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Session 1:

What is the Problem? Changing Medical Technology, Unchanging Physician Culture, Variations in Treatment

Moderator:

KAREN DAVIS

President

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Panelists:

DR. THOMAS LEE

CEO, Partners Community Health Care Inc.; Professor of Medicine,

Harvard Medical School

DR. ELLIOTT S. FISHER
Professor of Medicine and Community and Family Medicine,
Dartmouth Medical School

STEVEN M. SHORTELL
Dean and Professor, School of Public Health, University of California, Berkeley

Session 2:
What Can be Done? Systemic Reorganization

Moderator:
HENRY AARON
Senior Fellow
Brookings Institution

Panelists:
DR. JAMES MONGAN
President and Chief Executive Officer
Partners HealthCare System

DR. DENIS CORTESE
President and Chief Executive Officer
Mayo Clinic

DR. JONATHAN PERLIN
Senior Vice President for Quality and Chief Medical Officer
HCA Inc.

Luncheon Address

Introduction:
LEONARD SCHAEFFER
Chairman and Chief Executive Officer
North Bristol Partners

Keynote Address:
DR. MARK B. MCCLELLAN
Visiting Senior Fellow, AEI-Brookings Joint Center for Regulatory Studies

Session 3: Public Policy Challenges - Anti-trust Regulation

Moderator:
ROBERT CRANDALL
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Brookings Institution

Panelists:

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DR. M. GREGG BLOCHE

Professor of Law, Georgetown University; Visiting Fellow,

Brookings Institution

ROBERT LITAN

Senior Fellow, Brookings Institution; Vice President of Research and Policy,

Kauffman Foundation

Session 4:

Tools for Change

Moderator:

DR. SAMUEL HELLMAN

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Panelists:

MEREDITH ROSENTHAL

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P R O C E E D I N G S

Session 1: What is the Problem? Changing Medical Technology, Unchanging Physician Culture, Variations in Treatment

MR. AARON: Thank you all for coming today. I expect additional people will be coming as the day moves along. My name is Henry Aaron. I'm a senior fellow here at Brookings.

I want to say a word about how this event came about. It occurred because of a conversation via e-mail that Jim Mongan and I had about a year ago. You're going to be hearing from Jim later this morning.

The story was that we noted that about three decades have passed since John Weinberg observed very large variations across small areas in the use of various medical procedures. The striking thing is that they're as big today, it seems, as they ever were. "Why?" was the question I posed and what could we do about it?

Jim responded by saying that was something that he was spending a lot of his time -- most of his time perhaps -- worrying about. So I asked him to write a policy brief for the Brookings Institution on what was happening at Partners in Boston to try to improve quality, reduce discrepancies in treatment, and to talk a bit about the problems that he and his colleagues were encountering.

So he did that in collaboration with two of his colleagues, Tom Lee and Robert Mechanic. The results of their efforts either should be in your hands, or if you want, copies are available outside. Those issue briefs are the occasion for this event today.

But there's a larger question which Jim and his colleagues addressed. And that is how to close the very considerable gap between what modern medicine can do and what it does do. No two briefs of the length that they prepared can conceivably cover that topic.

We're hoping that the four panels today may do more about covering that topic. And I want to say right now that our chances will be a whole lot better if all of you who are here will participate actively in the discussion for which we're leaving time after the presentations by the panelists.

At lunch you're going to have a chance to hear from Mark McClellan, who recently joined the AEI-Brookings Regulatory Center, but now it's time for the first of our four sessions.

Karen Davis, who is president of the Commonwealth Foundation, a former Brookings senior fellow, and a former government official, is going to chair this session.

And my one request, Karen, is would you please make sure that these guys leave time for the audience?

MS. DAVIS: Thank you, Henry. And also thanks to Brookings for hosting what I think is a very exciting forum today. I'm very pleased to be here and to be part of this stimulating discussion.

There are many even now who believe that the U.S. healthcare system on the whole is simply the best in the world and it is true that we have in pockets around this country some of the most innovative and leading-edge medical care available, some of which you will hear about today. Yet, growing evidence indicates that our system as a whole falls far short of what it could be given the high level of resources we commit to health care.

Although we spend significantly more than other industrialized countries, the U.S. is the only country that fails to guarantee universal health insurance. And, in fact, coverage is deteriorating, leaving millions without affordable access to preventive and essential care.

Quality of care is highly variable and delivered by a system that is too often poorly coordinated, driving up costs and putting patients at risk. And for the most part, care is delivered without patients in mind, making the experience of being a patient even more distressing for those who are ill.

With all of these things in mind, the Commonwealth board of directors last year created a commission on a high performance health system -- chaired by Dr. Jim Mongan, from whom you will hear later this morning -- to help move the system towards a higher performance that all Americans want and deserve.

This past August, we issued a framework report that laid out seven keys to a high performance system. They include expanding health insurance coverage to all; implementing major quality and safety improvements; working toward a more organized delivery system, which I think is a lot of the focus of this morning's session, but one that

emphasizes patient-centered primary and preventive care; increasing transparency and reporting on quality and cost; rewarding performance for quality and efficiency; expanding the use of information technology and a mechanism for health information exchange across multiple providers of care; and encouraging collaboration among stakeholders.

In September, the commission released its first of a kind national score card on U.S. health system performance based on 37 indicators related to those seven keys.

Some of you may ask why a score card. Well, we believe that by showing the gaps between national performance and benchmarks that have already been achieved, the score card could offer performance targets for improvement, and it provides a foundation for the development of public and private policy action, and a yard stick against which to measure the success of new policies.

I'll spare you all of the findings on those 37 indicators. I'll just share with you that the bottom line is that the U.S. as a whole scores an average of 66 out of 100 possible points, where 100 is based, for the most part, on best performance either within the U.S. or across countries. In fact, if we could improve performance up to the level of the best experience that's observed either within the U.S. or across countries, the U.S. could save 50 to $100 billion a year and prevent 100,000 to 150,000 deaths.

But I think today what we want to focus on is the path forward. How do we tackle the hydra-headed beast that is our healthcare system and turn it into a creature that will do

our collective bidding, providing well-coordinated, cost-effective, high quality care for all Americans?

Do we need large, integrated delivery systems that will better coordinate care and adopt processes and tools that ensure high quality, safe care everyday for every patient? Do we need a larger role for government in aligning financial incentives to reward the right care? In short, how do we create systems in a highly fragmented, complex healthcare system?

We are fortunate indeed to have with us this morning three panelists who are doing a lot of thinking about these very questions.

We will start with Dr. Thomas Lee, who's an internist and cardiologist and network president for Partners Healthcare System. He's a graduate of Harvard College and currently a professor of medicine at Harvard Medical School. He is also co-chair of the National Committee for Quality Assurance, Committee for Performance Measurement, and associate editor of the New England Journal of Medicine.

DR. LEE: Thanks very much, Karen.

That frees the path forward to those people with a lot of anxiety these days. Although I do feel a lot of anxiety about health care, I actually have a fair amount of optimism as well.

I'm going to try to characterize from the point of view of a provider and a journal writer. I'll make some general comments about the nature of the problem, which I hope will help inform the subsequent discussions that will follow today.

Just two slides on the problems that you wouldn't be here if you didn't know all about already, so I'll be very quick on them; the sense that the status quo is unsustainable, is getting stronger. There is a crisis of confidence, what has epitomized in 2001 by the IOM Report, and it's only growing stronger. As you read through the news everyday, the drum beat of concern is very apparent.

Safety -- disasters get national attention, like an example being the three infant deaths in Indianapolis due to a mix up in anticoagulation preparations. And there's a tremendous rising concern with the reliability of care. I think Beth McGlynn will be associated with the number 55 percent for the rest of her life. That will probably be what it says on her gravestone. She wrote the 55 percent paper.

And the behind that, of course, the concern that also brings us all together is the affordability of care, which threatens any quality agenda. The top line that's going up and down is the one showing the annual rate of rise and premiums for employers, compared to overall inflation and the overall increase in worker's earnings. So while this economic war being fought out with economic weapons, could we spend a lot of time on that, the basic driving forces for rising healthcare costs are going to go on regardless of what happens in the marketplace and will create challenges for us.

Now, one of my points that I'd like to leave you with is that that bad news is inextricably intertwined with the good news. The first few points are from the perspective of a practicing physician, which is, you're not paying for the same thing every year. There has been really amazing scientific progress. And from someone taking care of patients, it makes a huge difference; you would not want to go back in time.

The last time I was involved in the care of a patient who died of HIV was in 1995. That's when highly active, retroviral therapy came along. And I do remember telling that patient that his life expectancy was 18 months, and he did not live to 18 months. Today, of course, it's a very different story. If you take your medications for HIV, you essentially have a normal life expectancy. Implantable defibrillators, molecular targeting of therapy for lung cancer, these are things that doctors and patients are very, very glad that we have.

Putting on my hat as a journal editor, I want to both warn you and cheer you by letting you know that there is even more dramatic progress on the way. And I sort of bucketed these three examples into short, medium and long-term, where short term, I think in the three to five-year time frame, we will see whether immune therapy or deep brain stimulation for Alzheimer's disease really makes a difference. And I would not bet against -- I would certainly think it's unlikely that both of them will strike out. It's a very good chance that one of them will make a big difference, and will help a lot of patients, and will be extremely expensive.

I think in a 5 to 10-year time frame, stem cell infusion or some early cell infusion for patients with myocardial infarction will be ready for prime time. There are 40 clinical trials underway right now. People working in this area feel the question is not can you help patients with myocardial infarction have better heart function down the line? The question is which cells do you infuse, which patients should get them, what time should you do the infusion, how do you deliver the infusion? It's that kind of level of questioning. It's not if, it's how.

I think in a 10 to 20-year time frame – some people say less -- chances that people with cancer will have metastasis could be greatly reduced by therapy aimed at cancer stem cells. I think this is all great news, but, of course, it will be quite expensive.

Now, the price of this progress I sort of broke down into two different categories that make sense to a non-economist like myself. Rising cost. Frankly, we can't expect to ever be offset by better patient outcomes and savings from less healthcare utilization. I just don't think that's realistic. I think we will have to suck that up.

But what's irritating are the indirect costs, and I think that's what a lot of this meeting today I hope will get at. Indirect costs, which are driven by healthcare delivery system dysfunction, those are costs that we really should go after, and I think we can.

Why do we have that dysfunction? Well, again, from the perspective of a doctor, we have this flood of information options that overwhelms doctors who are trained for medicine in another era. I am 53 years old. I graduated from medical school in 1979.

Certainly for people my age and older, and even a few years younger, the culture was dominated by the solo, heroic healer. He was usually male. He worked from 6 a.m. to 9 p.m. or beyond. The image that they had was that they were all knowing.

I know this will seem offensive to some of you, but I was actually taught as a student, never look up something in front of a patient. Leave the room. It's true. I was told, leave the room. Excuse yourself. Go out, look up the dosage, come back in the room and go on with things. There was a conspiracy between patients and doctors to make the doctor like an all-knowing healer.

"Disdain" is misspelled. But the disdain for cook-book medicine was evident in Robert Peers' New York Times article about the G-code initiative at CMS just this very week. So that model is not dead. But that model is increasingly non-viable because physician demographics are changing.

The 6 to 9 p.m. thing does not work for people today. Individuals know that they cannot know all they need to know. And to give best care -- and, again, this gets to our theme for the day – medicine really has to be a team sport for patients with chronic diseases like diabetes and heart failure, and the really expensive patients with multiple, complex conditions.

I'm going to skip this in the interest of time because I think that you get the idea.

Just to give you a little bit of data from our 500,000 patients and pay-for-performance managed-care contracts, where we get the data, the risk of inefficiency and

poor coordination are highest for most complex patients, as it's demonstrating in this slide. Certainly the experiences are greatest for those patients. So that the top one-half percent of patients account for 20 percent of overall cost; 3 percent of patients are 47 percent. This is a commercial population. So, clearly, that's where a lot of the resources are going, and we all know that their care is not coordinated as well as it should be.

The other population is patients with chronic diseases. This graph may be a little less intuitive than I thought it was at a time, but the blue bars are the number of patients we have with asthma, coronary disease, heart failure, and the red bars are the numbers then that got admitted within the past year.

The box tells you the bottom line. That is, of these six chronic conditions, 1 out of 10 of those patients gets admitted each year. As the right-hand Pear bar shows, if you have more than one of those conditions, you have nearly an 80 percent chance of being admitted. And these six chronic condition populations account for half of all inpatient admissions.

There seems like there should be some opportunity if we take better care of patients with those chronic diseases, but doctors have a hard time doing that based upon the single office visit as the main intervention in care.

So we believe -- and I think there are many optimists in the audience here who believe -- that our best hopes are in systems that can improve care and organizations that can implement them. Docs can't work harder or get smarter, so improvement's likely to come through adoption of systems that reduce the risk of errors; information systems with

decision support, human-ware systems that coordinate care when the patient's not in front of physicians. But to implement such systems, providers have to be organized and these organizations have to be effective.

Now, we're not here to talk about Partners Health Care, and you got the briefings anyway. We have had these five teams aimed at trying to re-engine our care with a diversified portfolio. But I'm not going to talk about those teams. The real agenda is really two related revolutions. And we tell our doctors that we're trying to do these two revolutions.

One is an industrial revolution in which clinicians adopt systems that reduce errors. The other's a cultural revolution that emphasizes team work instead of the doctor as the lone cowboy. As the box says at the bottom, we are telling our physicians -- most of who've read the right stuff -- that these times call for John Glenn more then Chuck Yeager. We have a lot of Chuck Yeagers who don't want to hear this message. But we need people – for those of you who remember the book -- who are ready to work in teams. And we want to focus on populations over time.

Three key tactics: electronic medical records, human systems to provide better care to populations over time. And then probably the hardest part is the culture change. That includes willingness to trade some autonomy to improve efficiency and quality.

So will we reach the potential medical science, the goal of having this meeting today? I am an optimist. I think that the systems and improved care that make it more

efficient do exist, and they're getting better all the time. The challenges are what it will take to get current physicians to use them and what will it take to get physicians to coordinate their efforts on those high-risk, high-cost patients.

There's a wide range of factors that will determine the rate at which this progress is achieved and I'm looking forward to discussing them today. Thanks very much.

MS. DAVIS: Thank you, Tom.

Next, we'll hear from Steve Shortell. He's the Blue Cross of California, a distinguished professor of health, policy and management. And he's professor of organization behavior at the School of Public Health and the Haas School of Business at the University of California, Berkeley. He's also dean of the School of Public Health at Berkeley. And for today's session, the most important thing is that he's the nation's leading researcher on the organizational and managerial correlates of quality of care and high-performing healthcare organizations. He's been recognized with the Baxter Allegiance Prize, the Gold Medal Award for the American College of Healthcare Executives, the Distinguished Investigator Award from the Association for Health Services Research.

He may not mind if I skip all of his awards, but he will mind if I don't give the title of his new book, which is Remaking Health Care in America: The Evolution for Organized Delivery Systems.

DR. SHORTELL: Thank you, Karen, very much.

I'm going to spend maybe 15 minutes. And the most important message I want to get across are really the first three slides. The first one is to remind us that we are not going to be able to deal with the issue of access to care in this country, which clearly needs to be dealt with, unless we simultaneously deal with the cost and quality issues.

It is going to do us very little good and actually could do people some harm to expand the access and to put them into a delivery system -- as Tom has said and Elliott will have further data -- that is not nearly as good as it needs to be. It is too expensive for reasons in which we can eliminate some of that expense. And a major portion of that has to do with the quality of care that we're delivering, which can be so much better in so many respects. So that's the first point, and we may come back to that.

The second point is we are not going to make sustainable progress on the issues that Karen and Tom and all of us in this room know about unless we take into account all of the major stakeholders. I call these the Five P's.

So there they are. They are the purchasers, the plans, the providers, the patients, and let's not forget the product suppliers. I needed to put "product" in there to get the Five P's to keep the alliteration going.

My point is simply one of alignment among these major stakeholders. We know the purchasers. They're offloading some of the costs. We have consumer-directed plans. We know the competitive disadvantage, et cetera; the role of the health plans between the purchasers and the providers; what kinds of plan/provider combinations might we form to

deal with some of these issues; patients of course at the center. And then the major fulcrum of new technology of course are the suppliers, the product suppliers, which are the pharmaceutical, biotech, medical device companies and so forth. So I'm going to talk a mostly around plans, providers and patients, but others I think will cover the purchasers and product suppliers. And finally, we need to be really smart about how we implement change.

Four levels, the individual level here, the group, the organization, and the larger environment. Interdependence and alignment again is key. At the individual level there's just so much you can do in terms of individual competence, education and training. A lot of it is it's a group and team level. That's where care is delivered. As Tom has said, it's a team sport.

So it's the issues of coordination, getting people to talk, transfer of knowledge and learning. At your organizational level, it's strategy, structure, incentives, culture. And then at the environmental level, of course, it's how do we align our payment, our incentives, our regulatory policies, malpractice. We can go on and on.

And again, the key point here is we need to get the incentives and the motives at these four levels of change also in alignment. So these are the three. We've got to think about access, cost and quality and the implications of that together. We've got to think of these five major stakeholder groups, what's their self-interest, enlightened or not. What's going to be the self-interest to get them to move in alignment? And then as changes are

made, we need to understand that these changes have reverberations around all four of these levels here.

So it's a little bit of flushing this out. We know a lot already. We are not using what we know. We know better. Why is it we don't do better?

Well, Tom mentioned the 55 percent, the Beth McGlynn and the RAND. This was a companion study that came on a little bit later from the provider side, some work we did at Berkeley/University of Chicago, looking at a thousand physician organizations in this country of 20 doctors or more. So there's variance around that, but these are the larger groups.

We looked at the extent of which they are implementing everyday certain care management practices to take care of people with asthma, depression, diabetes and congestive heart failure. These are some of the data you see from the first three that we looked at, to the extent to which they have organized patient self-education programs, care management systems, feedback to physicians in how well they're doing, performance data, use of disease registries and guidelines.

If we go down that first column of looking at diabetes, 70 percent of these practices had organized physician self-management education programs; that's pretty good. Forty-three percent and you can go down. But one of the things we know a little about from the literature is it's usually not any single intervention that makes a difference; it's a package. It's a combination. So how many of these practices who are doing all five of these

interrelated, basic kinds of things to take care of their patients? Eleven percent, bottom row there. Asthma, as you go down to the bottom row, 6 percent; congestive heart failure, 6 percent.

Then if you want to look at transfer learning, you might say, well gee, if a practice is using care management, case management or a registry for their diabetics, wouldn't they do it for their asthma patients or their congestive heart failure patients? As you go across the rows and get to the far, right-hand column there, you can see the answer is no. Twenty-seven percent have patient self-education. The rest are below 20 percent.

The first time I showed this slide -- look at the number in the lower right-hand corner – somebody said, "Oh, you've got a typo there, Professor." That's not a typo. That's eight-tenths of 1 percent. So we'll round up -- give it the benefit of the doubt -- 1 percent of physician practices in this country, three or four years ago now; we had a thousand -- 10 physician practices are doing all of these recommended processes in the literature across patients in these three categories. Ten of them. And for my next grant, I will tell you who they are.

(Laughter)

Actually, some of them are in the room here. Some of them are in the room here.

So if 55 percent of Americans are getting recommended care only 55 percent of the time, you can see on the other side why that might be. Providers are only using some of the recommended practices, and in this case even less than that.

We also stretched the data out a little bit. We said, well look, some of these must be high performers. So it kind of stretched it out to a top quartile and a bottom quartile. Look at these numbers. We've got this performance index. We don't have time to go into it. High performers, upper 25 percent; low performers, bottom 25 percent. So the upper performers are scoring 20 out of 30; the low, 2.9.

We have a care management index, and you can see the high performers are at 10 versus 1. We've got a health promotion disease prevention index, 10 roughly versus 1. A little bit of financial performance there. We also looked at turnover. I'll skip over that for now.

Bottom line; 75 medical groups in this country, 11 percent, scored in the top quartile on at least four of the six individual measures we had, and a little bit higher, 131 medical groups in this country scored in the top quartile on at least two of the three overall dimensions. And this is out in the literature that we can get you if you want to follow up later.

So what distinguishes the high performers from the low performers in our database? Two things primarily in terms of looking at variance and odds ratios and so forth. One, involvement in quality improvement and having a quality, patient-centered culture. And our measure of that was from the Baldridge Award, the section on the customer, and in our case, the patient focus. And the second thing was outside reporting, external accountability. Not so much financial incentives. It's that visibility.

Having the name of your medical group or your health plan with only one star when the one down the street has three or four stars, no one wants that. So it's this external accountability. There are two times and five times, two-fold and five-fold differences explained by these factors here.

Health plans. Elliott I know is going to talk about various ways we can put together smaller practices, and there might be a role for health plans. And again, our team, Robin Gilleus and others in a recent paper, we looked at health plans and the percentage of their enrollees that received care from staff and group model providers versus fee for service, more loosely organized IPAs.

So it's the percentage of enrollees that get their care from these more organized groups, group models and staff models. And on four or five of the measures, significantly higher are women's health screening rates, immunization rates, heart disease screening rates and diabetes testing. Same health plan. They get their care from a more organized provider versus less organized provider. Essentially no differences in patient satisfaction.

Meredith Rosenthal and colleagues have a paper that's just come out. She'll probably talk about it later on, Similar Kinds of Findings Dealing with More Integrated Medical Groups versus Less Integrated Medical Groups, using similar types of measures.

So the evidence base is very small. It's just beginning to grow a little bit. But what little we have tends to suggest that these more integrated groups are really doing some things that are helping people. So the question is not how do we replicate the Kaisers and

the Mayos and the Health Partners; there will be some of that but it will be limited given this is the United States of America. But how do we work with the other kinds of providers to mimic some of these things that some of these more integrated groups are doing? That's part of our challenge.

So I think part of it lies in incentives and capabilities, and you can unpack this a lot. Incentives that we're going to be talking about are financial. They are the public recognition I mentioned, external reporting. They may be driven over time by consumers voting with their feet but they're not yet. And also there's a role here for intrinsic professional norms as well.

The capabilities that need to be developed, building on what Tom has said -- and we don't have time to go into detail -- is how do you form this team, patient-centered culture, the patient really does come first? How do you create more innovative leadership? How do we get the information technology so it's really used and adopted? How do you do that and what are their forms of practice? Process improvement skills, team effectiveness, ability to partner.

There's an extensive literature, some of it evidenced based, on much of this. But it hasn't been brought to bear yet to the extent it needs to be in our healthcare delivery system.

One of my former students, we concocted this propeller. We all fly, so how do we get this plane off the ground? You see the blades there, the motivators, the facilitators, the work improvement processes, the spread.

And there are some of what we're talking about. Incentives, that's the motivators; not alone. Facilitators, information technologies, teams, performance measurement; standardized, continuously improving understandable performance measurement. Work improvement. The nitty-gritty, the operations research, the care process redesign, the care coordination, the PDSA cycles, lean production. The methods are out there. Human factors engineering. Then how do we spread knowledge across units and practice sites? Knowledge management and transfer.

So these are the blades of the propeller and we've developed that further elsewhere.

I think in the interest of time, we've gone over the barriers. I will highlight the lack of sufficient medical management, leadership and partnership. We need a partnership between medicine and management. And management here undergirding that is all the behavioral and social sciences that need to be brought to bear, and engineering, and human factors and so forth.

The real secret ingredient I think of the Mayos of the world, and the Health Partners of the world, and the Kaisers of the world are the medicine management partnership. And the challenge we face in this country in part is how do we bring that about in the more loosely organized, the three physician practice site, for example. How do you get the kinds

of ingredients that are going to be needed to get them to do what they're going to need to be able to do? And we might have more conversation on that.

So our goal you see is to keep us on the right-hand side. The chronically well. That's public health. I had to get that in, Karen, just once. Public health is on the right there. Sporadically well, little, occasional acute episodes. Sporadically ill, recurrent acute episodes. And then the far too many chronically ill that we have in this country. If we want to increase value, we need a system that's pushing to the right and keeping people to the right.

So my concluding observations are the need to marry evidence-based medicine, which we think we know something about, with evidence-based management, which needs a little bit more -- quite a bit more -- development, one of the areas I'm working on. And do we really have yet in this country this burning platform? That I think is the big question. Thank you very much.

MS. DAVIS: Thank you, Steve. Beth McGlynn becomes known as the 55 percent expert. Steve will be known as the 1 percent professor, using 1 percent of what we know.

Finally, we'll hear from Dr. Elliott Fisher. He's a professor of medicine and community and family medicine at Dartmouth Medical School and the Center for Evaluative Clinical Sciences. He helps produce the Dartmouth Atlas on health care. And his research helps clarify the mechanisms of harm from too much medical care, exploring the costs and consequences of geographic variations of medical practice, spending, and the

development of measures of providers' longitudinal costs and quality of care. He's a member of the Institute of Medicine. He served on the National Advisory Council of the Agency for Healthcare, Research and Quality.

DR. FISHER: Thank you very much.

Hank, thank you very much for including me in this panel. It's a great treat to be here.

A couple of comments at the start. I've recently learned to distinguish optimism from hope. Optimism implies some calculation of the odds. And I think if you look at the trajectory of U.S. health care over the last 30 years, you'd say we haven't done a lot. It's all been continuing to get worse. And I used to be tremendously optimistic. So now I'm saying I'm still tremendously hopeful. I'm always hopeful, but change is going to be difficult. And I think both Tom and Steve have outlined some ways that we can move forward.

I'm going to try to bring my epidemiologist perspective to this, but also try to move us to some practical solutions because that's really what Hank asked us to do as we thought about this panel.

This is a map that many of you will be familiar with. There are huge differences in practice and spending across the country that Hank mentioned at the outset of our talk this morning. Interestingly, there are also huge differences across the best hospitals in the United States.

This is from our Dartmouth Atlas data. If you look at care of patients with severe chronic illness at the end of life and look at physician spending on those patients, adjusting for case mix differences, Cedar Sinai spends about $20,000 over two years on the patients during their last two years of life, whereas the Cleveland Clinic spends about $6,500.

Jim and Tom, you've got some work to do at MGH. And, Denny, you guys are closer to the bottom. There are profound differences. And when you look at the other differences in practice, those are relatively large as well. The average patient at Cedar had 71 visits in their last six months of life. The average patient at the Cleveland Clinic has only 32 physician visits. Huge differences in practice.

We've now spent a fair bit of my life now, unfortunately, looking at what I'm now calling the paradox of plenty. When you look across high-spending regions or systems, the higher spending regions are characterized by many more hospital beds on a per capita basis, many more specialists and internists. Their technical quality of care is actually worse. They don't get more of the elective services that we know patients would want, on things like bypass surgery or hip replacement. Those do not explain the regional differences or system level differences in spending that we see.

What happens to people in high-spending systems is they spend more time in the hospital, they see doctors more frequently, and they're more likely to be referred to medical specialists. And if they're horizontal and they're seeing more specialists, they're going to get more tests and procedures.

In terms of health outcomes, we know the health outcomes are slightly worse in the higher-spending systems. There's no better improvement in functional status. We've now interviewed physicians around the country. Physicians perceive practice in these higher-spending regions and higher-spending systems to be worse. They think the quality of communication amongst them and their peers is worse. They have greater difficulty overall providing high-quality care. Patients see the same picture, of lower quality and lower access. They perceive greater difficulty gaining access to care in the higher cost system.

Most troubling is we've looked recently at trends over time, Tom, to speak to the question of improvement, and we've had tremendous gains in survival following acute myocardial infarction overall in this country over the last 20 years. But when you look at the differences in gains in life expectancy across regions, the gains have been smallest in the high-spending regions. The gains have been greatest in the most conservative and lower-spending regions in the United States. Costs have unfortunately grown more rapidly in the higher-spending region.

So the paradox of plenty is getting worse. Higher-spending regions are diverging from lower-spending regions in terms of their per capita cost and in terms of their outcomes.

I want to point you to the term that Jack and I use now to describe this issue called "supply sensitive services," things that are sensitive to the local capacity of the local

healthcare delivery system. Those are the things that drive differences in utilization across regions and that drive differences in growth across time.

We've looked at whether patient preferences can explain the differences we see across regions. They don't. And when you look at seriously ill patients, they had very similar preferences across systems, and the biggest differences we see are in the care of seriously ill patients.

Capacity and payment as I said are important drivers. Capacity is clearly related, but the payment system is also very important. As I said earlier, 30 percent more hospital beds per capita, 70 percent more internists or medical specialists, depending on which one of those you look at.

Whatever capacity we have in place in our system is going to remain utilized under the current payment system. Key point. What's interesting though is that capacity only explains about 50 percent of the differences across regions in per capita use of services.

It turns out -- and this is a slide from a paper that was published in The Archives, and we have another study that shows exactly the same thing – when you ask physicians about evidence-based practice, things that Beth McGlynn would say we should be doing, there's no difference across regions in terms of their between spending levels in terms of our recommendation of those services.

For a patient who has severe angina in an abnormal exercise test, we will all try to send them to see the cardiologist. Our systems may not let us do it, and that's probably

why Beth McGlynn gets a 55 percent number. But where physicians agree on the right thing to do, physicians will try to do it. The differences in practice emerge in gray-area decision making. When shall I see this patient again? How often should I hospitalize them? Things for which there are not good evidence-based guidelines around what you should do.

That leads to what I think is my diagnosis for what the underlying causes of problems are in our healthcare system. Local capacity and culture drive clinical practice and spending. And Tom spoke to the importance of culture and the importance of local organizations.

Clinical evidence and randomized trials are important, but they're very limited influences on clinical decision making. They influence that place where there is evidence. Most clinical decision making falls in the gray areas of practice, and we practice within local organizational context, in a policy environment that profoundly influences how we practice. If it's easier for me to refer a patient to an orthopedic surgeon when they've got back pain, I promise you I'll do it, because trying to take care of them in a 15-minute visit is very, very difficult. If it's very difficult to get them to see an orthopedist, I will not refer them. So local capacity drives the development of these local cultures.

The consequence is that what looks like reasonable, individual clinical decisions, or reasonable policy decisions on the part of Tom and the Partners folks because we know we get paid more for having more cardiologists and more orthopedic surgeons in our systems

under the current payment system. What appear to be reasonable decisions on our part drives over use -- decision making in the gray areas -- and I believe harm. Well, that's not a very pretty picture. The implication is that a focus on technical quality, a focus on guidelines, isn't going to get us out of the box.

So I think to address the problems -- and it fits nicely with the themes that have been raised already by my colleagues -- is that improving quality and cost is going to require local organizational accountability across multiple dimensions. Not just about technical quality and support for improved decision making where there is evidence, but accountability for decisions about capacity, about recruitment, about what investments to make in terms of the imaging services, the financial capacity locally to invest in electronic health records that might help improve our practice, and organizational support for quality improvement, feedback as Tom and I were talking this morning, informed patient choice and care coordination.

The challenge in our current environment is who can do this. Who could become an accountable care organization is the term that Glenn Hackbarth and I came up with in a MedPAC committee commission meeting a month ago. Who could be the accountable care organizations in our current delivery system? Let me spend five minutes outlining what I think those might be.

The first is the advanced medical home, which has been widely promoted by physician groups. The challenge of course is that patients with complex illness usually are

cared for across multiple different sites, and I think it's asking too much of the individual primary care physician based in their office to coordinate care across seriously ill patients who have a trajectory that involve acute hospitals, nursing homes, rehab hospitals, back to the hospital, multiple different specialists unless they're doing that full time. I think they're likely to do a very good job in outpatient chronic disease management, but it may be unrealistic to expect them to carry everything, and those models haven't been tested yet.

Established multi-specialty group practices are an obvious model, but that comprises about 8 to 10 percent of current physician groups, current physicians who are in that kind of practice. Fifty percent or so are in practices of five or fewer physicians.

So what can we do about that? Now, the notion that we've come up with to try to help with this -- and it's a difficult idea -- is the hospital medical staff. Lots of problems there, but it turns out epidemiologically, as I'll show you, doctors tend to work around a single hospital or within a single hospital. So there actually is a local virtual organization that exists in the physicians who are practicing within a local hospital environment. We recently published in Health Affairs a method for extending this to look at all physicians in the United States.

You can use Medicare claims and health plan claims data to figure out where physicians work. For physicians who have inpatient work, 90 percent of their work is at a single hospital, their primary hospital; 10 percent of it is spread around elsewhere. For

physicians who don't do inpatient work, most of their admissions still happen at a primary hospital.

We can also use claims data to define the populations they serve. That second slide I showed you about the academic medical centers is done using a similar approach, where we identify the populations served by those academic medical centers and then compare their performance.

The result when we do this on the outpatient basis is what I'll call an empirically defined multi-specialty group. And they look kind of like what you would think a multi-specialty group would look. They have some primary care physicians, they have some specialists, big hospitals, academic medical centers, have more docs per hundred beds that they have. Small rural hospitals have fewer docs, fewer specialists, and fewer surgeons. So they're plausible in terms of their clinical makeup. They look kind of like a multi-specialty group practice would look.

Complicated slide. But the bottom line -- and you can look at it in the article – is that most patients who are cared for by these systems get almost all their care within those systems. Or to say it another way, the patients who we assign to those hospitals and those medical groups get the vast majority of their care either from the hospital itself, the darker bars, or from the single referral hospital with which those doctors have a known relationship, where they're making their referrals, which makes complete sense.

Your rural hospital, most of your referrals will go to the local specialty hospitals. Even in urban settings they will be more likely to go to partners if they're affiliated with one group than go to some other tertiary care hospital, whose name won't be mentioned because they're not in the room. But it turns out that most patients get their care within these empirically definable systems.

Performance, as I showed you already and is shown here, differs dramatically across systems. I don't need to go into the details, but it's actually quite easy to measure the performance of large organizations. It's actually much easier than measuring the performance of individual physicians and the differences in spending across this kind of group are profound.

Most importantly, from thinking about the future of the Medicare Trust Fund, is that there are dramatic differences in spending growth across these groups. And this is data that we presented at MedPAC three weeks ago. What you see is if you look at the lowest quintile of physician groups in terms of their growth in spending on physician services over a four-year period, they were only growing at about 10 percent a year. They're pretty well behaved.

There are some groups, the top fifth, who grew at a growth rate over four years at 46 percent in spending on physician services. Now those guys, the 46 percent folks, have been penalizing everybody else in terms of the sustainable growth rate. So that if you think

about moving toward some financial models that would reward parsimony and intelligence in terms of future growth, maybe we could help.

There are big differences in growth across these local delivery systems. There are substantial barriers. The current market is obviously going in the opposite direction. Medical staff organizations are intrinsically weak as an association. They're not established as organizations. And there are serious legal obstacles to gain sharing, which I think will be talked about later today.

But there are substantial advantages. Performance measurement is much more attractable at the extended hospital medical staff or this accountable care organization level. You can actually look at care transition's total cost, numbers of days in the hospital, the kinds of things I showed you in that model. All physicians can now be measured, and it's much easier to think about measuring with some degree of auditing 5,000 accountable care organizations than it is to think about the daunting task that Medicare faces trying to measure the individual performance of 500,000 different individual physicians. We'll be spending 10 years putting in place a bureaucracy to measure the performance of individual physicians and we will reinforce the fragmentation of our current delivery system.

It does establish a locus of accountability for capacity and hospitals can intervene to improve quality much more effectively than individual physicians can. There are great examples of hospitals purchasing medical records for their affiliated physicians even in

independent practice. That changes the conversation and starts to build the capacity for the kinds of things Steve Shortell was talking about.

How can we move forward? I think we need to think about what is an accountable care organization, what could be an accountable care organization, and create some incentives to support physicians and hospitals and other providers moving together to form what one might call local accountable care organizations. Begin to report performance on them. That we can do right now. We'll be publishing some updated data on the Dartmouth Atlas within a couple of months that should give you some additional insights. And then forewarn those groups that there might be some future penalty for growing more rapidly compared to your brethren.

So I'll stop there and that will give us plenty time for further discussion. Thank you very much.

MS. DAVIS: Well, thanks to the panel for very much staying on time so we do have a lot of time for questions. If you would identify yourself.

DR. GREENFIELD: My name is Bob Greenfield. I'm a practicing internist in Annapolis, Maryland, and I'm on the Governor's Council for the American College of Physicians for the State of Maryland. I certainly agree that medical care in this country is very expensive and is not provided very well for other reasons that have been explained. I believe that a lot of the large institutions, many of which you are from, do excellent jobs.

But from my perspective, the underfunding of primary care medicine in this country has been a tremendous problem. It's not just that the physicians working aren't getting paid well but they're not getting replaced. In the state of Maryland, for the past few years there's just been a handful. One year, none. I think last year, two people in the medical school who elected to go into primary care medicine. And I understand at some universities, like possibly UCLA, I've read they've stopped their training track for people who would like to be internists and practice in communities.

Now, I have talked to a lot of medical students who would love to do what I do, which is take care of a lot of patients with multiple medical problems and try to oversee their care just as we were talking about. They would love to do this too, but there's no opportunity for them. There's no jobs. There's no income.

I believe one of the reasons why these statistics are so poor is that there aren't any primary care providers. In our community, they all go to the emergency room.

MS. DAVIS: I think you've made the point here. Thank you, Dr. Greenfield. And the American College of Physicians certainly has been a leader in promoting this notion of medical home. And for those that didn't follow the health legislation passed by Congress over the weekend, there is a new Medicare demonstration on the medical home. Elliott raised questions about whether they really could do the care coordination for complex patients.

But I think what's interesting about that demonstration -- I know the college has been promoting that idea -- is that it at least improves the payment for primary care and makes it relatively more attractive by moving more to a blended fee-for-service capitation model.

But primary care, do we really need integrated delivery systems or don't we at least as one part of that need to restructure the incentives to reward primary care? Anyone?

SPEAKER: Yes.

MS. DAVIS: Okay. Anyone else?

SPEAKER: Absolutely. No. I think one of the questions is how do you build a future health system that could adequately support primary care. Part of it has to be around adequate payment for primary care. But the other part is to say how do you get systems to invest and to be willing to support those?

Part of the notion of integrated delivery systems is they recognize quite quickly the need for primary care, but without a payment system that penalizes the growth in the overuse of specialists. As long as we continue to reward cardiologists – no offense -- for doing procedures as opposed to improving the cardiovascular health of their population, we're going to remain in trouble I believe. So we need to reinforce primary care.

DR. LEE: If I could weigh in a little bit on that. I think that the money is important, but I don't think it's the whole story by any means.

Yesterday, Karen and I were at the Guisinger (?) board and we were talking about it there. Every place I'm going, people are really worrying about this. It is one of these

things like global warming; that people are suddenly realizing this is huge. It's a major, major threat.

I think that besides the financial issues, the job is different from when you and I came out of medical school. And that job that drew you and I to internal medicine, the job where you didn't show patients you didn't know something, that was a pretty cool job.

The job today is different. The job is like managing an unbelievable amount of information flow. Tests are coming back to you, hundreds of tests everyday. Patients are e-mailing you, calling you, asking you questions which you don't know the answer to because you can't know everything.

It's a very different job. It's a really hard job, much harder. I think a reinvention of that job is necessary. I believe that systems with electronic records and teams to take care of patients offer the promise of solution. I don't think that 25 or $50,000 more per year alone is the answer.

SPEAKER: I completely agree.

DR. LEE: I mean, it's nice to have.

SPEAKER: Completely agree.

MS. DAVIS: Larry, would you introduce yourself?

MR. LEWEN: Larry Lewen. First of all, I think Dr. Lee just hit the nail on the head. I've watched Intermountain Health Care grapple with this problem of redefining primary care by building systems, and particularly information systems. They've really changed the

nature of that job and made it much more attractive. I think to try to make the point that we're going to have reimbursement to try to change the job definition is really the wrong way to look at it.

To that end, my concern -- and, Steve, you talked about what we ought to do. The question is how you get it done. I'm wondering if whether or not it isn't time for the academic medical center community to step up and say, look, we have the centralization, we have the resources, we have the variety of care systems available to us, and find a couple of academic medical centers that are willing to step up. Michigan and others are well positioned to do that.

The advantage of that is that when you develop those systems you also are educating a whole new cohort of physicians and nurses and medical technicians into that culture. You're right. We have to take on all these things at the same time, but you have to start somewhere. And I'm wondering if the panel thinks that might be a good strategy.

MS. DAVIS: So are academic health centers the solution or the problem?

SPEAKER: They're clearly a big part of the problem. The question Larry's posing is can they be any part of the solution. There are a few places stepping up to what Larry has said. There's a new school in Florida that's devoted entirely to this case. Western's doing some interesting things and a number of other places as well.

But a key point that you said, Larry, and others, primary care is not just about the physician. It's about the patient as their own caregiver, working with the physician and the

healthcare team. It's also about thinking about primary care broadly and how you restructure it, and the role of nurse practitioners and physician assistants as well.

So in a patient-centered system, we don't worry so much about who's going to be providing the care. We worry about the care that that patient needs, and then let's talk about the kinds of resources and teams and category of health professionals that can best do that. So that's a little bit more radical thinking. The American College of Physicians is terrific and the role of family physicians is absolutely critical, but we also need to broaden that out a bit I think.

MS. DAVIS: Yes? If you'd introduce yourself.

MR. LONDON: I'm Paul London. I wrote a book a couple of years ago about how the rest of the economy has changed. Somebody in the back said the question is how to do this. And in the rest of the economy real change happens because somebody gets put out of business. I mean, the automobile companies have struggled because they can't compete. And the problem in health care is you may have an example here or there of somebody who's doing this right. But the people who are doing it wrong don't get put out of business.

So I think there's a real argument to be made for looking way beyond health care to how other things are changed in the United States. And I think the bottom line is you have real competition that puts people out of business. When they start seeing people going to somebody else -- and I don't know how to do this; whether you would encourage instead of a national system a state-by-state system or regional system, so that these systems draw

patients away from other parts of the country, and then you start to see change happening. I don't think this is going to happen in Washington. I really don't.

MS. DAVIS: Steve, you want to take this?

DR. SHORTELL: We were involved early on in California's Pay-for-performance demonstration program, the Integrated Health Association. It's been going on for about four years. We very quickly realized – and some of the physicians around the table and the medical groups -- that under these kinds of pay-for-performance and financial incentives, with all their pros and cons, to the extent they do get implemented, and doctor groups and hospitals and various combinations are going to compete on value, quality metrics as well as cost, there are going to be winners and losers. And that's your point.

Up to now in American health care, by and large, we haven't created that kind of environment, whether there's going to be winners and losers. And in the integrated thing in California, even before it started, there were about 15 physician groups in California that went out of business. They went bankrupt, and there's been a few more since.

So the really good-performing, high value deliverers of health care in this country are going to be rewarded and the others are going to have to compete on that. So this will create to some extent what happens in other parts of the American economy. Now, there's dangers to that as well. We want to think about that. I don't want to be glib here. But this is about creating some winners and losers.

SPEAKER: Well, I think the key question will be how do we measure their performance? The challenges in the short term are that the currently available measure sets are much too narrow. We'll actually reward poor care and don't reward care coordination and longitudinal efficiency, if you will.

On our IOM committee, three out of four of us on the panel spoke to that issue, about performance measurement and its importance. So with better performance measures I'm with you. I've written elsewhere that I think we could send a third of the healthcare workforce to Africa and improve the health of both continents. And that does imply either putting people out to work or coming up with a health corps, replacement for the Peace Corps, which helps global health.

MS. DAVIS: If I can add to this, my view as an economist is there is no firm, other than the integrated delivery system, that produces an episode of care. And there's no payer that pays for an episode of care. So one of the reasons the usual market forces don't work is that we paid for units of service, not for a bundled episode of care.

SPEAKER: Absolutely.

MS. DAVIS: Yes? If you'd introduce yourself.

MR. SMITH: Bruce Smith. I just wonder if our colleagues could comment a little bit about the pay-for-performance plan that CMS proposed. Just based on reading the Pear article which was alluded to by one of the panelists, Pear certainly didn't think much of that plan. In return for a huge grinding and cranking and gathering of data, docs were going to

get 1.7 percent increase but with the threat looming that they're going to get stung next year anyway.

Is this a step forward, what the CMS is proposing, or is it a wretched kind of data, glomping, clumping thing that has bureaucrats and not sort of the practitioners laying out the performance standards that we're wanting to move forward?

DR. LEE: We probably all have opinions of this. I'll just give a very brief one from a provider perspective, and these guys can talk from other angles.

I don't like to be a critic as opposed to a playwright. I would say that given what they have to work with -- which is a completely fragmented healthcare system -- there aren't a whole lot of other options I think that the cook-book medicine thing, that was acting out, to tell you the truth.

I'm not crazy about this program and I think it does create a whole new bureaucracy, a whole new need for learning a coding, and a whole new opportunity for, frankly, fraud that needs to be audited.

That said, I think they felt like they had to do something. So I don't want to be pure critic. I'm not crazy about it, but I think that they're clearly trying to send a message or moving down a road.

SPEAKER: I would just say I agree with everything Tom said. It's a signal. It's the right kind of signal to send. It will get better. It will be all kinds of things that will follow this. It itself, what I know about it, has a lot of problems but it sends the signal.

MS. DAVIS: A lot of questions here in the back. Yes?

MR SCHOELTTLE: I'm Pete Schoettle, and I'm not a doctor; I'm a patient. A two-part question.

One, I've heard that one of the major financial or administrative problems with the medicine field is that persons making the decisions as to the care aren't paying, and the people who are paying aren't making the decisions, therefore, the market mechanisms just don't work.

But the second part of the question follows on your thing, bundle of treatment, paying bundle. If we bought a car the way we pay for hospital services, we'd have a 20-page bill that says you owe the tire manufacturer this, you owe the battery manufacturer that, and on and on and on.

Why can't a hospital say a stint procedure cost 10,000 bucks -- done -- instead of 20 pages of things we don't understand?

MS. DAVIS: Elliott?

DR. FISHER: I think that actually is the direction many of those who are worried about reform of the payment system are moving, toward bundling initially for inpatient hospital and physicians services, to try to align the incentives of the physicians in the hospitals to work together to provide good care for that inpatient episode. Perhaps the next step, according to some of the ideas in MedPAC, is to extend those episodes to be beyond

the hospital so the physicians and hospital would have had some incentive to make sure you go to a good nursing home and to make bundled payments for that.

What those need then are performance measures that actually measure how you're doing three months later so that you can make sure you're rewarding not just cheap care but good care, that we can choose wisely among providers.

I think that is the direction policymakers are trying to head. The current signal on paper performance is remaining within the current payment system and stuck with it.

MS. DAVIS: Yes?

MS. GIFFEN: Mary Giffen (?) with GAO.

To simultaneously address access to quality and costs, you've raised a number of strategies, including paper performance, public reporting, and extended hospital medical staff.

My question is, how important, relative to those different suggestions, does benefit design play? For example, what's covered, what's not covered, high deductible, low deductible. I know recently, groups such as the Citizens Healthcare Working Group have recommended a focus on defining a "core benefit package."

So my question is, how important is that relative to some of the things that you're talking about?

SPEAKER: Let me start off. And then, Karen, you might want to comment yourself on this one because I know you have a lot of thoughts on it. But it's critically

important. It's an interrelated package. Think of this as a rope, strands of a rope, really, that we need to climb and make progress on.

So the benefit design, what's going to be covered, the basic package versus supplemental, is the basic starting point for then the health plans, the purchasers, the providers, et cetera.

One of the great advantages of truly integrated multi-specialty groups with the payment and with the insurance mechanism -- and you take Kaiser Permanente as one example of that -- is they know in advance. It's just like in manufacturing. You know the sales force, the marketing. You know what the product is, et cetera. You know the benefit designs that you're selling, what's covered in there and so on. So the benefit design is an absolutely critical part in all this. And you're right. We haven't said anything about that.

I don't know. Karen, do you want to comment on that?

MS. DAVIS: No. I believe people normally think that the -- I believe the incentives on the supply side are more important than the incentives on the demand side, and that we put too much emphasis on worrying about how you get the patient to change behavior without really talking about how to get the system to change. But that will just trigger a lot more.

SPEAKER: Mi Fong (?) from the Center for Sustaining Health System Change. I'm sorry to be a curmudgeon because I think I actually am very hardened by the talk of bundled payments and attention to primary care.

I would push you a little bit to reexamine your assessment that CMS was sending the right signal with the voluntary -- well, now not so voluntary -- reporting program that they set up because they're investing a different order of magnitude of resources into setting that up and at the same time not able to provide $3 million to do a survey of cost of care provision to update the physician fee schedule appropriately. And I'm wondering what kind of signal that sends to the supply side.

DR. FISHER: Great question. I think it is a challenge. In a time of limited resources, I would certainly have not gone, first, by aiming at individual physician performance measurement with voluntary reporting if I were in the driver's seat. I think focusing on larger entities -- and it's perfectly feasible to measure 5,000 hospitals. If we built on our existing hospital performance measurement system and said let's identify 500 diabetics at each hospital, and look at their care over a year, and report that publicly for the docs who are affiliated with those hospitals, you'd change a lot of behavior very quickly because we'd know very quickly that some of the hospitals were doing a lousy job and the physicians who are associated with them. And the cost I think would be substantially lower. Or start with heart attack and my long-term outcomes, where you'd foster coordination care between the inpatient and the outpatient setting.

I agree with you, that in the period of scarce resources, it wasn't necessarily what I would have done. But I do think it sends a signal to the physician community. That is, no

longer is autonomy the only thing that you guys get to pay attention to. We're going to start paying attention to accountability.

SPEAKER: May Roo (?) just asked that question. He's done some very good and important research showing fragmentation of care for Medicare recipients. And it shows how the feasibility of rewarding individual doctors for their patient panel is really fraught with difficulty.

So as difficult as what Elliott was proposing about these accountable groups may seem to people, the alternative, which may be pretty dysfunctional, is pretty unattractive. So that's why I think your approach deserves serious attention.

MR. SMALL: Bob Small, Mayo Clinic. There's a lot of reports out about indicating that we should be training more physicians in the United States. But given the Dartmouth findings about the relationship between the number of physicians and cost and quality -- I'm pretty sure Dr. Fisher has written on this -- I'd be interested in each opinion of the three candidates about whether we really should be training more physicians in this country.

DR. SHORTELL: Let me start off. There's a recent study just done, in California as well, the office of the president looking at all the health professions and in medicine. It also concluded that in California we need to be training more physicians. It varies a lot by specialty.

One of the weaknesses, in my judgment, in these studies and one of the things we need to think through better is they by and large do not take into account changes in the

delivery system. They look at the past, et cetera, et cetera. And the way in which health care services are going to be delivered, 10, 15, 20 years from now, they'd be quite radically different. It has huge implications for a physician supply and the kinds of doctors we should be training.

So that's one of the big warning signals or weaknesses I find in some of these projections.

MS. DAVIS: Elliott, quick answer and then one last question.

DR. FISHER: I just want to be quite specific. If you take Intermountain Health Care, for example, to build on what Steve said, the way they use endocrinologists there to care for diabetics is to help design the care system for diabetics. And they're able to take care of 30,000 diabetics with three endocrinologists.

The traditional American medical model would say that every diabetic should be seen by an endocrinologist, or every complicated diabetic, which is not the case in more integrated delivery systems where you think about professional knowledge and only having those patients who require that level of professional knowledge see actually that physician.

So the fundamental redesign and a change in the payment system could up end any projections of physician workforce. If you benchmark our current workforce against Intermountain or against Mayo, we're way over supplied with medical specialists and somewhat under supplied in terms of primary care physicians, but have more than enough physicians for the next 20 years to manage the baby boom.

MS. DAVIS: I'll take one last question here.

SPEAKER: I'm Mac Lovell from George Washington University. A little while ago I went to a periodontist and they told me it was going to cost $2,200. I didn't argue when I had tools in my mouth. But I went on line to periodontal.com and put in a zip code, and I found information of what others were charging and it was around 600. So I went back to the doctor -- I printed it out -- and gave it to him. He said it was ridiculous and he knocked $2,000 off (laughter).

SPEAKER: That's wonderful.

SPEAKER: Is that information available on line for other services? If you could do that, that puts some real competition.

MS. DAVIS: So what's the status of price information?

SPEAKER: New Hampshire has put public transparent information about the prices of hospital-based services. The pricing does not allow you to understand the total bundle as we talked about the episode. You can learn what the hospital charges for this but you won't know about how many subsequent visits you have to have.

We need much better transparency on price information, both for individual services, but more importantly for the longitudinal episodes of care, the bundles that patients really experience. That's what you need to know to choose between a Mayo and a New York University Hospital where there are two or three-fold differences in a cost over a given episode of care but the prices are actually quite similar, the individual units.

MS. DAVIS: My apologies to all of those who were bursting to ask questions. But there are more sessions, and I'm sure you'll have a chance to get them in. Back promptly at 11 and join me in thanking our panel.

(Applause)

Session 2:

What Can be Done? Systemic Reorganization

MR. AARON: Any former President of the Brookings of the Brookings Institution used to have the wonder talent of being able to blow a whistle loud enough to deafen everybody and kill off conversation, but I am trying to play that role. Before I turn to the introductions for this session, I need to alert you to luncheon arrangements.

The program is quite full today, and we want to give our luncheon speaker, who is Mark McClellan, plenty of time, and I am sure you will want to hear what he has to say. When this session is over, I ask you to please go across the hall to sample the culinary delights that will await you, bring them back to here and take your seats as quickly as you can. I know nobody likes to balance luncheon plates on his or her lap, but I am sure that Mark's talk is going to be worth it. In the name of speed, I would only say to not to trample your neighbors, but please delay using your BlackBerrys to answer all your Email during the luncheon break.

I am going to introduce all three of our speakers now and then not interrupt them further. They each have I hope 15 to 20 minutes and will be as punctual as those in

our first session were so that we will have time for the many questions coming from the floor.

It is a real honor to introduce three of the most innovative health care administrators in the United States. You are going to hear first from Jim Mongan who is President and CEO of Partners HealthCare in Boston. Before being selected to head Partners, Jim had an extensive career, first in Washington as a staffer with the Senate Finance Committee and a stint at the Department of what was then called Health, Education and Welfare, and those of you know how long ago that agency was so named will know how long ago he was here, and that is where we got acquainted. He then became Executive Director of the Truman Medical Center in Kansas City, and was for a while president of one component of what has become partners, the Mass General Hospital in Boston. We are all in his and his colleagues' debt for the very thoughtful issue briefs that provided the inspiration for today's events.

Denis Cortese is President and CEO of the Mayo Clinic. The name Mayo, at least in my lexicon, is synonymous with high-quality and economical health care. He has been at Mayo for about three decades, first as a specialist in pulmonary medicine, and then in various administrative positions. Rather remarkably, those administrative positions have not stopped him from continuing to see patients and teach students as part of the Mayo team. He will, I am sure, explain why that word "team" is central to his and Mayo's mission.

His various honors as a member of scientific panels and health policy groups are described in biographical materials that either you have received or that you can pick up outside the door.

The last speaker in this panel will be Jonathan Perlin. Dr. Perlin for 7 years helped engineer a really extraordinary transformation of the health delivery system of the Veterans Administration. The VA health system at one time more notorious than noted, became during Dr. Perlin's period of responsibility the subject of glowing journalistic and scholarly studies about its farsighted use of information technology and the delivery of high-quality and cost-effective health care. Dr. Perlin left the VA this year to join the Hospital Corporation of America as Chief Medical Officer and Senior Vice President.

Before turning the floor over to Jim, I want to point out something about this morning's session, and in this session in particular. It is unusual in one rather ironic respect. It is a session on health policy, this one, at which all three of the speakers are actually, believe it or not, physicians, and that is a rarity in panels on health care policy. In fact, two of the three participants in the first session were also physicians. We will try and balance things out this afternoon and take care of that problem, but for this morning, let me turn it over to Jim Mongan.

DR. MONGAN: Thank you, Hank, for the generous introduction and for all your efforts in putting this conference together today. I very much appreciate it.

I am here this morning to talk with you about the pressing need for a fundamental change in the way we deliver health care in the United States, and to describe some of key elements of that change. At the risk of being a bit provocative, particularly with this audience, I would assert that the policy debate regarding change in health care over the past four decade has been dominated by economists and by the discussion of various payment and financing schemes with penalties and incentives to attempt to shape the system. I think it is past time for those directly involved with the delivery of services and the provision of care to step forward and to speak some more candid and some open critical truths about our field. It is past time to address the fundamental cultural and organizational change which will be necessary regardless of which economic levers are subtly or crudely manipulated by each new crop of health economists.

Here is how I will use my 15 minutes this morning. First I will try to capture and clearly and succinctly as I can the need for change. Next I will describe the critical cultural and organizational change that I believe is necessary. And finally, I will address some barriers to that change.

First, why do we need fundamental change? Simply put, as you have heard from this morning's panel, the way we deliver care in this country has not kept up with the underlying advances in medical science and treatment. This issue was clearly addressed in the 2001 Institute of Medicine report, "Crossing the Quality Chasm," and I will quote just one key paragraph from that report: "Our current methods of organizing and delivering care

are unable to meet the expectations of patients and their families because the science and technologies involved in health care, the knowledge, skills, care intervention, drugs, and devices, have advanced more rapidly than our ability to deliver them safely, effectively, and efficiently.

"The specific indicators of our need are that the services we all deliver all too often fall short in their safety, quality effectiveness, and efficiency. The most dramatic manifestation of those shortcomings is the extraordinary and mostly unexplained variance within medical practice as we have known it over recent decades. Dartmouth's Dr. John Wennberg, joined more recently by his colleague Dr. Elliott Fisher, pioneered in the study of these extraordinary studies patterns of variance in medical practice decades ago. Yet in spite of their stunning data, little or nothing has been done to address this issue. The enormous range of unexplained variance in medical practice across the country is nothing less than a rebuke to medicine in seeing itself as a science. This variance has a huge impact on cost and quality, with the promise of both higher quality and lower costs if best practices were applied more evenly across clinical medicine across the country."

What is the core change that I see as critical if our delivery system is to keep pace with the progress in medical science? The necessary change has two interrelated components, organizational change, and cultural change. First, at an organizational level, we must greatly accelerate the move from thousands of physician group practices and independent hospitals, toward larger, more clinically integrated health care organizations.

Importantly, I am not advocating larger provider organizations alone but, rather, large organizations which also become more clinically integrated in good part through the real application of health information technology. And more specifically, electronic medical records with decision support capabilities to help shape practice within those larger organizations.

The recent progress we have seen in medical science has been matched and, indeed, it is dependent in many ways upon the similarly astonishing advances in information technology. Yet we as a health system have fallen far behind other sectors in our ability to harness these advances in information technology to the daily delivery of complex and interrelated medical care interventions.

I believe that organizational change in turn involves two elements. First, structuring sufficiently integrated health care systems, and then harnessing those systems to effective health information technology so that we can function in what I would call a clinically coherent framework. Organizations of a certain size will be necessary to make the increasingly important investments in clinical information systems economically feasible. But perhaps more importantly, only organizations of a certain size and degree of structure can sustain a clinical culture that fosters and supports true adherence to clinical guidelines and peer review. As a final point that was made this morning, organizations of some size are necessary to make meaningful pay-for-performance realistic.

There are some in the audience who might say that I am headed down the wrong track, that the literature which shows a quality advantage in large groups is still relatively thin and that the data on cost and efficiency is mixed, but I would respond that the data of both quality and efficiency will become much more robust as systems like our own more thoroughly harness clinical information systems as has been done at the VA and Kaiser systems. But building a reformed system will really be possible when we have in each area of the country a number of health care organizations of sufficient size and degree of organizational and cultural coherence so that the organizations can assume true responsibility for the quality and efficiency of the care they provide.

I have been searching for a metaphor to capture this need for larger, more integrated health systems to replace the fragmented and atomized system we know today. Crudely, I have thought of the analogy of attempting to build a house out of gravel. It simply cannot be done. You either need to have well-formed bricks, or at least some way to aggregate the gravel in order to build the structure, or I would submit, in order to restructure the delivery system. Recently I saw perhaps a better metaphor when I read a quote from Margaret O'Kane of the National Committee on Quality Assurance who said, "The American health care system is like buying a car where they come and put all the parts on your lawn. What we are looking for is the entity that puts it all together and that is able to be accountable for the performance of the vehicle rather than whether or not you've got good sparkplugs."

Let me turn now to the second change, and that is the cultural change that is necessary to foster these larger organizations and to allow the delivery system to keep up with the advances in medical practice.

Those who write on change and transformation most often cite cultural change as the most difficult change to achieve. In medicine for decades, one of the strongest cultural foundations has been physician autonomy, or the belief that the individual physician has sole responsibility for their portion of the care of their patient and accountability only to their own professionalism. Of course they have been accountable to state licensure boards, but only for extreme misbehavior. Though legally accountable to lay hospital boards, in practice until recent decades, the hospital was seen culturally as the physician's workshop and woe until the hospital administrator who tried to address practice issues. And of course, physicians have steadily resisted interference by so-called third-party payers in the government. What we are left with is the grossly flawed accountability of the legal malpractice structure as a very imperfect check on autonomy.

Don't get me wrong, there is something to be said for physician autonomy. When any one of you are really sick, you want to be under the care of someone who has the authority to make critical judgments about the elements of your care, but unfettered and unbounded autonomy has enabled and in fact I would suggest driven the rather strong variance in practice that I described earlier with the huge consequences for quality, safety, and efficiency. So the cultural transition we need in medicine as medicine thankfully

becomes more science than art is a more appropriate balance between autonomy and accountability in order to achieve reasonable boundaries around variation of practice.

Electronic medical records are a tool to decrease variance, but they are only tools. We need a transformed cultural context for the tool to be effective. We need a culture in which individuals physicians cede some of their individual autonomy to a group empowered to design the rules and algorithms and prompts which enable electronic records to guide though not to force practice patterns which can lead to increased quality, safety, and efficiency.

What group should be the recipient of some degree of autonomy appropriate ceded by individual physicians? I would assert that best path would be that physicians cede some autonomy to colleagues in a larger group where they have some real accountability to their peers. This is not only the most feasible change, it is often the one most likely to succeed in the long-run. It seems preferable to the government plunging into all framing of practice, or to insurers or other proprietary groups capturing this responsibility.

The large groups of physicians could range all the way from large tightly organized groups such as Kaiser Permanente, through large integrated provider organizations such as Intermountain Health, the Mayo Clinic, the Geisinger Clinic, or our own organization partners, through large physician group practices to more virtual organizations of physicians in rural areas.

To add one more point, although the jury is still out, I believe that the threshold level of integration that health systems need to attain in order to enhance quality and efficiency is somewhere short of a fully capitated or budgeted employed physician model. We should recognize and we should praise the organized systems like Kaiser and the Veterans Administration which are far ahead of most of us in achieving clinically coherent frameworks for the care they deliver. But at the same time, I believe our general national political culture which puts great value on patient choice and the culture of our health system which so valued physician independence means that most of us will not move to this mostly fully integrated model at least in the near-term future. In a sentence, the cultural transformation we need is to establish a more appropriate balance between autonomy and accountability, a balance which would foster and support a move toward more organized groups of physicians.

Let me now set this cultural and organizational transformation into a national policy context. Last year I was asked to chair the newly established Commonwealth Foundation Commission on a High-Performance Health System. The commission is made up of 18 leaders from many parts of the health system. To link the commission's work to my focus today, the need for improved informatics and the need for organizational and cultural change are absolutely central to the commission's diagnosis of our system's failure and to our thoughts about treatment of those failures. Following on this diagnosis, among the commission's early recommendations are strong

recommendations to work toward more organized delivery systems and to expand the use of electronic health records.

Now let me close with a brief word on barriers to the cultural and organizational change I have described. I will touch on three: sociological barriers, legal barriers, and economic barriers.

The sociological barriers to the cultural change needed to achieve the more appropriate balance between autonomy and accountability are perhaps the most difficult barriers to surmount. Teaching medical students differently seems little more than a cliché, but in fact, we really do need not only to teach, but also to model in a more thoroughgoing way through our medical school, residency, and fellowship training that medicine is as much about accountability as it is about autonomy. We need to model a more serious questioning of unexplained variance within and across practices, variance which medical students are only dimly aware of at best. And we need to model an appropriate reliance on decision support and other mechanisms to appropriately narrow that variance.

We also need to better teach and model physicians working more seamlessly with other physicians and health professionals to model that medicine is, as my colleague Dr. Lee, a team sport, not an individual sport.

The legal barriers to the formation of a larger, more integrated group should also be more thoroughly explored. I am not a lawyer, but as stated in the summary of the issue brief, the development of such provider organizations seems discouraged by antitrust

policies which reflect greater concern for protecting consumers from price increases than optimism that organized providers might deliver better and more efficient care. We should thoroughly explore together the right balance between concern and optimism. We should, however, recognize the need for fundamental change from practice as we know it today.

Finally, back to the economists, there is of course a need for appropriate reimbursement policies. Under current reimbursement systems, there is no compelling business case either to move to larger groups or, for that matter, to moderate utilization. The demand for larger clinical information technology investments will begin to build a business case for larger groups. But I believe real pay-for-performance mechanisms, possible only with larger groups which reward meeting clinical improvement targets for both quality and appropriate utilization, could have a major impact on forming groups and on cost and quality.

In conclusion, I have attempted to set out the case for change, the major elements of that change, and a set of key barriers to seeing that change occur. We all know that achieving the change I have described will be an enormous task. After all, we are not only talking about 16 percent of the gross national product, but we are also talking about healing which touches every American family. We in the medical profession owe it to ourselves and to those families to match the capabilities of our delivery system to the extraordinary blessings of advances in science and medical practice. Thank you for your attention this morning.

(Applause)

DR. CORTESE: Good morning. It is just really a pleasure to be here. I think you will find some commonality of messages among all of us from this morning's session and probably this session also. I am going to take just a slightly different approach and postulate a few things, and then we will start with the slides.

First, we keep talking about a medical system in the United States, I would submit there is no medical system in the United States, and there never has been one. It is not broken. You cannot break something that did not exist. And we fool ourselves by thinking there is a system that is broken, because then individuals who do not think very deeply say let's fix it. You cannot fix something that did not exist to begin with, because if we ever consciously designed a medical system, I would ask you, Where are the system engineers? Where are the people who think about systems in health care today? That is one concept to have you think about.

The second is we are all pretty much pre-op in this room. I am not a surgeon, but all of us are actually pre something or other, and I would suggest that as you think about health care, think about what would you like to have happen to you or for you before or when or after you are in the office with a physician, whether it is in a big group or a small group. That is what we need to design. Think about it yourself. What do you want to have happen for you or to you when you go into that office?

Another concept is we do not have a system. Yogi Berra said something like, "If you don't know where you're going, you're not going to get there," and I would submit that that is part of our big problem in the country, that there is not an overarching vision for what are we trying to create, what do we really want, and only you all and others can answer that question. The Mayo Clinic has been relatively quiet in this regard for quite some time in the last couple of years. Bob Smoldt, my partner and chief administrative officer is with us, too. He showed me a quote from Jerry Garcia, the guitar player, and Jerry said something like, "Someone has got to do something. It's just incredibly pathetic. It has to be us."

(Laughter)

DR. CORTESE: That is all of you in this audience, because somebody has got to start talking about what it is do we need to do, and I always find it pretty easy to start with a vision of what to do. The vision I am going to paint here is really not ours, it is just something that seems to make sense at least from one group of people's perspective. It got started by a single physician practice in the Midwest adding two physicians about 10 years later, and in 1910 when they had about 17 or 20 physicians on the staff, Will Mayo had a quote, my favorite quote of all his quotes at the Rush Medical School graduation class. He said, "The best interests of the patient is the only interest to be considered." That is number one. That is what we should focus on. This is all about the patient. This is not about the drug manufacturers, the government, or the payers, anything other than the patient. He has

a comma after that part, and the second part is the key: "In order that the sick will receive the benefits of advancing knowledge, a union of forces is necessary. Patient care, teamwork; patient care and union of forces. Not individual doctors, teams taking care of business," in 1910.

In 1911, his next quote was, "All physicians should have their results published and patients ought to know them." This is in 1911. In 1907 the Mayo Clinic hired its first engineer, Dr. Plummer. He created a unified paper record. How many institutions 100 years later have a unified paper record, let alone an electronic one?

What happened in the last century? The further East you go, the less you understand what teamwork means in medical care.

(Laughter)

DR. CORESE: I am from Pennsylvania. I went to school on the East Coast. But the more there are individual doctors, there is a different concept as you move West. There is a slight difference.

Let's start. Let's say what would you like to have if you were a patient in an office? There are certain components, and there are others you might add, but there are just a few I want to talk about. They are right up here on this slide. We ought to be thinking about how do we create a learning organization for health care in the United States? I am not talking about individual organized practices; I am talking about the whole country. Wouldn't it be nice that if a hospital in Seattle, Washington, found a new way to avoid a

complication of a drug, every doctor in this country and every hospital in this country could know on the same day? Why can't we do that? We do it in the FAA. The National Transportation Safety Board does it. How hard is this?

Second is the science of health care delivery, and I am going to talk about individualized medicine is here. It is here today. If you are not feeling it, you will. It is here today with all the new science. It is coming at the best time we could ever have to improve health care, and the worst time for trying to be able to afford it. We have a real challenge here and a lot of tension.

Integration, paying for value, and insuring everybody. Let's go through each one. Learning organization first has three simple components that we look at. One, we need to have true professionals in health care. A true professional is not somebody who trains in a certain body of knowledge, does an apprenticeship and then practices it. That is what my plumber does, that is what an electrician does, and I would submit that that is what most physicians in the country do. They do not do the other two components of professionalism, and those are passing on the body of knowledge, and contributing to the body of knowledge. When I mean contributing to the body of knowledge with research, it does not have to be basic research. It could be process improvement research; it could be quality improvement research, the whole spectrum, translational research, basic research, being engaged in that process. And I think everybody who is physician should be engaged

in education because, after all, that is the definition of a physician, either training other professionals or educating your patients. You have to be engaged in that particular process.

A comment on education. I will add one other because it came up somewhere about changing the training of professionals. Academic medical centers have a lot of blame here if we are going to place blame, because physicians in training are selected through a selection process. They go into medical school, they are taught to learn everything, and the day they leave medical school, all of a sudden the only skill they need they have been specifically selected not to have, and that is to be joining a team. They are carefully trained to never be able to be team members. They are on joint committees as long as they are the chair, but they have to deal with patients, patients' families, other doctors, my goodness, you might have to deal with other doctors, administrators, for taking care of actual patients. The one skill they need, they are specifically taught not to have it because when you ask in your medical school when is the last time a medical school class took a clinical test collectively to get it 100-percent right? That is called cheating. And when you go practice medicine, you have to cheat all the time. When you are running an orchestra, that is not called cheating. You get the conductor up there, he is pulling from all the best that we can find. That is what medicine should be like. Because you are making the music of health care and somebody has got to conduct it, and I would submit to the physician who was asking the question about the poor doctor out there in practice that nobody has built an orchestra around to support the physician, and the only thing you really

want is a doctor who knows everything and can coordinate care for you, we pay them the least, and we pay the radiologist the most to read X-rays and go home.

Somehow we have to face this dilemma. In the United States today we have a system that was designed exactly the way we set it up. We pay the most number of dollars in DRGs to physicians and hospitals in the areas that we can demonstrate have the lowest quality of care. How hard is that to figure out? This does not take an economist to figure out. We are paying money for the worst quality, and of course you are going to get more of it. Why are we all shocked about this? This a serious problem in this country, and I for one take it as an insult that the federal government and others are messing up health care, because we are trying to care for patients out there. So somebody has to put some blame where it belongs, and there is a lot of blame to go around for where we are today.

Information: accurate, timely, and reliable, and it should be connected. We have more barriers to that in this country than you can shake a stick at. We can provide health care in Dubai that we cannot do for New York City and Miami in this country, and we do it by levering our staff in Rochester, Minnesota, and we do it by telemedicine. This can be done, and there are institutions doing the same thing. But accurate and timely information is the second component of a learning organization, and the third, for goodness sakes, is system engineering. You need engineering, you want a system, so we have to give some thought to that.

The science of health care delivery is this term that we are using in our campus to really translate this idea of engineering because physicians do not know what I am talking about. We have to put it into a science somehow so that they can understand we are talking about the practical application of processes to increase value and produce better health care. That is system, processing engineering, workflow, any of the system engineering approaches and there could be a whole list of those. That can be applied in new models of preventive and health care. I would submit to the question that was raised by the gentleman over here, the physician in practice, that physicians need to be leading that. They do not have the skills to lead it, I understand that, and that is why we have to change the health care system. Forget about me. I have been practicing for 37 years. Forget us. Think about the younger generation and having them learn a new way to deliver care, new models as Jim was mentioning, and then when they come out they have new ways to actually care for patients and they are doing it in a systematic process with teams focusing on what patients need.

Safety reporting and transparency. As I alluded to that about reporting the to hospital in Washington any everywhere in the country, just imagine what could happen in this country if we applied the same rules and the FAA and the National Transportation Safety Board requires for reporting near misses in the airline industry. You have to report them I think within 36 or 48 hours, and if you do not, you lose your job. Just imagine what could happen in this country if we had something like that. And forget the lawyers. If we

do this right, the lawyers can have nothing to sue. I am not asking for malpractice reform. I am asking for transparency, we work together, and we know this can be done. There has to be a vision that the country is moving to these things to get there.

Individualized medicine: genomics, proteomics, that is what I am talking about. Individualized medicine is telling us that there is not one kind of breast cancer. We currently treat eight kinds of breast cancer, we have specific, different treatments for eight kinds, we know that there are at least 125 types now, and this can go on for many other diseases. There are different types, and different treatments apply for each of the diseases. This is coming down the road, and that means there will be complexity and we are going to have a real problem because, therefore, there will not be a standard of care for health care. A standard of care in oncology does not exist. There is no such thing. It is what is the best care for that particular patient, and it is the process of thinking along those lines, applying the process to the care, and then measuring the outcome. It is the outcome that we care about, and we ought to be focusing on that.

Patient focus, I have already alluded to that. All of the magic occurs when the patient is in the room with the provider, whether it is a nurse or a doctor, I do not care how you look at I it. Even population health as the Gates Foundation is finding out, they cannot get everybody vaccinated. If you cannot put the stuff in the drinking water, it is 1 on 1 grot work (?), even population health. It is 1 on 1 and we just might as well focus on it. Population health does not solve the problem in health care. Population health is the

sum of the 1-on-1 interactions. If you want this to be better, you have to get those 1 on 1s much better.

Nontraditional settings, which means not in the office. It could be at the patient's home, it could be on their BlackBerry, it could be anywhere they are in the world. This is happening today.

Integration is another concept. There are several levels of integration. There is integration let's say at the practice level where teams of doctors and nurses are working together. That is one type of integration. There is integration around perhaps the medical condition. This is the Michael Porter type of example, and people were saying we were not paying capitated rates for certain kinds of episodes of care, and I say we are. I will give you one example, transplantation. That is a package price. We all bid on it, the patients come in, $200,000 for the transplant; $89,000 for a liver transplant. All of that activity around transplantation grew up on the Internet. Every patient and every doctor has access to the individual doctor's results and their practices, they are paid in package prices, and there have been great results. Transplants are just incredible with the competition that goes on. A liver transplant today requires 4 days in the hospital, no ICU. That is standard. It is incredible what has happened with the capitated approach which I do support, we can do this, and we have examples in the country.

Integration: practice, education, and research, all working together to improve care for patients. If we are just doing research for the sake of doing research, as

far as the patient is concerned, you are dabbling. It should all be working to try to improve the care for patients. Integration: institutions with providers, whether they are owned or not, whether they are salaried or not, but integrating and trying to work together.

The concept I would like to leave you with is the orchestra concept where you have the conductor, but you have the woodwinds, you have the brass, you have percussion, and I forget the other one, but there are four or five different groups. The strings. How could I do that?

(Laughter)

DR. CORTESE: You have the four groups. They are all integrated themselves. Just imagine if you were trying to conduct an orchestra and everyone in the orchestra said we are going to play as loud as we want. That is what it is like trying to manage an organization where the cardiac surgeons want everything they want. That is exactly what we have to deal with. You have to find people who are working for a greater good. Like Winston Churchill in World War I when he was fired, he went and volunteered for the Western Front because he reveled in serving a higher cause. We have to find people who want to work for the higher cause. What is the higher cause? That the music that you are creating collectively for the patient is better patient care, and that is hard to find. Why? We do not select for people, and we do not train them, so it comes right back to education. And of course the patient focus, focusing it all around the patient.

Pay for value. This is a hot topic. The current term people use is pay-for-performance, but I think that ultimately what we are looking for is we want to pay for quality versus the cost, and the cost is not the line-item cost, because I can tell you that I would be very happy to pay more money for a very high-quality MRI and have it done once than have a poor-quality MRI done five times. So the line item does not work, and in our insurance industry and all those who are commercial, they negotiate just how much discount you are giving me for the line item and that is all they think about, because we have a system in our country where all insurance that insures all of us under age 65 has no longer to deal with you when you are over age 65. All of your risk goes to a federal system. So why would they care about the long-term health of you? Why do they care if you get diabetes when you are 50? Because your transplant or your eye problems or your heart problems or your vascular problems when you have an amputation is going to incur on Medicare. So unless they are in the game all the way through, they do not have that big an interest. We need to change the format and have them have that interest. We have a public-private system and every other country has it in parallel where people can jump in and out. In the U.S., and we are the only country that does it, they are in series, and because they are in series, the incentives are terrible. It is mindless, frankly, to be honest with you.

So we have to begin to say we want to pay for long-term value, and we want to look at outcomes, safety, and service. I know that safety and service are outcomes, but I

keep emphasizing it because doctors need to think in different categories. Safety and service are different, and indeed, we should be paying for outcomes. And the purpose of process is to get the outcomes. Do not pay for the process. I can give you lots of examples where we get the process, and the outcomes are not any good.

I have been in an airplane sitting next to a pilot, it was a small plane, and we had a checklist. I helped him go through the process, but you sure do not want me flying that plane, because what you care about is the outcome. The purpose of that process is to help you get the outcome, but if you want the outcome, you had better be measuring the outcomes.

Insurance for everybody. This is a no-brainer. It is a national issue. This can be done. I would challenge Congress; they could do it tomorrow morning if they got down to it. Either go with a single payer or use the Federal Employees Health Care model. How hard is that? The federal government has both as a provider and as a patient, let's get on with it. Just do it. There it is. We have some examples that are popping up, and yes we are going to save and each little group does it, but this country needs to commit to some vision and move in that direction. We just need to get on with that because it is messing up health care.

That is my summary and those are the points that I wanted to make, and I hope I stirred you because I did it on purpose. Thank you very much.

(Applause)

DR. PERLIN: Good morning. A little bit earlier today Elliott Fisher remarked that hope is aspirational, but optimism is based on a trend. So I hope that in telling a little bit of the VA's story, and I recently had a very privileged opportunity as the Under Secretary and Chief Executive Officer, I can share with you some reasons to be optimistic about what is possible near-term. I also had the privilege of serving as the Co-Chair of the Electronic Health Record Working Group for Secretary Leavitt and President Zahak (?) to advance electronic health records. From that perspective, I hope I can share with you some reasons to be optimistic in certain areas, and hopeful in others.

(Laughter)

DR. PERLIN: I think given the magnitude of the change that Denny just outlined that all of us have reason for hope and optimism, but probably not for irrational exuberance.

I too share the belief that we have a nonsystem, and VA's transformation fundamentally was creation of systemness. I want to hone in on this revolution of movement from the industrial to the information age on IT as a fundamental piece of the underpinning for closing this gap between the potential of science and the practice of medicine.

I want to share with you five observations, and one that is obviously a resident point this morning is that the nonsystem is failing, and that information lapses from the specter of -- are part of that failure and that IT reciprocally underpins success.

Secondly, that IT shortcomings become exacerbated as health care decentralizes away from the traditional power points, again, the point of this morning that the point of services becomes everywhere but the traditional factory, something I will come back to.

Third, that finding, evaluating, and using the most relevant information becomes the new challenge, not memorization of everything, and I will share an example from VA's electronic health record for that. And related to that is that every day in practice we throw away a byproduct of that care that actually could be the basis either for supporting personalized health care or the creation of new knowledge, discovery, the sort of things that Mike McGinnis is helping with Denny Cortese to lead at an IOM Roundtable on learning health systems. And finally, that if we want to get to this great era of personalized health care, information systems are an absolute prerequisite because the resolution of pen and paper, particularly disassociated pen and paper, is simply inadequate. The background of course is that there are challenges to safety and quality, and I too pay homage to Beth McGwinn (?) here. I am an internist, I did not say 55, I said 54.9 percent, but you get the idea.

What are the qualities and the attributes of a health care system and truly systemness that we would want to get to? First, that safety is built into the woodwork and we avoid getting it wrong. Second, that effectiveness and the use of evidence consistently is built in and getting it right consistently. Third, that we eliminate waste through that

effectiveness, through getting to the right answer in the most evidence-based manner. And finally, I am steering away from the word patient center and I am suggesting we build in compassion. Patient centers become awfully hackneyed and, yes, compassion is a loaded word, that is difficult to argue with, but it actually operationalizes it with four attributes which, again, are responsive to information systems.

First, that through information the patient and lay caregiver are increasingly empowered. Second, that the care coordinates across decentralized environments. Third, that the care coordinates not only health and disease, but disease and disease, not disease management for the heart over here and diabetes over here, but reconciliation of the information for the patient, avoiding errors, duplications, and inefficiencies. And again, the promise of better recognition, the promise of personalized health care, and a system that anticipates needs rather than simply reacts to them.

What is the litmus test I suggest? I suggest that the litmus test is that we can create, and not thinking about this academically or from a policy perspective, but as patients and individuals with families who seek care, and provide and receive this kind of care without the need for an advocate.

How do I put into perspective operationally the challenges we have in safety? Many of you flew here today and you got on a plane and you thought nothing of it. Commercial airliners fail far less than one in a million. Just by show of hands, how many of us have lost baggage while traveling on commercial airlines? Hands up, please. People

in the front, look around behind you. I am just going to bet you were not terribly pleased when you got to your destination. In fact, these laughs about this say we disparage this, and the failure is one in ten-thousand. We are benchmarked in the United States that the failure rate for beta blockers, the drug that reduces your chance of dying by 43 percent in the first 6 months after a heart attack, is operating two orders of magnitude worse than baggage handling, 99 to 100 percent. Do you want to be that 1 in 100 or 200? Ninety-nine sounds pretty good, but people in other industries are looking at that disparity in the production process in the product that we in fact make, health care. I do not mean to reduce it and sound callous about it, but at the end of the day, we are inferring our performance after the sale. Imagine if Toyota/Lexus inferred that they build quality not from feedback from the production line, not by supporting improvements in real time, but by gathering data from customer satisfaction surveys and after-market feedback. Impossible. And immunization in America, it is not even like the beta blocker, it is actually performing at about 1 to 2 or 1 to 3 performance in most parts of the country.

So what does this mean? In a very practical way what are the lapses and failures of this nonsystemness and a lack of interoperable information, not just electronic, any interoperable information? Let me focus in on two statistics from the President's Information Technology Advisory Committee. First, it is thought in America that every fifth lab test is likely needlessly repeated because previous records were not available every

fifth last test. Every seventh hospitalization likely occurs again because data to preclude that hospitalization are not available at the point of decision making.

You are all familiar with Lucian Leape's and David Bates's work of every six and a half hospitalizations, and the IOM this summer yet again had another study that most patients in America can anticipate one significant avoidable adverse drug event daily. Safety gaps, quality gaps, compassion gaps, value gaps. Two trillion dollars, a sixth of the economy. Steffie Woolhandler at Harvard, Paul O'Neill and many others have estimated that a third of the American health dollar is waste, and even if that is wrong by a factor of 2, 4, or 8, there is a lot of opportunity in reconciling those qualities and those outcomes with the resources that are invested into them.

And the information becomes increasingly more powerfully important as the hospitals decentralizes for the most acute patients, but care is delivered absolutely everywhere else at places like these convenience clinics, the MinuteClinic that I am showing you a picture here of on the screen. These are positive, or certainly disruptive influences to the traditional delivery of health care.

How distributed does health care become? It is not only serving patients in their homes with telemedicine and psychological monitoring as is shown in the right side of the slide, but in fact, this device on the left panel actually shows not a cell phone, but a blood glucose meter that is in that cell phone. And they are not just cohabitating, but every time the patient takes their blood sugar, it uploads it to the patient's personal health record

and to the provider's health record. So the point of service is no longer a place, it is the person, and it increasingly follows that person wherever.

The VA is a highly computerized environment, and I will show you some demonstration of that. It was underpinned by the creation of systemness and a model of health promotion and disease prevention as opposed to episodic intervention for end stage disease, but underpinned by performance measurement, measurement of outcomes, as well as a support system, an electronic health record being ubiquitous throughout the organization. In fact, order entry in the top right, the system on the bottom for automated drug distribution, not only reduced avoidable errors, but that bottom distribution system operates with a failure rate of 7 per million. The mythical Six Sigma is 3.4 per million and, economically, by the way, it held per prescription inflation to 2-1/2 percent per year vice 16 percent as estimated by the Congressional Budget Office.

The model of lapse in the quality chasm was this disparity between the patient presenting with a need and having that need met in an evidence-based fashion. Sometimes it is a knowledge gap. In the case, for example, of pneumonia vaccination, it was not knowledge, yet 10 years ago, the rate of vaccination of appropriate patients was about 26 percent in VA. Outside of VA it was still in the 30s. If you ask physicians, nurses, pharmacists who should be vaccinated, everyone knew. In fact, the patient even knew. The problem was operationalizing that information and, in fact, it was performance measurement and the technologies that helped to close that quality chasm. Let me show

you from the starting point of 26 percent in 1995, to a national benchmark of 94 percent. And, no, I am not comfortable even though it is a benchmark at 94 patients because you see from the comparison of other industries that that is way, way short.

This is the system that helped to link the patient who was of a certain age or had a particular disease in a time-sensitive and context-sensitive fashion with the knowledge and just make it happen. In fact, there are simpler systems, just making this happen by exception is one of the pieces, but it actually made it very consistent. And it was not just better patient care, but in fact, the economics changed. Even as the number of patients cared for at VA increased from 2-1/2 to 5.4 million over the last decade, the number of hospitalizations went down by nearly 10,000, and the cost of caring for community-acquired pneumonia for inpatients decreased by $40 million per year. By the way, because I have the data for this population, just for veterans nationally with emphysema, it saved nearly 6,000 lives. Imagine what that number would be if we could put that evidence into practice nationally.

It was not just pneumonia. Here is the Beth McGwinn looking at VA, and the investigators found that on the measures of performance, VA scored significantly higher on the 294 that were in fact comparable, overall care, chronic disease, coronary disease, depression, diabetes, et cetera, leading to the conclusion overall that VA patients received better care than patients in other settings. That is a pretty powerful statement that electronic health record accountability and transparency were in fact valuable. And

speaking of value, if you look at the green bar and the red, the green is the medical consumer price index, and the red is Medicare per capita payments over the last decade in nominal dollars, they are up about 50 percent, adjusted for inflation, about 82 to 83 percent. If you look at the VA, the cost per patient over that same period of time is exactly the same as it was 10 years ago, and appropriately deflated it is about 33 percent less expensive. The value equation, of value being the relationship of quality to cost, actually framed the different aspects for measurement, quality, access, satisfaction, function, community health, all improved with actually fewer resources per individual and supported by systems that actually extended beyond the health record in the institutional environment itself to the patient's personal health record at home, thus the ability to track a patient with heart failure, a patient like my uncle who rather than presenting to the ER with a catastrophe when his weight begins to go up or he has difficulty breathing, alerts someone back at the ranch and there is the creation of systemness to prevent the catastrophe. And by the way, the system in VA, in fact using digital scales as well as this sort of communication, reduced out-of-network hospitalizations by 64 percent and ER presentations and ICU admissions by 86 percent.

Where is the power also added? I am proud of the fact that not one veteran under the care of VA was harmed as the result of the devastation of Katrina, and I am equally proud of the fact that every veteran, whether they are located from here in

Washington, D.C., or Washington State, had their medical records immediately available for refills of a prescription or anything else.

And if Beth McGwinn's data does not cut it, here is of course another take on the transformation. We have talked a lot about the difficulty of employing the knowledge that we have in practice, and in fact, many of you know the word TRIP, the Translation of Research Into Practice. Imagine if we had an engine for knowledge management where we not only could do that reliably in terms of decision support, but also translate the practice back into research, translate the practice back into a pattern of recognition for better care, creating discovery from care. VA, Kaiser, Partners, Mayo, National Health Service, HCA, all create large data systems. In the future, perhaps this data will be interoperable. Currently, the researcher forms the hypothesis and goes through this database and tries to dredge some information out. That works and it has worked pretty well, and it has created a number of careers. Imagine if we took a cue from other industries. Bill Gates suggested that at NSA, for example, they have machine learning, and whatever your politics or concerns about NSA, one thing that it has done very well is taking billions and billions of bits of data and having some hypotheses standing as hypotheses and having machine learning tee up the hypothesis so the investigator or clinician's new challenge is to evaluate the biological plausibility or the clinical relevance of the hypothesis that has been formed.

Did you know that with Google, for example, if I do three searches depending on what I asked for, it is likely someone could profile the individual to be a male between 45 and 55 driving a Japanese car with a preference for blue suits? We cannot do that in health care, but the odds are so much greater shouldn't we?

A lot work will need to be done in terms of the experimental design, understanding the evidence, and in fact, I think it is March that John Inglehart will have a dedicated issue of "Health Affairs" and some of the work going on, and a piece there talking about some of these opportunities.

AUDIENCE: January 26th.

DR. PERLIN: January 26th. There you have it.

Let me show you a real life example. This is from the Washington VA and the database of looking at trying to improve blood pressure control to 140/80, 90, or better. What the chief of staff noticed in this is that there seemed to be a falloff in the control over the winter, and that it improved again in the summer. He noticed this in a couple of patients and actually pulled all of the data for all of the population of 10,000 hypertensive patients, and this is new discovery, and no one has before reported a seasonal variation in a hypertensive control in patients with high blood pressure.

ICUs are a dangerous place. This is the ICU's report of mortality, and about 1 in 10 patients die there. It is interesting that if you look at the low and high blood sugars, they confer an elevated risk for death. That is understood. Looking at an N of 21,000 ICU

episodes coming from that, what was pretty interesting is that everyone thought it was likely that patients with diabetes would be at greatest risk from death from high blood sugar. In fact, looking at 221,000 patients, just calling up with new learning, the highest risk for death is in fact in patients without diabetes, a 3.8 times greater ratio for mortality. And for hypoglycemia, protected if you actually have a diagnosis of diabetes, another new discovery.

Let me close with the promise of personalized medicine and the inability of current systems to support this, pharmacoeconomics, the ability to tailor the prescription to the characteristics of the individual. Some of you in this room are likely on blood pressure pills, perhaps the first did not work, and that probably could have been predicted with 14,000 genetic tests today that are available for which medication worked and which one did not. No big deal if it did not work, not a terribly huge expense, it does add up on the size of the population, but you moved on to something else: the future of tailored prescriptions. For the parents of a kid with leukemia where the traditional therapy works for 299 out of 300, fortunately, it kills 1 in 300, and genetically we can know that.

Alcohol addiction. As I trained, alcohol programs where somewhat homogeneous. Twenty years ago people looked at naltrexone, an antiopiate drug and said this shows promise, there is some linkage with the opiate reward system. It worked sporadically. Researchers at the University of Pennsylvania and the Philadelphia VA found

that they can target those patients for whom it will work virtually 100 percent of the time: alcohol addiction is not alcohol addiction.

Even getting away from that, just the multifactorial condition, we cannot escape the news that was in the paper this morning of a falloff or an apparent falloff in the rate of breast cancer mortality in women over 50. It took a massive study. I wonder if we could have known that in real time as a byproduct of health care if we have these sorts of systems in place and that they were interoperable and we have population data, and we as health care consumers expected our redacted data to be used for discovery and improvement in our personalized health care.

In a clinical trial a large blockbuster drug was actually almost thrown away because it appeared not to confer any survival advantage. Serendipitously, someone noticed with co-administered with vitamin B6, patients had a remarkable outcome. You have seen the expense of discovery in pharmaceuticals, and this also near-billion-dollar drug was actually salvaged and there is likely a new process for it, so not just surveilling bad outcome, but novel opportunities for new successes.

The final example is actually my favorite. Here there was a study that was done over at George Mason, 500 patients with different types of cancer. If I were a patient with colon cancer being treated by an oncologist, the oncologist would go to the literature and look to other colon cancer patients, but in fact there were two patients with colon cancer, metastatic to liver that had biomarker patterns that did not look like colon cancer

but indeed looked like a particular type of breast cancer susceptible to tamoxifen. They got that therapy and their tumors regressed in an unprecedented fashion. Imagine trying to get that resolution from pen and paper, there were 500 biomarkers, and it is just not possible.

This is the promise of the future, and so I hope in conclusion that we have reasons for hope, we have reasons for optimism, and we can expect a change from an industrial to an information age model. Fundamentally, care changes from being centralized in the hospital with a particular class of providers being the prominent owner, to a decentralized model where increasingly patients expect care when and where they want it, information itself as therapy, not just bricks and mortar, where knowledge is not exclusively in a priesthood, but accessible not only to the provider, but to everyone and the real task is for us to be able to access the value and reliability of that evidence, and the quality, where knowledge development is not done in a particular context, a very highly controlled context of clinical trials, but knowledge development actually is a byproduct of what we do each and every day, delivering care, and the promise of moving from mass production, you can have the Model T Ford in many colors as long as it is black quipped Henry Ford, to mass customization, the ability to build on a chassis that is built systematically but tailored not to patients with diseases like your disease, but to your disease particularly is the promise of the future, and I hope you will share with me some optimism, some hope, and perhaps at times even some irrational exuberance. Thanks very much.

(Applause)

MR. AARON: We now have ample time for any questions you may have from the audience, and I recognize Frank Levy who should identify himself.

MR. LEVY: I am Frank Levy, and I am an economist at MIT. I had a question. I had heard the description a couple of weeks ago about the state of the industry that makes electronic medical records, and this description sounded like one obstacle to this process is that the industry itself is part of the problem itself, that at least until recently it is a set of fairly small firms none of which have had the capital to really upgrade, they are working on fairly old models, and then the products themselves have a lot of problems to them. I do not know whether that an accurate description or not, but I wonder if we could get some comments on that.

DR. PERLIN: Maybe I will provide a perspective again from working with AHIC and the HR Implementation Group. It has been a very challenging time because standards I would say are necessary but not sufficient, but in the absence of standards, whether you are a provider system or a physician office or a vendor manufacturing, you are only tentative about investing. Those entities are undercapitalized, as you identify, and if you might be risking buying the wrong one, it not being interoperable, or in manufacturing something and putting all your R&D into something that will not interoperate, there is also a tentativeness.

So I think one of the great positives of the current environment is there is a great deal of progress in anointing standards. Indeed, we will have to step to the plate pretty smartly in terms of getting systems that are built not just for charge capture which has been the history, but for really providing care.

DR. CORTESE: I would comment, too, that I agree with your assessment that there are a number of reasons and problems, but one of the additional ones is there really is not any ability for these systems to connect with each other or talk to each other. My own feeling is there is some deliberateness about that, because some of the providers are trying to sell products and more of them, and they are deliberately not coming together to work together which is a bit surprising when you see how the banking industry decided on their own, and I do not know the actual history, but I think they did that own their own to develop standards for interconnectivity because they say, one, it was in their best interests and, two, I think they felt the government was breathing down their necks and maybe they acted pretty quickly.

But in the environment of health care, really a lacking problem is the ability to connect like we can do on the Internet. We send images to each other and who cares what applications anybody is using, even what hardware or software, but that matters to the current manufacturers.

There is one additional point, too, and that is common definitions of the data itself is really required in health care and that has been a struggle nationally for many,

many, many years. For years, in our own institution we struggle with it. We have 64 different ways to define a blood sugar. A glucose, I am sorry. Not a blood sugar, glucose, blood sugar is one of them. Sixty-four different ways for that definition to be entered into some system to be able to do the stuff that you are talking about. This is fantastic stuff, and to be able to inquire and get knowledge as an ongoing output of the practice is exactly what we should be aiming for and we need common definitions and connectivity so that we no longer have to worry about applications, we just take care of patients.

MS. FISHER: My name is Annabelle Fisher (?), no relation to Dr. Fisher. I have been a health care clinician as well as a patient starting out at Mass General, having worked at Harbor View Medical Center and San Francisco General, and I am very well familiar with the VA system.

What I did not hear you comment on and what I found was a bit disturbing to me as a professional is the role of the mental-health providers within the health care system. Dr. Cortese, if I could have my ideal mental medical service provider, it would be able to have my doc return my phone call, it would be nice when I was a kid when the pediatrician made house calls, it would be nice when my doc could spend more than 5 minutes with me in an office visit because the time is so consuming.

I agree that there has to be some technology with regard to records, but what about the confidentiality issue? Do we patients lose it? I know as a professional, and I

have worked with the military as a civilian in an outpatient mental-health clinic and I have to reassure them that my records are private.

The second part of the question has to deal with ethics accountability for all health care professionals where if a doc or a mental-health provider or whomever is brought in front of the state boards for a really bad incident and they get a slap on the wrist and they say don't do that again and we don't want to see, but they are not disbarred from the health profession.

MR. AARON: Let's focus on this issue of confidentiality because it really is an important question.

DR. CORTESE: It is core principle of our organization that our records are confidential. I think from the patient's perspective, I find it helpful to think of confidentiality maybe in two categories. When it is patient information with the patient's name or identifier linked to it, clearly in my mind the owner of that is the patient. They can control the level of privacy that they would like to have on that record, but they also have to assume the responsibility to realize that if they keep part of that record secret which is the second level of privacy, there are two levels here, if they want to keep it secret, then it is very possible they can end up in an emergency room being on a medication that the doctors when you are unconscious do not know about and you could have a complication. As long as that understood we have patient control of the privacy level.

On the other hand, if it is redacted information and the patient's name is removed, as part of the vision I was describing, that information if it is in the VA or if it is in the Mayo Clinic or Kaiser or nationally, has a real potential to be used in a way to help generate knowledge, knowledge meaning something you might be able to use for other patients who have similar problems. That information should be usable and, indeed, it usually is. We ask patients their permission to do that. On an ongoing basis we do it every year. So I think private information is one level, secrecy is a separate level, and the third is if it is just general results of outcomes that patients have certain diseases, that should be available for science and for generation of new knowledge.

DR. PERLIN: When I first thought about this issue I got trapped into a fallacy, and that that electronic inherently more risky than paper. In fact, the great Harvard, I guess it was about 15 years ago now -- we talked about the chart being perused by 300 pairs of eyes, and there was no audit trail of that. Electronic health records increasingly build that audit trail. At the VA, with the electronic health record, the health information actually is ephemeral and it only comes together at the moment it is being looked at. Obviously, the elephant in the room, the VA data loss, that was not the health system; that was the parent holding organization that was a laptop and that was a free-standing database. Those databases need to be better protected. That was egregious, but there have not been violations of a patients' health record on a system that has been built and operating not in this sort of graphical form for over 20 years.

In the way that we begin to develop and operational comfort with our financial information being available for us for online banking, for online management of whatever sort of transaction or use of an ATM card, I think we need to come to that understanding of both the similar risks and benefits of that. I agree fully with Denny that there are likely some opt-out aspects, but the risk there is an incomplete picture.

MS. PUSKIN: I am Dina Puskin. I direct the Office of the Advancement of Telehealth at the Department of Health and Human Services. I find this a very interesting discussion. My question is, Jim and Jonathan, you have had to in one way or another implement systems where the provider base is not always the most enlightened, to create changes and adoption and use and help people learn how to make the best use of the information being provided, and not to ignore it. For example, we know from alert systems that physicians if there are too many of them sometimes they ignore it. What have been the human factors and human programs that you have used that are the key developments in terms of success to really integrate the human factors with the technology to make the use of it?

DR. MONGAN: I do not know that there is any magic to that answer. Both Tom and I think alluded to the fact that this is not electronic records alone, but that it is building a culture which will sustain and support the use of those electronic records. It takes a lot of time, a lot of hard work, a lot of physician leadership as exemplified by Tom and a number of his colleagues. It also takes some crosswalking between the IT

community and the medical community about the IT people trying to make the systems more usable, the medical people spending a little more time and effort on the training involved. But I would say that it is an institution-by-institution, department-by-department, foxhole-by-foxhole issue to try and roll out these systems and get people accustomed to not only having them, but using them.

We were first tracking the distribution of electronic records across our system and we were getting to some pretty good numbers, but really it was the use we were interested in so we had to start tracking how many of the prescriptions are being written electronically and now we have to watch that number come up and each of those things takes training, exhortation, and time, but I think we are getting reinforcement by the fact that those numbers are steadily increasing across our institutions.

DR. PERLIN: I just very quickly agree with Jim that it is self-reinforcing once you have that information available. I think the reality is that in VA 10 years ago, charts were available in hospitals 60 percent of the time. I do not have a statistic for what it is nationally, but paper charts are notorious unreliable.

The point that I agree with most emphatically is that in VA with a direct workforce of 200,000, approximately, by the way, 10,000 less than a decade ago, VA invests in getting about 2,000, or about a percent, of people together every year, about 700 informaticists, 700 clinicians, 700 administrators, to go over what the needs are, receive complaints or criticisms on what is not working, and this changes the acceptance from not

just buy-in, to ownership, and that difference between buy-in and ownership means the difference you, administrator, your system is not working, and we really define what our needs are to practice more effectively, we own this, and we know there will be some hurdles but we can get through it. So I would simply support that that degree of engagement is absolutely critical, be in the performance measurement or performance support, decision support aspect, or even in the adoption of the system.

DR. CORTESE: One other advantage about having a contemporaneous single record whether it is paper or electronic is the powerful peer review that that introduces automatically. It is not a systematized peer review, it is the peer review throughout the practice all the time because whatever a physician writes or recommends is seen by subsequent physicians beyond that and you really think a lot harder when other people are looking at your work like that. It really is a powerful tool, at least in our institution.

MR. MACNAMAR: My name is Tim Macnamar (?) I am not a doctor, but I did build the first computer model of a medical school in 1968, so I do have some interest in the subject.

I am here to speak on the part of rational exuberance. Every medical record in the United States today is interoperable and connectable today with keeping your legacy software if you use something called XBRL, extensible business reporting language. I urge you to go on the Web site at xbrl.org and you will find that this was developed to finish

XML which as you know is the language of the Internet which you all use, and it was terrific. In 1998 technology it introduced metadata by document which was a great breakthrough. Microsoft just brought it out to the market on Vista. They just brought you 1998 technology.

SPEAKER: That sounds like Microsoft to me.

(Laughter)

MR. MACNAMAR: Microsoft, IMB, Hewlett Packard and others are part of the problem, not part of the solution. Open standards and open sources are the solution.

Again, I am just a guy who believes in XBRL, and like the guy at NASA who said, "Isn't there something else we can do with this Teflon?" There is. It was developed for financial purposes. All the Chinese report to their stock exchanges in it right now. The U.S. SEC will probably make it mandatory in July next year for the calendar year next year where they have a test going, all 8,500 U.S. banks call report, but it has all been done in the financial community and nothing has been done in the health care community. But I am pleased to tell you the body of knowledge, the expertise, and go to the fellow from Mayo's point; we need a taxonomy which is not difficult to develop for medicine. You may think it is contentious, but it is no more contentious than it is talking FASB 107, believe me. It is all quite doable and it is starting right now. So I would be delighted to send you PowerPoints or whatever you want. Thank you.

DR. : And you just made my point. That was exactly what I was saying. Everything I listed is doable. It just takes vision and a commitment and a focus to make it work. I am very glad you made those points.

MR. MACNAMAR: It has been done. I did not do it. Xbrl.org, the Web site is terrible. Drill down to the papers underneath. They are quite good. I don't run the Web site.

MR. AARON: Thank you very much. I don't think there was a question at the end of that. Larry Lewin?

MR. LEWIN: This is a follow-up on Dina's point which I thought was right on. At Intermountain, one of the things we did to try to get greater acceptance, and recognizing that pay-for-performance and other things that important to change behavior and financial incentives were really a ways off, was to develop a board-sanctions set of clinical objectives, percentage of patients with an A1c below 7.0, and similar measures for about 15 or 20 areas.

Once those were in place and the physicians understood that the data system was going to used to try to find out where we were relative to those, we began first of all to get a lot more participation, and then an amazing amount of convergence against those goals.

So while I agree that payment reform is important because most of the cost and quality studies have shown that as you improve cost and quality you also reduce

revenue and works against the business case under the current system, there are other methods that we can use to get physician buy-in and begin to achieve some of these clinical outcomes even before we get the financial reform.

MR. AARON: I am going to ask a question. Did you want to say something?

DR. MONGAN: I was just going to make one comment about Larry's comment, in that I think that is another important motivator which works well professionally. In the work that Tom and I have been doing, we have begun to keep much more of a simplified but formal scorecard across our system of how the various institutions are doing on these serious of quality, safety, and efficiency things.

One of the other things that is broken in this country is that hospital boards by and large know ten times as much about the finances of the hospital than they do about the quality of the hospital, and we are trying very hard to tip that balance and to have them become as facile with the quality indicators as they are with the financial indicators. And believe me, it gets physicians' attention when they see their hospitals ranked against each other even inside their own system.

MR. LEWIN: I would just make one other point if I could, Henry, and that is as I have tried to make that same argument to clients mostly in academic health centers and large systems, the answer almost invariably is we cannot do those kinds of standards, or we can set the standards, but we cannot measure performance against them because our

data systems do not have registries. So the two are really tied together and you cannot just start in one place, the point that Steve made earlier. But I really think there is a lot we can do even before we get payment reform.

MR. AARON: Jon?

DR. PERLIN: I think one of the things worth noting is that there are increasing market pressures for automating systems and for reporting. The Transparency Initiative, and I believe this totally extends across party lines, recognizing the challenges of the cost of health care really require reporting on only 10 indicators and those 10 indicators spawned 41 subindicators, some of them quality indicators, HQAs or CMS indicators. This year they go up to 21 and next year to 35 and they spawn all sorts of subordinates. You cannot possibly collateralize enough people. Why would people want to automate on the basis of this? It turns out it is tied to a 2 percent market basket uptake. They are described as voluntary, but that marginal difference is absolutely transformative in behavior.

So I think that there are policy things that fundamentally change the way provider systems have to react to the changing expectations. And the part at the very top is that in fact you begin to shine some light and illuminate the variation that is out there which will give you some opportunity to improve.

MR. AARON: Your answer really segues nicely into the question that I wanted to put to you. At lunch, one former Healthcare Financing Administration director is going to introduce the former CMS administrator. CMS oversees about 45 percent of

total health care spending. So what their rules are, regulatory and financial, have a major impact on the way in which the hospitals and the medical system in general works.

In light of the goals you are describing, if there were one or two things you would tell them to do, now is a good chance. What would they be? This is Washington policy gets made. Make policy, please.

DR. MONGAN: I had to do that 30 years ago, and now I do not have to do that, so I am a little off the hook.

MR. AARON: Try and remember what it was like when you were young.

DR. MONGAN: Since you have given me an opportunity here, it is very tough, because in spite of the fact that, yes, we have this huge leverage of paying 50 percent of the health care bill and we have these heads of CMS who are sometimes viewed as almost czars of the health care system, on the other hand you come back to this situation of having gravel to work with. So I think it is very hard to do the kinds of things you would want to do.

I would go forward with more pay-for-performance, but pay-for-performance is very, very tough, as you have heard, with individual doctors or groups of two or three doctors and things of that sort. So I think what I would group with, and frankly I do not have an answer yet, is what the best federal levers would be to encourage more integration so that we move away from the singles and the twosies and threesies into

larger accountable groups of the type that Elliott Fisher was talking about earlier this morning.

I am not certain whether his path of trying to develop these virtual hospital medical staffs is the best way or whether there are other ways to aggregate physicians into groups. At the moment I do not have a better answer, but that is where I devote a lot of my time and energy during hopefully a transition period.

DR. CORTESE: Yes, that is a tough question. I guess I would answer it with two concepts. One would be that if you think that the best interest of the patient is to have their care be coordinated and organized over their whole lifetime, then Medicare has to go away and some other kind of a system-wide care of people needs to exist throughout their whole lifetime. Maybe that becomes a single payer, a government thing, or it reverts to a government-type model like a Federal Employees Healthcare model for everybody over time and you just phase out Medicare over time. So that is one concept that is not a regulatory concept.

The regulatory answer is in my view point if I were running CMS is I would start paying for the outcomes. Medicare has over 30 years of data already. They know where the best outcomes are in this country, they know where the highest costs are in this country, and they know that those two do not match. So pay the areas that are getting the best outcomes the higher amount, and pay the places that are getting the worst outcomes the lower amount. You do not need any pilots. You do not need to do any kind of projects.

The data is there, just pay. Change it today and everybody will start chasing the dollars, and those areas that are already underperforming will say, Why are those other areas performing better? What do we need to do to go after the dollars that are being moved out of our region? That is a regulatory problem.

The problem that the CMS has is their board of directors is Congress and Congress will come in with the political pressures from the regions that are already underperforming and it will be real hard to make that happen. Thus, I think Medicare has to go away because they cannot do what they need to do.

MR. AARON: Jon?

DR. PERLIN: I think I would agree with many of the aspects. First, value-based purchasing. I think obviously one sees motivation in that, so I think it should be outcomes oriented.

I do worry about the sort of atomized performance measures for a couple of reasons. The first is that it shines light in a particular area and there is only modest evidence that there is transfer of learning, so you could have high performance in an area and leave other areas neglected. Second, with respect to this value-based payment is that it reinforces the fragmentation in the system. If the attribution is to physician A or physician B, the truth of the matter is, in today's health care, care is delivered by a team and there are problems with attribution. So how do you generate a performance measurement system that not only appropriately attributes but actually facilitates the sort of contextual

improvement that Steve Shortell spoke to eloquently about this morning and confers the accountability for value-based purchasing?

The second is that I am obviously pretty passionate about health information technology, and now that I am in the private world I think there simply should be differential reimbursement for electronic versus nonelectronic systems and that it should comport to certain interoperability mechanisms, if not particular standards, then mechanisms to facilitate transfer of information to facilitate systemness out of the nonsystem.

The third and final point is a totally sort of wild idea, but I am troubled by the problem that exists with upping for insurance each and every year. If I am the administrator of a plan and the plan's profits are based on not giving care in that period that is a very limited period of time and there is a lot of transfer from year to year, then the incentives have problems. Imagine if one could buy an insurance policy, and maybe you should have some thoughts on how to structure this, that is a policy for 20 years or 30 years, and perhaps that policy is traded on a secondary market like a mortgage and there is an ability to actually create value in that paper by investing in preventive services. Maybe this is too farfetched, but are there some other ways to structure the incentives so that the investment is actually for preventive services maybe until such a time that a patient becomes eligible for a system like Medicare.

MR. AARON: I think long-term insurance actually would have a very profound effect on the incentives that providers confront.

MS. BOSCOE: I am Emily Boscoe (?) from Academy Health. I was wondering how culturally resident care fits into restructuring our health care system so people at the margins are included in this vision.

MR. AARON: Did you say resident?

MS. BOSCOE: Culturally competent or culturally resident care.

DR. MONGAN: From my perspective, I think it is a very important piece of dealing with these related issues of quality and access. We certainly have plenty of data even within our own system that shows different health disparities, if you will, among the patients we are serving at our hospital. We are spending a lot more time looking into that and not only studying that, but putting into programs. We have particular programs for Hispanic diabetic patients at one of our health centers whose success rates were less than the others, so it is an inextricable part of this puzzle. Again, I think that integrated systems are in a better position to deal with it because I think, A, we are in a position to get the data to tell us where to intervene, and then, B, to have the resources to try and put an intervention into place.

MR. AARON: There is one more question, but after your question I am going to suggest we break a little early for lunch and then it will not be such a madhouse

getting over, grabbing your food, and coming back. You can live in a more civilized manner and eat at greater leisure.

MR. GOOZNER: My name is Merrill Goozner. I am with the Center for Science in the Public Interest. I want to talk about the quality of evidence. Dr. Mongan, you have raised the issue of large organizations being able to use evidence-based medicine to deliver better quality, but just a cursory reading of the daily press will show us that there is a lot of debate about the quality of evidence that we have. And the fifth P that I think was up there earlier this morning which we have not talked a lot about, the product suppliers, who have a lot of influence over the creation of that evidence. Given the promise of health information technology that is going to take years to put in place no matter whatever system we use and to be able to generate better evidence than we have, how well will these large organizations be at insulating themselves from the producer interests in the generation of evidence?

MR. AARON: The question is are these large entities going to be able to stand up to the drug and device manufacturers?

MR. GOOZNER: In essence.

DR. MONGAN: I have to believe that we will be in a better position to do it than fragmented, atomized groups of small groups of physicians and individual hospitals. We again across our system can not only have some purchasing power, but we can also have the ability to track the results that we are getting, whether it is devices or drugs or

other supplies that we are purchasing. So I do not think it is a complete panacea or a magic answer and does not immediately change the teeter-totter completely, but I will tell you that we are going to be in a lot better position with the data that we are beginning to aggregate now than we ever would have been in 10 years ago to deal with those kinds of external pressures.

DR. CORTESE: I will comment on that, too. This is really a key question as we look at generating better evidence for the standard of practice and the standards of practice in the future. If you look at a spectrum of activity starting with basic research and discovery and over here is application to clinical practice, there is a significant curve, it could be a steep curve, it could be a flat curve, but it is significant and requiring more time, more resources, clinical trials and evaluation. That center part where all of the gray stuff is that we do not know for sure needs to be evaluated, not basic research, it is not out in clinical practice, it is in the area we call translational research in our institution, in this region.

The federal government through NIH funds $28 billion worth of this stuff way over here, in the middle section, frankly, nobody funds any of it. There is about $400 million that comes out of the federal coffers, $400 million versus $28 billion, and the problem is maybe venture capital and industry will fund some of that, but that is way over here when it is just about to go to clinical practice.

Where is the funding that is going on that will allow a lot of people who would like to do exactly what you are saying? And I do know lots of groups that are doing it. It is actually the whole concept of what NIH is trying to move toward with the idea of large-scale biomedical science. They just started the Centers for Clinical Translational Research, TTSAs, they were just funded in September to be able to generate this kind of evidence and, yes, indeed there are people who want to do it, and, yes, we can stay free of industry influence. It is a matter of commitment to refine and establish the role and practice for new technology, and I will give you one example.

Vioxx that came out, and we all heard about that. The results of the way it was handled ended up with the drug coming off the market, but all of us who actually practice medicine and care for patients know there is a subpopulation within this whole universe of our country who really were benefiting from that drug and the little 8 percent of heart disease meant nothing to them. They would have loved to take this drug. There was one organization in the country that knew all that, Kaiser. They knew who that little 20 percent was, they were able to identify them and, indeed, those patients were the only ones getting Vioxx to begin with in their organization. They were doing this kind of modeling, the Archimedes model that David Eddy has.

So there are lots of opportunity for our country to do it, we just have not committed to this center section of turning the gray, questionable knowledge, into definite knowledge, and this country can do it if we commit to it.

MR. AARON: That is a good note on which to end our morning session. We will come back this afternoon, and the first session this afternoon will address a number of the legal questions that were raised in the issue briefs that Jim and his colleagues, Tom and Robert McCenna (?) wrote. So let's all get together back here at 1 o'clock. Thank you very much.

(Applause)

Luncheon Address

MR. TALBOTT: Mark, I hope this doesn't come as a shock to you.

Leonard was the youngest director of HCFA, the predecessor of CMS, initials that I still haven't quite managed to figure out, that somebody can explain that after you have dealt with more important things. Of course, Leonard has also had an extremely successful and distinguished career in business, running the biggest health insurance company in the United States, WellPoint. But I think what is particularly worth underscoring in his long list of credentials are the following, and that is that he is a member of the Institute of Medicine; he is a member of the Board of Fellows at the Harvard Medical School; and he is the region's lecturer at UC-Berkeley under the auspices of the School of Public Health, the School of Business, and the School of Public Policy.

Just on a personal note, I will say that in addition to being a trustee, he is a terrific friend and a great traveling companion. He and his wife and daughter and I and a couple of our other buddies just schlepped all over the People's Republic of China, and I had the

fascinating experience of watching Leonard, among other things, deal with a spitting camel in Kashgar on the border of Central Asia.

So, with that rather unusual introduction, I give you Leonard who will introduce Mark.

(Applause)

MR. SCHAEFFER: Thank you very much, Strobe. I don't know why we are doing these tag-team introductions, but I am here to help.

It is true that I was the youngest administrator of HCFA and also the least qualified which Henry and Karen will attest to. So I think I am here to introduce the most qualified.

But I have been involved in healthcare for 30 years, more actually, and people are always asking: Why is the American healthcare system such a mess?

After 30 years, I can tell you there are three reasons in descending order of problem that they create. The first is lawyers; the second is economists; and the third is doctors.

(Laughter)

MR. SCHAEFFER: Of course, the question is you can't just point out the problems; you have to say what the solutions are. The solution to lawyers is very simple. We do what William Shakespeare suggested, and first we kill the lawyers.

The problem with economists is a little bit more troublesome, but they are all really more interested in international trade than they are in healthcare; that is where they should go.

The question of doctors becomes more fundamental because they are the means of production. I was extremely impressed -- I really want to underline this -- by the presentations this morning because what is necessary is physician leadership.

Physicians care about three things. They care about the patients; they care about their peers; and they care about their personal economy and incomes. Their peers are other doctors. Nobody else counts for most physicians, and so we need physicians to take leadership roles in the American healthcare system and become database managers. We heard from, I think, several this morning, and I was very impressed, and we are about to hear from one of the best at all things. Unfortunately, he is an economist, but we will slough over that.

Mark is currently the Visiting Senior Fellow at the AEI-Brookings Joint Center for Regulatory Studies, okay. He has had a highly distinguished career as a public servant in the Bush Administration. He was first a member of the President's Council of Economic Advisors and Senior Director for Healthcare Policy at the White House from 2001 to 2002, FDA Commissioner from 2002 to 2004, and CMS Administrator beginning in March of 2004 until very recently. Besides now serving at AEI-Brookings, he is still an Associate Professor of Economics and Medicine at Stanford, not a bad gig.

In the Clinton Administration, he was Deputy Assistant Secretary of the Treasury for Economic Policy. He ran Stanford's Program on Health Outcomes Research. He was the Associate Editor of the journal, Health Economics, and on and on.

He is a graduate of the University of Texas at Austin, has an M.P.A. from Harvard, an M.D. from Harvard-MIT, and a Ph.D. in Economics from MIT. This is an obviously over-qualified individual.

(Laughter)

MR. SCHAEFFER: As long as I am unburdening my knowledge over the past 30 years, I will tell you about doctors. I spent almost my whole life working with doctors and lawyers, and this is not something I am proud of. It is an explanation, not an excuse for my unpleasant personality. It really does bad things to you.

(Laughter)

MR. SCHAEFFER: But the combination of the medical background and the economics background and the breadth of Mark's experience really is stunning. If you can combine that with someone who is willing to take risks, who is willing to do innovative and important things, I think that very big mountains can be moved in healthcare.

I would like to just finish my introduction by saying that Mark is clearly the most qualified person ever to serve as head of HCFA/CMS, and in personal opinion, the second best administrator in the history of the Agency.

(Applause)

DR. MCCLELLAN: Thanks, Len, for that, as usual, unique introduction. It is a real pleasure to be here with all of you.

I can't tell you how happy I am to be at Brookings. There are really two main

reasons for that. One is quality of the work and the energy level and relevance of the work in many areas of policy but particularly in issues related to healthcare and entitlement that is going on here. I want to thank Henry for putting together this excellent conference and all of you who have been a distinguished part of it. I am pleased to be here now that I am out of government for about seven weeks.

The second reason I am very pleased to be here is because it has made my wife very happy. Soon after I announced that I was leaving government, someone sent me a New Yorker cartoon which was of a woman sitting at a kitchen table with her kids and she is on the phone and they all have a horrified expressions on their faces and she is saying to the kids: Your father just announced that he is leaving his job to spend more time with his family.

(Laughter)

DR. MCCLELLAN: I had that experience firsthand. I left my job. I was fulltime at home. I got to take the kids to school and pick them up. Much to their surprise, I did that successfully and on time. I got to spend some time with the family around the house. But after a few days, the comments turned to: Can't you clear off this table? Can't you get off the phone? Don't you have an office somewhere?

(Laughter)

DR. MCCLELLAN: Fortunately, thanks to Strobe and everyone here at Brookings, I did. It is a real pleasure to be part of Brookings at this important time and a real privilege

to be part of such an important conference.

Now, you all heard this morning from a lot of the leading thinkers about where our healthcare system ought to head, and people who are firsthand involved in trying to make those changes in our healthcare system. I couldn't agree more with the urgency of health professionals helping to lead the way to a more effective healthcare system in this country.

But putting on my other hat, that economist hat that Len mentioned a few minutes ago, I also want to point out that we have a real problem in giving health professionals the support they need to do the right thing in our healthcare system, and I think that is one reason it has been such a challenge in getting from here to there. We are doing a really good job now, thanks to all the leadership of people here and thanks to the things they are trying to actually do in the delivery of care around this country of laying out where our healthcare system should be, yet we are not achieving it. So, when there are what are perceived as missed opportunities, the result is a lot of frustration, and that is what many people are experiencing in our healthcare system today. It is time to provide the kind of support that providers who are working to deliver high value healthcare really need.

Today, I just want to provide a few remarks and some perspective from Medicare and a little bit more broadly on some practical and concrete steps that can help make that happen now.

You all know why this is so important. I think you have heard about it some already at this conference, about the tremendous promise of medicine today. Our healthcare

system is delivering more and more in terms of health. The potential of personalized medicine, more prevention-oriented medicine is even greater for the future. Yet, something that should be regarded as good news by everybody in the country is generally regarded with fear and dread, that even if these better treatments come along, they won't be able to afford them. They won't be able to take advantage of them. So, instead of enthusiasm, we have a lot of frustration with the public, with employers, with other healthcare payers, and with physicians about where our healthcare system is, despite the fact that the promise for the future is tremendous and despite the fact that we have a lot of very promising specific ideas out there about what that future can look like.

You have heard today about some of the challenges in making these changes, some of the challenges related to the culture of medicine. Coming from where I came from recently, I am not going to talk about culture directly. I am going to talk about health policies because I think health policies can have a fundamental impact on the culture and sociology of medicine and whether these kinds of reforms can really take hold and lead to fundamental transformational improvements in our healthcare system.

I also want to emphasize that because we are in a pluralistic healthcare system, these kinds of things don't happen by themselves. We must have a lot of things moving together to get the kinds of changes that we want tin healthcare -- the good ideas, the policies, the different stakeholders, all working together.

To give you an example, in the Medicare program where I recently came from, the

beneficiaries who have the most to gain from many of the approaches to coordinated care and emphasis on prevention and reducing duplicative services, many of these beneficiaries have the most to gain of anyone in our healthcare system and have had the least access to coordinated prevention-oriented care, to benefits that are up to date, to care management programs, even to drugs until recently. What we have seen in Medicare is that simply paying for more services in the same old way isn't going to lead to effective care. In fact, if we don't design our payment policies and our policies in Medicare the right way, it can actually retard other needed changes in the rest of the healthcare system.

Too often today, the good ideas that people have about how they can improve their practice aren't easy to implement because you can't do it and still make ends meet. Just to give you an example, I have heard a lot over the last few years about some really innovative approaches to using health information technology to deliver better quality care at a lower cost. There is a lot of evidence that IT systems, properly implemented, can improve quality, can reduce costs by reducing duplicative tests and by helping patients get timely and appropriate interventions to prevent complications and to keep them out of the hospital, maybe even keep them out of the doctor's office. But we are not seeing the kind of adoption of these IT systems in a way that really is leading to more effective care.

One solution to this that many people have suggested is just paying for the IT systems, but I want to be clear that simply paying more for new technologies, whether it is lab tests or imaging procedures or potentially even IT by itself, won't get us to that kind of

better healthcare system, won't get to the investment that we need in delivering care differently.

The reason is that the way we have been paying in healthcare, as all of you know, is different than in other parts of our economy. In other parts of the economy, when you pay more, you expect to get better quality. You expect to get lower overall costs. For example, you buy a product that lasts longer, that you are not going to need to trade in or replace as soon. In other parts of our economy, if there were big variations in the quality and the efficiency of providing services, those variations won't persist. Suppliers or providers either improve their quality or they get more efficient, or consumers go elsewhere.

But that hasn't happened in our healthcare system. In healthcare instead, we generally pay more for more services regardless of their quality or their impact on patient health. In fact, in many cases, we haven't even been able to reliably and predictably and validly identify quality care, let alone provide better support for it.

To come back to the point about the need for providers to take the lead in improving the way that care is delivered, if you are a physician and you are struggling to make ends meet in your practice today because of all the payment pressures and you are thinking about making an investment in an electronic health record system or in other reforms in your practice to avoid unnecessary services, to delivery care more efficiency, to take steps to keep patients well and at reduced overall healthcare costs, well, the payment systems in Medicare don't recognize that value in many cases. So it can be difficult for a doctor to

make these kinds of investments or a healthcare organization to make these kinds of investments that improve health, that reduce overall costs, and yet still keep the office budget in balance.

In contrast, in the payment systems that we have today, if a doctor decides to invest in another CT scanner or another lab analyzer even though there are already plenty of them in the neighborhood, well, Medicare will pay for that and most other healthcare payers will pay for that as well.

Similarly, if you want to change organizational structure, that takes a lot of effort and can have a lot of financial implications and a lot of cost and time for the leadership of the organization. In our current system, if you actually succeed in making all of those efforts to try to transform the way in which doctors in your organization work together or to form a new kind of more integrated care organization and you incur all the costs necessary to make that work, well, you get rewarded by getting paid less in our current payment system. No wonder we continue to see large and persistent variations in practice that are associated with big differences in cost but little apparent impact on patient health.

Thank you, Strobe. You can see it is full service here at Brookings.

No wonder we aren't seeing the same kinds of transformation in healthcare that lead to better productivity, better health at a lower cost that everyone agrees should be achievable in our healthcare system, that would match improvements in productivity that we are seeing elsewhere in our economy but we aren't seeing in healthcare.

This is starting to change in many important ways. Support is starting to grow for making these needed changes in medical practice be reinforced and be supported by our payment systems rather than happen in spite of them, and it is happening in Medicare where we work to change the focus from simply paying the bills when people use more services and have more complications to identifying and supporting what we really want which is better quality and lower costs. It is happening in the private sector as well where providers and employers and health plans are implementing performance-based payment reforms and incentives for patients to choose better care that meets high quality standards. And it is happening through collaborative public and private efforts. All of these steps can help us actually get to that high value healthcare system which in turn makes it easier to adopt better care to get the kinds of cultural changes in organizations and still make ends meet in medical practice.

I want to talk for a few minutes about changes in several respects that are moving towards this greater emphasis on value in payments and our support across the American healthcare system, and I want try to be concrete about what is actually happening.

First of all, in order to provide better support for quality and to help consumers choose better care, it helps to be able to measure it. Major steps are taking place right now towards more support for publicly reportable consistent measures of quality and cost of care. This is a challenge in healthcare. Measuring quality has been a real problem, and it is a major undertaking that matters to all of us that are involved in the healthcare system.

Right now, there are a lot of collaborative efforts underway. I am involved in many of them with private leadership and public support through a broad range of quality alliances in which healthcare providers and consumers, payers, purchaser, all major stakeholders are working together to overcome the technical challenges of providing useful information on quality and cost in healthcare. There are a number of issues there: coming up with quality measures that are clinically meaningful; making sure that there are large enough samples and the measures are developed using appropriate statistical methods; making sure that providers aren't pulled in 18 different directions by 18 different payers through different types of quality measures; and making sure that through a collaborative effort, all of these measures amount to a large enough impact that they can actually change patient care.

If you have got a bunch of different healthcare payers, each with a different set of measures of quality and each that account for just 1 or 2 percent of a physician's practice or a hospital practice, no wonder that you are not seeing a big impact of those kinds of measures on patient health. The collaborative efforts include groups like the Hospital Quality Alliance, the Ambulatory Care Quality Alliance, the Nursing Home Quality Alliance, the Pharmacy Quality Alliance and on and on that are working together to develop measures of quality, collaboratively.

These measures are increasingly moving away from individual measures for individuals aspects of care to a more comprehensive look at things that patients truly care

about such as episodes of care measures for common conditions and procedures. These include for hospital care. Medicare now reports publicly on about 20 measures of clinical quality. That is not enough. In the next year, Medicare will expand to include a full range or a broad range of measures of patient satisfaction, which we expect to see used broadly at virtually all hospitals in the country, and will start reporting on outcome measures as well, measures of outcomes for heart attacks, for congestive heart failure, and for complications related to surgical procedures. These are steps in the direction of giving patients and everyone who is concerned about quality of care in our healthcare system, much more objective information that they can use as a goal for reforms in payments and other support for needed improvements in medical practices.

At the same time, changes are also taking place in physician measures of quality as well. For those of you following this issue closely, you know that Congress last week passed legislation that will include a quality reporting requirement for physicians for the first time ever. Again, it is not measures that Medicare comes up with completely on their own but measures that are developed through the collaborative kinds of processes that I just described.

As I think Elliott Fisher and others who have been involved in this conference have pointed out, the quality measures need not only take a look at the overall quality of episodes of care such as for an elective surgical procedure or for chronic disease management or for use of preventive services by patients who are otherwise fairly healthy,

it also needs to account for significant variations in clinical judgments and gray area cases like the work-up of back pain or the treatment of BPH -- benign prostatic enlargement -- treatment of how aggressively cholesterol levels should be treated and so forth. All these variations in practice lead to differences in costs and no clear, at least yet, differences in clinical outcomes. But with better measures of quality and cost of care, we can get a much better handle on that.

In all these areas, there is a lot of work going on now. The faster we can make progress on it, the more support and more of a foundation, a meaningful foundation, we can have for supporting better quality care. I think the pressure to take steps like this is going to continue to rise across the healthcare system. For example, in Medicare as costs keep going up, the alternative, the main alternative has been squeezing down payment rates just as has been happening in recent years with physician payments. We would be in a much better shape if we actually are paying for what we really want in the healthcare system.

Now, with better measures of quality in place, the next step is to use these measures to actually get better care. One of the main things that Medicare has undertaken in the last few years is to try to move towards determining whether performance-based payment reforms can actually work in the Medicare program overall. If you take a step back and look across Medicare now, there is really a full spectrum of demonstration programs in place for performance-based payments in just about every aspect of the traditional Medicare program -- hospital care, physician care, physician-hospital collaborations, what

has traditionally been called gainsharing, even regional collaborative approaches -- to get to payment systems that are based on supporting better quality and lower overall costs, paying providers more, paying the participating providers more when they achieve measurable improvements in quality and reduce overall cost trends.

Elliott Fisher, mentioning him again, and others have been working on the notion of an accountable care organization that would actually fit within one of the demonstration programs that Medicare has in place right now to support regional collaborations in new payment methods. Since so many of you here are actually involved in delivering and developing these kinds of programs, I hope you will take advantage of the systems that Medicare has in place now to provide payment systems that back up what you are trying to do in the delivery of care.

Now, some people are nervous about the government or even a collaborative public-private effort determining what additional quality means in terms of payment rights. There are different approaches to using quality measures to support better care. Another alternative is competitive bidding programs which Medicare is now using as well. Later this year, Medicare will start competitive bidding for durable medical equipment and other types of services. The idea here is that with quality measures of what we want from the services being provided, providers can compete on the overall cost of providing those services, again leading to a payment system and support for better quality care at a lower cost.

Medicare has also expanded the availability of health plans organizations in the program, not virtual organizations but actual health plans organizations that are provided coordinated care. In this program, Medicare is now doing full risk adjustment of payments. So it is basically a form of competitive bidding. If you want to get any significant payments in the Medicare program today, you need to be able to attract and retain people with chronic illnesses, and with other options available to them, the only way to do that is to offer services that help those beneficiaries get the care they need at a lower overall cost.

As a result, we are starting to see in Medicare the reverse of the traditional view of HMOs and managed care organizations as focusing only on the healthy patients. In fact, some of the fastest growth in the Medicare program in the last couple of years has been in so-called special needs plans, plans that concentrate and that only serve beneficiaries with multiple chronic illnesses, the ones who have the most to gain from care coordination services.

Now, you heard this morning from Jim Mongan and others who are involved in the efforts to develop integrated delivery systems in our healthcare system as well which is an alternative to health plans providing these kinds of integrated or coordinated services. Provider-led organizations would do so. I am not sure which of those forms is going to be dominant. I am sure that the kinds of payment reforms that Medicare and other payers are working to implement based on supporting quality care at a lower cost can help promote their adoption. So regardless of what specific form these more integrated delivery systems

take, there is a lot of progress being made to try to get the payment systems in place that can support them.

I want to spend my last couple of minutes talking about another way in which this kind of quality information and cost information can be used to support organizations that deliver better care at a lower cost. It is a little bit outside the focus of many of the presentations in this conference, but it is a big part of what is actually going on in practice, and that is patients or consumers having a big impact on getting to better care and better medical culture through their own choices.

A lot of the systems that Medicare is putting in place and a lot of the developments happening in the private part of our healthcare system are designed to help individual consumers and groups of consumers make better choices about their care. Medicare has done a lot of this work themselves. Those hospital quality measures and other types of quality measures are available on Medicare web sites that collectively over the last year have almost 400 million page views for nursing home quality, hospital quality and the like, and those are just getting more and more popular. But electronic information systems and other support systems for patients have truly become an integral part of the Medicare program with the implementation of Medicare Part D and the prescription drug benefit.

Looking back, this is a big change in the program. I am still sleeping it off a little bit. But if you look back on the three main things that we were trying to accomplish in implementing the benefit:

Number one, making sure beneficiaries were aware of it and could take advantage of it, and right now about 90 percent of Medicare beneficiaries have coverage;

Number two, making sure it was a program that would work for the beneficiaries in it, and the satisfaction rates according to just about all the recent independent surveys are running about 80 percent or more, especially more for people who are dually eligible for Medicare and Medicaid;

And number three, doing it at the lowest possible cost, and the cost estimates for this program have come in more than 30 percent below the independent projections of the Medicare actuaries and the CBO analysts, and those cost projections are going to come down again when the President's budget comes out in February because the 2007 costs to taxpayers are actually lower than they were in 2006. So the costs are lower than expected.

I think the single most important factor in getting to those numbers was the emphasis that we placed on trying to develop new personalized support tools for beneficiaries. These are tools on the web. At Medicare.gov, you can go and get personalized comparative information on health plan coverage and pharmacy availability, right down to the dollar for the drugs that are you taking now or any other medications that you might want to find out about. Many people don't go on the web. Most people in Medicare don't, but we also made this kind of information available through our 1-800-MEDICARE helpline which is available 24-7 and got millions of calls this past year.

I think the most important way to get the information out was through grassroots

partnership. Medicare worked with more than 10,000 local community-based organizations all over the country, including a lot of groups that did not support the Medicare law but that are very well connected with people around the United States who had questioned about the benefits, and it provided an opportunity for literally of hundreds of thousands, if not millions of face-to-face counseling and advice sessions all over the country. It was a very different way for the Federal Government to work and a very different way certainly for the Medicare program to work, but I think it made a fundamental difference in people begin able to find out about the program and making a decision about the program that has actually led to a high level of satisfaction and much lower costs than were expected in the program.

Medicare is building on these steps now. It started a MyMedicare.gov web site, and again the help is also available on the phone an in person, where people can get more personalized information, not only about the costs of their drugs but also about other services that Medicare offers such as whether or not you personally have used the preventive services recommended for people like you that Medicare covers, not just general advice about go get preventive services but very personalized advice about you personally haven't had a mammogram in the last two years even though Medicare covers it and even though it is recommended. Medicare has seen that there is a significant response by Medicare's beneficiaries to this kind of personalized information.

It is not only Medicare that is doing this; it is happening in the private sector as well.

There have been some recent announcements by health plans working together to develop a consistent foundation for personal health records. Just this week, an organization called DOSY (?) announced by employers a week or so ago, that it is putting together electronic medical information that can be integrated with personal health record tools. Steve Case and Revolution Health are starting a major program to be rolled out early next year. Again, the health consumers make more effective decisions about their own care.

So all of this, whether it is on the provider side with using better information on quality and costs to help drive to better care or on the consumer side, using better information to help consumers make more informed decisions, all of this comes back to getting what we want, getting from here to there. We know that we can do much better in terms of delivering high quality and efficient care in our healthcare system, and we now are taking some specific steps that can help us get here. Properly implemented, these steps can empower physician leaders and others who are working so hard to achieve organizational and cultural change. Working together, we can make these long overdue changes actually happen. Given the current state of frustration with our healthcare system, we need to make sure these steps happen as quickly as possible.

Thank you all very much for the opportunity to speak with you today.

(Applause)

DR. MCCLELLAN: I would be happy to take any questions if anybody has any, or comments.

QUESTIONER: Bruce Steinwald (?), GAO; we have corresponded a lot.

DR. MCCLELLAN: It is good to see you.

QUESTIONER: One of the earlier speakers observed that one of the things that may inhibit meaningful reform is direction from the board of directors. In the case of CMS, the board of directors is the U.S. Congress. Now that you no longer report to that board, would you care to comment on what you think the prospects are for real reform in Medicare?

DR. MCCLELLAN: Well, I think that there are different prospects, and nothing could be more fun than working with my formers board of directors, but let me divide things into two groups.

On the one hand, we have a deep philosophical divide in this country about whether we should have a healthcare system that is primarily controlled by the government, not only funded by the government but where care is directed a lot by government delivery systems or government-sponsored payment systems versus people who support a more competitive choice-based approach to delivering care. That philosophical debate isn't going to get resolved in the next year, and many of the flashpoints of that debate involve the Medicare programs like price negotiation for Part D and whether the Medicare Advantage Program is good because it can save money overall and give people more benefits or bad because Medicare is paying a bit more for people who are in Medicare Advantage than in fee for service. That debate, I don't think is going to get resolved in the next year.

At the same time, I think there is more consensus about the need for reforms in the way that Medicare can help support improving quality overall in our healthcare system. This goes to issues like quality reporting. If Medicare doesn't participate in those efforts, you are never going to get a broad enough consensus and consistent enough movement to quality basis for payment and for getting information out publicly. Medicare has got to be a part of it. It is too big for the healthcare system to move without its involvement.

Or steps to make better evidence available on medical technologies; one of the last things I did at CMS was propose a rule on using Part D data to learn more about utilization of drugs in subgroups of patients and about safety problems and so forth by using the drug data linked to information on beneficiary outcomes. I think there is more consensus about the need for a better evidence based for our healthcare system.

So in those areas, I would expect to see some further movement by Congress. There may well be some legislation related to Medicare later on in 2007 because of the instability of Medicare's payment systems particularly for physicians.

There are a couple of other areas where I think there is also -- speaking from a CMS standpoint -- opportunity for moving forward together. One of those is on care for the uninsured -- we were just talking about this over lunch before this session -- where the SCHIP program which is up for reauthorization this year has a considerable amount of bipartisan support. I think it will end up getting reauthorized with more funding and hopefully with an additional push to use that approach more effectively in partnership with

the states to cover more people. So I think there is, despite some concerns about Congress being divided or at least having different vies on some issues, some real potential for Congress to take some steps to help CMS promote a better quality healthcare system.

QUESTIONER: I am from the Center for Studying Health System Change, and it occurs to me that Medicare Advantage has come a long way with risk adjustment for payment and the plans have always reported quality measures or at least a limited set of them. I am wondering if there has been any talk about marrying those two approaches to have pay-for-performance within Medicare Advantage either by requiring the plans to, well, in effect CMS outsourcing physician P for P to the plans or a pay-for-performance where the plans' payment rates are tied to their quality.

DR. MCCLELLAN: A very good question about how does pay-for-performance, how can that be reinforced by what is going on in the Medicare Advantage side. Many Medicare Advantage plans are actually starting to use P for P system for their own providers, and I think that trend will continue. The plans have been some of the biggest advocates for trying to get to consistent widely accepted measures of quality of care because they like to use that to have a different basis for payment than just capitated rates or payment per day in the hospital and volume-based payments for other types of services. I think the Medicare Advantage Program actually helps move along pay-for-performance throughout the healthcare system.

Another question is whether pay-for-performance measures directly for health plans

are a good idea and something that MedPac has talked about and I know others have advocated. I am not sure that it would make that much of a difference, and the reason is that the plans already have a competitive bidding system in effect. They name what their price is for providing services in Medicare. Presumably, if we have got a good competitive system in place and people are choosing plans based on the premiums and the benefits offered, they are not going to choose a plan that is higher cost, that doesn't also deliver higher quality. That competitive bidding system itself tends to build in performance-based payments because people aren't going to be willing to pay a higher premium for a plan if it is not actually coming through on quality services.

To make that work, you need good measures of quality of the plans themselves. I think those should come along as well.

But I am not sure that when you have got a competitive bidding system as opposed to a regulated price system like in Medicare's traditional fee for service program where there is no relation between the payments and quality, that the pay-for-performance would really make as much of a difference.

QUESTIONER: My name is Dr. English. I was a surgeon for a significant period of time and did a lot of procedures of various sorts and a lot of outpatient procedures.

A couple of years ago, I went to see a dermatologist to whom I was referred by a wonderful dermatologist for four tiny basal cell and superficial squamous cell lesions, all of which are not serious unless ignored for years. I was in the doctor's office -- the

dermatological surgeon, he called himself -- for six hours for four tiny lesions. As a general surgeon, I would have done the job in 20 minutes and charged maybe $200. He charged $4,300, and Medicare paid it because I got the form that showed that they paid it.

The question is how is the determination made because I have tried to get that information from your former institution about that.

DR. MCCLELLAN: Yes, I am familiar with it.

QUESTIONER: How are these prices determined, particularly the issue of inappropriate or abusive use of Federal coverage?

DR. MCCLELLAN: That is a very good question, and I think your experience is an example of why we need to get to payment reforms if we are ever going to get to a high quality healthcare system where organizations that get the culture right get the support they need.

Medicare's payment rules for physician services including removals of basal cell carcinomas by various specialties are set by very complex administered price system with more than 10,000 services and they are all rated according to the number of what are called relative value units which is supposed to be a measure of how much physician effort is involved. Medicare then has a fee for service billing system for using these codes. Basically, if you bill for more of the services, Medicare generally pays it.

There are some fraud detection programs in place. Frankly, not as much as we ought to have, but Medicare's budget is constrained, so there is only so much that the program

can do. They try and prioritize your fraud and abuse activities to go after the most egregious cases. I haven't heard as much about that one, but I can give you 20 others that are probably even more important in terms of wasted dollars in the Medicare program that Medicare has been trying to go after.

All of this is a long way of saying that it is just not the best way to pay if you want to promote high quality care at a low cost. Some of the surgeons groups have actually been the leaders in advocating for a different payment system. They have really been squeezed as more and more doctors bill for more and more services where the value isn't always clear. Their payment rates get squeezed as well.

Most surgeons don't have a very elastic volume of surgeries, and surgeons wrote me repeatedly last year, saying we need a new payment system because better quality care in surgery generally costs less. If you have fewer complications and less OR time and get patients out of the hospital sooner and have a smoother rehab, that ought to cost less. It is better results, but under current payment rules, surgeons get paid less when they try to take steps like working with a hospital or working with their operative team that can help prevent complications and that can have a more routine occurrence of very high level surgical results.

So those are all reasons why we need to change the payment system, and I think it goes towards the importance of moving away from that very complex administered price system I was talking about and moving towards a payment system that focuses on what we

want which is the results that patients are getting at the lowest possible costs.

QUESTIONER: Could you address the issue, real quickly, of Part D of Medicare? You are no longer servicing your board. Do you think that Part D -- and that can go for whether you are a senior or on SSI or SSA -- do you think that Part D will be more refined and will continue to be a voluntary program for seniors and/or do you think the current Congress and future ones will eliminate Part D and/or allow us to go to Canada or where have you for drugs? Thank you.

DR. MCCLELLAN: No, I don't think Part D -- and maybe we can fit in one more question before we finish -- but I don't think the program is going to be eliminated, if you look at some of the proposals now, because it is turning out to be pretty popular. Critics of the program are talking about incremental changes or changes around the margin like not getting rid of all the private plans but maybe having the government somehow help with the drug prices that they negotiate. That is a long way from the debate that was happening about this program a year ago when there were calls by many prominent Democrats for repealing the whole thing and starting over. That is not really where the debate is right now.

I think as the program continues, people are going to get more experience with it. They are going to do a better job of making it work well. The program is going to do a better job of helping make sure people get not just 80 percent satisfaction rates but hopefully higher satisfaction rates still.

And I do think you are going to see more progress towards incorporating the use of drugs in getting healthcare costs down overall. In 2007, for example, the average bid, the average cost that the private plans in Medicare, the PPOs and the HMOs, said they need for drug coverage came down by about $20 a month, a huge amount. The reason for that is that they have seen a lot of progress in integrating the prescription drug care with the other services they provide in a way that has helped them cut down on hospital costs and other patient management costs which is the way it should be. I think you are going to see more steps like that.

So I think the program, if anything, is going to get more integrated into Medicare and will continue to get refined. Nothing in Medicare ever, ever remains constant, but it is, I think, here to stay for Medicare for the future.

One last question.

QUESTIONER: Thank you. I am a practicing internist in Annapolis, and I am very pleased with the Medicare program. I am glad it is there for my patients. I think it works well for most Americans.

But I am puzzled over two things, and a lot of us talk about these things, two wasteful things. One is the redundancy in laboratory studies because there is not an electronic repository for all the CAT scans and blood tests that are ordered on patients as they move around. As Medicare patients move around, they wind up having them repeated, and it costs a lot of money. Why doesn't the government just simply put an

envelope in everybody's Medicare file?

The second one is many patients today are arriving in emergency rooms with multiple medical programs at night and on weekends because they can't find their primary care physicians or don't have one because they haven't been funded. Tremendous expense is paid for taking care of these patients where it would be a fraction of that if they could see their regular doctor and be taken. Those are two questions I have.

DR. MCCLELLAN: Those are two real problems, and I will try to do this quickly.

On the first, on the lab issue, Medicare started, as I mentioned, a demonstration program and how physicians are being paid or they get paid more for better quality now. In that demonstration program called the Physician Group Practice Demonstration, the internal medicine or multi-specialty group practices get paid more not when they order more lab tests but when their patients have better results and when the overall cost trends come down. That payment reform has made it possible for the physician groups to invest in electronic record systems that help them keep track better of the lab tests being performed and significantly reduce the number of lab tests they order.

It makes financial sense now. It didn't under the old payment system. Under the old payment system, you just got paid more when you did more lab tests. It shouldn't surprise people that that it is what you get. Now, the physician groups can be better supported if they take steps to use electronic records to reduce duplicative lab procedures, and I think that is the right direction to go.

With respect to the failure of access to primary care leading to higher costs elsewhere in the system, that is also a real problem. One of the things that Medicare did this past year was significantly boost the payment rate for internists. This is going to take effect in January, 2007.

Remember, I was talking about these RVUs before that determine how much a specialty procedure is paid relative to an office visit or services that require cognitive effort from physicians. The weight or the RVU weight on an evaluation and management visit, an E and M visit, will go up by about 30 percent between 2006 and 2008. It is going to be phased in over a couple of years. That is going to translate into a significant redirection of the way that Medicare pays towards putting more money into spending time with patients and helping them understand and get access to the prevention-oriented they need to stay out of the emergency room.

Related to this, Medicare is also going to be experimenting with a payment system called the Medical Home which provides for an additional payment to a doctor designated by the patient as their medical home. If the patient has good results and good quality care and lower overall costs of care, that payment is even larger.

So these are some steps to try to get at the problem that you mentioned which is a trend towards disaggregated and poorly coordinated care which we can no longer afford. I am not sure we ever could, but we definitely can't now.

Thank you all very much for the opportunity to talk with you.

(Applause)

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Session 3: Public Policy Challenges - Antitrust Regulation

MR. CRANDALL: (In progress) -- of applying traditional antitrust doctrine to a sector as complicated as health care, I was wrong on both counts, it appears. First of all, I think you are going to hear that our speakers are going to talk more broadly about legal problems involved in policymaking and moving to a more efficient health care sector which extends beyond antitrust policy. And secondly, the issue apparently in antitrust policy is less how you implement it than whether antitrust policy itself is some sort of a hurdle to the efficient organization of the health care sector which I would find surprising given the rather sharp decline in the enforceability of antitrust laws over the last 25 or 30 years. I see Bob Litan blushing there about that.

This afternoon we have three very impressive presenters all of whom have some combination of law, economics, and medicine. Starting from your right to your left, we have Gregg Bloche who is professor of law at Georgetown University, an adjunct professor at Johns Hopkins Bloomberg School of Public Health, and Nonresident Senior Fellow here at Brookings. In the Center is David Hyman who is a Professor of Law and Medicine at the University of Illinois. And then finally is Bob Litan, my former and current colleague here at Brookings who used to be in charge of the Economic Studies

Program here, but is now Vice President for Research and Policy at the Kaufman Foundation in Kansas City, and still a Senior Fellow in Economic Studies here at Brookings. We will start with Gregg Bloche.

MR. BLOCHE: Thank you. It is an honor to be here today and on a panel with such impressive colleagues.

Almost a year ago, Jeannie, the 38-year-old sister of a dear friend of mine began losing weight, and mysteriously, her hematocrit, that is, her red blood cell count, dropped. Jeannie was mentally ill and disabled and unable to take charge of her own care, and in the months that followed, doctors affiliated with three different hospitals conducted her workup in desultory fashion. Gastrointestinal and blood studies were eventually negative.

In late-September a gynecologist entered the picture and examined Jeannie and found an enlarged uterus on physical exam and ultrasound. No follow-up studies were recommended, nor did Jeannie seek any. Several weeks ago she lost consciousness and was taken to the emergency room of her community hospital and admitted. Less than 2 weeks later, Jeannine was dead from end-stage endometrial cancer that could have been caught in time to give her years of life and maybe to cure here had the doctors who conducted her workup coordinated her care and moved quickly. So Jeannie is a reminder to me that we are not here today to talk about an abstraction.

I do not think law is the solution, but the question is, is law the problem? I want to broaden things out a bit, although I will say some things antitrust law by way of setting the stage for what David Hyman will say in particular. I want to take a look at the underlying stories that drive American health care law.

At the risk of oversimplifying, there are two warring stories behind American health law. One is that good doctors know what they are doing, just trust them, and that the law should intervene only when doctors fall short of standards that are set by the good doctors. The other story is that doctors are as venal as the rest of us, not more so, just as venal as the rest of us, and too often are paternalistic and so they need to be pushed toward good behavior in one manner or another.

First of all, the good doctors know what they are doing story. This is medical law's classic model with perhaps a high point in the 1950s and the early-1960s. Tort law is perhaps the best example, the ideal of deference to physician set standards of care in medical malpractice cases. And there are also an array of legal safeguards for professional autonomy, stronger in the 1950s and 1960s than they are today as they have eroded somewhat. For instance, a rule against the so-called corporate practice of medicine, there are state licensing standards which are set and enforced by boards composed almost entirely of practicing physicians, and traditionally little or no role for competition. In fact, the professions were immune for antitrust regulation until the mid- to late-1970s.

Then there is that other story, that doctors are as venal as the rest of us, and this against at the risk of oversimplification, comes in two forms. There is a left-leaning version of the story, and a right-leaning version of the story. The left-leaning emphasizes a number of things. First of all, going back to the mid- to late-1960s, informed consent as a safeguard against the evils of medical paternalism. Second, regulatory approaches to quality and cost. Those of us with at least some gray hair remember the days of health planning and certificate-of-need regulation which still exists in some states, and all sorts of anti-kickback rules that guarantee that I will have students in my health law classes they want to practice fraud and abuse law and make a guaranteed living for a long, long time, and they will. And restrictions on self-referral, mandatory peer review, and more robust professional discipline. One could add much to that list.

The right-leaning version of the doctors are as venal as the rest of us story emphasizes of course competition and free markets, and it is an ironic extension of the informed consent idea, where we go from informed consent to consumer choice at multiple stages, principally though at the time of signing up for benefits and at the time of actually getting health care. So we have competition between integrated health plans, competition between providers, both doctors and hospitals, and cost sharing to motivate consumers and to make the competition work, cost sharing at the level of paying premiums and also deductibles and co-payments for care.

The competition story has a number of legal implications. The driving force behind it, and the law has evolved considerably in this direction over the last 30 years, is to empower entrepreneurs and to create incentives. So we have moved from immunity of the professions to the antitrust laws before the mid-1970s, to today with a robust application of the antitrust laws, and there is a push to roll back certificate-of-need regulation and put an end to health planning, there is a push to roll back restrictions on kickbacks and referrals, the so-called Stark Laws, there is a push to put an end to or at least to shrink regulatory safeguards for professional autonomy because of the perception that they stand in the way of competitive solutions, to roll back tax subsidies for purchase of health insurance, and amongst some, particularly amongst very conservative folks, an effort to empower as it is put, consumers, providers, and insurers to contract for standards of care that are lower or perhaps higher than those set by medical malpractice law, and finally, to roll back or at least preempt under ERISA state coverage mandates, for instance, minimum benefit and any willing provider laws.

The scope of the antitrust agenda is broad. What is uncontroversial amongst almost all of us except for those perhaps who argue for physician unionization which I would not, is that there should be no collectively set restraints on price, competition, or on advertising. What is more controversial is the notion that doctors should not collaborate in the marketplace to oppose particular incentive arrangements. For instance, rewards for

providing less care, rewards that are problematic if one hews to the Hippocratic ideal of undivided loyalty to patients.

Some good news, and David is going to talk a lot more about this, the Federal Trade Commission and the Department of Justice antitrust policy promises safe harbor for the kinds of collaboration that we have been talking about today, collaboration aimed at improving health care quality, including the development and implementation of evidence-based practice protocols and pay-for-performance schemes. What is though dismaying to doctors and hospitals, although arguably defensible, is that antitrust agencies do look askance at collaboration that raises prices, even if this collaboration promises quality-enhancing clinical integration and, again, David will say much more about this.

All of these approaches to the to health care law share two common and unrealized assumptions. Number one, the existence of a comprehensive body of knowledge about the effectiveness of clinical interventions. And number two, widespread agreement on how to value clinical benefits and weigh them against costs when we are able to measure effectiveness. If these assumptions were accurate, then the good doctors know what they are doing model could make sense, there could be a right way to practice medicine, though free-marketers might quibble over the profession's cost-benefit tradeoffs. And that doctors as venal as the rest of us could make sense in both its left-leaning and right-leaning versions, regulators could impose the right resource allocation and practice protocols as they purported to do during the early days of certificate-of-need regulations,

subject of course to quibbles over one-size-fits-all cost-benefit tradeoffs, or health plans and providers could market competing menus of cost-benefit tradeoff options that is virtually the de rigueur position to take if you are moving amongst fancy law professors who write about this subject. But as we all know now, thanks to John Wennberg and many others, these assumptions are not accurate and different doctors handle like scenarios in astonishingly different ways. We are nowhere near to either a comprehensive body of clinical outcomes data or consensus on how to value outcomes so there is huge indeterminacy and room for conflict over legal and regulatory questions about the right treatment, the right resource allocations, or the right competition of policy.

And it gets worse. Health care law is created by a chaotic patchwork of decision makers in 60-plus jurisdictions, that is, 50 states, not counting D.C., plus the 12 federal circuits, and in scores of state and federal agencies and, of course, 50 state legislatures in addition to Congress with its multiple committees and overlapping jurisdictions, and so the result is guaranteed incoherence as these multiple actors push in different directions.

And it gets worse than that. Indeterminacy and incoherence create space for health care's many well-financed interest groups to make plausible arguments and to prevail. You always win the health care argument in America by saying that the other side is rationing care, holding back benefits that might prolong people's lives, et cetera. So the result is a legal landscape that Jackson Pollock could have fashioned for health care.

What are urgently needed are steps toward shrinking the indeterminacy, and I submit that that is an initial common pathway. Our chaotic patchwork of legal decision makers is not to become more orderly, but enhanced knowledge about clinical outcomes could contribute to more rational decisions and so would an agreed-upon framework for striking balances between costs and benefits, and I am really pleased to be hearing in a bipartisan fashion there has been movement in this direction in conversations about this in recent weeks and hopefully in the weeks and months ahead. What is needed is to make this sustainable and to develop evidence-based, cost-sensitive, and transparent practice protocols to measure quality against.

There are some challenges here, and a few of here at Brookings are working on a proposal to try to do this in a way that enables it to happen with sufficient buy-in from interest groups so that they will not upset the apple cart, but there are challenges. Our diverse public and private health care financing system precludes a one-size-fits-all approach to practice-and-payment protocols, providers resist clinical outcomes research and protocol development that challenge widely used approaches, and there is resistance in our culture to the idea of denial of beneficial care. We are working on a project that focuses on a provider and a medical device manufacturer, a pharmaceutical maker buy-in from all of these different groups, giving them a chance to have voice in a process of standards development. One idea is to go with Medicare first and to create a model for the

private sector, so I hope you will stay turned for the results of that as it develops in the months ahead, and I am going to stop.

(Applause)

MR. HYMAN: I was about to pass the technology test, and then I flunked the technology test. Mislabeling, well, that is a nice way to start off on error problems in health care.

(Laughter)

MR. HYMAN: We talked this morning about hope and optimism, and after spending 3 years of my life working on this report that you see over here while at the Federal Trade Commission and culminating in the report jointly issued by the FTC and the DOJ in the midst of an election year, I was tired of working on divide of high-profile politically charged firestorm areas, so I stopped working on competition policy and switched to malpractice policy. I am not sure whether that is hope or optimism, and I also do not know whether it was hope or optimism that caused the organizers to load up the morning with physicians, feed everyone lunch, and then put two lawyers on. But I will note that half the audience immediately disappeared, and that is a market in action right there.

(Laughter)

MR. HYMAN: I also wanted to mention that the report which took the hard work of lots of people including the person who I work with most closely at the FTC, Sara

Mathias (?) who is sitting in the back of the room. So everything that is good about report, you talk to me, and if you do not like it, go talk to her.

Bob in his introduction said essentially antitrust has tanked over the last 30 years. That is to say the least contested, but it is clearly wrong in health care. If anything, health care has been the dramatic upswing in antitrust enforcement whether you look at pharma, whether you look at hospitals, less successfully in one than the other, look at physicians. And as Gregg I think has nicely pointed out, it has really been an important tool in changing the norms of health care and the institutions in the way in which they operate.

We are here to today to talk about a much more focused question though which is to what extent is antitrust going to impede the development of the kinds of integrated health care organizations that Jim and his co-authors have written about. So I just pulled out the relevant sentences from the briefing paper about this, and everybody can read that, right? I hate people who read their PowerPoint, so I will not do that. But the basic insight is that there is a significant antitrust problem with moving in this direction, and I am here to say I am thinking that is not quite right. I think antitrust creates significant problems for certain sorts of things, but they are not the sorts of things that Jim and his co-authors are interested in doing, I think competent antitrust counsel can actually give you a significant amount of comfort in this regard, and you will find that the agencies are actually

quite enthusiastic about talking with you and giving you comfort as well to the extent you are not engaging in price fixing because they tend to frown on that.

Why is this an antitrust issue? And this is not just an integrated delivery system question, but it about pay-for-performance as well. This is a quote from a CMS press release of almost 2 years ago, that moving to pay-for-performance is going to involve and require significant involvement by physicians for all of the reasons we heard about this morning, so collaboration is going to be very important. The antitrust response to that from Jim Blumstein at Vanderbilt is anytime people start talking about collaboration, antitrust enforcers hear collusion and they start sending out subpoenas and threatening lawsuits and so on.

At the same time, I think it is helpful for people to understand how antitrust enforcers think about what is going on here, so the dyad I have offered is, are antitrust enforcers true believers or agnostics, this is quote from the last two pages of the executive summary of the health care report making I think clear that the agencies are truly believers in something, they are true believers in competition as a way of maximizing consumer welfare and consumer sovereignty, and in that regard, health care, although it is a complex product sold in a complex market, it still is not an exception to that, and there are different types of market failure, but the antitrust response to that is to fix the market failures rather than eliminate the market. In that regard, I think it is quite clear that antitrust enforcers have some basic principles that they adhere to.

At the same time, I think it is quite clear that most antitrust enforcers view themselves as agnostic on the questions that we are talking about today and in other occasions, and that is, what should the delivery system look like, and what should insurance policies look like. They do not have a view on that subject. Their view is generally that is what competition is for, to service what people's preferences actually are, what they are willing to pay for, what they actually want, and the impersonal workings of the marketplace, that is putting people out of business that are offering rotten service, that is the agnosticism and simultaneously the true believer aspect of antitrust.

But at the same time, it is important to recognize that all of these discussions have a history, as Gregg has already pointed out. This is a quote from Bob Pitofsky, former Chairman of the Federal Trade Commission and Gregg's colleague at Georgetown University Law School, and this is a bipartisan consensus on antitrust enforcement, I think it is clear. Anytime Gregg said rationing is a sort of show-stopping argument, quality of care is also typically used as a show-stopping argument. Anytime people talk about we should have more competition or we should have private contractual restraints, the usual response is to offer quality of care as a one-size-fits-all response, and what is striking, as Bob points out, is it does not matter what the change is and that incumbent providers of the services view anything and everything historically as a threat to be resisted, and they use quality of care to oppose all of the things that you see, some of which it turned out people wanted, others of which it turned out people were not all that keen on, but once again, that

is for the impersonal workings of the marketplace to sort out, not for incumbent providers of the services. In that regard, it is no different than allowing local hardware stores to keep out Home Depot, or you can fill in whatever other examples you want. The basic idea here is figuring out in Washington or elsewhere what the right answer is is hard, but allowing people to seek their own interests is much easier.

Where does that leave us in the specific antitrust issues that are implicit in the discussion today? I have listed a couple of them, so let me go through them one at a time.

The first is if you look at antitrust in health care enforcement over the last 15 or so years, you see different patterns in hospital mergers and physician enforcement, and I will not talk about pharma because it is its own distinct thing. There was a whole series of hospital mergers, and the government is, depending on how you count it 0 or 7 in challenging hospital mergers. There is one successful one that is currently pending before the commission, but if you look at nonadministrative litigation, they are 0 for 7. So the providers actually do not have much to complain about, every time there has been a challenge they have won. The reason why the last case was done administratively was because it is a retrospective at post-merger challenge done before the FTC because they got tired of losing.

The physician cases, on the other hand, they have all won. They have won about 25 of them at this point, and almost all, I think 24 of them, have been involved with

consent judgments where the physician groups have agreed to stop doing whatever it was that the agencies were unhappy with them for doing. These fall into two distinct categories. One is what I call busted messenger models, the messenger model, and I will not bore you with the details, is a way in which really nonintegrated physicians can collectively negotiate. If they do it wrong, it is a significant antitrust problem, if they do it right it is not an antitrust problem at all, and in a lot of instances they do it wrong. The other example is entities purporting to be integrated that really are not, and that is its own problem.

What is that? And this takes us deeper into antitrust law than we may want to go post-lunch, but the basic idea is the antitrust laws treat very differently entities that are a single corporate entity and individual discreet actors who collectively try and do something. There is significant antitrust risk with the latter, there is really not significant antitrust risk with the former, and the difficulty in this setting, given what we have already heard about physicians wanting to be independent but also wanting to be able to collectively negotiate, is it is very hard to go in between those two constraints without running afoul of the antitrust laws, and a long story made short, I do not think the kinds economically and clinically integrated entities that we have heard about over the course of the morning run into either of those risks. If you are economically and clinically integrated, you do not have a significant problem under the antitrust laws, it is when you are neither that you have a significant problem.

I have already talked about prospective versus retrospective challenges. All the doctor cases are going after people who either really did not merge at all or had busted messenger models so they were not interested in merging. The retrospective that the working paper highlights as a unique risk is because when you are 0 for 7 in hospital cases, you have to change the way you approach cases, and it does not reflect a fundamental rethinking by the agencies that they are going to go after consummated bona fide high-quality organizations. I have already talked a little bit about partial versus complete integration. Essentially, the more integrated you are the less you have to worry about under the antitrust laws. A long story made short.

The last point is we have heard a lot about supply-side discussions, integration, providers reorganizing themselves along the lines they think consumers want or at least to deliver high-quality care even if it turns out that consumers do not want it. It is important to recognize, and Mark mentioned during his remarks after lunch, that there is a demand-side component to this as well, and from an antitrust perspective we don't much care which of these we use. If it turns out consumers prefer demand-side solutions to supply-side solutions, that is just fine, and if vice versa, that is just fine, but the basic idea here is it is for consumers to decide that, not for anybody else to decide it for them.

The last point on this side is, is antitrust really to blame for the sort of impediments to full clinical integration? I think I am willing to see it take a hit, but not a very big one. I think there are other things going on that make it hard for the creation of

these sorts of clinically integrated entities. Gregg has already talked about some of them. Culture is clearly a factor, the fraud and abuse laws are a factor, interestingly enough, malpractice I do not think is much of a factor in this regard, so I cannot come up with a way to happily merge everything I am working on.

The final point I want to leave you with is to ask the question that really has not been asked very much today, because the basic idea has been this is the next magic bullet or the magic bullet, what we ought to do is do it, and then everyone will say thank you very much. There are a couple of reasons for caution. There is a generic reason, which is sometimes people want tightly integrated arrangements, think iPod. Sometimes they do not want tightly arrangements; think Ma Bell, think AOL, think of the Post Office. There is a reason why FedEx and UPS are the growth sides of that particular business. And when you try and cram down the consumer's throat something they are not very keen on, they find ways to make their displeasure known, think the managed-care backlash, or Hillarycare before that if you prefer.

Bob's comment is I think is the health care-specific observation, sometimes the thing that health care providers are unanimous on, including consumers, that consumers should want is not in fact the thing they want or the thing they can afford, and it is rather ironic, but people prefer receiving health care close to home even at the cost of a significant increase in risk of death and lower quality. You can say if we told then that they would be willing to suddenly move, but it is not so clear that that is the case. It may end up people's

preferences are different than providers' preferences. Yogi Berra has already been mentioned today, but this is one of my favorite quotes about the problem with building a clinically integrated system that satisfies the requirements of everyone with M.D.'s and Ph.D.'s and even J.D.'s, but if it turns out people do not want to go to the ballpark, nobody is going to stop them.

(Laughter)

MR. HYMAN: Let me leave you with one provocative question, which is the possible role of information disclosure as a way of addressing this, and do we really need integration to get what consumers what. This is obviously the kind of sign where if you have ever been a factory you will find these signs on the wall of every factory in the United States. The number is usually a lot higher than that in terms of days without accidents. The misnomer here is that in pretty much all hospitals the number would be 0 or 1.

(Laughter)

MR. HYMAN: But other than that, it is a useful challenge to thinking about the way in which we go, wherever it is, we go from here. Thank you very much.

(Applause)

MR. LITAN: Do you want the short version or the short version? The short version is I agree with what David has said, that I do not believe antitrust is a significant impediment. I will give you the intermediate version so we can quickly get to the Q and A.

A caveat. Number one is I am no health care expert. I was up here because I used to help enforce the antitrust laws for 2 years of my life. The second caveat, I missed the morning session, but I read the piece about integrated health care, which leads to the third caveat or at least confession, and that is I have experienced integrated health care. I have been to the Mayo Clinic; I have been to a very specialized place called the National Jewish Respiratory Center in Denver which is the world's best lung hospital which still treats me. So economists define data as the plural of anecdote, and I am a walking database and so I feel like I have some experience because I have also been the patient of many doctors for the same condition in a nonintegrated setting, and I can tell you personally that if you had the choice and if there is anything seriously wrong with you, you go to the integrated place. You are literally gambling with your life to go from specialist to specialist to specialist to have the same tests repeated over and over again, filling out the same damn forms wherever you go, it is an ungodly system what we have. So if you have a chance to go to a place like the Mayo Clinic or something like that, then I stipulate that is better than going from place to place.

Why isn't managed care in general as good as the Mayo Clinic and the place that I went to? I think because you do not have a choice. When you go to managed care you are stuck. I had a choice to go to the Mayo Clinic and to the National Jewish Respiratory Center because I was part of a plan that paid off and I was allowed to do that, but if I had been part of a managed care network, I would not have had that choice.

There though an outlier to the sort of integrated story where there is no choice, and is the VA system. That is the superintegrated system. When I was in the government, I was in debates where we seriously, although it never really got out into the real world, talked about giving veterans vouchers and just shutting the VA system down, because why is the government running a specialized health care system? This was 10 years ago. And today the VA system is held up for a model for where we all want to go. It is the most amazing transformation I think in medicine that I can possibly think of. One of the major reasons for it is EMR. The VA has integrated all that data, so when you go see people in the VA system, they know exactly every test that you had, and it was just like when I was at the Mayo Clinic or whatever, you go from doctor to doctor and they just pull it up on a computer screen and they know everything about you, and if you are in the VA system, you are a beneficiary of that. That is one of the great success stories and how the VA system rescued itself. Now what we are debating today I guess in this conference is should we have more VA system type care. That is one way to interpret it.

Or another way to interpret it is, and maybe I am misinterpreting what the authors said, if you cannot have one-stop shopping at a physical place like a Mayo Clinic, I interpret it as setting up the equivalent of virtual Mayo Clinics so that you have a bunch of independent operators who belong to a common network, they share all their data over an EMR system, and they are acting as a virtual network. Then the question is, do the antitrust laws in some way prevent that? The short answer to that and to what David has

said is, no, I do not think so. It is not just because they have lost the seven hospital mergers, which they have, and when I was at the Justice Department I was there when we lost two of them, and I can tell you why the government loses hospital mergers. It is a very simple reason, two words, home town. When the big government goes into X place, and one of our X places I will never forget was Iowa, and another place I cannot remember where it was, you go into X place and you have hospital A wants to merge with hospital B. And by the way, both of these cases were merger to monopoly so that the place was going to be left with only one hospital. So you would think in a normal context in a normal antitrust case where you go to monopoly, this is a slam-dunk. How can you lose such a case? And we lost in both cases. There was a very simple reason, obviously a home town, if it is a jury trial, the people all know the hospital and they know the people, and you the big government coming in from Washington are looked at as a foreign country trying to invade X Iowa, wherever you are, so you are already the enemy. And it is even worse if the hospitals happen to be nonprofit, if they happen to be Catholic hospitals. In particular, can you imagine, as our attorneys have when I was with the Justice Department, cross-examining the nun who is running one of the hospitals? And you try to explain to the nun or get her to admit that when she is going to have control over all the hospital services in the entire city that somehow she is going to have an incentive to raise prices, and the nun says very sweetly, "We don't do that kind of thing. We help everybody." Now do you have any trouble understanding why the government loses?

(Laughter)

MR. LITAN: By the way, it is not just because the government loses hospital cases and that is the only reason why you cannot put these integrated things together. An integrated outfit is like a conglomerate merger. Think of it that way. A conglomerate merger is when you take a firm that is multiple product lines and merge it with another firm which is within a bunch of other product lines, and the government never wins any cases, in fact, I do not know of any case of any conglomerate merger that has been stopped in the antitrust laws because you have people in different markets. An integrated health care delivery system is like merging people in different markets, it is like a conglomerate merger, so I do not see on the face of it antitrust being a problem. If I were the authors of that paper which I love very much, I love the integrated service policy brief, I would take out that sentence about the antitrust laws. It is not a problem.

There are other problems. One of them could be privacy but, again, privacy does not seem to be a big problem because you can sign a waiver and say I will let my medical records float all around your system if you want to participate in this deal. So I do not see privacy being a major impediment. The real impediment to the formation of these deals is something that Mark McClellan said at lunch, it is the payment system. It is that you do not get paid for undertaking the investment and spending all this money to develop this EMR system, with one footnote. The footnote is, and this is partially out of ignorance, and I am going to sit down and people will know more about this than I, doctors do invest

in computer equipment, and they invest in all kinds of infrastructure, and even though Medicare or Kaiser Permanente or God knows whatever health care insurance system is out there, even though the health care insurers do not pay the doctors to invest in infrastructure, they go ahead and do it anyhow because it the cost of doing business. So the question has to be, is investment in EMR that much more expensive than investing in a bunch of computer software with a bunch of fancy interfaces with health care insurance companies?

On the surface, my gut tells me, yes, I know it is more expensive, but I do not know how much more it is, and I think that is an empirical question. And I would think that with technology and the costs coming down, setting up systems where you can transfer data across the Internet do not to me on the surface appear to be overwhelming expensive. But if they are, then the failure of places like Medicare and insurance companies to reimburse, that is the major impediment in my view to why we do not see more of these operations in place. That is the end of my comments, and I will be looking forward to your questions. Thank you.

(Applause)

MR. CRANDALL: Thanks, Bob, Gregg, and Dave. I do not think you will be able to show that your success in merger cases is statistically significantly different in other markets, but that was my point of my comments earlier, it is not that antitrust itself is in demise, it is that the economics has taken over the interpretation of the merger statute,

and with much more dynamically competitive markets the government is much less successful in pursuing merger cases than it once was, particularly back in the 1960s.

As for David's point about differences in different parts of the antitrust laws, the problem here is Section 1 of the Sherman Act. I take it you are referring to certain per se rules of combination, conspiracies, and restraint of trade, and those driven by economics, those are driven by legal interpretations of what constitutes a per se violation.

One of the things before we get into questions for the panelists is Henry suggested to me that perhaps some of the speakers from this morning's session would want to talk or to at least suggest how in fact antitrust might be an impediment to the efficient integration of health care delivery, specifically Dr. Lee from this morning. Do you have any counterpoints to anything you heard this afternoon?

DR. LEE: Certainly the specific example that until this last year was a major problem was electronic record implementation. The first-years incredibly are $30,000 per doc in the first year, amortized over 5 years for a group of five it is more like 10K per year per doc. It is amazingly expensive and part of that is training. And our inability to directly assist doctors with that either kept doctors from doing it or they went off and they did a different record that was lower priced and then we would be faced with trying to get them to switch to one that we could interface with. So that specific example has probably been the most crippling.

MR. CRANDALL: Could I ask you a question?

DR. LEE: Sure.

MR. CRANDALL: When you said $30,000, aren't there economies of scale in this? I have been to different doctor groups, there are 15 or 20 doctors in one outfit and presumably they only have to make one investment and you could amortize the cost across a lot of docs.

DR. LEE: When you have 15 or 20 docs in one place, then the economics change dramatically. But 75 percent of American medicine is like one-, two-, and three-doctor practices and we have a lot of them that are in our network. In the long-run, we have actually told them we are not sure your way of practicing is viable, that you have to try to come together, but it is a major trauma for them to do it. The electronic record is making some of them do it because they can afford it.

I know the regulations have changed, but that until very recently was a huge show-stopping issue for our ability to move forward, and now we are actually racing forward.

MR. HYMAN: May I just follow-up? The change was actually in the fraud and abuse side of it, so it was not really an antitrust issue at all. Secondly, as I think Bob has already pointed out, lots of doctors have quite extensive computer records, and there are actually state-of-the-art computer records in lots of doctors' offices, it has just been the billing side. My sort of hardnosed no longer antitrust enforcer perspective is we are paying you for that already to have adopted EMR and not just the billing side of it, so if it so

sufficiently large that you cannot cover it in a one- or two- physician group, then you should not be practicing as a one- or two- physician group. And that is no longer my agnostic hat on, that is my ends forcing hat on.

DR. MONGAN: As one of the colleagues of Dr. Lee's working on this, I would guess there has been one other thing, and maybe we have very cautious in this regard and, frankly, I am much more focused at the moment on trying to make our organization better than bigger, so this is a little bit on the side of our screen at the present time. I have been somewhat concerned in consulting with the attorneys about this look back, and maybe I understand that a little better, but the broad sense as I got it, that they could come in, that Darth Vader could come in, and say prove 4 years later that costs are lower because you did this as opposed to being higher, and I think we are on the cusp of doing some neat things and can show some 2 percent reductions here and I hope next year 4 or 6, when health costs are going up at 12 percent, I do not know that I am willing to bet the farm that I will be able to demonstrate that I saved 13 percent and costs went up 12 percent, so undo what you did 4 years ago. Maybe if I had a deeper knowledge or understanding of how that look back business works, but that was the other thing that I think was in our minds.

SPEAKER: I would be happy to talk with you about. I used to be on the faculty of the University of Maryland and we had three people who had done tax and taught tax, and the joke was which one you asked dictated whether you could deduct a

particular expenditure. So I think it is fair to say there are variable risk tolerances depending on who you talk to. I understand having lots of money on the table and making multiyear investments is going to make you more cautious, but I think if you were worried about risk, that is not where you would put your chips.

MR. CRANDALL: I do think that this illustrates though a classic difference in risk perception between the enforcers who are thinking strategically about their long-term picture versus the CEO who is taking the risk. You classically have situations where we academic types as well as enforcers believe that those who are the recipients of enforcement signals are grossly overreacting or being grossly risk averse, but this is part of human nature and it may well be that there needs to be more clarity from the antitrust enforcers with respect to the signaling on this front.

MR. LITAN: I just want to add that you are in a big urban area, right?

DR. LEE: Yes, Eastern Massachusetts, yes.

MR. LITAN: I think you have unbelievably conservative antitrust counsel. That is point one. Point two, it is not just an issue of documenting cost. Emerging is all this academic literature about the improvement in the quality of service through integration. You are delivering a better service, arguably even a new service.

MR. CRANDALL: At lower cost.

MR. LITAN: Even if it were not at lower cost, even if it were at the same cost, it is better from a quality point of view to have a bunch of different docs look at the

patient than have just one doc look at the patient with just one specialty. My advice is I think they are being way, way too conservative.

MR. CRANDALL: Hire Bob.

(Laughter)

MR. LITAN: I just gave you the advice, and I would have charged you $500 for it and send you out of my office.

QUESTION: A general question for the panel, which is to try to turn the last comment from Bob which is this is really about the demand side and that people are not demanding quality and paying for it, into an antitrust issue. Specifically, the application of antitrust laws to the health insurance industry. Ten years ago we were arguing about managed competition which was the theory that we really ought to have government structure competition in health insurance to drive competition from the demand side.

Now what has happened is actually the reverse, we have gone from what used to be hundreds of insurance companies to insurance markets that are dominated by in some cases one company or two companies. In Maryland, CareFirst and MAMSI have 92 percent market share, they are charging 25 percent over cost which is the maximum that is allowed by law, and no one is going to come into that market for a variety of reasons.

A specific question was put to me by a Maryland legislator last week. He asked, How can you get away with this? I explained first that under McCarran-Ferguson,

the federal government has exempted insurance from antitrust enforcement, and he looked into it further and discovered that Maryland did the same, so there are no antitrust laws applying in state insurance, and I think that may be true in other states.

SPEAKER: What is the barrier to entry though into Maryland?

QUESTION: CareFirst. What has changed is that in managed care as opposed to traditional insurance where everyone is paying the same rates, just plain insurance, under managed care, market share translates into discounts and no one is going to be able to come in and get a better deal than CareFirst, and they have acted when other people have tried to come in.

What we find in most markets is 90 percent or more concentration of two or three plans who get the discounts, and there really is a barrier to entry, particularly if you want to challenge a Blue Cross plan that has a billion dollars in the bank.

The most specific question is, A, should McCarran-Ferguson be repealed as we apply federal antitrust to the insurance industry?

MR. CRANDALL: Yes.

QUESTION: And B, should the states do the same? Or would you recommend even more aggressive action to break up what now look like monopoly and oligopoly conditions that effectively result in costs passed through insurance rather than aggressive purchasers who are trying to drive a quality and innovation market?

MR. CRANDALL: Why would antitrust be more effective then than it has been in the case of hospital mergers?

MR. LITAN: I don't know how much more effective it would be, but there is no intellectual case for exempting the insurance industry from antitrust law.

MR. CRANDALL: I will grant you that.

MR. LITAN: None, zero. There are people who talk about if you repeal McCarran-Ferguson that you ought to have some safe harbors to allow them maybe to share their loss data because that would allow maybe smaller insurers to come in without having a lot of customers. So I can see some safe harbors, but largely speaking there is no justification for it at either the state or the federal level. Would you disagree?

MR. HYMAN: I want to answer a different question.

(Laughter)

SPEAKER: No, he is a politician.

MR. HYMAN: Worse, he is a professor and I get to ask him, not answer him. First, Maryland is an odd market to say the least because it has an all payer system. Second, Bill Kovacic and I, Bill is a Commissioner on the FTC, have a piece in "Health Affairs" about a year ago talking about conclusions if any should we draw from concentration data in the health insurance market, and Jamie Robinson had a piece that we were responding to.

Third, if you look, although there has been lots of consolidation, it is typically consolidation across markets rather than within markets, and over time there has actually been some deconcentration in the health insurance market as the blues have become less dominant because of entry by for-profit providers. The real source of concentration is the dominance of the blues which is historical and whether antitrust is an effective tool for dealing with that when state insurance commissioners had not is a sort of interesting question. So if you think they already have enough to do, you might not want to add more onto the antitrust plate, and that is a separate discussion.

SPEAKER: There is an irony here. The original model of managed competition or regulated competition as some called it before until -- put a different label on it, is a model of exactly this kind of integration. The original vision was one of having doctors and hospitals as participants in only one health plan which of course took away any notion of competition at the level of contracting between insurers and providers. But I think this conversation of the last couple of minutes underscores the tension amongst different visions of competition. Also if we had competition between truly integrated systems, a la the 1980s ideal of managed competition, it would be really difficult to titrate the system such that we would have few enough competitors to really have large integrated systems as was envisioned, and yet a large enough competitors to avoid the CareFirst phenomenon.

MR. RAINES: Frank Raines from Revolution Health. I am comforted that the antitrust experts think that antitrust is not part of the problem. That gives me great comfort.

(Laughter)

MR. RAINES: We can move on to find the culprit elsewhere. Second, I think the general notions you put forward that you ought to be highly suspicious that an organizational change is likely to improve quality particularly at the level of the firm, that skepticism is almost certainly wise. Integration at the level of treatment, particularly by condition, almost certainly will produce quality improvements. But it is very hard to find anywhere in the economy where simply bringing together organizations by itself produces much in the way of a quality improvement or even in a price reduction other than what they can do through brute force in the marketplace.

But what I found curious, and it was in one of the slides, antitrust is based on the notion of sovereignty of the consumer, but we did not hear anything about consumers. The entire discussion was a theoretical discussion or a destructual discussion, but there was nothing what is the power of competition laws or fair trading laws or laws that protect the marketplace on encouraging the sovereignty of a real consumer? As has been noted, it is a very strange market where the consumer of the service is not the person who pays and that person who pays may be many degrees away.

I would be interested in knowing what can the competition laws or the agencies contribute to increasing the sovereignty of the consumer? How can consumers have access to greater information? How can consumers be able to have a personal health record that they control as opposed to it being controlled by the provider? How can the restrictions on the practice of medicine based on the organization, whether it is a corporation or not, change? Why is it that only doctors can perform certain procedures when other equally qualified people for that particular procedure might be available? These strike me to be the real issues where traditional notions of competition law can matter in how do we empower the consumer to act like a consumer, and how do we have a system at least an incentive to respond to them as they would respond to a consumer in any other market, rather than the debate among the behemoths which in the end, whether we have two behemoths or three behemoths is probably not going to make a lot of difference as to whether or not the mortality or morbidity rates of cardiac surgery within a particular community is going to matter.

To me, let me give you just one example of what you do about the merger of the nuns, one thing you could do would be to say as part of this, we will agree to this merger as long as you ensure that you will over airfare for anyone in the neighborhood who does not want to go to your hospital. You do not need to get involved in organizing the local hospitals to say let's have some competition at the level of the consumer and just let them vote with their feet. If you do that, you can do whatever you want in terms of

organization. That is a different approach, but it actually is very consistent with traditional antitrust analysis that goes to real consumers and not to all these intermediaries.

MR. CRANDALL: David, do you want to take that?

MR. HYMAN: Yes, that was very helpful in framing a couple of issues. The first point, the word employers I do not think yet has been heard during the entire course of the day, but they are obviously a very significant factor in the insurance market as well as on the delivery side, the choices that are available to their employees. And for better or for worse, and mostly because of the tax code, we have an employment-based health insurance market for the non-Medicare population, and that is how most nonelderly get their health insurance, the private individual and small group markets are much smaller. So it is certainly important to keep that in mind.

The second point is in terms of engaging consumer, the 361-page report that I showed you the cover of actually has both a lengthy description of a state of the world on health care, but also a series of things that antitrust can do, is doing, and should do more in order to improve the performance of the health care marketplace. An important is a lot of the limitations are actually imposed by states or by federal policy, so the restrictions on scope of practice that you mentioned, the significant barriers to entry, are often created by states and antitrust is significantly limited in what it can do to dismantle those. The agencies engage in what they call competition advocacy to try and persuade the states to do

fewer dumb things, dumb from a competition-oriented perspective, sometimes with considerable success, but there are obviously significant pushbacks.

The last point is on the community commitments and having the nuns cut airline tickets, the Department of Justice actually in one of its defeats agreed to a community commitment from the hospital that it would hold its price increases below a certain amount for the following several years and that is universally sneered at among people who are worried about how to address these problems. It is a short-term fix to what is a long-term structural problem. I had not thought about airline tickets, but I suppose that might be a structural fix.

SPEAKER: David's next-to-last point about the limited jurisdiction of antitrust agencies is really, really important. There are a whole lot of other sources of law, and that is one reason why I tried to broaden out the conversation, some of which you mentioned that the antitrust agencies do not have jurisdiction over and they are generated by local legal actors who are often going to be responsive to the big players in the neighborhood or even the small players in the neighborhood. How does one achieve order out of that chaos?

The first thought is that the possibilities for doing so are fairly limited. The second thought is that probably organization like large employers and Revolution Health are in a position to play a leadership role in doing that. To the extent you go over the heads of these local legal actors and those who influence them and reach the culture with the

vehicles that organizations like Revolution Health will have, the media, et cetera, you can bring about a transformation in what consumers expect of their health care system, you can generate the demand which will in turn lead to the provision of the kinds of information to consumers that right now the system is woefully failing at.

MR. LITAN: I have to add just a couple of things. And Frank, I apologize if I sound too flip, but there is the old adage the older you get, the more conservative you get, and I have been doing a lot of health care reading lately in my capacity at the Kauffman Foundation where we worry about entrepreneurship, and when we go out and do focus groups of entrepreneurs and we ask them what the most important impediments to your growth and formation, the number one answer we get is we cannot find talented people, and the second answer we get is health care, and I will bet you you would probably get the same answers if you went to big companies as well. Health care is a huge deal, and so I have been doing a lot of reading, and Dave made the point that we have this employer-based system by accident as a result of World War II and we had wage controls and so people gave health insurance as a perk and now it is tax deductible and now the whole system is basically screwed up as a result of it.

So ultimately the only way you are going to get the consumer to really care is over time the consumer pays more than the first dollar, and over time if I had to bet we do nothing else because of the rising cost, all of our policies that we get through our health care insurers are going to have higher and higher deductibles, and ultimately only when we

get high deductible policies are consumers going to care. Then they are going to demand the information that Mark talk about, quality and price, and the one thing that would help is a state law in every state that says a doctor has to put a price list. It is the office you can go into where you do not know the price of what you are going to get, and the reason you do not know the price is, A, you do not care, and, B, because the price varies depending on what insurance company you have, because the doc bills different prices to different insurance companies. But if we had consumers who were on the hook for the first several thousand dollars a year, I guarantee you that the first thing that a lot of us would go in and ask the doc before he orders the test is how much is it going to cost.

SPEAKER: There is still going to be an obstacle because the different managed care companies and different insurers are going to negotiate different prices for those consumers out of pocket.

SPEAKER: They may, but at a minimum, the consumer is going to ask how much it costs when they are on the hook for the first three or four thousand. I do not think we are going to get consumer-driven change until the consumer is really on the hook for at least a significant portion of the first dollar cost.

SPEAKER: But doctors don't charge differently, they get paid differently.

SPEAKER: That is what I meant.

QUESTION: I will be Reagan here and grab the microphone.

MR. CRANDALL: Did you pay for this?

QUESTION: I did not pay for it.

(Laughter)

QUESTION: An economist would have to say something like that.

SPEAKER: We don't pay for our health insurance.

QUESTION: It is a health market.

SPEAKER: It is a health market. That is right.

QUESTION: I would like to pick up on the virtues of the electronic data medial records, the point which has been cropping up throughout the whole day, and just try to reconcile the discussion of the colleagues with my own experience. I do not doubt that it sounds right and it must be right, but when I look at my experience, and I just lived in New York for 6 years and I am back here, and I did my care at Mt. Sinai, cardiology, general internal medicine, orthopedics, ophthalmology, of course, you had X-rays and I had a couple of medical procedures, in no case within this hospital, and maybe this is the point that the colleague made about organizations, did any office, even though they were in the same hospital, know what the next department did. They had a different billing system. I repeated all the records. I went through everything. When you got an X-ray, they billed that outside. There were some particular things that they could never get straight, whether Medicare was my secondary or primarily, I was on my wife's system and so forth. Granted Bob Litan's point is that he had one condition and they were focusing on that and I am talking about different conditions, but somehow one would have thought in theory -- and I

went to GW and had the same experience down here, repeat all the records, repeat all your cards, repeat everything. I think it is a little better at George Washington than at Sinai.

I do not know how the VA has made it work. How do the electronic records get from one office to the next in concrete terms?

MR. CRANDALL: For the purposes of this panel, I guess we could all agree that it probably is not because they are exempt from antitrust.

(Laughter)

MR. CRANDALL: It is something else.

SPEAKER: They are screwed up.

MR. CRANDALL: We had better stop right here. Let us thank all three of our presenters.

(Applause)

Session 4: Tools for Change

MR. HELLMAN: Ladies and Gentlemen, it's Friday afternoon. Everybody has plans or at least some do. Perhaps we can begin.

I am the moderator for this group of two somewhat separate panels. And so, the way this will work is Meredith Rosenthal and Michael Cannon will be the first panel. We'll have limited questions then. Then, we'll have the second with Kate Baicker and Bob Reischauer and then full questions.

Taking the prerogative of being both a Brookings trustee and the moderator, I wanted to make a few comments. And these comments are not so much on tools for change but on the practice and potential of medicine, which is the title of this day's discussions.

In my business, you are required to disclose your potential conflicts of interest, and so I'm used to do that, and I do it now. I prefer to think of them as not conflicts of interest, but points of view. But, you can take them for whatever you'd like to take them for.

So, I'm an oncologist. I am a basic and clinical researcher, and my career led me to have a number of academic leadership positions that you can see here. And perhaps one that's directly relevant to my point of view is I worked in international health service, Great Brittan in 1965 because I was sure that it was coming and wanted to learn something about it. So, you can see how prescient I was.

But anyway, it's -- part of my disclosure is pertinent to this. In doing that, I also have a number of industrial relationships, which give me a point of view on this whole subject. I'm on the board of directors of two treatment device companies, one of which, Varian(?) Medical Systems, dominates its market. It makes half the world's radiation therapy machines and 70 percent of those that are in the United States. So, it's a formidable company in that manner.

And I'm on the board of Inside Tech, which is a start up, making a completely – a method of completely noninvasive surgery and facing the regulatory difficulties of getting this potential advance into the marketplace. I'm also on the scientific advisory board of a gene therapy company, all involved with cancer.

And finally, and relevant to some of the discussions today, on the board of directors of a company, Vantage Oncology, which is trying to put practices into the communities which follow the kinds of practices that occur in academic medical centers with regard to quality. And one of the main points of it is all information is transparent through the whole system, and all practice guidelines are similar and are monitored.

So, those are my disclosures. I am a cancer doc. And I want to say a few things from the vantage point of cancer, which I think is relevant to all the major chronic diseases. And by major chronic diseases, I mean coronary artery disease, stroke, chronic renal disease, diabetes, multiple sclerosis.

First of all, while cancer has a bad name, it is the only curable one of the chronic diseases. It's worth thinking about. And their cure rate, at least as defined by five year survivals, which while not perfect are definitely correlated to long-term continued survival, not absolutely but close.

They've gone in practice, since I've been in this business, which as I said, is 47 years, from 33 percent to better than 55 percent. So that's something nice to be proud of, but it leads you to believe and understand that this is half way technology. We're changing all the time. There is no standard of care.

And I would suggest to you there isn't or shouldn't be for any of the serious chronic diseases because we don't do well. When we get penicillin for strep throat, a parallel to that in the major chronic diseases is then you can begin to have a standard of care. We do not have a standard of care now. And it is difficult to do that.

I was going to say two things that you should understand. The country, while we're all concerned about costs, is very committed to curing cancer. We have the federal – I think it's the only time that Richard Nixon and Ted Kennedy agreed, and that was in the joint approval of the National Cancer Act of 1971.

There is unanimity on this matter and willing to put significant amounts of our public expenditures there, not of a limited healthcare budget, but significant amounts of our current expenditures. And I say it that way because the National Cancer Act made the National Cancer Institute a autonomous part of the National Institutes of Health.

So, what are the hurdles that I see that I have personally been involved with in this one? And these are in research. There aren't very many hurdles, except limited funding. And the government until quite recently has really been very generous in its support of cancer research, and I presume it will continue to be, although we're having a bad patch right now.

Regulatory process is extraordinarily difficult. The FDA is, in my judgment, inordinately risk averse. It's one thing to be talking about over the counter medications for the treatment of constipation and quite another to be talking about cancer therapies or multiple sclerosis treatment. And this distinction is very poorly made and a tremendous impediment in taking the potential of medicine and putting it into practice.

Second – and it also has the problem that it costs an inordinate amount of money to go through the regulatory hurdles. And if that's the case, all your small companies that have a bright idea and some initial clinical results cannot get forward unless they make an arrangement with big pharm or big device companies, depending on which one their in. And those companies have their own problems, and they are reasonably risk averse.

So, there are lots of ideas that are sitting there that have, in fact, good early clinical data, that get stuck. And a consequence of this is, I think, unreasonable pricing. But I understand why it's so, but it is so, the new idea. So

you get drugs that are coming out at fantastic prices. You get return on investment for fixed equipment of less than a year, where the equipment is going to be good for 10 years.

So, I mean but you understand why it occurs. And it's greed as well, but it is a significant issue here. And of course, the payer problem. We've heard about bread payers(?), but from getting these things going is you can have FDA approval and a device which looks great or a drug that looks great, but if the payers won't pay for it, you can't do anything.

And the payers are not organized. They're individual payers. You've got to go individual markets to do this. There are tremendous hurdles. And this has not been talked about much today. There are significant hurdles to bringing new things to the market in this country, much more than in Europe. But nothing goes in Europe that doesn't go in America. This is the major healthcare market. If a company can't make it in America, it doesn't make it.

And then you heard a little bit about individual care, but I would commit to you there's personal care too. You can't very well have guidelines for, let's say a disease I treat and take care of all the time and that's breast cancer, because within those guidelines, there are so many individual variations. One woman's breast cancer, even if the stage is the same, her personal preferences are co-morbid conditions or logistics between where she's going to be treated area all

different. And they influence what you do. So, having guidelines and trying to use those for pay-for-performance is going to require much more skill in my judgment than is currently available for this.

And just a few comments and then I'll quit. This is Tuesday's New York Times. As Law and Order says, ripped from the headlines on Tuesday, front page, well, there's performance based bonus in Medicare. You all notice that it was just a little bit over the fold, so that's pretty good. For something like this, you don't expect to see that.

And then you go to science times. You remember that section occurs every Tuesday in the New York Times. My wife always grabs it and I didn't see this one until I was much later in the day. But there's Larry Altman, who's a senior colleague and publishes his occasional column, Doctor's World, and he's talking about individual patient care based on management derived from clinical wisdom and comparing that in a – as I say a nostalgic way with evidence based medicine.

Well, you can't have one and the other. They just are completely unlinked. Evidence based medicine goes from pay-for-performance. Clinical wisdom, it's very hard to figure out how that fits into this system. And it was kind of interesting to both see those the same day.

So what have I learned about – in this 47 years about current treatments or chronic disease? One, halfway treatments are what's expensive. Definitive treatments are cheaper. Halfway technology is what we have in all the major chronic diseases today.

The person who gets a major procedure for coronary artery disease increases their risk of having a problem with time, not decreases their risk of having a problem with time. It is very expensive. You can think of, of course, kidney failure, and the solutions we provide are halfway solutions. You know, a kidney transplant is hardly a solution. It's what we have today. And the same things can be made for cancer.

So I leave you with two daughters of Asclepius. I'm sure you are all familiar with the two daughters and their operation, but they were Hygeia and Panacea. And their names speak to what they were. I'd like to say they're both cheap dates, because the panacea isn't really that expensive. But if you have Hygeia, you don't need as many Panaceas.

And we have no mechanism in our current healthcare system to pay for good preventive medicine, because of the comments made earlier about cost shifting to Medicare later on. It's not so important to provide as initially if Medicare is going to foot the bill later on. And the underlying philosophies for Hygeia are utilitarian, classic utilitarian theory. You don't have any doctor

patient relationship there. You have the population versus provider relationship. It's much easier.

So vaccinations questions are utilitarian questions. They're not individual questions. But that's not true for a treatment for Panacea. That requires right space philosophic approaches.

The payer – I'm not going to talk about this one. I think I'll leave it. We did talk about this relationship. The one point I want to make is that what the patient wants, at least in cancer, is to be returned to their pre-morbid state, not to have some fixing, which gives them a new morbidity or a transient fixing, a fixing to the pre-morbid state without new problems for them to deal with. And they're willing to see a greater investment for that than for a halfway thing. The paradox is it's the halfway that costs more.

Those are my comments, and now I'll go back to my official chore and introduce to you our first two speakers and then allow them to speak. The first one is Meredith Rosenthal. I'll introduce both of them first and then they will get up.

Dr. Rosenthal is an associate professor of health economics and policy at the Harvard School of Public Health. She received her PhD in healthcare economics at Harvard as well. Her principal research interests are around economic incentives that influence consumer and provider health

decisions. And she is currently working on projects that examine trends in the health insurance market, pay-for-performance, tiered networks, and consumer directed health plans.

And our second speaker is going to be Michael Cannon, who is the Cato Institute's director of health policy studies. He has formerly served as domestic policy analyst at the US Senate Republican Policy Committee under Senator Larry Craig, where he advised the senate leadership on health policy. Most recently, he coauthored the book *Healthy Competition: What's Holding Back Healthcare and How to Free it.*

Meredith?

MS. ROSENTHAL: Thank you, Dr. Hellman. And thank you, all of you who have stuck through with the entire day here. Actually, this morning as I was sitting in the audience with the first panel, I was beginning to break out in a cold sweat over standing up after those folks. So, it's nice that the room is half empty. I can at least convince myself that you're hot as threatening.

So, I'm going to talk to you about pay-for-performance. And I'll keep the sort of preface about the extent of pay-for-performance and what it looks like today relatively brief. Looking around at faces in the audience, I know many of you are old hands at this. But let me just say a few words.

This morning many of the talks, if not all of them, referenced the Institute of Medicine's Crossing the Quality Chasm, the report that came out in 2001, that really – it didn't generate any new evidence around the quality problems, the problems in value and efficiency of care, but really consolidated a lot of evidence in a really striking way. And physicians were not the only audience for that report. Large employers, who we've not talked about very much today, employers were very motivated reading that report.

Employers like folks at GE, Boeing, and other large companies that spend a substantial amount of money on health benefits, really took that report to heart and said to themselves, why are we not doing purchasing in healthcare the same way we purchase everything else in our business? And so there was a kind of sense to that.

And without sort of making the critique about whether or not one can compare buying auto parts to buying medical care, there was a certain sense to some of the recommendations in the Institute of Medicine's report and in particular the recommendation, one of many, that the payment system should be better aligned with at least what we know today about what is high quality care as well as what is efficient and patient centered care.

And so in the last five years, we've really seen a dramatic growth in pay-for-performance. There are inventories around that have documented well

over 100 paper performance programs across the country. We did a national survey last year and found that half of HMOs were using pay-for-performance to reward either physicians or hospitals or both. And so, pay-for-performance, you know, I think unlike some of the other concepts that we've talked about, including electronic health records, consumer directed plans, paper performance is actually very widespread and fairly far along in terms of penetrating the commercial market.

And so, what are the characteristics of these plans? Well, the plans that are using pay-for-performance, they do tend to be HMO plans and particularly those that, as I think of them have, the way they contract, associates payment with an accountable physician. And in particular, either they're using capitation payment and so therefore, there's sort of a budget for an individual or a population to a specific provider who is then accountable for that population or there's a gate keeping arrangement.

So, it's very clear when you go to see did Ms. Jones get her mammogram, who indeed was supposed to be responsible. Now whether that accountability is the way clinicians would think about accountability I think is perhaps an important question. But at least from the health plan's perspective, there's a contractual accountability there. So not too surprising, we see pay-for-

performance more often in those settings with that kind contractual accountability.

And I should remark – I'll end up talking a little bit about Medicare, but that's very much not what the Medicare system looks like, as we know, just a very open system, where physicians don't really have ownership of a patient population.

And another important – regionally, pay-for-performance is really everywhere except in the south, again, where the organization of managed care looks very different from the rest of the country. But one important factor we found was that those health plans who themselves had performance contracts, that is, part of their pay depended on how well they scored on their own hiatus(?) measures, for example, those are the plans most likely to do pay-for-performance themselves.

And so I think the theory that there's something being driven here by purchasers, maybe not individual consumers are aware of this, but the employers who are purchasing health benefits on their behalf are really driving a lot of this movement. And it's really those enlightened employers that I mentioned before. I guess enlightened is a term of – a normative term. So I think of them as enlightened, but you may not.

So, the programs today, they're very experimental. They're very early. So, most of these programs focus on physicians. And to begin with, they were very much focused on primary care in large part because there was fairly good consensus on at least a rudimentary set of quality measures for primary care.

And so these measures have been developed over the last decade or so, things like appropriate cancer screening, appropriate immunization, that sort of thing. And so most of the pay-for-performance programs, they set aside a small amount of money, say five percent of payments, and associate that with performance on a handful of measures, five to ten measures at most, largely again, preventive care measures. And this is sort of the way the programs have started out.

All of this is beginning to change pretty substantially. However – oops. These are my own slides. Sorry. Let me take one quick peek. That's embarrassing. Okay. There we go.

All of this is beginning to change, however, as pay-for-performance is looking to have a much greater impact. The health plans that are doing this and some employers directly incidentally are doing pay-for-performance; they're moving it out much more towards the specialists and hospitals. Because of course as we all know, while primary care might have been the place where measurement was easiest early one, in fact, many of the concerns

we have, particularly with regard to costs and overuse, which I think is beginning to drive many of these programs, is really in the specialty procedural sector as well as hospitals.

And in addition, where I mentioned earlier that programs are really focused initially on these fairly well established primary care measures like cancer screening, underused measures as we call them, they're increasingly looking to cost efficiency measures, information technology, and also intermediate health outcomes, in particular for diabetes care, for example, blood pressure control, hemoglobin A1C(?) control, I see this again as trying to get much more meaningful than they have been to date.

And so, while these programs are relatively new, of course, pay-for-performance had been tried in healthcare before. There are some good examples of much older programs, the old US healthcare program that rewarded primary care physicians for the same kinds of preventive care measures as well as health partners in Minnesota, the Hawaii Blue Cross Plan, most of the – most of these programs are quite new and are just beginning to be studied.

There are only a few really rigorous evaluations out there. And right now, they're quite mixed, and many of the studies have only one or two years of follow-up. And so, I think the questions they raise, you know, we can't really look at the studies and say paper performance has no role in transforming

the health sector. Because as I mentioned earlier, the pay-for-performance that we see now, it's very much a first step.

These programs, I believe, are rolled out in such a way that they were politically feasible, they used agreed upon measures and small amounts of money, and were often rolled out to those providers who were most prepared to contract in that way, again, those capitated primary care groups, multi-specialty groups. But, as pay-for-performance grows and as payers and the employers that are ultimately footing the bill for health benefits become increasingly concerned about seeing some results, I think we'll see a lot of changes.

And so, in my view, the evidence we have to date is beginning to hint about what's effective. There are some studies that find relatively little effect, some studies, like the recent study in the National Health Service that shows some evidence of gaming, some evidence of unintended consequences of these payment systems, things we should all be conscious about.

But it doesn't really tell us yet whether pay-for-performance is going to be really fundamental to driving the kinds of reforms that have been talked about today with regard to the adoption of electronic health records and broader clinical integration.

So in my view, just looking out answering what is the likely outcome of the growth of pay-for-performance with regard, again, to broader

health reform, well, I think it depends on a number of factors. And I would say first, the programs are evolving substantially in terms of their technical aspects. And one is I think that there's much more concern today and there needs to be more concern about thinking really what we're trying to do. If, in fact, the goal is to get small practices, for example, to invest in the electronic health records, recognizing the costs that Dr. Lee was talking about earlier of what those systems will likely incur on those practices.

It needs to be part of their worth system. A one or two percent bonus on fees from a small payer, for example, isn't going to go very far towards building an electronic health records system. And so there needs to be some consideration of balance. I think that they should be sort of commensurate with the costs of improvement. It's not necessarily clear that any one payer should be paying the whole cost of adopting these systems, but they at least need to be in some proportion.

Another thing that programs to date have not done so much is really thought much about giving incentives to providers that today are not performing very well. So these programs tend to get rolled out in broad networks. And as we've been talking quite a lot about today, there's quite a wide variation in the performance of providers. And those that are performing nowhere near that

gold standard often have very little incentive to improve because they're simply too far from the target.

So, maybe there are other strategies such as building in rewards for improvement. Maybe there are nonpayment strategies that are needed to bring those providers who maybe have little resources for things like electronic health records, maybe those strategies need to be thought of.

I guess I'm not quite as free market as the panel before me. But the notion of simply putting pay-for-performance in place where it's likely to reward certain kinds of groups and not others and saying that's okay, that's the market working, I'm not quite that complacent. And I think some thought needs to be given to that end of the market that really needs at least to be helped to move along for some period of time.

And I think again, there's considerable concern, I hear at least, among physicians that if we reward these process measures, which are often the case in these pay-for-performance programs -- again, they're sort of noncontroversial measures such as childhood immunizations -- that if we reward these little pieces, that in fact we'll really take away from physicians thinking about the broader patient, from concentrating on those things that are not easily measured. And I think that's a real concern.

And the development of better capacity to measure health outcomes, patient experience, and integrate those into pay-for-performance, I think could dramatically improve these programs. Although, the concern about using those real outcome measures, of course, is adequate risk adjustment, adequate adjustment for patient behavior, that sort of thing. These are all, of course, balancing concerns. But I think a move in that direction and particularly with regard to cost as well, bringing that into pay-for-performance, could dramatically change the capabilities for pay-for-performance.

And speaking of cost, in my view, it's been five years since cracking the quality chasm and employers, I think when they got into pay-for-performance and pushing their health plans towards pay-for-performance, they had quite a lot of faith that improving quality would result in lower costs. Well, whether there's a causal association there or not, we've seen the health spending trend continue to go up at fairly high rates. And so, I think the time has come and the health plans certainly tell me that they are getting considerable push back from employers about well, why am I paying more and more for this; can you show me what we're getting; is there any evidence either of improved outcomes or improved costs or ideally, of course, both.

And so that's really leading these programs as I showed before to begin to adopt efficiency measures. Sometimes they're not so controversial;

they're things like generic substitution. But sometimes they really are above total cost per episode, and there's concern about appropriate risk adjustment, appropriate measurement there. And while I think afford ability, to me at least, is one of the central quality questions that we have, if more and more people are uninsured, population quality is clearly declining.

I think there's a real risk here, a real tension with the credibility of these programs, the legitimacy of these programs as quality improvement mechanisms as the tension against their emphasis on costs. I think it's going to be an important tension to resolve, again, because I think in the absence of any cost savings or cost mitigation, all of this is likely to go out the window.

And then finally, Medicare's role is going to be really important here, and Dr. McClellan spoke very eloquently about all the activities that Medicare is undertaking. And in fact, it has done quite a lot not only for Medicare beneficiaries but for the commercial world in producing a lot of new performance data that can be widely used and in developing those quality alliances around which commercial payers are also gathering and physicians' societies as well to develop consensus measures.

The one central idea here is that in this fragmented system where in many places maybe there are only two health plans, but most of the providers that I know have 20 or 30 payers, then if they're all doing their own thing or some

of them are doing pay-for-performance and others are not, the effects are likely to be diluted. So there's purely private collaboration going on in some markets. And I think it would be interesting to discuss with some of the antitrust lawyers some of the implications of those collaborations.

But also, Medicare has a role in forming sort of a focal point for pay-for-performance, and that seems entirely likely to happen in the case of hospitals for example, with the hospital quality alliance data. I would expect ultimately that Medicare would begin paying on those data, and I can see no reason that commercial payers would do anything other than follow Medicare's example.

On the physicians' side, I hate to be too pessimistic, but it is very difficult to imagine how Medicare can feasibly measure performance at the individual position level, which is the only unit that today it looks at. And whether some of these ideas that were discussed earlier this morning about developing virtual networks of physicians to hold accountable comes to fore seemed very critical to me in asking the question will any of this really matter for physicians.

Commercial health plans are in much the same place that Medicare is with regard to implementing really effective pay-for-performance. There's a

limited amount that one can do when many physicians are in solo or dyad practices. And it's really not clear what kind of data one can collect.

I think the best hope perhaps is using the all payer data sets that have come together through pilots like the Ambulatory Care Quality Alliance Pilot. But even there with the all payer data, there's a somewhat limited opportunity. I'm sure there are some clever ideas about how to get around that, but again, in terms of Medicare's role here, I see great promise on the hospital side, on the agency side, clearly, Medicaid, and nursing homes, Medicare, and home health agencies. There's a lot of logic to moving that model forward in a fairly powerful way. On the physicians' side, I think it's much, much less clear.

And ultimately, I think one interesting notion here might be if Medicare could find a way of measuring physicians at a reasonable level of accountability, whether -- looking at the data very much in the way Elliott Fisher was talking about this morning, which is to say look, there are physician practices that are all along the spectrum.

And right now, under the sustainable growth rate mechanism, basically the rich are getting richer and the poor are getting poorer, could there be a mechanism under pay-for-performance that could allow us to throw the SGR out the window, which nobody mostly I think endorses. Could we do that and use efficiency at some reasonable level of accountability as a way of driving some

reasonable cost control in Medicare, which clearly has to be done through some mechanism.

So that's what I see in terms of the potential of pay-for-performance. I think there's a lot of potential upside, a lot of questions about the specifics of how it's going to be implemented. Thank you.

(Applause)

MR. CANNON: Thank you. Thank you for sticking around for the economists after the doctors and the lawyers. My name is Michael Cannon. And there's a lot of enthusiasm about pay-for-performance especially with the late night legislating that Congress did a couple of days ago where physicians are now going to be required to report on their performance according to certain quality measures if they don't want to face a pay cut.

And I share some of that enthusiasm. I think that it's particularly appalling that we have payments systems where purchasers generally in Medicare in particular shovel money out the door without much regard to quality. But when it comes to third party purchasers creating provider focused financial incentives that are designed to promote high quality care, I think we have to be particularly cautious. Because those efforts have the potential to improve quality in many instances, but also the potential to reduce quality and access for others at

the same time. And those difficulties I think are even heightened in the context of Medicare.

So, what I'd like to discuss are three things: first, some of the difficulties involved with provider focused pay-for-performance efforts; second, how those difficulties are heightened in the context of Medicare; and third, how we might reap the advantages of pay-for-performance within Medicare, while minimizing the potential for harm.

So, the first problem, as I see it, confronting any pay-for-performance scheme is that of having a purchaser, essentially a bureaucracy to define quality. And quality has multiple dimensions and is often highly subjective, which makes it very difficult for any distant decision maker to come up with a uniform definition of quality for a large and diverse population.

Now, clinical trials may reveal that an intervention reduces mortality for the average patient. But that average benefit is not uniform. It's not uniform within the trial. It may conceal no effect or even harmful effects within the trial. And such effects become more likely when we move from the trial subjects to the general population.

And once we reach that level, we find that the patients not only respond differently to the intervention, but they don't value the benefits of the intervention equally. For some patients, the costs of the intervention, for

example, a drug's side effects, may outweigh the benefits. And for other patients, they may be taking a number of prescriptions for multiple co-morbidities. And the clinical trials usually tell us little about potentially harmful interactions.

So in these situations, the same pay-for-performance incentive that encourages the provider to provide quality care to the typical patient, instead promotes low quality care for the atypical patient.

The second problem confronting a pay-for-performance scheme in provider focused financial incentives is how to create financial incentives that cause providers to change the behavior but only in the desired ways. One way the providers can meet the performance goals is compliance. Do exactly what the health plan wants you to do. Another way is avoiding patients who make it harder for providers to meet those goals. And that response reduces access for some patients.

Another way of meeting performance goals is to lie. Studies have found that 50 percent of physicians will deceive – do deceive third party payers and 70 have said that they would do so under certain circumstances. So it's not hard to imagine ways that providers could do the same with regard to pay-for-performance measures. And such deception is very difficult for purchasers to monitor.

Now, the trouble with pay-for-performance within Medicare is that each of these difficulties becomes even greater when trying to implement pay-for-performance within Medicare. Traditional Medicare covers many more individuals than any other purchaser does. So, right there, any perverse incentives that might occur in a Medicare administered pay-for-performance program would automatically harm more people.

In addition, Medicare enrollees are sicker than your average patient, so that they have higher rates of co-morbidities, which makes each enrollee more likely to be harmed by those sorts of perverse incentives.

And finally, Medicare would take longer to create – I'm sorry – to correct any of those perverse incentives, because Medicare is notorious for being slow to correct errors in say its payment system, and I think that we could expect the same sort of efficiency when it comes to any perverse incentives that CMS administered pay-for-performance scheme might create. And so those sorts of perverse incentives would live on in Medicare long after a private purchaser might have corrected the problem.

Given the likelihood that a CMS administered pay-for-performance system would crowd out pay-for-performance efforts, I think that it's those unattended consequences would even reach beyond the Medicare population. Now, it makes Medicare an attractive tool for advancing quality is

that it has market power. I mean it's the very fact that they have – that traditional Medicare has 37 million patients in there and so many providers rely so heavily on Medicare payments for their incomes.

But what I think this – what – this view that we should therefore be looking for Medicare to lead the movement towards pay-for-performance, I think what that view overlooks is that Medicare's market power derives from the political power of providers and seniors. And we can glimpse how that political power is likely to affect a CMS administered pay-for-performance system just by looking at the recent history of the sustainable growth rate, where the physician lobby has held off reductions in their payments for I think four years now.

In fact, providers influence is such that Medicare's trustees report – the Medicare trustees report openly acknowledges now that its spending projections are unrealistic because by law, those estimates must assume payment cuts that providers would never tolerate. Medicare's chief actuary, Rick Foster wrote in his part of the last of trustee's report, "While the Part B projections in this report are reasonable in their portrayal of future costs under current law, they are not reasonable as an indication of actual future costs. Current law would require physician fee reduction totally an estimated 37 percent over the next 9 years, an implausible result."

So, implementing a pay-for-performance scheme requires a number of steps: finding quality data that relate various inputs to outcomes; translating those data into performance measures; making allowances for atypical patients; targeting, calibrating, and continually adjusting both performance measures and financial incentives in the face of uncertainty about the reliability of new findings; collecting data around provider compliance; distributing rewards; and defending penalties.

Now, if a Medicare pay-for-performance scheme is administered by CMS, providers will have inordinate influence over every step of that process. As do Medicare's payment systems broadly, a pay-for-performance system would spur congressional administrative lobbying by providers who seek to protect or increase their incomes, who fear being penalized for factors beyond their control, who don't want to change the way they practice, who want additional research funding devoted to their modes of care, who seek to gain advantages over their competitors, who wish to ensure that performance measures can be gained, who do not want the pay-for-performance system updated too frequently, and who want only one set of performance measures set by Medicare and then adopted by private insurers.

And as much as we in this room and as much as pay-for-performance enthusiasts, and I do count myself among them, as much as we

might want the pay-for-performance system in Medicare to work, even we aren't going to pay as much attention to that process as the provider does. The healthcare industry spends more money lobbying congress than any other industry. And a pay-for-performance scheme administered by CMS is only going to increase that spending.

So that I think provides perhaps the most powerful argument for diverse private experiments in pay-for-performance. The fact that private plans are not as easily influenced by providers will offset the relatively weaker market position and leaves open, I think, the question of whether private plans or Medicare would have more influence over providers' behavior. Though Medicare theoretically has the power to change providers' behavior, providers typically have the political power to change Medicare's behavior.

So, ultimately in my view, pay-for-performance schemes would be more effective if they focus on precision first and market power second. And the smaller experiments by private insurance, I think are better positioned to deliver that precision and could build market power by establishing a reputation for quality.

Now, whenever we're talking about pay-for-performance, I think it's important that we keep in mind just where we are in the process of implementing this and figuring out whether it works. And we don't know if pay-

for-performance really works. And we don't know how much it costs. And if we don't know whether it works and we don't know how much it costs, then we certainly don't know if it's worth the money that we're spending, if it's cost effective. You don't know how much it costs or if it's effective, you can't figure out whether it's cost effective.

There have been precious few randomized controlled trials of this concept. And the results of those precious few trials have been inconclusive. So, whatever enthusiasm exists for pay-for-performance is not derived from the type of evidence of effectiveness that pay-for-performance enthusiasts believe should guide clinical practice. Third party financial incentives remain an unproven tool for improving healthcare quality, let alone in a cost effective manner.

So we help policy (off mike) frequently lament providers' eagerness to use whatever new piece of technology they get their hands on, so it's a little more than ironic when we get our hands on a new policy tool and exhibit the same behavior.

So, in my view, these difficulties suggest that certain approaches would maximize the potential of pay-for-performance while minimizing any harm, particularly in Medicare. The first approach we should take is diversity. Given the many ways that provider focused pay-for-performance incentives can go wrong, I think that smaller private experiments, the kind that Meredith was

describing, are preferable to a grand experiment that – a grand public experiment that crowds out all others.

The current system of pay-for-performance programs provides that type of diversity, allowing insurers and employers to conduct experiments and learn from each other's successes. And the competition to improve quality care in a cost effective manner encourages private purchasers to experiment in pay-for-performance. Private control gives them the flexibility to design and alter those experiments nimbly and as important, any harmful failures are confined to much smaller populations.

I think the politics of Medicare always guarantees that any potential harm coming from a CMS administered scheme would be more likely to occur, harm more patients, and take longer to correct. Therefore, rather than let CMS or some quasi governmental body even administer pay-for-performance system in traditional Medicare, I think Congress should consider confining pay-for-performance, at least provider focused pay-for-performance financial incentives to Medicare advantage, under which beneficiaries can choose a private plan that covers Medicare – that provides Medicare covered services and Congress should resist the temptation to expand pay-for-performance into traditional Medicare.

Now, the second strategy I think that would maximize potential pay-for-performance while minimizing the harm is for employers and insurers to experiment not just with provider focused incentives, but also with patient focused financial incentives. Private insurers have already begun to do so.

One weakness of provider focused financial incentives is it can encourage low quality. They can create perverse incentives that encourage low quality care or reduced access to care, and they're completely opaque to the patient. The patient is not aware of those financial incentives and is not – just doesn't know about the forces that are affecting her healthcare.

In contrast, patient focused financial incentives engage the patient in the pursuit of quality while allowing patients and their doctors to deviate from what the experts consider best practices if they decide that that's in the best interest of the patient.

So, if traditional Medicare is to use financial incentives to drive quality, I'd suggest that those incentives would be better targeted to individual patients. In either case, the ultimate locus of decision making would be better left at the level of the individual patient.

So, in sum, I'd suggest that if the potential risks of a broadly applicable pay-for-performance system are serious enough, that those adversely affected should have the right to opt out of those systems, either by making those

incentives focused on the patient herself or confining pay-for-performance program to an environment where the patient can move from plan to plan. And perhaps, the patient should have the responsibility of bearing that cost for the choice to opt out of the system.

Moreover, I'd argue that pay-for-performance holds enough promise that special interests shouldn't be allowed to stymie its development through political pressure. Thank you.

(Applause)

MR. HELLMAN: This panel will be – I'm trying to limit this one just to discussions on pay-for-performance and then we'll go onto the second speakers and their discussions.

Are there questions? Yes?

MR. KELLEY: All right. Bruce Kelley with the Mayo Clinic. Michael, I wanted to ask you your thoughts on this. On the previous panel, one of the speakers mentioned that you'll never get really good transparency and quality and cost saving until the patients are paying more of the bills themselves, if I can paraphrase.

You talked about Medicare and the idea of a patient – you pay-for-performance based on that the patients are involved in or the consumer as opposed to the provider.

What do you think of the idea that Medicare, it has a piece schedule, say okay, Medicare will pay what it will pay, but the provider, the physician can charge more or less and let the patients have some say then in did I get good quality care; is this worth it?

Interestingly, both of those are currently against the law.

MR. CANNON: It's an interesting question. I was at a Cato Institute event that we had on pay-for-performance and someone brought that very idea up to me after the event. And that very person is actually sitting in the audience here as well. Yes, it's illegal to balance bill, but that's one option to, you know, for allowing – for Medicare to encourage higher quality healthcare. I mean if you were to release that constraint, that's one option for doing so.

(Off record comments)

MR. HELLMAN: Other comments? Greg, did you have a comment?

MR. CANNON: And Peter was the one who brought it up. I don't know if you wanted to weigh in on this, Peter.

MR. HELLMAN: Go to Peter.

MR. CANNON: I have to confess. Peter sent me a document about this, and I have not read it yet, so that's why I want to defer to you.

MR. MCMANIMON: Hi. I'm Peter McManimon with Blues(?), Hale, and Hamilton right now. The actual McManimon modest proposal would be as follows: that you would have HHS or CMS designate a series of standards and a level of performance above which would qualify a physician to be high quality or some star or whatever.

Physicians who had voluntarily met those standards, and that might include providing information from their non-Medicare patients in terms of their aggregate performance, but if they volunteered that, and they could demonstrate that they were in excess – they exceeded the standards, they have the authority to balance bill under Medicare, not that they would be required to, but that they could balance bill.

And we know from Ed Pack(?) that private fees are 20 and even 30 percent higher than Medicare, so that we'd be talking about real money potentially. In theory, it would not cost the government anymore because the Medicare allowance would stay the same. But we would also find out what the patients thought this high quality was worth. And because it would be voluntary on the part of the physicians, if they didn't want to participate, they didn't have to. If they wanted to, and I suspect a lot of them would, we get a lot more information available about individual performance, and we'd probably get an improvement in performance. So that's –

MR. CANNON: And I think – just to follow up on that, I think that, you know, if we're – what we're doing is liberalizing the pricing structure within Medicare, that's something that I would certainly be sympathetic to.

My concern about it is that you suggested that if the physicians meet these quality criteria. My concern is about how the quality criteria are set. One way to get around the problem so that it's not Medicare who is setting those quality criteria is to have, you know, a list that CMS comes up with of private organizations whose criteria would qualify – compliance with whose criteria would qualify a physician to be able to balance bill.

It's just one way of detaching that – the quality questions from the political process.

MR. HELLMAN: Greg, did you have a comment?

MR. GREG: A question mainly for Meredith, although I'd be interested in all your thoughts about this. You were less than enthusiastic about the prospect of consumers getting mobilized to support pay-for-performance and unenthusiastic, therefore, I take it about the prospect that employers would carowit(?) absent the promise of savings as well as quality.

Could you say some more about that, and is there any hope given the movement towards more data to be available to consumers, that maybe we

would see a wave of interest, even though consumers aren't footing much of bill, a wave of interest on the part of consumers in pay-for-performance?

MS. ROSENTHAL: Did I mention consumers? Maybe my lack of mentioning them was demonstrating my lack of enthusiasm.

MR. GREG: When you mentioned employers in one of your slides, you focused on their not being interested unless there's a cost.

MS. ROSENTHAL: I think with regard to employers, clearly they care about the welfare of their employees for a variety of reasons, you know, largely those labor market reasons that we think they offer health benefits for in the first place. And so they care about delivering a quality benefit that's valued by their employees. But, clearly, the cost trends are at the fore of their interest at the moment.

With regard to consumers interests in quality, I think, you know, I think this proposal also is very provocative. For me, my concern is with regard to historical patterns of consumer choice. They don't seem to relate to quality information, and so – and I'm optimistic that that's evolving reality, that, you know, consumers over the last decade, if you look at the research for I think fairly meaningful quality measures that have been disseminated, consumers have not been taken up, have not been used by consumers.

But there's a lot of education going on and I think a lot of novelty right now with regard to delivering that information in a way that's more meaningful to the way people actually make decisions.

But I see – I guess as Karen said earlier, I see a role for consumers for sure in promoting quality and in guiding the system towards what they really want. But I'm very cognizant of the real information problems and decision making problems that consumers face.

And I'd say we're not really there. I'd put a much greater emphasis on supply side incentives than demand side. Well, really looking at both. But I think the more promising opportunities for health system change are not about market competition but really about a revised payment system that gives the providers incentives to reorganize and develop the kinds of innovative ways of delivering care that we were talking about earlier today.

But I don't see that consumers have no role to play, just I think diminished relative to these other strategies at the moment.

MR. HELLMAN: Bob?

MR. BOB: (off mike) with hospitals and doctors, we take on pay-for-performance contracts where about half of the incentive money is about efficiency, admissions, radiology use, pharmacy. But for the more fragmented world out there, the onesies and twosie doctors, are there any pay-for-

performance models that seem to offer some potential for, you know, directly related to efficiency?

MS. ROSENTHAL: In those PPO programs, there are plenty that look at imaging and generic substitution. I don't know of any that have successfully looked at global measures of efficiency. And you can imagine the kinds of adjustments that you'd want to do to any global cost per episode measures would be tricky on the small population.

But I believe that's what care focused purchasing is really about and that I would expect some of the payers -- care focused purchasing, it's an aggregation of payer data, national payers for the most part to try to get large sample sizes for measuring efficiency at the individual doc level.

MS. THOMAS: I'm Dana Thomas. I'm with the US Coast Guard. I had a question. I guess I'm thinking about as an economist, can you tie back instead of like the pay-for-performance idea just to the healthcare outcomes, the quality of the outcomes, and the cost to something more tangible for the employers, like the health productivity measurements, the decrease in disability costs or absenteeism or even presenteeism(?) in their work force, and you know, be able to judge the quality programs or the care that they're getting on those metrics? I mean does that seem feasible or realistic?

MS. ROSENTHAL: It certainly is a hot question. And I know there are some studies looking at that. It's measuring presenteeism, as you can imagine, is very tricky. And so the studies that I know of have been done actually in large health plans where they actually measured how many claims were processed. So you had – not that many of us work in places where our productivity is easy measured, except for maybe junior faculty.

But I think that's – I wouldn't be as narrow as that. I do think that's important and I think employers are open to those kinds of arguments. But I think that it's also just as important how much their employees value the product they're getting in a health benefit, because that's part of – again, that's part of attracting labor.

So, it's not totally – they're not trying to minimize their health benefit cost. They're just trying to maximize the value of that.

MR. HELLMAN: Just as a segue into the next section, the last comment, Bob, and then we'll move on to the next group.

MR. BOB: This relates to Peter's (off mike). I was the co-chair of the Institute of Medicine sub-committee that served the larger committee on pay-for-performance. And we discussed and kicked the tires of various incentive mechanisms directed both at providers and at beneficiaries. And you know, we

respected your idea. It's political legs, I would think, are very, very short, you know, because you will be accused of denying access to low income beneficiaries.

The alternative, of course, is to say that we will reduce the coinsurance fraction for Part B services and the deductible for hospitals to those beneficiaries who select high quality or efficient providers. The downside to that, of course, that could cost you a whole lot of money.

MR. CANNON: The other downside is who is going to be selecting those high quality providers.

MALE SPEAKER: Well, you have that problem with all of us, so.

MR CANNON: No, no, no, no. But is it going to be disproportionately the low income people? I mean there's a – Peter will get attacked for his idea because – for cutting off care to low income people. But, all of these pay-for-performance ideas have that potential including that one. Because are the high quality providers going to locate themselves where the low income people live?

So –

MALE SPEAKER: I think we could get into that.

MR. HELLMAN: I think maybe we'll stop this session, and we can round back on some unanswered questions after the last part. Thank you both very much.

(Applause)

MR. HELLMAN: I'll do this from here before I unhook myself. I'm turning around so I can unwind. I had a different kind of unwinding in mind, but anyway our next two speakers are Catherine Baker. She serves as a member of the Council of Economic Advisors. She received her BA in economics from Yale and her PhD in economics from Harvard. She's an associate professor of public policy at UCLA and a research associate at the National Bureau of Economic Research.

Wait, wait, Catherine. I want to do Bob. Unless you want to do Bob.

I think Bob is – Bob Reischauer is well-known to all of us. He is the president of the Urban Institute, has served as director of the CBL, the Congressional Budget Office, and to those of us here, a long standing and former member, a very distinguished one of the Brookings. And any device to get him back is well worth the effort.

So, I'm especially pleased to have him here. He has his undergraduate degree from Harvard and his PhD from Columbia.

Now.

MS. BAKER: Okay. Can we maybe dim the lights a little? Great. Excellent. Thank you all for sticking around, and as the next to last speaker, I will try to just speculate wildly and move around a lot and keep everybody awake.

So, the goal I think of a lot of this discussion is to think about moving towards that higher quality care and the role of patients and the role of providers. And what I'd like to talk about now is the role that as policymakers we can play in giving a nudge towards higher value, higher quality care.

And there are a number of policy instruments at our disposal, and none of them is easy and none of them is obviously beneficial. And some of them are obviously harmful and hopefully we can discard those. But I'd like to lay out for you some options that I think are promising.

I don't think that I need to spend anytime convincing the people here that healthcare spending is growing rapidly and that that's potentially a big and bigger and bigger problem. On the public – you know, totally we're spending about 16 percent of our national dollars on healthcare. And that's growing on both the public side and on the private side.

And on the public side, entitlement programs like Medicaid and Medicare are rapidly consuming the entirety of the federal budget. And if nothing were done, we would spend more on Medicaid, Medicare, and social security than we spend on everything right now. And that means we either need to double

taxes or quit all the other programs that you're spending on or do something to reign in spending on those programs.

And we talk about that in the long run. You've heard a lot about the unfunded liability of those programs, but they impose real constraints on public spending now. They're already crowding out a lot of discretionary spending. So this is surely a problem for the long run, and I would argue a big problem even today.

On the private side, health insurance premiums are growing three times as quickly as CPI or as inflation and that means that workers are taking more and more of their compensation in the form of healthcare. Now, both of those things would not be such a problem if we really thought we were getting out money's worth out of the system. We don't sit around bemoaning the fact that we're spending more and more and more of our national dollar on you know, consumer electronics or something that wasn't around before to spend any money on. And there's a lot of great new stuff in medicine that we're spending money on. So, why are we so worried?

Well, you've heard a lot of evidence today and in the long run that we're not getting out money's worth. And so, when you're spending an increasing share of your resources on something that is of questionable value on

the margin, that's something that you want to pay attention to right away. But I think that's a pretty easy sales pitch.

One thing that people may not realize though, is that a big chunk of the dollars we spend on healthcare out of public budgets are going to subsidized private care through the tax code. Employer provided insurance is untaxed, and that means that we spend money by not collecting revenues on that worker compensation that we would be collecting if that employer provided health insurance didn't have tax favored status.

Now, that sounds like some obscure part of the tax code, but really we spend as much money on that as the federal government as we do on Medicaid. So it's a big chunk of public spending, and it's going to be of increasing importance as private health expenditures rise.

So, can our spending go further? Are we just stuck in this box where we have low value spending and there's nothing to do about it? We spend more than twice as much per capita as many developed countries. There's evidence internationally that we spend a lot of money. There's evidence that we don't necessarily get our money's worth because our health outcomes are certainly not twice as good as those other countries. And even within the US, there's evidence that we are not allocating our dollars efficiently.

And I know I've worked with Elliott on some of these issues, and I'm sure you've heard a lot about them before, so I'm going to zip through this. We spend a lot of GDP on healthcare. Our outcomes don't look that great. Even in the US in areas where we spend more on Medicare, we get lower quality care, not higher quality care. So all of that is to say our healthcare dollars should surely be able to go further.

So, what are the consequences of that inefficient spending that I have just zipped through and hopefully didn't have to convince you of. Healthcare dollars aren't going to the places with the highest value. When we're spending so much more money in some parts of the country without commensurately better outcomes, that tells you that you could move some money around and do better for your dollars.

Not only are we not spending our healthcare dollars as wisely as we could, we're not allocating our resources as a country correctly between health and other goods. So, it could very well be that people would like to take some of that lower value use healthcare dollar and put it towards rent or clothing or something else. So, we're not allocating efficiently within healthcare. We're not allocating efficiently between healthcare and other goods.

And all of that has real implications for how well people are doing, particularly at the low end of the income distribution and ultimately, for standards

of living for everybody if it affects economic growth. So, our goals should be to get higher value care, to have our dollars go further and have spending decisions based on somebody somewhere evaluating whether the cost of a procedure is warranted by the benefits that come from it.

And if we could get that kind of allocation of resources, we could stop worrying about how much we spend on healthcare. We'd be getting our money's worth. You wouldn't worry about what fraction of GDP it was consuming nearly as much.

Now, that goes along with, I think, having care more widely available and affordable. Part of the reason that we have a rising rank of the uninsured is that healthcare is increasingly expensive for people who don't have health insurance, especially for people who don't have health insurance through their employer. Because the non-group market in health insurance does not function well now. So our policies need to take that functioning into account.

So, to understand how you can push us in that direction, you need to understand why healthcare spending has grown so much recently. And it's not that we're going to the doctor so much more often or that we're going to the hospital more often, or even that we're staying at the hospital longer once we go there. The real source of increase in healthcare spending is the intensive

technology that gets used once you go to see the doctor or once you go to the hospital.

Now, on average, that's great stuff. The healthcare advances that we've seen in the last 40 years have extended life expectancy remarkably. They're improved the quality of life. They've improved mortality post heart attack. They've improved infant mortality. They've improved lots of different measures of healthcare, and nobody would advocate going back to 1960's medicine at 1960's prices.

But that said, on the margin, we're not doing so well. The last MRI that you do, the last angioplasty, that has very little value to that patient, even though the technology as a whole is well worth what we're spending on it as a whole. And that's because consumers aren't in a position to really evaluate is this worth it for me.

Certainly, Medicare is not doing that very well. We're not doing it well on the private side either. The barriers through Medicare, I'm not going to spend much time talking about, mostly because I want to wrap up in my allotted time and also because you've heard a little bit more about that.

On the private side, the tax treatment that I mentioned before creates a very unlevel playing field. You get a tax advantage if you get your

insurance through your employer, but you don't get a tax advantage if you buy your insurance on your own or if you pay for routine care out of pocket.

Now, again, this sounds minor, but it's not. You're talking about a 30 or 40 percent sale on services that you consume through your employer provided plan relative to services that you consume in any other way, either through insurance that you buy on your own or through out of pocket spending.

So what this means is that people who choose a bare bones policy or a basic health insurance policy and pay for routine care or low cost care out of pocket face a severe tax penalty, payroll tax and income tax, 30, 40, even 50 percent.

So this means that there's a strong incentive to get a really generous employer plan that covers everything. Now, if our auto insurance or our homeowners insurance looked like this, you would have, you know, free detailing on your car every six months, somebody would be shampooing your rugs covered by your insurance. That's not the way we purchase any other kind of insurance because it doesn't make sense to ensure against routine expenses that you can afford.

Insurance is for catastrophic expenditures, for unexpected things. Insurance reduces uncertainty and provides crucial financial protection against high expenses. That's why we all have deductibles on our auto policy and on our

homeowners' policy. And for health insurance, clearly health is different from other goods, but what isn't different is that it doesn't really make sense to insure routine care that you can afford out of pocket. Because insurance has its own costs. Insurance is expensive.

So this structure that we've set up that is, you know, an historical relic, pushes people into these really expensive first dollar cover plans, which means they don't consume care efficiently once they're in them, and it means that health insurance for people who don't have it through their employer can be prohibitively expensive.

So how do we improve those incentives? We can remove the bias against basic plans and consuming routine care out of pocket. You can do that in two different ways. You could level the playing field up. You could have all health expenses be tax free, whether you get them out of pocket, whether you get them through your insurance, no matter where you get your insurance.

You could level them down. You could have all health expenses taxed the way any other type of income or compensation is taxed no matter where you get your care. Either way would remove the bias that pushes people into expensive first dollar coverage, but they have different implications for how much healthcare people consume overall and how expensive health is relative to other goods.

So I would like to lay out a path that builds on the success of health savings accounts. Now, people are pretty familiar with health savings accounts and I won't go through a lot of the details on that. The basic premise is that if you buy a catastrophic plan that has a deductible of about $1,000 per person, $2100 for a family, you can then create an account to pay for your routine care out of pocket with tax free dollars instead of having to pay taxes on that routine care.

So it eliminates the bias against that kind of policy that was otherwise in the tax code. These have been increasingly popular. When they were first offered in 2004, obviously they were very new. People weren't sure how well they were going to work. There are now more than three million people enrolled and that number is rising quite rapidly.

I won't go through the current rules. So the advantage of this is that – the main one is that the tax penalty is removed, which I just described, but it creates the incentive then for higher value care consumption because people are making decisions about their healthcare, trading off the value of that dollar of getting healthcare against the dollar of consumption of anything else that they might do in the future.

And health – HSAs have an advantage over making all healthcare spending tax advantage, because if you can bequeath this to you descendants or

you can use it for non-health expenditures once you're over 65, the incentives to really evaluate how you want to use those resources are preserved. It makes the policies that go along with the HSAs, the high deductible policies, much more affordable for people, and it can be combined with other proposals to expand access.

So, I'm not going to belabor that because I think right away some issues come to mind about whether this is fair. Is this just for the healthy and wealthy? Is this really going to bring down expenditures? There are some real questions to ask about this, so I'd like to spend my last negative five minutes talking about the effect on overall spending, afford ability, and risk pooling issues that I think everybody rightly questions.

So, first of all, I would argue that HSAs could be a really valuable tool in reigning in health spending. So the first reason I think that people think this isn't particular – this might not work is that it still offers important financial protection. There's a deductible, but then there's an out of pocket max for most plans of around $5,000. We all know that most health expenditures are done by people way out in the tail of the distribution. So 80 percent of healthcare dollars are spent by the 20 percent of people who have the highest spending.

What would a high deductible policy like this do for their spending? Well, if you back it out, it turns out a fair amount of spending would

be tentative in this plan, because the first $2,0000 for a family say is the deductible. The next $2,000 that families pay out of pocket is paid at a coinsurance rate of about 20 percent for the average HSA. So that means that up to $12,000 of medical spending would be subject to some cost sharing, higher cost sharing than people currently pay.

So if you do a back of the envelope calculation, about 50 percent of health dollars are spent by people with less than $12,000 a year of bills. So that does leave a chunk of spending that wouldn't be touched by this. But it leaves half of spending where people would face increased incentives to be cost conscious consumers. And if you back out roughly how much of this would translate into reduced expenditures? If you went – if you took the entire population and rolled it from current PPO plans into a typical or average HSA plan, it would reduce spending by about five percent.

Now some people will see that as, you know, the glass is five percent empty. That sounds like a lot of money to me, five percent of sixteen percent of GDP is a lot of money. So that's a good thing.

Now, the second criticism is wait a minute, how can people make a decision about what kind of healthcare to consume in an emergency situation. Most healthcare is on these expensive procedures, you're really expecting

somebody in a crisis to make a decision about what kind of healthcare to consume. Answer: yeah, they do it all the time.

First of all, only about 20 percent of healthcare dollars are spent in emergency situations. That doesn't mean they aren't spent on very sick people. But if you define an emergency as any time you have an injury, any time you go to the emergency room, anytime you receive care within the first 24 hours of a critical episode, and you sort of add up all those things, that's about 20 percent of dollars.

So most of the really expensive stuff is happening, you know, days later when decisions have been made about treatment patterns. And so people have time to evaluate where am I going to get the highest value care, not where am I going to get the most care, not where am I going to get the cheapest care, but where am I going to get the care of the highest value to me. So there's plenty of time for that.

And there's evidence from the medical literature that when people have improved information about quality, they go to higher quality places, even in emergency situations. So it's not that people aren't able to evaluate the choices available to them; it's that often they don't have any reason to do so and often they don't have any information about prices.

And I know people have talked about that already, but certainly all of this is predicated on the idea that people need information about quality and they need information about price. And the federal government can play a strong role in leadership there.

The last point that I want to make on this and then I will zip on is that people still get the negotiated discount rates that their insurer provides. So I think that in this world of higher deductible health policies, people have in mind you're out on your own. You know, how are you supposed to get as good a deal as Etna got when you go to negotiate with your provider?

You still get Etna's rates because you're still covered by a high deductible health policy, and that health insurer who's providing that policy still has an incentive for you to save money, because they're on the hook for anything you spend upon your out of pocket max. So people are still getting all of those advantages, but now they're getting more.

There is evidence that in fact people are moving towards more cost effective use of care. I give the example of the use of generic drugs, but these are still very new plans. For the long run, evidence is not in yet. And I'll move on.

Last, are these just for the wealthy? Is it something that poor people can't afford? Well, what people don't always take into account when they evaluate the effect of this higher deductible on a low income family is the fact that

the premium is so much lower for these policies. It's lower both because people are paying more of the up-front cost themselves, but also because their improvement in behavior as the change of incentives is taken into account and the policies are more – the care provided through the policies is more cost effective, so the premium can be even lower.

So, if you look at the data on this, you see that the average premium is almost – takes up almost two thirds of the difference between the difference in the deductibles. So this means if your deductible is $3,000 more, your premium is $2,000 less.

So, if you hit your deductible year after year after year, you might be worse off in the HSA than you would be in a traditional policy. But if you don't hit your deductible year after year after year, you save money in these policies. Because you take the money from the premium, you put it into your HSA, and then you use it to cover any out of pocket expenses you have.

Now, what about the chronically ill, who hit their deductible every year, every year, every year and always have high expenses? Fundamentally, any insurance plan that we devise is not going to be able to take care of a chronically ill uninsured person who is trying to get insurance, because that's not an insurable event.

If you are chronically ill and you have $10,000 of spending year after year after year, an actuarially fair policy will charge you $10,000 for that care. Because insurance is about uncertainty. Insurance is about pooling risk and protecting against the unknown. A chronically ill person who isn't already insured based on a healthy health status to begin with can't get insurance. It doesn't incorporate that known fixed expense. And if we want to help those people, we need to design policies to give -- first of all, get everybody insured when they're healthy. Second, during the transition when some people who are uninsured now and have chronic illnesses can't get insurance that they can afford, give them extra money. But don't design the insurance system to cover those people because it's not insurance. Just call it a transfer to low income sick people and transfer money to them that way.

So I'm going to stop there. I think there are plenty of other concerns, all of this predicated on better information being available that you've heard more about. But ideally, with that better information and with a critical mass of cost conscious consumers, people will help drive the market towards higher value care while maintaining the important financial protections that insurance provides. Thanks.

MR. RISHOUER: Let me say how much I appreciate being given the much coveted last speaker of the day slot on a conference that is on Friday. I mean it's really a three for. You know, you can't.

Cognizant of the limited amount of time that we have and the richness of the presentations that have gone before, I'm not going to give you a rich dessert, but rather some comments on the discussion that my fellow panelists have introduced in some of the earlier discussion this morning.

You know, for the past decade or so, we've really seen an explosion of efforts that are designed to develop mechanisms that we all hope are going to shrink this gap between the practice and the potential of medicine in the country.

We've seen efforts to encourage the spread of IT. You've heard about them, electronic medical records, computerized physician order entry systems, bar coding of hospital supplies, electronic transmission of lab results and diagnostic tests, electronic patient monitoring both in hospitals and when patients are at home.

We've begun to develop and publicly make available performance measures for various types of providers. It started with heatus measures for HMOs, but it's expanded as Mark told you through acute care hospitals, home health agencies, sniffs(?), various types of physicians.

And as Meredith has elaborated on, some plans have even begun differentiating provider payments based on performance. But the overall amount of this relative to how much we pay to providers is pretty minuscule at this point.

There's also been a lot of efforts more recently to measure effectiveness, comparative effectiveness, and even cost effectiveness of certain drugs, devices, and procedures. But I can't say a lot of this evidence that we have gathered has played an important role in coverage decisions or un-coverage decisions, which is what it should be playing a role in.

And we've begun encouraging a lot of strategies to manage chronic care and to manage certain diseases. In theory, all of these efforts should work to close the gap that this conference is focusing on, but in practice, as several of the speakers have mentioned, the jury is really out. We don't know how effective this is going to be.

My own feeling is that all of these efforts, even under the best of circumstances are likely to produce only a very modest narrowing of the gap between practice and potential unless we're also willing to undertake additional steps to spur some very fundamental changes in the structure of the healthcare delivery system and the ways we choose to finance all our healthcare in the discretion that we leave in the hands of both beneficiaries and providers and in the extent to which we cover the uninsured.

And such changes can come about through wrenching reforms of the sort that were proposed in the Clinton Administration or in more evolutionary ways. We've tried both and I think the bottom line is neither has succeeded at this point. But hope springs eternal and the magnitude of the problem means we will revisit it over and over again until we get the right outcome.

From what you've already heard, it's obvious that the structure of the healthcare delivery system has to change if we're going to develop a system that produces high quality care in an efficient way using resources parsimoniously. The current system, as you've heard over and over again is siloed, fragmented, uncoordinated, duplicative, and inefficient.

We all know that producing high quality healthcare is a team effort team sport, not an individual sport, one in which there has to be an accountable party that in concert with the individual patient defines appropriate care and that care should be defined across a lifetime, not a year; organizes that care; allocates resources for the most appropriate providers; educates and encourages the patient to shoulder his or her responsibilities for good care; and monitors the results.

In short, you know, healthcare is a lot like a football team. You need a general manager, a coach, a quarterback, journeyman players, scouts, and others. But what we have is a bunch of individual players, each wanting to be the

quarterback running around the field, which doesn't have defined borders or a common play book or a common set of signals, and we pay them for doing it.

To mix the metaphor even more, we have patients who want to graze freely on the open range consuming as much or as little as they want wherever they choose to wander on the commons. We tried to limit this in the 1990's, and there was a backlash. And now we're probably back where we were in the late 1980's.

We have providers who want the freedom to organize themselves and build institutions without regard to any rules or zoning regulations. We equally support solo practitioners, small groups, and multi-specialty groups. Dr. Lee suggested that small groups, and I think he's correct, can never have the inherent capabilities of doing what has to be done to ensure high quality integrated care.

And at some point, we have to say no, but nobody has had the guts to do it because of the likely consumer backlash here. And so the consumer backlash has affected both our attempt to limit what the patient has in the way of options and with respect to providers as well.

We've allowed a proliferation of institutions, be they specialty hospitals, rehab and long term care facilities, ASCs, imaging centers, et cetera, et cetera to further fragment care and encourage overutilization. And many of these

largely exist because of distortions in our payment systems, which they're designed to exploit.

And all of this persists year after year in large measure because of our financing and payment systems, which at best support this inefficiency and at worst strengthen and reinforces it. In short, we don't have our financial incentives aligned to encourage the behaviors that will improve quality, encourage efficiency, and slow the rate of cost growth.

We pay for quantity, not quality or what we should pay for with, ideally, which is health outcomes. We have a very distorted payment system. We saw one example of it and the question or the anecdote about the dermatological services that the doctor received and a price that was charged for that.

And those of you who are in the Medicare world know this full well, but we devote totally inadequate amounts of resources to calculating and updating and changing the relative payments that are made to various types of providers for various services that they provide. And some people say well, it's Medicare and it's screwed up, but one has to realize that this payment structure is relied upon by many, many private insurers when they set their relative payment rates as well. So this is a serious issue.

The other members of the panel discussed two of the silver bullets du jour for changing these incentives that we have. Pay-for-performance is

focused on improving the supply side, providing payment incentives that are going to encourage providers to improve quality and moderate cost growth.

Steve Shortell and Elliott Fisher and I served on this Institute of Medicine Panel, which in September issued a pay-for-performance report that recommended that – sorry, Michael – that pay-for-performance be phased in for the Medicare program. And I'm also the vice chair of the Medicare Payment Advisory Commission, which for the past several years has recommended a similar policy change. While I do think that some deliberate but modest steps in this direction would be beneficial, my immersion in this topic over the past couple of years has left me with an appreciation for the overwhelming complexity that's going to be involved in getting it right because of the fragmented nature of our delivery system. In short, I share a lot of Michael's hesitation about this and even Meredith's concerns about going too fast too soon.

The development of a robust set of accurate and timely performance measures is really a huge challenge. Scaling and combining individual measures into a composite index, the providers will find fair, understandable, and actionable raises numerous methodological issues.

You can think of, you know, all these individual measures we have. You know, were you given an aspirin when you entered the hospital after a heart attack? You have that. Were you given a beta blocker when you left?

What's the excess mortality rate in that hospital? Do you add those up just like that?

I mean certainly some of them must be a little more important than others. And then you think about how you would actually do this, and we could have NASA devote 10 years to this, and it still probably wouldn't be satisfactory.

Both the ION panel and Medpac(?) believe that pay-for-performance should reflect the shared accountability for medical care so we don't find ourselves strengthening the silos. But with few exceptions, our fragmented system doesn't provide easier or acceptable ways of doing this. Who do you give the performance bonus to, if you think about this, when the care has been provided by primary care doctor, four specialists, a hospital, a home health agency all working together to produce the result?

You get Elliott and others who are working on innovative arrangements to overcome this and you have some integrated health systems in the Boston area, the Mayo Clinic, Isinger(?) and places like that where you might find an answer to this, but in the vast swath of this country, there isn't an obvious place where these resources could go in a pay-for-performance system. And so, they'll have to be some wrenching adjustments or very unequal distribution of pay-for-performance bonuses if you were to go forward.

And then there are the problems that arise from the need to reward not just clinical quality or patient satisfaction, but also efficiency for which we have very few, if any, robust measures. If efficiency is not part of the game plan, we're going to find that we might improve quality, but we're going to push up costs a whole lot.

The standard approach to examining efficiency is to look at resource utilization across episodes of care. And you define episodes such as the year after a specific diagnosis or the two weeks before a hospitalization and the six months after a hospitalization and all of the care that is within that area that relates to the diagnosis.

Medpac has done some pioneering work in this area that illustrates how complex it's going to be to provide accurate and effective efficiency measures. Some of this group and this work grew out of a rather surprising finding last year, which was Medpac's staff produced a table that showed that for a number of diagnoses, coronary artery disease for one, the resource intensity of episodes of care for CAD in Minneapolis was significantly higher than it was in Miami. And this went against all of our common knowledge that Miami is very inefficient place and Minneapolis is one of the more efficient.

This is measuring resource use by standardized dollars for procedures, so there's no – and there's some risk adjustment involved in this as

well. Well, the Medpac staff drilled down a little further into this and it found surprisingly enough that for the average CAD diagnosis in Minneapolis, they used more high cost stuff, like hospitalizations, than they did in Miami.

So then they drilled down to the next layer and what did they find? They found that the fraction of the Medicare population in Miami with a CAD diagnosis was 23 percent. And in Minneapolis, it was only nine percent. And so, then we looked at the two types here, the diagnosis only people and those who got some kind of treatment. And you found that folks who got treatment actually in Minneapolis received 12 percent more resources than those who received treatment in Miami. But for the diagnosis only group, the ones that came in and were diagnosed but didn't do any significant treatment, it was twice as expensive in Miami as it was in Minneapolis.

By now, you're supposed to be confused. That's the purpose of what I'm doing. But it gets down to how difficult it's going to be, because you have to come up with some notion for particular conditions what's the right acceptable level in different geographic regions or for different patient populations. And unless you can do this in a sensible kind of way, pay-for-performance is not going to lead you down the path we all hope that it will.

Kate's presentation focused on the demand side of the equation, ways in which patients might be incentive-ized to become more cost conscious

and more informed consumers of healthcare. And she's an advocate of catastrophic health plans and health savings accounts and changing in the way we treat health expenditures in the tax system.

I have a lot of reservations about this, and I'm not going to go through them in detail, so we'll have some time for Q's and A's. But I'll just tickle off what concerns me most. First, I think like the managed care revolution of the early 1990's, I have the feeling that the make the consumer king movement has the cart before the horse in the sense that she's willing to admit that we don't really have as much information and knowledge as one needs to make the system work.

And so, you run the risk of creating a new system which people then frustrated with and we have a backlash as we did in the late 1990's, where consumers said, you know, you gave me managed care and they just stinted on the care I had and didn't give me any kind of information that I was getting higher quality care. And in many cases, of course, they weren't, but – which was why they didn't get the information. But there was no attempt to gather that information before.

Second, even for something as vital as healthcare, I think there's a sizable portion of the population that can't or may not want to shoulder this much

responsibility for decision making. They don't want to invest the time, the effort to make sensible choices.

If we look around at the way people consume or invest in other very important issues, you know, how they treat their retirement savings, the purchase of a home or a car, decisions about mortgages, how they treat credit cards, how they choose spouses, you know, it is clear that you know, a high fraction of the population is not the rational consumer that the economists, analysts, lawyers would like to see everywhere. And I think we have to reflect that in the way we design our healthcare options.

Third, I fear that the approach that's being advocated here could easily strengthen the fragmentation of our delivery system. Most, I think, Americans like that aspect, the fragmentation. They don't realize the down side of it. And if they're in this free range environment as individuals, they're going to fight hard to keep it that way.

Fourth, I think there's a danger that quality of care over a lifetime could be jeopardized by the myopic nature of consumers who may be incentive-ized to invest less in care when they're young than they should for an optimal healthcare situation over their lifetime.

Fifth, I think that structures like the one Kate describes could prove to be unacceptably inequitable unless contribution limits to HSAs, premiums,

deductibles, or coinsurance amounts are varied with income and with health risks and unless the tax deduction has transformed into a credit. And I know she would agree to some of these things, but they aren't there now. And given that they aren't' there now, I don't think we should get on the horse to ride.

Sixth and finally, I worry that overall expenditures related to health could rise. And I say this not because health expenditures narrowly defined will rise, but the amount that we devote to it. And I had this -- you know, everybody gets to tell one anecdote.

And I had the decision making process of was I going to offer high deductible savings account plan in the Urban Institute. And I brought my research assistant in and we discussed what our behavior would be. And of course, he would sign up for it and he would, you know – I would make my deposit to his health savings account, and he'd be healthy as a horse for the two years before he went off to graduate school. And he would say goodbye to me, take the money, pay the 10 percent penalty, tax penalty, and go to Europe, or pay his graduate school tuition at Princeton.

And it wouldn't show up in the health accounts. Gabe would come to me and say see, we've saved. But it would show up in the entertainment account of young people. And I, as an employer, am not sure that's where I want the dollars that the Urban Institute spends, thinks it spends on healthcare to go,

especially when by making the choice he did, the premiums that I would have to charge myself, who would stay in the other option, would be higher. Thank you.

(Applause)

MR. HELLMAN: I know time is late, but we'll take just a few questions for Kate and Bob and try to stop at – as close to 5:00 as possible.

Right over there?

MR. LONDON: Yes. I'm Paul London. I asked a question earlier. I think the key to this is still the information systems. I mean I've thought for 8 or 9 or 10 years and I think the Institute of Medicine has thought since 1991 that we needed at least information systems so we could look at, you know, doctors weren't handling these little notes.

That being said, I think people, whole, want to restructure medicine, and they don't look at an industry like trucking. I mean trucking in 1980 was significantly restructured. And the government didn't think of everything that had to be done to do this restructuring. It opened up the market to a certain amount of competition. It set standards for safety, and it sort of let a lot of other things so.

And I think that, you know, the same thing happens – and companies come and go. MCI came into the telecommunications area and looked

like it was going to eat up AT&T and then it sort of disappears. You know, these kinds of things happen in other parts of the economy.

I think it's awfully ambitious to think that you can actually sort of think some plan up ahead of time that will restructure healthcare. I think you sort of got to figure out a few things that you ought to do, and I think medical records are way up there and that people ought to require this. As Newt Gingrich says, Make them do it. And just make all the doctors do it, and if they – you know, they all have computers in their offices. They use them to follow their stock. I mean, this is not some huge expense.

So, you know, I think you do that and then you don't try to restructure everything else. You see what falls out. Otherwise, it's such a daunting challenge.

MR. HELLMAN: Do either of you have a comment?

MS. BAKER: I'll make two responses. First, I think it's an important point you're raising that you can't just overhaul the whole system and start over. I think if any of us were designing a national system for delivering healthcare, we would end up with nothing like what we have now.

If we got to start over, that would be great. But we don't get to start over. We're stuck with this employer system for private health insurance,

and that's where a lot of risk pooling takes place. We're stuck with this vulcanized set of overlapping programs.

We have to think about reforms that will not disrupt a lot of the important functions of the market, and that's why some of the incremental approaches that people are talking about, I think, are great steps in the right direction that we can't pretend are the magic bullet to fix everything. But I'd be pretty afraid of the magic bullet because it comes at you really fast. So, I'm glad to start with some incremental approaches.

And in terms of picking low hanging fruit, information technology seems like a really important place to start. And the federal government buys a lot of healthcare, both through programs like Medicare and Medicaid, but also just through the federal employee's health benefit program. There's a million enrollees. Well, that's a place where you could demand better information be available.

And if the federal government starts with that leadership role and has done under (off mike), through Medicare and continuing on, and with the recent executive order promoting health IT, that's a way to use both the bully pulpit and the buying power of the federal government to get the ball rolling on standards for information, so that people don't have to guess about the way that

information is going to be uniformly collected and used both to generate quality measures and also just to generate better electronic medical records.

MR. HELLMAN: Bob, did you have any comments?

MR. RISHOUER: Yeah. The government never paid for 50 percent of trucking, so I think in the end, the nature of the product really is quite different. And the question here is if Dr. Lee and his group can provide high quality care more efficiently and a lot cheaper than an uncoordinated group of providers in the Boston area can, shouldn't we, as the person that's paying 50 percent of the total bill, you know, steer our patients towards that as opposed to what we have generally done, which is say well, you know, that kind of provider needs to be the other kind, needs to be kept in business and provide stronger incentives.

And I don't – I'm not a bomb thrower or a radical. I don't disagree with what Kate said, I mean, but I think we want to move very slowly and in the ways that seem to be the most efficacious for getting this – a more integrated system going.

MR. HELLMAN: It's 3:57, and the last word goes to Henry Aaron.

MR. AARON: Well, thanks to everybody who has presented and stayed through the afternoon session. I have – I would like to recall the speakers

to the presentations that were made in the morning. I don't think that Tom or Dennis were talking primarily about issues of access.

And I don't believe on balance they were talking primarily about issues of cost. They were suggesting that for the money we're spending for the population we now cover, we could do a substantially better job of delivering high quality care to close the gap between what healthcare could deliver and what it does deliver by relying more heavily on large integrated group practices organized possibly in different ways. Mayo is different from (off mike) is different from Kaiser and so on.

My question is do either of you, taking that as the objective, see instruments available to public policy to encourage patients to move into such organizations. The presupposes that they're basically correct in their claim of better quality. What could we do to encourage, to bend the playing field a bit to favor that kind of organization?

MR. RISHOUER: You know, if you want to not bend it but force it, you can have conditions of participation in Medicare that say you have to reach certain thresholds of quality.

MS. BAKER: And if you wanted to go in smaller bites in that direction, we've seen a lot of innovation in the Medicaid waiver process for

different types of insurance products, but we haven't' seen a lot of experimentation with different rewards for quality through that program.

Maybe that's an avenue to do some experimentation at the state level, because we know that there needs to be a critical mass of providers and consumers who are aiming for that kind of care. We know that the way a patient gets treated when walking through a hospital door is not just a function of that patient's insurance status and that patient's preferences, but everybody else's as well.

We know there are these huge variations in practice pattern that are driven by capacity, that are driven by norms, that are driven by different insurance pools and all of that. So, it's hard to really know from the small scale experiments that we've seen what would happen if an area went more whole scale, full cloth in that direction because we know there are those spillover effects. So, we're not there yet.

MALE SPEAKER: I think there's a huge problem in this sector. If this were mobile phones or trucking or anything else, there would be CEOs and others who would want to expand the business, but I think, you know, when you've come to partners or Kaiser or Isinger or anything, there's limits to the desire of the management to double the size of the patient base or the number of docs in the hospitals they're dealing with.

And so what you want to do is replicate then so that the Boston area has five of these things, you know, then although they all say – and that's a very different challenge for you.

MR. HELLMAN: Thank you all very much for – let me thank the panelists for an excellent discussion.

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