your patients struggle to find housing, employment, pay for healthy food. Those are the so-called social determinants of health.

In my home state, our Medicaid program is now working to address those same challenges to try and keep patients healthy, and make sure Medicaid is on a sustainable financial footing.

Talk to us about why addressing the social determinants of health care is so critical to keeping your patient population healthy?

Dr. SAFYER. Well, I think everybody here could understand easily that the social determinants of health have a huge impact on someone's well-being.

The Bronx is somewhat exaggerated in terms of its challenges. We have areas where there are no pharmacies. We have areas where the walkups are five storys. We have areas where the air conditioning and/or the infrastructure of a building is toxic.

We have areas where there are food swamps and food deserts, and they are different, and you can conjure what that means. And those are just a few of the examples. I would also add that sometimes just exercising is difficult for young people. What we need to do is begin to change how communities exist to boost well-being.

Something like 50 percent of the Bronx is overweight.

Senator MURRAY. You said that. That is astonishing.

Dr. SAFYER. Yes, and an amazing amount of our population have actual diabetes, and that is something that is multi-factorial and you have to go after that.

So I think that health care systems should be leaders in making change, but they cannot make it all on their own. Just give you one example.

We go to bodegas in neighborhoods that have the highest levels of obesity. It is a food store. You cannot find food in that store. You would not identify it as food. It is filled with beer, and liquor, and soda waters.

Those bodegas get rewarded for keeping the companies, the soda companies buy the equipment to keep the soda cool, but they have to put it in the front, and you have to leave your vegetables in the back, and they are not seen. They are not gone after.

So these things are very complicated, very complex and they have a huge effect.

Senator MURRAY. Thank you.

The CHAIRMAN. Thank you, Senator Murray.

Senator Cassidy.

Senator CASSIDY. Gentlemen, loved all your testimony. At one point, I told my aide, "Be still, my heart." I was so excited about what you were saying.

We have something online, which some of you have said things and perhaps have directly referenced, a white paper as to how to address and how to lower health care costs. We would love you to go on our Website and give us a review because we are trying to implement some of this.

I am going to speak quickly and ask you too. I have limited time.

Dr. Safyer, you have mentioned that you do an intervention where you counsel people on diet to hopefully address the epidemic of obesity.

Do you have longitudinal data? Does counseling on diet actually make a difference or not?

Dr. SAFYER. We have made a large impact. I want to make one thing clear, which is that we open all of these programs to more of the community.

Senator CASSIDY. But you have actually seen merely counseling because it does seem multi-factorial, but nonetheless, just by counseling, you have been able to get folks to lose weight?

Dr. SAFYER. Yes, and counseling includes other members of the group bonding with each other, and working, and being competitive, and learning how to do it.

Senator CASSIDY. Got it. Let me move on. I am sorry, not to be rude.

Dr. SAFYER. Sure.

Senator CASSIDY. Dr. Lansky, you mentioned the direct primary care model in your testimony.

For those not familiar with it, I call it "the blue collar concierge" in which you pay a monthly fee and the doctor takes care of your primary care needs. Senator Cantwell and I have a bill out there for that.

In your experience, just because I am trying to socialize the idea, how could greater use of direct, primary care reduce administrative costs to the system?

Dr. LANSKY. Right now, we have, in the fee for service system, we have a lot of billing and insurance policies going on that are very confusing and generate an enormous amount of administrative work.

Direct primary care, I think, produces essentially a version of the capitation for the primary care physician, which reduces the trans-

actional data around the individual episodes and fee for service payment.

Senator CASSIDY. I know that you know this, but just for everyone else to understand, if you look at the percent of a primary care doctor's billing that relates to administrative costs as it relates to billing, it is much higher than for a surgeon.

Dr. LANSKY. Right.

Senator CASSIDY. A surgeon might be 2 percent; for a primary care doctor, it might be 25 percent. And so therefore, that is where you have the most impact of this.

Dr. LANSKY. Yes.

Senator CASSIDY. We would like to expand that.

Dr. James, you mentioned that a way to get waste in the system is to do something like a DRG. I compare it to an Uber driver.

I got brought home from Dulles. I was reading. All of a sudden, I was on a circuitous route because the taxi driver had a vested interest in taking me to where it was the biggest traffic jam. I ended up in Reston. It was just incredible.

Dr. JAMES. A beautiful community.

Senator CASSIDY. Beautiful community, but it cost me an arm and a leg.

[Laughter.]

Senator CASSIDY. The Uber driver, he has a vested interest in getting me home as quickly as possible.

Dr. JAMES. Yes.

Senator CASSIDY. I could not help but think there is a comparison there.

Dr. JAMES. Yes, it is a line financial incentive.

Senator CASSIDY. It is a line financial incentive.

Now, what can we do in Congress to better align that? When I speak to my physician colleagues, there is a great deal of complexity in coming up with the sort of information system, the data analysis, et cetera that is needed to be comfortable taking on two sided risk.

Dr. JAMES. Yes.

Senator CASSIDY. What can we do to aid that?

Dr. JAMES. My personal answer would be to continue to invest in CMMI, the Center for Medicare and Medicaid Innovation. Again, in both administrations, it received some pretty good support, but that is their mission to work out those sorts of things.

At a policy level, I think that is probably one of the better investments you could make.

The truth is it requires consolidation. It does not require ownership. So we have grand examples. Northern California, for example, where an I.P. model physician group, about 1,200 independent physicians, came together and formed that group.

Senator CASSIDY. Now IPA's, though, inherently are, or at least traditionally, have kept the smaller practice model ethos as opposed to the more corporate of a Kaiser, for example.

Dr. JAMES. That is correct. They evolve over time, though, and they start to develop the methods by which their members can benefit from this kind of coordinated care management. They start to develop information systems. They start to build better contracting.

Senator CASSIDY. So how do we facilitate that? CMMI would be to kind of reward those successful models and to promulgate?

Dr. JAMES. Well, they test different models for payment.

What we have currently are seven or eight different models for moving toward capitated payment where you get full risk alignment, where you get full financial incentive alignment.

I think we need more experimentation, more tests of different models.

Senator CASSIDY. So encourage that testing.

One more thing, here again, I may just hang around for a second round. Dr. Lansky, I am trying to think.

What do we do about a state like Tennessee, a state like Iowa or Louisiana where we have maybe one or two or there is no insurers competing in the individual market, the Obamacare exchanges.

When I look at Medigap, there is great competition, in part because those insurance companies do not have to go negotiate with a provider network. They can take Medicare rates and they are automatically in business.

Now, I am not saying we would have to take Medicare rates, but you could take some multiple, 1.2 or 1.5.

What are your thoughts about using reference pricing—which you referenced in yours, reference pricing being Medicare or it could be Medicaid but probably Medicare—in which somebody could go to a Tennessee, Iowa, Louisiana and immediately compete with the dominant insurer?

Of course, the dominant insurer has the ability to negotiate a price. With this, the price is negotiated for them, but that eliminates that administrative cost of that negotiation and allows someone to step in and compete with another insurer, which experience shows drives down cost.

Any thoughts on that?

Dr. LANSKY. I think you are outside of my expertise on that, but I think conceptually, that is an interesting direction to go.

Senator CASSIDY. Okay. I am over time. I yield back.

Thank you.

The CHAIRMAN. Thank you, Senator Cassidy.

Senator HASSAN.

Senator HASSAN. Well, thank you very much, Mr. Chair, and Ranking Member Murray for holding this hearing.

Thank you to all the witnesses for being here.

I will echo Senator Murray's comments that I do not want any of us to lose sight of the fact that there are children who are still traumatized at our border today because of the humanitarian crisis created by this Administration.

I just want us, as Members of this Committee in particular, to continue to push the Administration to reunite families as quickly and humanely as possible.

As to today's hearing, I thank you all for being here. Dr. Balser, I will just say I loved your testimony about medical homes. I am the mom of a medically complex young man and I can still remember what a difference a medical home made.

I can still remember going to a subspecialist appointment with my son and trying to explain what the X-ray from another subspecialist meant. I am sitting in a room thinking, "Why is the mom

explaining the X-ray to the doctor?" So it is a really important thing, not just for cost, but for quality outcomes, and for peace of mind for families. Thank you for your work on that.

Dr. Lansky, I wanted to drilldown on the issue of outcomes, how we measure them, particularly around prescription drugs.

We spend a lot of time in this Committee hearing about how prescription drug prices are skyrocketing. They are a major driver of health care costs, and we should be working to rein them in.

The Trump administration has paid lip service to this issue, but has not taken any real, meaningful action. I am worried that this Administration is actually headed in the wrong direction when it comes to controlling these costs.

Take the recent news about what can only be described as a sweetheart deal between the giant drug maker, Novartis, and the Centers for Medicare and Medicaid Services.

Novartis has an innovative new therapy known as CAR-T cell therapy. Novartis has priced this critical therapy at a whopping \$475,000. It is really amazing therapy. It harnesses the patient's own immune cells to fight and kill certain kinds of cancer. We need to make sure the patients can access it.

But it has come to light that CMS and Novartis had a pretty cozy relationship when it came to working on how CMS would reimburse for the drug; a relationship that would have set off any lawyer's alarm bells. In fact, CMS's own lawyers were reportedly, "surprised and concerned," their words, with Novartis' interactions with CMS on this reimbursement scheme.

The lawyers also pointed out that the agency was unusually deferential to Novartis when it came to figuring out reimbursement.

That deference resulted in an agreement to enter into performance based reimbursement that rated the drug's effectiveness based on patients' outcomes, which sounds good. Except that Novartis convinced CMS to measure the effectiveness after just one month when experts say patients generally do their best rather than measuring at a later point where improvements tend to level off or the patients even may decline.

So they convinced CMS not to look at an overall assessment that would be accurate. The result was a reimbursement scheme that would have amounted to essentially a blank check for Novartis.

Now, thankfully, this inappropriate relationship between CMS and Novartis has come to light and the reimbursement scheme CMS and Novartis cooked up has been halted.

But I raise this issue today because it is not the first time we have seen troubling ties between the Trump administration and Big Pharma that put consumers' interests at risk. I worry about what other kind of backroom or insider deals with Big Pharma the Trump administration may be pursuing.

We need to make sure that patients have access to these amazing new drugs like CAR-T cell therapy, and we need to figure out how to reimburse properly for these groundbreaking therapies.

But letting the drug company write the reimbursement policy is like the proverbial fox in the henhouse.

Dr. Lansky, do you have any thoughts on how Congress can make sure that pharmaceutical companies cannot rig new payment

systems? How can we measure outcomes in a way that is meaningful, and balanced, and immune from undue influence?

Dr. LANSKY. A very important question, of course.

The structure that is being discussed now with creating outcomes-based payment for drugs is a structure worth exploring. It makes a lot of sense, as you said.

The outcomes have to be fairly long term, long enough to capture the meaningful outcome for the patient and it is for a definitive therapy.

We have, however, not supported as much value-based assessments as we could. So groups like ICER, which do drug assessments and PCORI, has a variety of assessments. PCORI, as you know, is not allowed to look closely at the long term cost benefit of the therapies they are evaluating.

ICER does look at those and ICER probably would have data for you to help look at what is the appropriate place to set a threshold for an outcome measurement.

So I think the Congress can support more value assessment strategies through a variety of mechanisms that would provide the data for CMS and others to negotiate with better information.

Senator HASSAN. Thank you very much.

Thank you, Mr. Chair.

The CHAIRMAN. Thank you, Senator Hassan.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Mr. Chairman, I, too, feel compelled to respond very briefly to the Ranking Member's comments before turning to my questions.

In March, the leader kept his commitment to you and to me to bring, what had been bipartisan bills, to the Senate floor to fund high risk pools and cost saving reductions.

These bills would have led to a decrease of up to 40 percent in insurance premiums over the next two years, which would certainly have been welcomed.

It was very unfortunate that the Ranking Member, for whom I have great respect and with whom I have worked very closely on many issues, chose to block those bills.

If there has been a change of heart on that, I would certainly welcome it.

To turn to my questions now, Dr. Balser, there is growing research that shows that we may be over testing and that can be part of the problem, part of the waste that all of you have identified.

For example, a 2014 study of women over 30 found that nearly two-thirds who had undergone a complete hysterectomy were still being tested for cervical cancer, were still getting that screening, which obviously makes no sense whatsoever.

We are also seeing trends of over-diagnosis due to over testing in certain populations of older adults, who may not stand to benefit from additional screening. And sometimes the risks of the screening increase with age.

What changes should we be pursuing in the area of testing to try to prevent that kind of waste?

Dr. BALSER. Thank you for that question.

Divided into two buckets, one is making sure that the testing we are doing is really evidence-based, to speak to the area you mentioned around hysterectomies.

Frankly, again, just like physicians have trouble keeping up with all of the different drugs and in every situation—which drug is the most cost effective or the most efficacious—the same thing is true with testing.

Such as, for example, bone marrow tests where it is a very complicated process of ordering all the various tests on the bone marrow.

What we are finding is that if we expand the traditional function of a Pharmacy and Therapeutics Committee that every hospital has to include testing; so a Pharmacy, Therapeutics, and Diagnosis committee, and then just like driving into the clinician decision support the right drug to use, we actually pull information from the Electronic Health Record to guide the physicians in what test to order and how to interpret those tests.

Sometimes we have automated support and in other cases, we actually ensure that the physicians talk to the lab medicine folks before the tests are ordered. That reduces greatly unnecessary testing.

On the other side, there will always be areas where we over test intentionally because the risk to patients, should we miss something, is enormous, and a good example is prostate cancer. We will always over-diagnose prostate cancer because the risk of missing it is high. So I think the key there is to minimize overtreatment.

Again, really having good support for PCORI and the other kinds of institutes that are helping us do the outcomes research.

For example, at Vanderbilt, many patients with prostate cancer, we now know, do not require surgery. It can be safely followed with MRI screening. That is saving patients a lot of morbidity and also saving the health care system a lot of money.

Senator COLLINS. Thank you very much.

Dr. Lansky, a September 2017 article that was in “Managed Care” magazine highlighted your organization’s strategy in dealing with Pharmacy Benefit Managers. I have done a lot on this issue in the Aging Committee in looking at transparency.

You mentioned that you hired an expert consultant to go over the P.B.M. contracts. You found example after example where the P.B.M. turned the formulary to its advantage and not to the customer’s advantage.

It seems to me there are perverse conflicts of interest in the way this whole system works, in addition to a lack of transparency. One is that the P.B.M. may be paid a percentage of the cost of the drug. So that is an incentive for the manufacturer to have a high list price and the manufacturer wants to please the Pharmacy Benefit Manager in order to have its drug included on the formulary.

Any comments on that?

Dr. LANSKY. Yes, I agree with those points absolutely; very challenging.

We have been working, as you mentioned, to identify what we call a formulary where the conflicting incentives that are now operating in the system would be removed. You would have trans-

parency of the cost through the patient, who ultimately is paying for all of this, and is the beneficiary of it.

We have identified a number of areas where that could be improved. The challenge now is to rebuild the intermediary layer of payment and financing so that kind of an evidence-based formulary can be applied.

Senator COLLINS. Thank you.

The CHAIRMAN. Thank you, Senator Collins.

Senator Smith.

Senator SMITH. Thank you, Chair Alexander and Ranking Member Murray.

Thank you all very much for being here today. We have a joke in my office that this is a particularly wonky hearing and so I am particularly happy. I really appreciate it.

Several of my colleagues have asked some interesting, I think, really important questions about the skyrocketing challenges we have with prescription drugs, and I want to just nod my head to those questions. It is the thing that I hear the most in Minnesota.

I am doing a whole series of listening sessions on this around the state, and had one woman in particular who stuck in my mind, who laid out five examples of insulin pens that she purchased all around the world: \$8, \$11, \$15; exactly the same medicine, exactly the same manufacturer, \$140 in the United States. And this is what my constituents and all of our constituents are grappling with, and it is really a challenge.

But I would like to just actually hone in on something else that I am quite interested in. Dr. Lansky, you are talking about how employers, and many of you are talking about, how employers are playing a more activist role in negotiating directly with providers to try to control costs and also, I think, make sure that people are getting the good quality care that they need.

Could you just talk a little bit more about how that happens in the world? What I am trying to get at is who ought to be deciding what care a patient needs? Who is the final decider?

Sometimes I know when I talk to my friends and colleagues who are in the provider community, nurses, physicians also, sometimes they feel like the people who are not providers, the people who are, in their words, the bean counters are deciding.

Could you help me understand how you see that balance and how that comes together? Especially as employers play a more important role and that is roughly half of the people who have insurance.

Dr. LANSKY. So we believe the patient and their physician or other provider should be deciding, and those parties should have the right information, incentives, and authority to make things happen.

We have some opportunity to influence the information and incentives, and even to delegate the authority to someone. Because we do have a fiduciary role as the plan sponsor—on behalf of hundreds of thousands of people and a great deal of money—to guide the process, to structure the process so that ultimately that patient and physician can have the information and incentives to make the right decision.

Senator SMITH. One of the big challenges that I hear is that it is so difficult to get the data and get the information. It is not at all transparent. In fact, it is extremely confusing both for patients and often for providers too.

What do we do to address that problem? Anybody?

Dr. BALSER. So one challenge we have is that inside a healthcare system where the physicians are employed by the health care system, we have much greater ability to move information through electronic decision support and guide physicians in their practice.

Increasingly, we are trying to create ACO-like structures and affiliated networks around us that let us influence care out in communities where physicians may be in small groups and do not actually have the kind of support we have at a Vanderbilt.

A challenge we face with that relates to the Stark and Anti-kick-back laws, which were designed at a time where they were well-conceived to try to prevent self-dealing. But today, the way those laws are written, they actually are preventing us from providing evidence-based guidance to clinicians that we do not primarily employ.

I have actually included in my written statement, it would be wonderful if Congress would look at that. Not eliminate those laws, but try to modernize them so that we can do the right things without running into harm's way to support physicians that we do not employ.

I am not imagining that 100 percent of physicians in this country are going to be employed by health care systems. We are always going to be working with doctors that we do not employ.

Senator SMITH. Dr. Safyer.

Dr. SAFYER. Yes, I agree with everything that Dr. Balsler said.

I would add one component that is underlying here, which is our information systems, which tend to be in the academic medical centers, have robust information to give us many answers. But we could do a lot better if the different systems spoke to each other, which is not good business for the providers in the systems.

When we built the railroads in this country, the gauge of the track that you were on did not change as you came out of Minnesota into another state.

So our information systems are designed to be proprietary and to compete with each other, but not share information that would be readily available.

In the Bronx, we built a rail, which is connecting the different systems. It is a workaround, but it only has about 25 different items in it. It is not comprehensive. We have the information. It is not easily accessible.

Senator SMITH. Thank you.

Mr. Chair, I know I am out of time, but I want to just close by saying that I appreciate this. I am struck by all of your testimony about the amount of experimentation and testing that we need to be doing.

It is one of the main reasons why I am so concerned about the Trump administration's recent efforts to undermine the work of the Centers for Medicare and Medicaid Innovation. That is the place where we need to test out ideas on ACO's and others that you have

been discussing. I think that it is a big mistake to move away from that.

Thank you.

The CHAIRMAN. Thank you, Senator Smith.

Senator Warren.

Senator WARREN. Thank you, Mr. Chairman.

We are talking today about how to reduce health spending and Senator Murray mentioned one approach with a lot of promise, it is called bundled payments, and I want to follow up some on that.

Currently, Medicare pays for health care by reimbursing hospitals for each individual service that they perform. Right now, if you get a hip replacement, the hospital gets paid in little chunks, or big chunks, for every piece that they did.

They are paid when the doctor cuts you open. They are paid when the anesthesiologist puts you to sleep. They are paid for the operating room. They are paid for the device. They are paid for follow up visits. And then if things go wrong, they are paid to treat your infection or for a second surgery to treat the problem, and on and on.

But the Affordable Care Act let Medicare test using bundled payments for certain services and it is a pretty simple idea, just like it sounds. Instead of getting paid for every piece separately, the hospital gets paid one set price for a whole bundle of services that go from start to finish.

Dr. Lansky, let me start with you. Why does changing the way that Medicare pays for procedures to a bundled price have an impact on the quality of care that the patient receives?

Dr. LANSKY. It does not guarantee that it will have an impact on quality of care, but it creates a platform for the team to work together. So the team is now convened to manage against a budget, essentially, across diagnostics, treatment, rehab, and outcomes entirely.

Unless they also have an incentive to achieve a good outcome, if anything, there may be a risk. We either do too many bundles or they will not optimize the spending to achieve a good outcome.

Once the team is convened, if they are also accountable for the outcome and their payment is in some way contingent on outcome—

Senator WARREN. When you say “outcome,” it is things like low rates of infection.

Dr. LANSKY. Yes, and also if it is a knee replacement, can they walk?

Senator WARREN. Can they actually walk?

Dr. LANSKY. Are they returning to normal activities of daily living six months after the surgery?

For a bundled payment to lead to higher quality care, it must cover an entire episode from beginning to end. The payment has to be affected by the patient’s outcome. Ideally, the payment should be prospective, not retrospective. In other words, the team knows upfront they are getting a certain amount of money and managing to it. If it is a retrospective payment, a year later, some accountant figures it out.

Senator WARREN. Right, because you are trying to shape behavior upfront. Okay.

So back to a hypothesis, we think that is what it would do. Paying a bundled price, if done right, would give hospitals the incentive to keep patients healthy and managed towards good outcomes.

Now, Medicare set out to test this hypothesis with some research projects designed to examine whether costs went down and whether patients did better.

The first round of research was opt-in. Meaning, the hospitals that got bundled payments were the ones that signed up to get paid in this way. They volunteered. The data looked good, but researchers suspected that the hospitals that signed up were the ones who were confident that they could do better under a bundled payment system.

So Medicare tried a more rigorous test which meant requiring all the hospitals in a certain part of the country to participate in certain types of care like hip and knee replacements or bypass surgery.

Now, Dr. Lansky, when President Trump took office in 2017, his Administration just flat out canceled most of the mandatory parts of the research agenda. So that raises the question.

Are we getting solid data about how bundled payments work if we just collect results from the hospitals that chose to opt-in?

Dr. LANSKY. There are two effects I am concerned about. One is that we do not know whether we are only getting the high performers or the low performers in the data.

The second is we are not moving toward a competitive market where we have all the providers in the community revealing their data for you and me to see and make our own decisions where we want to go for care. We are only getting a few spotlights.

Senator WARREN. So the Trump administration said they canceled mandatory participation in this research project because they said it was just too hard on hospitals. Sometimes hospitals argue that the older patients or sicker patients are going to have more problems and the hospital is going to be penalized if it does not have good outcomes.

Let me ask you, Dr. Safyer. You have a lot of experience running programs providing outcome-based care to patients in the Bronx.

Are there ways to design successful programs even for hospitals serving patients that have a very high degree of health challenges?

Dr. SAFYER. The answer is yes and I believe that the role of Medicare and Medicaid should move in that direction aggressively.

I will just make one very important point to your question which is, and we discussed it earlier, the social determinants of health are huge and important, and we need to account for them. So that should be built-in to it.

Quite frankly, I was disappointed in some of the metrics that we have used in Medicare where that was not included and it was ignored.

Senator WARREN. Okay.

Dr. SAFYER. I think we need to get back to that.

Senator WARREN. Look, in Massachusetts, we are leading the way on efforts to reward high quality care, and we are doing it in our Medicaid program, which cares for many of the most vulnerable patients.

Here is the bottom line. If we do not stop trying to improve health care in this country—we do not stop trying to improve the health care in this country because it is hard or because it makes people who benefit from a broken system uncomfortable—if President Trump decides he wants to get serious about bringing down health care costs in this country, he can start by reversing his shortsighted decision to cancel research on one very promising way to do it.

We should make this research better, not take this research off the table.

Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Warren.

Senator Kaine.

Senator KAINE. Thank you, Mr. Chair.

Thanks to our witnesses.

I echo comments made by our Ranking Member at the beginning.

Also, Senator Hassan, I hope this Committee might take up the condition of children who are under the jurisdiction of HHS, the Office of Refugee Resettlement, because I think it is an important thing we should exercise oversight on.

I appreciate you being here today on this important topic. My constituents in Virginia are asking me all the time about health care costs. This Committee is, I think, uniquely suited because of the folks on the committee—former governors, physicians, et cetera—to reduce costs.

I was intrigued by the testimony of Dr. James and Dr. Balser on waste, and I am just going to read a couple of excerpts from your written testimony.

From Dr. James, “Higher quality eliminates waste. This year, total expenditures on health care delivery in the United States will approach \$3.6 trillion. Midpoint estimates suggest as much as \$1.8 trillion in recoverable waste.”

“The primary drivers of waste are, (1), care delivery execution that still relies primarily on personal expertise and human memory; (2) in the face of high and rapidly increasing complexity of clinical practice that, ‘exceeds the capacity of the unaided expert mind’ framed within; (3) legal structures, cultural expectations, and payment methods that actively encourage utilization. Waste estimates include healthcare fraud and abuse. However, these factors are small compared to other sources.”

Dr. Balser, you have similar testimony. “Nearly all analyses have shown that amid myriad causes for the rising cost of healthcare, from accelerating technology to inflated pricing, by far the largest single issue is waste.”

“The largest sources of waste are euphemistically termed ‘unnecessary services,’ and frankly, in most other industries would be less generously labeled ‘sloppiness’. The root causes are predominantly system failures in our ability to effectively communicate, not only in transmitting the key information about our patients and the care they are receiving, but also shortcomings in the decision support that clinicians need to provide care that is timely and cost-effective.”

I found that testimony fascinating and the timing of our hearing fascinating.

Yesterday, the Administration shuttered a 20-year Federal program, the National Guidelines Clearinghouse. This was put in place 20 years ago in 1998 to collect best practices about a variety of health conditions and treatment options. Those best practices are vetted before they are included in this online clearinghouse.

The online clearinghouse is used 200,000 times a month, largely by health care providers who are dealing with patients and then using the online database to try to figure out what is the best treatment modality for a patient, so they do not waste. So they do not do something wrong. So that they more likely provide the high quality, which you suggest, Dr. James, will drive out waste.

The Administration just closed the program yesterday after 20 years. The American Health Insurance Plans, AHIP, the Association of Family Physicians begged the Administration not to shutter this voluntary informational resource to allow clinicians, and possibly, especially clinicians in small settings, rural setting family physicians to be able to get the best information so that they can not direct the wrong treatment, but the right treatment to help their patients.

High quality drives out waste. High quality should help us reduce costs.

Can you think of a single good reason why an Administration would want to shutter a program like this that provides vetted health quality information to providers?

Dr. JAMES. Senator, I am not here to defend the current Administration, first of all. I do not know why. I will say this, the piece that is missing from your model is the last mile. It is not enough to have a database. You do need the evidence, so it is a critical piece.

Senator KAINE. Yes.

Dr. JAMES. How do you get it so that it is available in every patient interaction almost without having to hunt it, which is what it really takes?

Senator KAINE. But you would assert that we do need the database.

Dr. JAMES. Well, I need the content, and then I need to get it down to that interaction.

Senator KAINE. Any other thoughts about why it would be a good idea to eliminate the National Guidelines Clearinghouse?

Dr. SAFYER. Well, there is no good idea for shutting down an opportunity to learn about why we spend so much and do not get the quality that we need. I cannot even get close to it.

But just to make a comment about something that has come up a number of times, which is related.

Senator KAINE. But could I ask either Dr. Lansky or Dr. Balsler first?

Can you see a reason why the Federal Government would shut down the National Guidelines Clearinghouse after 20 years?

Dr. LANSKY. No.

Senator KAINE. Dr. Lansky, no. Dr. Balsler.

Dr. BALSER. No.

Senator KAINE. The asserted reason is budget cuts. We just did a tax bill that increases the national debt by \$1.5 trillion. This is

a small, in the single digit million dollar annual allocation program.

The notion that we can increase the debt by \$1.5 trillion over ten years to give tax breaks to big corporations and then eliminate a best practices Website that produces quality, which is good for people, and drives out waste and cost is beyond me.

My time is up. Thank you, Mr. Chair.

The CHAIRMAN. Thank you.

Senator Murray and I need to go to the floor to speak before the vote at 11:45. I have asked Senator Cassidy to Chair the hearing, and any second round of questions that Senators might have, and then conclude the hearing.

Before I leave, I would like to thank the witnesses for coming. I am struck, as I think any normal person would be, by the idea that as much as half of what we spend on health care is wasted. There is always waste in any human enterprise, but that is a ridiculous amount of money.

As we continue our hearings here, I want to, and I am sure Senator Murray feels the same way, we want to see if there are steps we could take here that make a big difference in that. So we will listen carefully to what you have to say.

I have heard you focus on utilization. You focused on complexity; we have heard that in our other hearings. At an earlier hearing, the testimony was that we do not use more health care than other countries, but that our prices are higher.

So I guess the trick is for us to listen carefully enough to figure out, what could we actually do about that here? There may be one, or two, or three things that would have a big effect.

When I was a young man and worked in the White House, I was an impatient person and the wise man I worked for would say to me, "Lamar, just a little move here makes a big difference out there."

So if we could avoid getting balled up in technical details here or partisan politics, it could be that toward the end of the year, that we could begin to work together to see if there is one, or two, or three things that we might do, which would set in motion a reduction of complexity, or better utilization, or whatever step to work on that waste.

We have some very good talent on this committee. We have at least two physicians, governors, former governors, all sorts of people who are used to solving problems.

So I would say to my colleagues who are here, and I will say to the others, that after we get through these four or five hearings on reducing health care costs, I hope we can sit down and say, "Now, what can we actually do about this?"

Your testimony today has been extremely helpful. I hope it has been worth your time because it has been worth ours.

Senator Cassidy.

Senator Cassidy [presiding]. Let me ask my colleagues, are either of you interested in a second round? Yes? Okay. Well then, why do you not go first?

Senator Kaine. Thank you, Senator Cassidy. Mine is just to be polite to Dr. Safyer. He was about to answer and offer an opinion,

and I cut him off because my time was running out and I wanted to hear from Dr. Lansky and Dr. Balsler.

So, Dr. Safyer, do you remember?

Dr. SAFYER. I remember.

I just want to make a very important point, I think, which is, do not underestimate the Federal Government's power if they got involved in the price of drugs, the price of insurance, and all these quality issues along with the price for equipment that we buy and put into peoples' knees and hips.

It is unregulated. It is the Wild West. I think we are dangerously going back in that direction.

So I do agree with Brent very strongly, and the other people here, that the quality is sometimes not the best, but the providers need to be in a system where other things are in tune and working in that direction.

If you just look to Europe where there is arguably one socialist system in terms of health care. The rest have private insurers, private providers, and so forth, but they discipline the price of items, the governments. There are rules to the road and there are not rules to the road in our environment.

I do not think it is very hard to find where the waste is up and down. And everybody I think, and I do not think Brent would disagree with me, needs to be involved in that transformation.

Senator KAINE. If I could say, and I will conclude, Senator Cassidy, with your comment about the need for rules for the road and discipline mechanisms, we do not even use market mechanisms to discipline price.

So we had a recent testimony on drug pricing, and I pointed out that the cost in the United States of Gleevec, which is an anti-leukemia drug, is dramatically higher than the cost in other nations.

I asked our HHS Secretary, "Do you know what a best price contract is?" He said, "Yes, I kind of know what it is." I said, "All the time in commercial settings, in a commercial negotiation, you will say, 'I am going to pay you for this, and because I have such a big market, I am going to pay you at the price that is the best price you offer to any other nation.'"

If we just use standard commercial practices like best price contracts, for example, which are market mechanisms, if we did that, we could dramatically reduce the cost especially of mature drugs that are past the point where dollars are being put in to research them.

So discipline does not even have to mean countering the market. It even means using traditional commercial practices, which we refuse to use, to discipline costs in the country. I think we should be exploring how to do that.

Dr. SAFYER. My wife and I are physicians. People show up at our doors.

So recently, I bought the equivalent of Naloxone, which is miraculous if somebody overdoses, because I am just kind of waiting for it to happen, even though my neighborhood is not the Bronx. The inhaled version of it is \$400. I mean, it is incomprehensible. The companies are making money on both ends of it and nobody has disciplined it.

In addition to that, my wife has allergies, bees, yellow jackets, wasps. EpiPens now are in that same range. It is just an old drug that has been around forever and it is unreasonable.

Senator Kaine. Thank you.

Senator Cassidy. There are several things to follow up on.

Dr. Lansky, when Chairman Alexander mentioned a few things we could do that could make a big difference—and you echoed in your testimony, or I echo you—price transparency could be a big thing. Now, people will pooh-pooh that and say, “Price transparency does not work,” using some experiment out of New York.

But I like what you did with joint replacement with reference pricing. Sure, you can go wherever you want, but you are going to pay the delta between that which we find is high quality, good price and that which these folks down the road decide to charge.

Any comments on that?

Dr. Lansky. I think the evidence is good that reference pricing works. It works for drugs. It works for procedures. The key is it has to be for a defined product.

So I think in all of the discussions we are having, the opportunity we have to standardize what the “it” is that people are competing on. What they are pricing. What you and I, as consumers, can recognize as a fixed object, if you will, in the marketplace. That is an important part of it.

But the model is very effective, and I think the opportunity to even within Medicare—

Senator Cassidy. So let me go beyond that because I do not review the health economics literature as closely as you do.

But I remember reading an article I thought well done, that if we look at ACO’s—really, and the guy like me who is 60 years old, got a little bit of osteoarthritis and takes my Advil whenever I need it—you do not make your money on me, managing my health care.

You make it on those who have chronic disease and/or hearts, hips, knees, joints, joint replacement, hearts. Bundle payment, just merely focusing on bundle payment for joint replacement, heart conditions, and perhaps high cost chronic illness is actually as effective as trying to enroll everybody into an ACO.

Dr. Balsler, you seem to agree with that.

Dr. Balsler. I totally agree. I think the ACO experiment has not been as successful as we would have liked because we tried to run before we learned to walk. Bundles are learning to walk.

If you say we are going to do a bundle around heart surgery, it forces about 100 people to get together and figure out the most cost effective and smooth approach to designing the system. So from the time the patient shows up at the door to the time they are out three months, they have the highest quality outcome and the lowest cost. It really, strongly incents a health care system to do that hard work.

Senator Cassidy. Just because I am not sure, it may be that walking is really where we need to be and perhaps a direct primary care model for the guy like me who has a little bit of osteoarthritis and whatever happens when you turn to be 60 years old.

Yes, sir.

Dr. Safyer. I agree, but I see it as a first step. No pun intended. So what we need to do is have those kinds of programs, but we

need to be moving the entire system into one that is an ACO or risk bearing.

Senator CASSIDY. I am not sure I have seen, though, that ACO's work for people who do not have significant medical expenditure.

Dr. SAFYER. Yes, but people move in and out of different experiences in the health care system appropriately. So when the whole system is aligned, I think you get better outcomes. You also get the demand.

Senator CASSIDY. But there is an administrative overhead associated with ACO's—

Dr. SAFYER. Yes.

Senator CASSIDY.—Which, if you go to a direct primary care model, you will eliminate that administrative overhead.

Dr. SAFYER. Well, the largest overhead is in the commercial arena and that is very large.

Senator CASSIDY. Let me ask you this, because chronic disease management, you mentioned in your testimony doing End Stage Renal Disease. Now, that seems just crying out for a bundled payment, but it seemed in some regard, we have not been able to achieve that.

Any thoughts on the successful application of bundled payments to ESRD?

Dr. SAFYER. I agree with you and where you are going, and I think we should be doing bundles, which is a word that is commonly used, in many more areas, and we should be aggressive about it.

But we should have a target about where we are going. Again, I come back to it. If you are not disciplining the pharmaceutical companies, the vendors, and the insurers to something that is reasonable, you will never get towards what France has or Portugal has, which is not, I am not talking about the British system.

Senator CASSIDY. So that leads into my next question.

Dr. James, we in the Federal Employees Health Benefit program get a risk-adjusted amount to an insurer to take care of a Federal employee. These members of CalPERS and other organizations give a risk-adjusted amount to an insurer to care for that.

Senator Collins and I had a bill, Cassidy-Collins, which would have given a risk-adjusted amount to states to care for those folks who are on the exchanges and of those who are on Medicaid.

I think it is fair to say that states gain Medicaid to maximize reimbursement to lower their exposure. And frankly, providers help states gain because it is cost less contracting.

What are your thoughts conceptually about the Federal Government on a risk-adjusted basis capitating, if you will, per patient payment to states for things such as Medicaid and for, say, the acute care aspect, not long term care, and for the individual market?

Dr. JAMES. I like the way that you are headed with that, but I think you stop a step too short.

It is funny. We see it in Medicare Advantage. Currently, we basically capitate insurance plans, and then they pay the care providers fee for service, and that is where the whole thing breaks down right there.

Insurance companies, states, do not deliver any care. They do not plan or design those care systems and that is where the alignment has to take place.

Senator CASSIDY. So you are saying the payment should go directly to the insurer or to the patient to choose their plan?

Dr. JAMES. If we could have talked them into it, I would have preferred that the Federal Government paid us as a system direct capitated payments for Medicare patients' right to the care delivery system.

Senator CASSIDY. Then what about for Medicaid and for the individual market?

Dr. JAMES. We had in Utah, led by a fellow named Dan Liljenquist, who is someone you really ought to look into, with what he is doing with pharma right now. He was a state Senator. We had a Medicaid ACO that basically deployed exactly that.

Senator CASSIDY. So conceptually, you feel like it is a valid thing.

Dr. JAMES. Yes.

Senator CASSIDY. I can tell you, you are always burning down the world when we did it, but it seemed like everybody else was doing it.

Dr. JAMES. Yes. One other little comment on the last conversation, in the "Harvard Business Review" in July 2016, Mike Porter and Bob Kaplan, me and Greg Poulson debated that issue about bundled payment.

The way to think about a bundled payment is capitation light for medical procedures that have clearly defined boundaries.

Senator CASSIDY. Yes.

Dr. JAMES. An awful lot of what we do in medicine does not have clearly defined boundaries.

I like the way that Dr. Safyer, you were saying, it is a step before you run, walk before you run. But you are stepping toward a capitated model.

Senator CASSIDY. Let me ask one more thing, because they just called votes and I have one more thing I wanted to ask.

We have not talked about tort reform, but I will tell you, my physician colleagues will say, "The reason I ordered that MRI is because if I do not, I get sued." There has been data that states that have put in tort reform have lower ordering of so-called unnecessary tests than states which have not put in tort reform.

Dr. Balsler, do you want to take a shot at that?

Dr. BALSER. Yes, there is no question that states that have put in, not just caps on torts, but committees, expert committees that actually screen cases for reasonableness have an enormous impact in reducing this problem.

The states that have very robust screening processes where frivolous suits are just not carried forward are doing much better in this regard.

Senator CASSIDY. Does anybody disagree with that position?

Dr. SAFYER. No. I agree strongly.

Senator CASSIDY. One more thing, Dr. Safyer, I do have one more thing.

Surprise medical bills; New York has apparently done some stuff. The ACA had three ways to go at surprise medical bills. I think New York has another method. Any comments on that?

I think we, on this Committee, would be interested in helping out on issues such as surprise medical bills, which, for those who are not familiar with what I am speaking, you are brought to an emergency room. Your physician is out of network because they contract with the hospital. The hospital is in your network. You think you are covered, and then you get the surprise bill.

Doctors do not like it because doctors say, "The payer does not negotiate with me because they think they can get a better price by not negotiating with me."

Thoughts on that?

Dr. SAFYER. I am in favor of disciplining that and I think New York is moving in the right direction, but we are not quite there yet.

Senator CASSIDY. What about the ACA's provision? I think that ACA had the greatest of three insurers must pay providers the plan's average in-network amount, Medicare amount, or so-called usual, customary, and reasonable. But I think New York is actually doing something different than that. Again, any comment?

Dr. SAFYER. I do not have the facts in particular, but I know it is moving in the right direction and something that we are paying attention to.

Senator CASSIDY. Okay.

Dr. SAFYER. It is frightening to people and could potentially keep people out of emergency rooms when they need them.

Senator CASSIDY. Yes.

Thank you all for being here.

The hearing record remains open for 10 days. Members may submit additional information for the record in that time, if they would like.

Senator CASSIDY. The HELP Committee will meet again Wednesday, July 25 for an executive session.

Thank you for being here.

The Committee stands adjourned.

[Whereupon, at 11:46 a.m., the hearing was adjourned.]