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WHAT DOES 21st CENTURY MEDICINE LOOK LIKE?

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P R O C E E D I N G S

MR. WEST: Good morning. I'm Darrell West, vice president of Governance Studies and director of the Center for Technology Innovation at The Brookings Institution. And we would like to welcome you to our discussion of 21st century medicine. And we have a Twitter feed set up at #EvidenceBased if you wish to comment during the course of the forum.

So, as we all know, healthcare is changing rapidly. We have seen major shifts in laws, regulations, and policies in recent years. But amidst all those changes it's important to pay attention to the evidence on which medicine is practiced.

There's a new book entitled "Unhealthy Politics," which examines the quality of the evidence that undergirds our medical treatments. And the book authors argue that much of the way medicine is treated is not based on actual science or in sound science. So the authors, Eric Patashnik, Alan Gerber, and Conor Dowling, suggest that medical treatments go into usage before they are rigorously evaluated and this harms patients and adds to the cost of healthcare.

So today we are pleased to have Eric Patashnik with us. He's going to discuss his new book which was just published by Princeton University Press. And then we will have a panel discussion with several leading experts.

Eric is the Julis-Rabinowitz professor of public policy and political science at Brown University. He is a leading expert on health policy and he's also a nonresident senior fellow here at The Brookings Institution. So I'm going to turn it over to Eric. He will give a very short presentation on his book, and then we will hear from a couple of other experts, as well. Eric.

MR. PATASHNIK: Thank you. It's a pleasure to be here, especially to be on a panel with Elisabeth Rosenthal and Robert Pearl, two of the real thought leaders in American healthcare.

While the Affordable Care Act has survived multiple repeal attempts, our healthcare system still needs to reduce costs and improve quality. We spend dramatically more than any other advanced democracy on healthcare. Yet as my co-authors Alan Gerber and Conor Dowling and I report in our new book, "Unhealthy Politics," a major of U.S. doctors told us in a 2015 survey that the quality of healthcare for the average American patient is the same as or even worse than the quality of the average patient in Western Europe. Only 36 percent of U.S. doctors in our survey said the quality of healthcare

for the average American is better than in Western Europe.

The disappointing performance of the U.S. healthcare system given our very high level of spending stems from many factors, including high prices for medical services. But one of the most important and underappreciated sources is that a significant portion of the $3 trillion America spends on healthcare is spent on treatments of little demonstrated value.

Most Americans assume that common treatments are always based on sound evidence and that when treatments are found not to work, they will be quickly abandoned. In reality treatments can diffuse into clinical practice before they are rigorously evaluated. And once doctors begin using a test or procedure it can become hard to stop, even if studies show that treatment works less well than alternatives. As Atul Gawande wrote in The New Yorker, millions of people are receiving drugs that aren't helping them, operations that aren't going to make them better, and scans and tests that do nothing for them and often cause harm.

The uptake of medical evidence is slow and haphazard. In the book we take a close look at the use of arthroscopic surgery to treat osteoarthritis of the knee. In 2002, the New England Journal of Medicine published a remarkable study that demonstrated that the surgery worked no better than a sham procedure in which a surgeon merely pretended to operate. We wondered how the healthcare system would respond to the study and why this operation had diffused in to practice in the first place.

We found that surgeons became excited about the procedure and began performing it on their patients before there was hard evidence about its effectiveness. When the sham surgery study came out in the New England Journal, medical societies challenged it on questionable grounds and lobbied to maintain Medicare coverage of the procedure. The use of the operation eventually declined, but surgeons continued to perform closely related procedures that also rest on a weak evidence base.

The sham surgery case, of course, is stunning in its details, but it's illustrative of systemic problems in American healthcare. Although estimates vary, some experts believe that less than half of all medical care is based on adequate evidence about its effectiveness. When there are two available for the same condition, such as surgery versus medication, doctors often do not know which one works best. And as a 2012 study in Health Affairs points out, once studies are published about the comparative effectiveness of treatments, we often observe little or no change in practice over the near to medium

term.

Pharmaceutical companies and other powerful groups clearly have a vested interest in maintaining coverage and reimbursement of low-value treatments. But why has the countervailing reform pressure been so weak despite the massive cost that the inefficiencies of U.S. healthcare impose on patients and taxpayers? And why do efforts to strengthen U.S. evidence base and eliminate waste continue to cause so much political controversy? The persistence of this problem is a puzzle given the wide consensus among health policy experts associated with both parties on the need for reform and the fact that all patients, both rich and poor, are harmed if medical care is not guided by evidence.

To explain why the government's response to this problem has been inadequate, the book explores the role of three key actors: the public, physicians, and politicians. We carried out several national public opinion surveys to learn how ordinary Americans think about these issues. Our surveys showed that the public would like information about how well treatments work and they want to be warned if a procedure is unsafe, but people worry, understandably, that insurers and the government will use evidence about the effectiveness of treatments to ration care and to limit doctors' ability to tailor their own care.

On the optimistic side, our public opinion surveys show that the support of doctors for the use of evidence to guide medical care can significantly ease public fears. The public views doctors as knowledgeable and trustworthy guardians of their interests. If doctors were to become more forceful advocates for evidence-based medicine our research suggest they could help build public support for needed reforms.

Unfortunately, doctors and medical societies have not been consistent leaders on this issue. Many doctors support evidence-based medicine in the abstract, but they bristle when studies question the effectiveness of treatments in their own practice areas. We performed a national survey of physicians to learn how doctors see their own role in causing and combatting waste and inefficiency in healthcare. We found that many doctors are not very well-informed about these issues.

For example, only one-fifth of the doctors in our survey said they were very or somewhat familiar with research on geographic variation in healthcare spending and utilization despite the tremendous attention this research has received from leading policy experts. Not only are most doctors

not up to speed on this research, but they seem comfortable with medical societies advocating for their professional autonomy and economic interests when treatments are challenged by research.

We asked doctors what do they want their medical societies to do when a study calls into question the effectiveness of a treatment commonly used in their practice area? The most preferred response, almost 75 percent, was for medical societies to take an active role critiquing the study and pointing out weaknesses. Just 52 percent of doctors supported the medical society playing a neutral information transmission role without taking a stance. In sum, many doctors want their medical societies in some respects to act like trade associations, but the public does not necessarily recognize this.

The government's inadequate response to the medical evidence problem also reflects the incentives of elected officials themselves. The American political system has often claimed they're properties of self-correction. When governance veers dramatically off course, opportunities may arise for a political entrepreneur to frame a problem and sell a solution to the public in order to capture a political reward. But the serious problem of inadequate medical evidence to guide care has prompted only limited investment of political entrepreneurship from elected officials.

We conducted a series of survey experiments to see how the public would react if a politician takes a pro-science stance when research questions the effectiveness of a common treatment. We found that it is quite risky for politicians to challenge the medical authority of doctors even when the evidence is on the politician's side. The public trusts doctors much, much more than they do politicians and politicians fear that they will take a reputational hit if they question whether doctors always know best.

To be sure, some reforms to strengthen the evidence base of American medicines have passed. For example, the Affordable Care Act established the Patient-Centered Outcomes Research Institute, or PCORI, an independent, nonprofit organization that funds studies to compare healthcare options to learn which works best. This is a valuable step, but PCORI has not yet had a major impact on clinical practice. It has a narrow research mission and, by design, doesn't issue practice guidelines or make policy recommendations. The agency has not yet gained a broad reputation for relevance among -- for making a difference among the general public. PCORI is up for reauthorization in 2019 and it is not yet clear if it will survive.

Now, one might have expected conservatives to have supported PCORI since they've

long expressed concerns about wasteful medical spending. There's a strong consensus among both liberals and conservatives that we need to get more value from our healthcare dollar. But the battle over Obamacare, which has been so heated and so contentious, undermined the incentives for bipartisan, technocratic consensus among members of Congress on the need for reforms to improve the quality and efficiency of healthcare.

Republicans attack PCORI as a rationing board during the Obamacare debate. Less, I think, because they disagreed with the need for patients, physicians, and payers to have better information about what works in medicine than because they were looking for ways to foment public doubts about the government's role in the healthcare sector.

It remains to be seen whether a bipartisan consensus on reforms to strengthen the clinical evidence base and promote the delivery of clinically appropriate care will reemerge if and when the fate of the ACA is completely settled.

None of this is to suggest that the U.S. healthcare system lacks strengths. We enjoy the benefits of a high level of medical innovations, breakthrough treatments have been developed, and the best American healthcare is genuinely excellent. Overall, though, the U.S. healthcare remains inefficient and wasteful and many treatments are not grounded in sound science. Problems of both overtreatment and under treatment are rampant. There are large variations in utilization in spending across regions that are not driven by patient health or preferences. And doctors have not consistently used their professional authority to ensure that the healthcare system is based on the wise and cost-effective management of scarce clinical resources.

The big challenge, in conclusion, for the U.S. healthcare system over the next quarter century is not only to extend health insurance coverage to the entire population, but also to ensure that the medical care delivered to Americans is of high quality and affordable for both individuals and society.

Thank you. (Applause)

MR. WEST: Okay, so, Eric, thank you very much for jumpstarting our conversation. First I want to introduce our other two panelists.

We're pleased to welcome Dr. Elisabeth Rosenthal here to Brookings. She currently is the editor in chief of Kaiser Health News, so you'll be reading a lot about things she writes there.

Formerly, she was at the New York Times, so I'm sure many of you saw her work there. She also is the author of a book entitled "An American Sickness: How Healthcare Became Big Business and How You Can Take it Back."

Also joining us is Dr. Robert Pearl. He's a former CEO of the Permanente Medical Group. He also is the author of a book called "Mistreated: Why We Think We're Getting Good Health Care and Why We're Usually Wrong". Two provocative book titles right there.

So, Elisabeth, we'll start with you. Eric mentioned this $3 trillion in medical expenses that we spend. You've written about how healthcare became a big business. How did we get to the point where we are today?

DR. ROSENTHAL: Well, I think what we've seen in the 25 years since I trained as a doctor is the increasing power of commercial interests in healthcare. And commercial interests have very different metrics for success than medicine. You know, medicine is about healing, it's about people. As you see the commercial interests come in, most of which are for-profit, the motive is, well, what's the best money-maker?

So we see things like, you know, there was one rule I wrote in my book that a lifetime of treatment is better than a cure. And everyone was like, no, that's not true, how could that be possible? And from a financial point of view, it sure is. You know, you make -- look at the type 1 diabetes industry. If there was a cure for diabetes tomorrow that would put out of business a $10 billion industry.

So my point is if we, as we do now, trust in the market to give us cost-efficient healthcare, it's not going to deliver.

THE WITNESS: Okay. Robert, you suggest that we aren't getting good healthcare. How does that happen and what are the basic barriers?

DR. PEARL: So, first, I wrote "Mistreated" because I believe that most Americans think the American healthcare system is the best in the world, and every piece of data says that they're wrong. (Laughter) Buy the way, all of the profits from the book go to Doctors Without Borders, so it's all being done for not-for-profit reasons, the book itself.

The reason people see it that way is that we have a culture that values intervention over prevention. And as Eric has said so well, we have a culture that maintains the status quo.

Now, my favorite story or research done was by Barry Marshall. Barry Marshall is a pathologist in Australia. And in the 1990s, we used to take out two-thirds of the stomach when people had an ulcer and we'd blame the patient. You know, stress, your spouse cooks food that's too spicy. And Barry Marshall looked at the specimens that were taken out and saw that around all the ulcers there were these bacteria. And he published a very nice article, large series of cases, and what did he expect to happen? That people would take notice and recognize that it was actually an infectious disease. What did they do? Nothing.

He then did the most amazing experiment in the history of the world. He put a scope down his own mouth into his stomach and took a picture of his stomach, showed that he didn't have an ulcer. He went to the laboratory where there were bacteria, drank a petri dish worth of bacteria, re-scoped himself, demonstrated that he produced an ulcer. He then took antibiotics, scoped himself a third time, and he cured himself. This is what we call in medicine the Koch's postulates, the most definitive proof. And what did the American medicine do? Nothing. Still continued to take out two-thirds of the stomach for 15 years until he won the Nobel Prize for Medicine, which is almost never given to a physician, as the recent ones showed. And then finally, two-third of the doctors changed. It's just built into the culture of how we want to do things.

In "Mistreated" I talk a lot about the fact how context shapes perception and changes behavior. What we see, it's not conscious, as Elisabeth said, it's not we decide to do these things. It just happens because we see the world through our own lens. Upton Sinclair said it's very hard to get a person to see something that's going to be negative for their income.

MR. WEST: So, Elisabeth, you wanted to respond to that.

DR. ROSENTHAL: Yeah, and I want to point out the importance of income in that statement because I think in real time now, I mean, how many people in this room have had colonoscopies? I mean, this was where my wake-up call was, right, or my protocol first and then wake-up call.

I had a colonoscopy at a center in New York, a famous cancer center that will go unnamed. They billed $12,000 for this colonoscopy, a screening colonoscopy. And I had great insurance, so I paid nothing. So I was like most people would be, yahoo, zero. Right? But I was pissed

because I know in a world of $12,000 screening colonoscopies we're in deep, deep trouble.

So now there's a new test called Cologuard, right, which would upend the screening colonoscopy industry. It has had -- and I'm not going to say here whether it will be the answer or not, but it has had a lot of positive test results. I think a bunch of institutions that think a lot about cost control are using Cologuard. It's kind of an early detection test. If it's positive, then you get a screening colonoscopy rather than screening everyone out there every 5 or 10 years.

Why is Cologuard advertised on TV rather than prescribed by your physician? Because who opposes it? All of the gastroenterology groups. It is a huge threat to the industry. And I think in doctors' minds, and having been one, there's this kind of natural conflation of I know it's best, I know it's best in my hands, I can think of a patient I saved. And, hey, I built a surgery center to do screening colonoscopies. What happens if everyone can just mail order this test? That's very threatening.

DR. PEARL: But it's more than that, Elisabeth. I mean, you're absolutely right, you know, it's been demonstrated that a test once a year, five minutes in the privacy of your home, no bowel prep -- remember you have to drink all this stuff and it's terrible, you miss two days of work, all right -- five minutes, once a year, privacy of your home, zero risk. It is a better screening test if done every single year. Now, if it's positive, which is about 8 to 10 percent of people, then you are a candidate to have a colonoscopy. But it's never going to get done.

But what bothers me much more about it, 200,000 people die every year in the United States from colon cancer. Half of them could have been prevented. A hundred thousand deaths could have been prevented. How do we do as a nation? Right now we screen about 60 percent of people. Forty percent of those deaths are simply avoidable, but we pay no attention to that as we focus on the need for an expensive piece.

Or hypertension. Hypertension is the number one cause of strokes. Forty percent of ischemic strokes are preventable if you control the hypertension. How do we do as a nation? Fifty-five percent. The best programs are 90 percent. Do you see front page headlines that there's hundreds of thousands of people dying every year? No. And something comes along that's a new drug that prolongs life by two weeks, it's a front page story. Why is that? Because it affects the stock price. It affects the industry, the income call to stream.

And again, I want to be very clear, I don't think very many people -- the pharmaceutical industry would be different -- very many people do things intentionally to make more money. That's simply how they see it.

DR. ROSENTHAL: Right, I agree.

DR. PEARL: If you're trained as a gastroenterologist, a colonoscopy is the best thing for your patients. You think you're doing the best thing no matter what the evidence, as Eric's pointed out in his new book.

MR. WEST: Boy, we are covering everything this morning: ulcers, colonoscopies, now hypertension.

Eric, I want to come back to you. So you note that every treatment has its own constituency. You said doctors often act like a trade association. How can we get beyond this basic problem and strengthen evidence-based medicine?

MR. PATASHNIK: Well, it's a big challenge, for sure, and I think there's not a single silver bullet solution. But I don't see us moving forward without the leadership of doctors.

If you look at how the public thinks about healthcare, healthcare in the United States is an extremely personal matter, the variety of groups that are involved in healthcare, and we found in our public opinion surveys that the public distrusts almost all of them. The public distrusts insurance companies, the public distrusts pharmaceutical firms. In fact, we had one question in one of our surveys where the public, a significant fraction, a majority of the public believes that drug companies keep cures secret in order to maintain profits from existing products. Now, I truly do not believe that, but it shows the degree to which the public is actually quite cynical about many of the actors in the healthcare arena with one big exception, and that's physicians.

I think it's important to stress, and I agree completely, that I don't think that physicians are cynically rubbing their hands together to think about how to make more money. But the incentives of the healthcare system push them not only to prescribe and use treatments that may not be effective, but when evidence does come out that suggests that it may not work as well as believed, there are good organizational reasons and psychological reasons, cognitive reasons, where it's difficult for the medical profession to absorb that information. There's a tendency for groups to view research through the

narrowest possible lens.

So, for example, in the knee surgery study that I was looking at, when that landmark study came out the reactions of the medical societies was not to say this is a really important study, we need to take a hard look at why we're performing these knees surgeries. What is the empirical basis for this? What's the theoretical reason for that? What about other very closely related procedures? Perhaps they, too, need a close look.

Instead, there was a tendency to try to cherry-pick the study and to try to critique it on extremely questionable grounds in order to maximize the preservation of physician autonomy and to say there is still some subgroups of patients for whom it's appropriate.

And all of this kind of activity, the way in which medical societies react when studies come out, is something that I think is lost on the public. The public just does not see this this way. We thought when we began our study perhaps the public thinks warmly about their own individual doctor, but recognizes that some of the medical societies has economic interests. And in some ways, to our surprise, we found that's not true.

Actually the public does not see organized medicine so differently from their own doctor. There's a natural tendency for people to attribute behaviors to collectives, to organizations based on their encounters with individual members of that organization. And, of course, many doctors are extraordinary people and so people like their doctor and they assume that groups of doctors also have their best interests at stake, not realizing that these are powerful groups.

So the key I would say, Darrell, in answer to your question is politicians, it's extremely difficult for them to get out front here because the public does not trust them on this issue. They need the support of the medical profession.

The medical profession's efforts here have been inconsistent and weak. But our studies show if doctors were to lead on this issue, we show that a lot of the public trepidation about the needed reforms would decline. They can be leaders here.

MR. WEST: And, Elisabeth, I'd like to get your thoughts on remedies, too, in terms of how we can ground healthcare in reliable science.

DR. ROSENTHAL: Very good. I agree totally that individual doctors, I think, you know --

and I hear this a lot because I spoke to a lot of doctors when I was writing the book. They were great sources for American sickness and they felt that the health system wasn't working. They do not think that organized medicine, the specialty societies, or the AMA speaks for them. On the whole they are working really hard to do the right thing in a system that doesn't support that right now.

So they are equally frustrated, but they're really busy in their office and they feel like there's no group that speaks for me. And I think that group is what I'm waiting to see rise up because they -- you know, just a little example. A heart surgeon at Yale, really busy guy, calls me and says, you know, it really bothers me, my patients are languishing in the recovery room for hours and hours and hours, and I want to get them out of there quickly because it's better for them. But the hospital doesn't seem to care about that. And of course not because the hospital is billing for that recovery room in 15-minute intervals, so for them it's an asset. And I'm not saying that they're doing it in order to make more money, but there's no financial pressure to say we got to change this tomorrow, and there should be.

And I think, you know, the physicians could speak up more, but they're really busy. And as you hear from them over and over again, they have, you know, these kind of dysfunctional medical records which don't give them the information they need, but make a lot of money for somebody else. You know, they're really good, our medical record system, and you hear this again and again, is really a medical record system designed for billing rather than for healthcare.

And so what we need, I think, is -- and this is where I come out at the end of the book, and it's not really system-oriented because it's not saying we need single-payer or we need a market-based system. It's saying we need physicians and their patients whose interests are really aligned in this to come together and make their voices known.

MR. PATASHNIK: Real quick, I think it's important to point out that there is a reform movement within the medical profession. There are important voices of doctors who are absolutely trying to lead on these issues.

For example, there's been an important step called choosing wisely that asks a number of medical societies to identify treatments and tests in their areas that might be overused. That's a really important step. However, the problem with that is that many of the societies actually only pointed to sort of low-hanging fruit, some of the treatments that were not very expensive or that were not actually widely

used, and some of the societies actually pointed to treatments that were overused by other medical societies, not even their own society.

In addition, empirical studies show that that important step has not had a big impact with clinical practice yet. A lot of doctors are not necessarily following the recommendations of the Choosing Wisely campaign. So we have begun to see some leadership, but there needs to be more.

In addition, I think, you know, the role of physicians, the political role and their public prestige nobody else can match, but we will need some policy steps to reinforce this. There is an excellent report from 2015 from the Hamilton Project through Brookings by Nicholas Bagley and Amitabh Chandra and some colleagues that look at some of the steps that would be needed, looking at changes in Medicare coverage and reimbursement policy, things like reference pricing. There's a variety of policy tools that could be adopted to try to promote more value-based medicine.

MR. WEST: I have one more question for Robbie, then I'm going to open the floor to questions from the audience.

So, Robbie, what are your ideas on how we can do a better job of incorporating evidence basis into medicine?

DR. PEARL: So I fundamentally believe that the current system is broken and it's broken, again, not because of bad people. They're actually suffering, as Elisabeth has talked about so well. It's actually the fact that the -- it's a 19th century cottage industry. It's fragmented, doctors scattered across the community. It's paid on this piecemeal fee-for-service basis that incents volume and doesn't reward value. The technology is 50 years old. It's very frustrating to doctors and there's no comprehensive set of information. It's a very broken system. And so my believe is that it needs to change.

I think what we've heard is really the problems that exist within the system. You know, we've talked at least about four major interventions. Heart surgery versus heart medication been shown to be exactly equal, the cardiology is going to embrace the heart surgery. The GI area is going to embrace the colonoscopy. And the Choosing Wisely, arthroscopy didn't even make the list of things that were going to be sitting in place. And look at the difference between the primary care listing around PSAs and the urologic societies listing on PSAs. There's no evidence.

I actually have concern that the system itself will not allow the change to happen even though there are very good people who want to see it. So I believe it needs to shift. It needs to become integrated, by which I mean the physicians needs to work together in groups across specialties. Primary care with specialty care, collaboration and cooperation increases. It has to be paid on a prepaid capitated basis. That's the only way you shift people to be making the right decisions. You've got to do it in the context of quality and patient satisfaction. And we have to give people modern technology that's going to help them to understand the right pieces that sit in play.

I personally think it's not going to come out of doctors. It's going to come out of two forces: it's going to come out of the businesses and the patients. That's the alliance that I believe can be most effective. Because the businesses have an economic interest to say if this is not going to make my people better, then why would we be doing it?

And I'd say more significantly, I'm a big proponent of things like video. Thirty percent of what's done in a doctor's office today could be done without your having to miss work or miss school and drive there, get the care for a few minutes, and go away. Not everything, but about 30 percent that's there. It's never going to happen in a fee-for-service world. It's higher quality because I can do it for you today rather than two weeks from now. It's more convenient because you don't have to come and drive there. And it happens to be significantly lower cost.

So I think we need to reshape it In "Mistreated" I talk about it as the four pillars: integration; data, technology data; change in how we pay people; and I'll add the last piece, leadership. And I'm a big believer that physicians are going to have to step forward in this different context to help lead the transformation process along with nurses and patients and others, and policymakers, and that that alliance together can make the difference. And if we don't do that, we're just going to see American healthcare devolve.

DR. ROSENTHAL: And I just want to add I agree with the businesses have been really asleep at the wheel. Who paid for my $12,000 colonoscopy? The New York Times, right? And, okay, my insurer negotiated it down to $9,000 what was actually paid. You know, the New York Times should be outraged that it's paying this much and should be in this discussion. But I think the system is so complicated that a lot of employers -- and we're starting to see a change in this -- they outsource it.

They're like, well, you know, just raise the premiums, raise the deductibles, and let's hope our employees don't rise up in protest.

DR. PEARL: But that just can't keep going. And people are paying out of pocket at the maximum right now. People who -- the typical person is making 50-, $60,000 a year can't pay the $5,000 deductible post-tax and still have the dollars they need for their housing, their transportation, their education, and the other things that are in life. We've just reached that ceiling right now.

And so what I'm fearful of, you're seeing some of it in Washington, D.C., is that the solution is going to be to take away coverage, either take away who gets coverage or how much is covered, because that's an easier political solution than actually addressing the fundamental dysfunction of the American healthcare system.

MR. WEST: Okay, let's bring the audience into this. There are lots of questions. Right there on the aisle is a gentleman with a question, so there's a microphone coming up to you. If you could give us your name and your organization.

MR. ALTMAN: Fred Altman (phonetic), I'm retired. There are two organizations that might be helping in this. One is medical schools. Are they doing anything? The other one is HMOs, such as Kaiser. Are they doing anything effectively?

DR. PEARL: So in terms of the medical schools there are a few new medical schools or new -- or old schools that are changing, trying to address some of it. But for the most part, that's what I call the "legacy players." This is about a culture. Understand, you know, you never confuse the Germans and the Italians, right? You know, the same people, the same genetics are born, you put them in these two different countries, you never confuse the product you can get out of that. The same thing's true in medicine. Who teaches at medical school? The same physicians who are practicing in the system.

And I want to go back to what Eric said. This is not bad people. Italians and the Germans are not different people. You just put them in a different --

MR. PATASHNIK: I didn't say it. (Laughter)

DR. PEARL: -- in a different culture. So I don't think that's going on.

I think a lot of the HMOs, this is what they're doing. You know, so Kaiser Permanente as an example, we're at 90 percent on colon cancer screening and 90 percent on hypertension control. We

were just on a panel that Elisabeth organized at the Mayo Clinic called “Transform.” And places like the Mayo Clinic and places like Kaiser are going it’s just that the totality of those programs, it’s about 30 million I’ll say covered lives, individuals. It’s the minority of American medicine. And the problem is that the majority overwhelms the minority at a national perspective and in terms of national outcomes.

DR. ROSENTHAL: And you can see, I think, a lot of really great examples of how it can work, you know. But I’ve been around medicine for 30 years and I’ve seen endless demonstration projects or pilots. In New York City, where I’m from, you know, HMOs got a pretty bad name in the ’90s and they are going to have a really hard time entering the market and our five big medical institutions are going to make it really hard for that to get in the door.

MR. PATASHNIK: So I had thought on the role of medical schools that we might see in some of our physician survey that younger doctors would have a better understanding of these issues than older doctors, thinking that perhaps they’d been confronted with this in their medical training, and that’s not what we found actually. More senior physicians had a better understanding, as well as physicians that had some training or residency at the VA and those that also pay more attention to public policy and politics, so those that are reading these issues.

We did a pilot survey in Charlottesville, Virginia, before we did a national survey and we were able to really talk to physicians to see for those that did learn about the problems of waste and inefficiency in healthcare, where were they learning about it? Were they hearing it from their medical societies? Were they hearing about it from peers, in their training? And to our surprise the most common place for people who were the best informed about these issues was by reading Atul Gawande in The New Yorker.

DR. ROSENTHAL: Right.

MR. PATASHNIK: So that suggests that actually professional education has not been the key transmission. The ones that are picking upon it is part of a general public discourse more than from peers or their own training.

MR. WEST: We have a question right here in the front row if we can bring the microphone up here. And if you can give us your name and organization.

MS. FILBERG Diane Filberg (phonetic), clinical psychologist. I’d like to know what you

think the probability of switching from fee-for-service and into either capitation or outcome-based reimbursement is. And if so, how?

DR. ROSENTHAL: I mean, particularly these days in Washington I don't do probabilities because I've made a lot of wrong calls. I think, as Robbie said, we are at a tipping point where this is just not doable for patients to go on this fee-for-service. I mean, after all, the Physician Payment Reform Commission several years ago that was bipartisan, Senator Bill Frisk was on it, you know, good, hardcore Republican, said we've got to get away from the fee-for-service.

Now, how that will happen, you know, we could either have a capitated payment model, which much of Medicare is, we could also have a fee. You know, no one mentions in this country what many, many, many other countries do, which is a rate-regulated system. You look at Switzerland, at Germany, they're regulated rates. That would work, too. And they're not imposed from the outside. Doctors are involved in setting those rates. We could have a single payer, and I could see lots of ways.

You know, look, at the end of the last election, Hillary Clinton, as many Republicans and Democrats have thought about -- or mostly Democrats actually -- lowering the Medicare age, allowing some kind of Medicare or Medicaid buy-in. You know, hey, we have an allergy to talking single-payer, but once that happens, in 30 years you wake up and go, oh, my gosh, we have a single-payer system. I'm not saying that's our route, but I do think we have to find a way out of it and we can't just keep paying more for things that we know don't work.

And I would say, you know, part of it is that insurers, including Medicare, because of lobbying efforts largely, I think, continue to pay for things that don't work. And that's some of the outrage to me.

MR. WEST: Robbie?

DR. PEARL: I think there are two problems. Let's just hypothetically say, let's have everyone decide hypothetically for the moment that a system that were capitate prepaid and accomplished all the good things would raise quality and lower cost. We could debate whether it would happen. Let's assume that it's going to do those things for the time being.

Now let's look at the impact on the delivery system. You're going to have fewer people because you have healthier people. You're going to have fewer hospitals because you're not going to

need as many hospital beds because either people are not getting the disease or the care will become more efficient and effective. How likely are people going to voluntarily embrace a situation where they're likely to lose their job and close their local community hospital? I mean, that's the reality.

What we want to see as patients, again, is not psychologically that someone says I want to waste money. It's just, as a psychologist, you know, it's just what happens inside our minds that sit there.

I believe that if the large employers said to American medicine you have five years. Five years from today we are not going to allow people to take care of our employees unless they are in some kind of integrated system. It can be an organized Kaiser Permanente or it could be doctors in the community virtually. It doesn't have to be the -- you have to have a comprehensive electronic health record so that all of our patients' information is available to every physician at every point of care. And you have to be able to take capitation not at the insurance level, but the delivery system level, so that now we're going to incent collaboration and cooperation and avoid redundancy. Have primary care to work with specialty care. Solve the patient's problem in the primary care office, maybe by a connection between primary care and specialty care, so you don't have to come back again for another visit and wait for care. You have five years.

Doctors are very smart. They will figure out a way to make this happen in the right way, but it's going to require someone who's going to give them that deadline. Without that deadline I believe it's not going to happen. With the deadline I believe it could happen. And that's why my push is to the big employers and the people who work there. They're called employees on some days and patients on the other days, to say we need to have change. You have five years from today, go. And I think then it would happen.

MR. WEST: Okay, we have another question right here.

SPEAKER: Thank you very much. I understand that there's an increasing consolidation of doctors into practices that are under the umbrella hospitals, some profit, some nonprofit. Regardless, so that the concept of the small practice, whether it's primary care or even some of the specialties, are really being absorbed in a vertically integrated hospital structure. So my question to you all is if that's true sort of nationwide, whether it's South Dakota or New Jersey, then doesn't that disempower the doctors,

who are increasingly becoming employees, to effectuate the kind of change you're talking about?

DR. PEARL: Absolutely. So what you're describing, and this is the real complexity when we're talking about changing American medicine, it's almost like a treatment. Treatment can both help the patient or hurt a patient. And the same thing that can lead to the right solution can exactly become the problem. So you're describing it very well.

What we're seeing now is when you have three competing hospitals in a community that as they consolidate into one, rather than using that new size to achieve efficiency, what they're doing is using it for market control and price going up.

And one of the things that's fascinating to me, and Elisabeth was involved in publishing it the Kaiser News, is what happened in Santa Barbara. So Santa Barbara, I'm from California, although these days I spend more time in D.C. than California, but Santa Barbara's a beautiful town located between San Francisco and L.A., and there's basically one hospital there. And as you might imagine, it charges a lot of money for the same things that other hospitals do less.

The City of Santa Barbara now pays its employees insured under their plan $5,000 to go down to San Diego, to Scripps, a very high-quality place, to get their surgery because it's half as expensive. If that starts happening at the employer level, and the City of Santa Barbara is an employer, you can be sure again that the changes are going to happen because now you've broken up that monopoly.

But right now the employment of physicians, the consolidation of hospitals is being used predominantly. I like to tell people I teach at the business school at Stanford, it's always easier to do more than to do better. That's the default position and we've got to change that pressure so that it becomes essential to do better, not simply to do more.

MR. WEST: Elisabeth?

DR. ROSENTHAL: And I think everything, as Robbie said, is about intention. You know, why are you consolidating? What we have seen overall is consolidation to get market share, not consolidation.

And what people miss, both physicians and patients, is that meaningful one-on-one doctor interaction that's about listening, which is disappearing quickly from our system. Now, that can

happen within an institution if that's the purpose of the consolidation, but very few institutions consolidate for that reason and I think partly -- mostly because they're run by people who are looking at business efficiencies, not looking at how can we do better healthcare? How can we do mental health, which we neglect totally? Right? How can we make a medical record that suits the doctors' and patients' needs rather than the needs of the billing department?

So I think it's all about the intention and the metrics of success in healthcare, which are humanistic as well as scientific. And that's being lost because we've moved over to the metrics of business, which are efficiency, profit generation, your return on investment. Why are you buying a new machine, a new PET scanner? Well, because it's a good return on investment, not because we have a lot of people here who need PET scans.

So I think we've really got to change the culture and return to, you know, with modern technology, a kind of culture of medicine that's lost.

MR. WEST: There's a gentleman next to the wall in the fourth row that has a question. Give us your name and organization.

MR. PATTON: Yeah, thank you very much. My name is Tom Patton (phonetic). My organization is the Center for Advanced Healthcare Learning and Simulation, but it's only an idea right now and I'm at an early stage of doing something to address the area of simulation in healthcare education and medical education, driven by the ongoing reports of the third leading cause of death in the United States being medical errors after heart disease and cancer.

It's related and there's a lot of evidence that can be developed through simulation training about competency to do the job. And I wonder if it's not too far afield to ask the panel -- by the way, thank you for a great discussion -- to ask the panel to touch on a broader adoption of simulation to improve the quality of healthcare, reduce medical errors, and better outcomes.

DR. PEARL: Simulation is a tremendous advance. We have seen that in -- medical schools couldn't exist today without simulators, whether you're talking about how to resuscitate a patient, how to intubate a patient. We have tremendous simulations for our OB/GYN residents when women have bleeding after delivering a baby. It's a very complex set of algorithms and you only have a few minutes to do something very important to save a life. And the simulators are essential. Lots of different

-- there's hands-on simulators. There's actually video game simulators. And I encourage you to develop that as something that's been crucial. Every anesthesia resident trains on simulators.

So simulators are essential and increasingly, I think, as we want to train the ancillary staff of medicine, simulators are going to become even more important as the cost of training just simply rises and we have to figure out how to accomplish that. And so globally there's a problem sitting there.

Having said that, I also think that when you look at medical error, so much of it has to do with this notion of context, shaping perception, and changing behavior. I talk in my book about the fact that the Stanford prison experiment, Zimbardo takes volunteers, healthy volunteers, puts them together, gives half of them aviator glasses, they become the jailers; the other half get an OR green with a number, they're the jailees. He puts them together to try to improve the penal system of the United States. Within 48 hours the jailers see the jailees as dangerous criminals. They had debasing -- they had them clean toilets with their bare hands. The jailees see the jailers as sadistic. They board up the doors to prevent that. Within 48 hours they know what's going on.

A lot of medical error in medicine is this notion. And no one's going to believe this, but one-third of the time when doctors go from Room A to Room B, they don't wash their hands. One-third of the time. Now, every physician takes a test, passes a simulation on washing their hands. They know that infections in the hospital, the third leading cause of death, happens because people carry bacteria on their hands from patients, one to the other. No doctor wants to hurt someone, don't do it intentionally, but they're late for the office, they have an extra patient to see, something happens and they change their perception.

So I think that what we need is a combination of education, simulation, and training, but we're also going to have to change the culture that now lets people see what they're doing. Because in the context of a capitated system, an integrated system, and some of the context now, all of a sudden, they can see the problem in a way that today they simply do not.

MR. WEST: There's a question right here up front. There's a microphone coming up right behind you.

MR. WATWAN: Hi, I'm Nat Watwan (phonetic) from Columbia University. I would appreciate your thoughts on the role of patients in this difficult enterprise. So do you see a potential for

patients' empowerment and activation to participate at all? The patients in the 21st century are very difficult from patients 50 years ago. More than a few patients will do the research before they go to see the doctor, especially some major procedures, like do I need that knee surgery? Of course, well, the incentive is obvious that the patient has his own interests in mind.

So you see a potential that the patients -- and also, I think the patient organizations potentially could play a role to help improve quality for the care.

MR. WEST: Okay, enroll the patient.

DR. ROSENTHAL: Yeah, I mean, I had wanted -- and maybe I'll get to this someday, so stayed tuned. As a kind of aftermath of the book to start an organization called We, the Patients. Because I think patients do have this kind of -- and they should respect their doctors, but there are these tools where they could be far more active.

But I think one of the things I call for in the book, and I mean it, is that patients have to change their view of medicine, too. You know, my mom goes to the doctor and says, oh, I saw Dr. Hart (phonetic) yesterday and she didn't even give me a blood test. You know, patients have shifted with the culture of medicine that doing something is good.

You go in with knee pain and, you know, if your doctor doesn't say, well, maybe we could do arthroscopy, you go out thinking, well, you know, he just or she just told me to wait, and, you know, I spent $500 for this visit. So I think we need to educate patients about what's helpful and get away from this idea that's become so common in America medicine that doing something is good. And the problem is, again, and I always get back to the financial incentives, unless you're in a capitated system, that idea of let's wait a week and see how your knee feels, there's no money in that. Right?

So highly underutilized both because the system doesn't deliver it and patients in the U.S. have come to expect doing something as kind of the best thing.

MR. PATASHNIK: So patients, of course, should be at the heart of medicine.

DR. ROSENTHAL: Right.

MR. PATASHNIK: That's what medicine is all about. But I think there's some evidence that if we have shared decision-making that patient preferences could play a bigger role. A lot of times patients don't realize they actually have choices. Physicians may not understand that if a patient was told

here's Treatment A or Treatment B versus C, and this is the pros and cons of each of the, the patient might make a different decision, so that's very important.

But it's difficult for patients and many times patients are coming to see a doctor under distress. There's asymmetric information. The physician knows dramatically more about any condition than the patient does even if the patient does research on the web. You might not actually be able to learn the information you really need.

And finally, I think also quite importantly, a lot of patients' advocacy groups, which are important associations, many of them have strong industry ties and many of them are back not by sort of voluntary contributions from people how have the disease or are trying to contribute to better science, but they're closely aligned with industry that has a particular interest in promoting specific treatments and interventions. So all of that can make it extremely difficult even for the best educated patient to wade into this area.

MR. WEST: So, Robbie, you said patients, in part, at long distances will drive the revolution. We'll give you the last word on this.

DR. PEARL: Sure. Well, first of all, I think patients need information. The asymmetry of information is clear, but we know end-of-life care that 70 percent of patients say I don't want to be dying in a hospital, and 70 percent of the people die in the hospital because we don't give them the information, whether it's about the treatment that's available, what's likely to happen.

And the fascinating part to me of end-of-life palliative care is that when you actually tell patients the truth and they make the right decisions, they often decide not to have aggressive care. And actually, the New England Journal of Medicine showed they lived longer, as strange as that sounds, because very often the end-of-life care is more detrimental than it is on a very false hope of promise.

When you give people the opportunity to engage in decision-making, whether it's around arthroscopic knee surgery or prostate surgery or back surgery, it's a whole variety of tools development by a variety of companies, they make the right decisions for themselves. But more often than not they're going to make the decision that we as experts might see as being very appropriate that's there.

Elisabeth has a Facebook page, I believe, that she has patients commenting upon. I encourage people to get involved in that to provide the stories and the information to try to create a

revolution.

And the last thing I'll say about it, though, is that we have to recognize that our minds, in spite of data, as patients we're at risk for the same kind of distortions in perceptions. And I like to talk about President Clinton and Washington, D.C. You know, he finished his two terms as president. His wife became the senator from New York, who would ultimately run for president. And they were living in New York at the time and he developed chest pains. And the City of New York publishes data on the 35 heart hospitals in the greater New York area. This data is so researched, down to the third decimal point, it's risk-adjusted. A tremendous amount of information list 1 through 35.

President Clinton led healthcare reform in the early '90s, you may remember. Who does he pick to do the evaluation of his heart problem? The hospital with the second worst outcomes. When he needs surgery where does he go? To the hospital with the worst outcomes by the surgeon who has the highest complication rate. And guess what happens. He has a complication.

So we have to be aware that this lack of attention to data is a risk that we all have. We all want to believe that our doctor telling us who's the best surgeon is better than the data published by the state of New York. But, of course, that's absurd. The data telling us has never watched him operate or her operate. They don't have any data outcomes on their own.

What they're talking about is in quotes, "their reputation." And we have to understand how intuition, how reputation, how other pieces are important. But that ultimately, to the panel, objective data information needs to be there, the tools given to the patients. And we need I believe someone pushing that.

I'd like to believe that Washington, D.C., it'd be the government; I don't think they will. I do believe the major purchasers can particularly when it's going to involve a lot of technology information engagement, and that's my hope for American medicine if we do it. I think we can solve it in five years. And if we don't, I think we will get disrupted by a variety of outside forces, which we don't have enough time today to talk about, but they certainly exist out there. And we will rue the day we didn't do what we could have done today in the United States.

MR. WEST: well, thank you very much all of you for sharing your thoughts. So, Eric, congratulates on the book. Elisabeth and Robbie, appreciate your contributions. And thank you very

much for coming out. (Applause)

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