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FALK AUDITORIUM

WORLD CLASS: A CONVERSATION WITH AUTHOR DR. WILLIAM HASELTINE

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PARTICIPANTS:

Welcome and Introduction:

JOHN ALLEN, President, The Brookings Institution

Keynote Remarks:

DR. WILLIAM A. HASELTINE
Chairman and President, ACCESS Health International, Inc.
Chairman, William A. Haseltine Foundation for Medical Sciences and the Arts
Trustee, The Brookings Institution

Moderator:

PAUL GINSBURG
Director, USC-Brookings Schaeffer Initiative for Health Policy

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P R O C E E D I N G S

GENERAL ALLEN: Ladies and gentlemen, thank you for joining us this afternoon. I'm John Allen; I'm the President of the Brookings Institution. We're very pleased to have you here this afternoon and to welcome our Brookings Trustee and featured guest this afternoon, Dr. William Haseltine.

From 1976 to 1993 Dr. Haseltine was a professor at Harvard Medical School in the Harvard School of Public Health where he was the founder and the chair of two academic research departments, the Department of Biochemical Pharmacology and the Division of Human Retrovirology. He's also known for his pioneering work on cancer, HIV and AIDS, and genomics. He has authored more than 200 manuscripts in peer review journals during his career.

Dr. Haseltine is also a pioneer in the field of biotechnology, having founded more than a dozen biotech companies in the fields ranging from development of cutting-edge pharmaceuticals to new materials and fuels. He is the founder of Human Genome Sciences, Inc. and served as the chairman and CEO of that company for 12 years. Today Dr. Haseltine is the chair and president of Access Health International, Inc. and is also the chairman of Haseltine Foundation for Medical Sciences and the Arts.

Relevant to today, Dr. Haseltine is also the author of numerous books, including the management and leadership best seller, "World Class: A Story of Adversity, Transformation, and Success at New York University Langone Health", from which we are gathered here today. It's excellent book, but it's also a subject where he'll talk about increasing hospital productivity. And it's also the subject of an upcoming panel that we'll be running here at Brookings as well.

So, Doctor, please know that both in your capacity as a Trustee, but as a friend, but also as a Doctor which such great experience under your belt, that we not only

deeply, deeply appreciate your assistance to the institution, but your presence here today to talk about your book.

Now, after I've concluded, the Doctor will talk for about 15 minutes or so, and then he'll be joined on stage by Brookings Senior Fellow and Director of the USC Brookings Schaeffer Initiative for Health Policy, Dr. Paul Ginsburg. We'll go for about 25 minutes in the conversation and then go to Q&A.

As a final reminder, we are very much on the record.

So, Doctor, thank you very much for joining us, and please join us up here for your comments. (Applause)

DR. HASELTINE: Thank you. It's a different experience for me to be on this side of the podium, having spent many years on the other side listening to our various speakers. So thank you for the opportunity.

Let me give you a little background about why I wrote this book and actually created the Foundation, of which this book is one part of -- it's an expression. That is through my activities as a scientist, as a businessman, as somebody interested in health for my life, I've been really concerned about the rising costs and poor quality on average of American health. We spend a lot more than any other country and we don't get very much on average for what we pay. In fact, our costs are rising so high that I've seen the former chairman of the Joint Chiefs say from this podium, the biggest strategic threat to the United States is healthcare costs. That gets your attention.

Then I remember studies very early on sitting on the board listening to Bel Sawhill talk about restoring fiscal sanity and the curve of rising healthcare costs as driving most aspects of the Federal budget going forward, and the huge efforts to bend the curve so it wouldn't continue to rise and eat up all our discretionary spending.

Those were real motives that came from my knowledge at Brookings and

actually what I saw. The thing that's a little puzzling there, a little bothersome to most people, is people in this room have access to good care. That isn't typical of our fellow Americans. Our fellow Americans do not have access to great care. And it isn't because we don't have it available, it's we don't distribute it properly, and we do it very inefficiently. Even our best systems are somewhat inefficient.

So I began my Foundation by looking around the world at places that do various processes efficiently and can we bring those back to the U.S. Very quickly I learned that the answer to that question was no, we can't, because all of those things they do so efficiently were invented here. Let's take a doctor who does 50 cataract surgeries a day for $25 each. Well, we could do it, we're just not organized to do it, we have no incentive to do it. Or our heart surgeons, I know many that do 2,000 operations a year on beating hearts, which is safer by the way, for about $1,500-2,000 each. Better surgeons, efficient. We have invented all those processes, but it doesn't translate to the complexity of our system and how we are arranged. Not that we couldn't do it, we have no financial or organizational incentives to do it, and we don't seem to have the pressures to do it.

So what I then did is look around the world for the best examples of healthcare that I could find, study it as I learned to do at Brookings and as a professor, in great detail, write book about it and essays, and then try to work with people to make change.

So what I've done over the last 10 years is build organizations that are active on the ground in major countries -- India, China -- and then not so major countries, like Singapore, Philippines, some places in Northern Europe, to try to influence people of good will who are trying to make a change and give them the tools to be more effective. And I have to say in some cases we've been pretty effective. We're very close advisors to the central government in India right now and some of the large states. One of the states has

220 million. So I give you a different idea of scale. You know, when you work in China and India, you're talking about 50-60 million people at a pop. And for me, my fundamental belief is every human has the same value, every human life has got the same value. To me, I prefer to improve American lives, but if I can improve Chinese lives or Indian lives, or people's lives in South America or Africa, I'm happy to do that as well. And it seems that the richer and more powerful you are, the harder it is to make a positive change. If you're really desperate, then it's easier maybe to make changes under some circumstances.

And in the course of writing these books a lot of my friends said, why don't you look at our country, for Christ's sake -- we need help right here. So I started to look around and I was fortunate to find a very good example of change right here, right in my neighborhood, which is I live in Manhattan now, at NYU Langone. And it's a story that I came across by accident. I was on a board at NYU Shanghai on innovation. They wanted NYU to come to Shanghai to help them, teach them about innovation, and it's a liberal arts college. And I thought maybe we could do something with an area. I know something about biomedical research and medicine. And when I went to see the CEO and chairman at NYU Langone, he very quickly told me absolutely not. We are focused on being best in New York, best in the world right here. I don't have any energy to do this. I can advise people if it doesn't take too much of our time, but that's about it. But let me show you what we're doing. And when he took me into his conference room and fired up his dashboard and showed me what he was doing, I couldn't believe it. I had never seen anything like it. It is what information should be at its best. It's like your dream of what information systems should do and almost never do. I mean Google does it really well, Amazon does it really well, but how many other really complicated systems like an academic medical center does it well?

And then I decided it was so unusual I asked him if I could write a book about it, and so I did. And that's how it came to be.

And I've learned some really fundamental lessons. A first lesson I'd like to abstract from this is that the debate that we hear about healthcare every day is who is going to pay for it and how they're going to pay for it. They don't really talk about what you get for what you pay. First of all, in America that's a bad discussion, because we pay a lot and get a lousy healthcare system. Slovenia is ahead of us. Slovenia. Cuba is ahead of us in healthcare outcomes. What are healthcare outcomes? There's a report by the National Academy of Medicine, it's titled "U.S. Healthcare in International Perspective, Poorer Health, Shorter Lives, Especially for Women." Not a good title. And we've just slipped down the international ranking from I think 35 to 36 in total outcome. And what does outcome mean? It means infant mortality, three or four times higher than it could be, maternal mortality, deaths under five, and longevity. And as you all know, our longevity is slipping a bit for one reason or another. That's not good for a country that spends $3.2 trillion on health, something like 17.9 percent of our GDP.

There's a lot of room for improvement. So the debate is on how we pay for it, what we're going to pay for it, not necessarily what we get. And, secondly, it's not about what providers can do to improve themselves. This book, "World Class," takes one institution and really the way to think about is like a massive Harvard case study. It's like 10 case studies all put together into 1 book of 1 institution over a 10-year period. Subtitle of the book begins with the word "A Story of Adversity". They were in bad trouble, they were going to bankrupt the entire University, they were losing so much money. They were protected by a patent which is about expire. And so the University's reaction was get rid of them. But when they got rid of them they came back $500 million more in debt. They put a wall between them that says your money is your money, our money is our money, you may sink but we'll still survive, but without a medical school or a hospital, which they didn't want. That was the first thing.

"Transformation" is the second title, how they transformed themselves. Today it's a great story of success. And I was very pleased -- this was written as a business book also, but it's a best seller in the category of leadership and management. Just without hospital, leadership and management -- period. Why? It's a story of how they did it. They went from losing $150 million to making $200 million this last quarter -- this last quarter. That's their surplus. They went from number 60 out of 90 in quality and safety to number 1 out of 120 academic medical health centers in quality and safety. They went, as a medical school, from rank 40 to number 3 in the country, ahead of big names like Penn and Stanford. That is an amazing transformation. And they quadrupled their research budget and have the highest per capita NIH and other extramural funding per scientist in the country and are rated the best biomedical research institute in the State of New York by international rankings.

That is one story. But let me tell you another story, which gives you a different view. And that's a story which I was telling our colleagues, the other day I was going out to Bushwick, sort of the latest rundown part of New York where the artists have migrated. Pretty soon it's going to be gentrified and they're going to have to move somewhere else. But it's sort of like the Williamsburg before Williamsburg -- or after Williamsburg. And so I'm in an Uber and I of course am talking about the new book and how excited I am, and the Uber driver says, I have to read that book, which is great for an author to hear. It's wonderful when the Uber driver wants to read your book. I said why, and he said my family uses NYU Langone Brooklyn. Now what was Brooklyn? Brooklyn is a safety net hospital that was taken over by NYU about three years ago, and it's got the highest Medicare and Medicaid uninsured population in the region around it in New York State -- 85 percent -- and had gone bankrupt and had pretty lousy quality. Today it's making money -- just a little money, but it's making money -- and the quality is the same as NYU, one of the

best in the country.

You can take these systems and transform even a safety net hospital. And he was excited because he was telling me what great care he gets now at NYU Brooklyn and how bad it was before, how great it was for his Arabic speaking grandmother, who actually was able to see a doctor and had follow up. That's on the ground validation for what these systems so.

I didn't realize it until after I had finished the whole book and started speaking to people about it, what the core of the transformation was. And I'll just give you something to think about for a minute -- there's one thing that has reached attention, almost everybody in the world, about NYU Langone that didn't before. Nobody knows about this transformation, by the way. Most hospital directors don't know it, people in New York don't know about it. Hopefully my book will bring it some attention. But they gave free medical tuition to all entering and present students in their system. As different as that decision is from others in the country, is as different as everything they do. And that is pretty different.

Now, ask yourself why they would do that. If I'm the dean of Stanford or I'm the dean of the University of Chicago Medical School, I'm saying oh, my god, I'm going to have to do that too, and they're going to compete with me. The fact is NYU Langone had the best students anyway, they're not going to get better students by doing this. So why did they do it? They did it because they have a singular focus, and that goes through every single thing they do on what's best for patients and what's best for American medicine, in a very deep way. So they want people who should be doctors and have the drive to be doctors, to be able to be doctors. And they want them to be the kind of doctors they want to be without looking at a $300-400,000 debt.

They had an instruction to make a difference to medical education, and they created three-year medical school, which is now free, and they've revamped education.

That's why they're genuinely recognized to be one of the best medical schools in the country. But they did it for patients. They reorganized their entire way they treat patients. They don't treat patients in hospitals unless the absolutely have to. They do outpatient care. Eighty percent of their surgeries are outpatient today, 95 percent of their income is outpatient. That's best for patients, it's where they are, it's safer. So everything they've done, including how they've organized their research, is with a patient orientation. And it's not -- we were just in China where a bunch of the American hospitals were talking about medical tourism, and I thought I was at a hospital convention. They were talking about patient centered and they were talking about hospitality. Hospitality is part of it and I don't want to minimize it, it's an important part of it, but it's not the core of what a health system does. It delivers high quality, convenient, safe care that cures your problems, and does it in a way that is affordable to you. That's what healthcare does. And in the meantime, they smile and they're nice to you, and they make you feel good, and they give you information about your system.

There are many, many lessons in this book. There are business lessons, healthcare lessons, information technology lessons. I'm happy to speak with our interlocutor about any of those questions and take your questions, but I hope you find this book interesting. I hope it can make at least a small difference to what we're doing in healthcare in this country, move the debate away from only how you pay for it to what you get and what the provider's responsibility is, and what providers could do, even in this very complex environment. Their goal at NYU is to say what can we do best independent of what those guys in Washington, the state house, and the mayors' office are going to do to us. We're going to be best and we're going to cope with whatever they give us.

So, with that. (Applause)

MR. GINSBURG: I really enjoyed reading the book a few weeks ago.

DR. HASELTINE: Thank you.

MR. GINSBURG: I'm glad you wrote it because -- and I guess what motivated you was that something important happens and that people need to learn from it.

You answered some of my initial questions, but actually let me start with you place a lot of importance in the integration of the medical school with the hospital and the decision to have one executive who is responsible for both. Could a capable but lesser leader have succeeded in this role? And have you seen other academic medical center pursue such integration?

DR. HASELTINE: This is a little bit inside baseball for academia, but we're all kind of academics here and come from academics.

In an academic medical center you have doctors who have two responsibilities, they have a teaching responsibility and they have a hospital responsibility. And it is a nightmare to manage if those are handled by a dean and a CEO because you're drawing on different resources, you're fighting over budgets. And I come from a system like that at Harvard. It's a little bit difficult to describe how horrible that could be, but I'll just tell you one story. The guy who eventually became the dean and CEO had a pipe break in his office about a week after he arrived. Three months later, nobody came to fix it because the two deans were fighting whose budget it was going to come out of. Well, if that happens over a broken pipe in your office, what about your surgeon's time, et cetera.

So one of the key decisions was to unite the two. And my recommendation for any medical school in the U.S. that can do it, any new medical school, and there are a number I'm helping to advise to be created with hospitals, make one CEO, make one dean, then you have a united budget, you have a way to organize and really make it. So I don't think they could have made these changes without that. And that gets into a whole other question about how important boards are and how important the leaders is.

But you asked the question, could another leader do the same thing.

MR. GINSBURG: Yeah, it's a matter of how doable is that job by a capable person.

DR. HASELTINE: Well, let me say, are other people doing it. A friend of mine, Ed Rush, a very close friend, has just been made, in a brand-new title, the president of all the education and all the hospitals, and they never had that title before. And I think this is part of the inspiration that's going on, and people are beginning to do that. There are a number -- at Penn they did the same thing, and I think it's a rational decision.

Some places are so complicated in their structure that you can't imagine that happening. But if it can happen, it should happen. And that makes the leader's job much easier. He doesn't have to be such a great leader to dominate one or the other. Usually one dominates, right, the other guy is subservient, and then there's some kind of a change in there's always fights. So I think it makes the job of a leader easier.

MR. GINSBURG: Thank you.

You talked about how important the very large investments in health IT were in the success of the NYU Langone and transforming, so can you tell us a little bit more about the role that that plays?

DR. HASELTINE: Let me tell you what I saw when I went into that office for the first time and he fired up his computer. He said, let me show you one thing, we do everything in real time, and I mean real time, he said. How many people right now are waiting in the emergency room and there they were, seven people, and each one had a number. And, by the way, that number was on the board in the waiting room as well as on his computer in the office. Where did they go and how long have they been and where have they all gone, in real time. He said, you know, we have metrics, we measure everything. Like we're really concerned about the safety of blood in New York and how expensive it is.

So this is how many units we want to use. Let's see how we're doing. Bingo. You see what the goal is and where you are. Let's see for a hip replacement who is using a lot of blood and who isn't. Bingo. It's there. Now, these people should get together, and they do get together, to try to reduce blood levels, and this is what's happened over time.

The same thing with infection rate. Anything you want to measure is there. It's in real time, it's measured, so all the clinical measurements are there, not only for the hospital. But one of their key decisions was to go from inpatient to outpatient. They're shrinking their hospital beds, turning them all into single beds, fewer, safer, and have built -- move from 4 to 400 outpatient services. That's all connected by information. And it's not only vertically transparent, it's horizontally transparent. So every doctor can see what every other doctor is doing on the same kind of procedure. Doctors generally don't know if they're good or bad. They know what they do, they all think they're good. Some are, some aren't so good. And so they actually can compare. And if you want, they can go right into their other patient's record if they need to, to actually see why that guy had an infection or didn't, and so can the boss. They set goals for everybody and they give them a cash bonus if they are a doctor, and they give research money if they are a researcher.

They built a system in which there is no interface between any input and any other system. Every system -- so let me tell you what it is like as a patient. After starting my (inaudible) book, I became a patient for a couple of things I wish I didn't have, but I'm happy I was at NYU when I had them. And I filled paperwork out once in three years, four years -- once. Now I put my hand down, it takes a palm print, and the only time I sign paper is for special permission, that's it. And every doctor has on their -- they have the information, what every other doctor has done in a very clear and transparent way. And when I go home I get their notes for what they put in. I see the X-rays, I see the MRIs. Within five minutes or fifteen minutes from the time I had my blood taken I get the doctor's

office, the results are there. That's what an information system can do for you. It's an amazingly efficient system.

And it goes right through for education and research. It takes -- the asset management question -- it takes a singular focus. How did they build it? First of all, they put a lot of money into it. It cost about $1 billion.

MR. GINSBURG: Actually, when you go on, if you could clarify what do they have to do besides saying, okay, I want epic.

DR. HASELTINE: Okay. It wasn't just epic, it's about -- I'd say about 30 systems if you integrate all together, and it makes them no interface. You know, what I learned in discussing it with these -- and the way I did this is I interviewed most of the people who made these changes over a period of three years -- recorded them, transcribed it, edited it, because most people don't speak English, including me, and you learn a lot by doing that. What the key is, is not the hardware and the software, although it's important to make sure everything is integrated, the hardest part is to get the humans who are doing the work to input the data in a smooth fashion. And they have about -- an ever-growing group -- it's at least 200 people by now, about 30 doctors, nurses, med techs, that fan through the hospital working on process, to make sure that that process doesn't interfere with the work and doesn't interfere with the patient interaction with the doctor.

Then they have other systems that use that to optimize for cost and quality and outcome. So they look at the data and they then adapt. So they have two other units, one that's working on value based medicine and another that's looking at process change to make it even more efficient. And it's that effort that goes into it, not just the software and the hardware, although that's important.

Now, how did it come to be? And I think this is I think an important lesson. When Bob Grossman first got there, the dean and CEO, he said I need information, three

months later he still didn't have it. He said I'm flying and a 747 is about to crash. I don't know where the switches are, I need the information. Somebody three layers down in the organization who installs the equipment said, I know where the information is. He said you do? He said, yeah, and I can solve your problem, but I have a condition. What's the condition? That I meet with you and not your direct reports. That's an important lesson for information.

There are two lessons I think from this. And I ran a company myself that was dependent on information. You need a singular mind to build an information system. Now, that's a hard thing if you're talking about building an information system for the United States. Is there such a mind, and where would it sit? In India they built an information system like that for their entire population, not for health but for every economic transaction. And they identified everybody and they built a great information system that allows the government to give you as an individual $2 if they want to, or you to pay your taxes. It's totally an amazing system. So it can be done, but they built it with just very few people -- three people from Infosys were the brains for that system. So it can be done for 1.2 billion people, but it's got to be singularly directed and it's got to have -- to make it work, it's got to have almost a maniacal focus to make sure it continues to work and to improve. But it is really important.

The original subtitle of the book was going to be successful management in the information age, because this is a story -- and let me just tell you one other thing about this, because it's so important. Chandrika Tandon, whom some of you may know -- she gave a lot of money to the Engineering School at NYU -- is a senior management consultant. Just because she was interested, she was on the board of other parts of NYU, got interested in what was going on early on. She consults to the top Fortune 50 companies. She said this information system is the best one she's ever seen, because not only is it comprehensive,

it's real time and actionable. Now, maybe our friend here who is in the military has seen systems like this, but they are very, very few and they really take a singular focus to build.

MR. GINSBURG: Thank you.

You have a great section of the book on changing a culture without inciting a revolution. If you could elaborate for this audience.

DR. HASELTINE: Well, I'll tell you that one of the things that I think Bob Grossman's most pleased about is that they made major changes, some of the ones I had described, but let me just tell you a couple of others. The day he walked in, he walked out the top three executive officers of the hospital and the top four executive officers of the medical school. All gone. All senior leadership out the door. And in two years he changed 30 of his 32 department chairs based on their qualitative performance, their quantitative performance, not based on what people thought of them. Just showed that they weren't doing the job that their peers were doing.

Yet there wasn't a revolution. He actually required that if you were a researcher that 67 percent of your salary had to come from your grants -- at Harvard it was 100 percent -- or your salary was reduced, even for the tenured professors, and he was, of course, taken to court and he won.

So how to do that without a revolution. It isn't that there were some people who were unhappy, and it isn't that there weren't some people who went to their friends who were their patients, it isn't some of the patients were billionaires who happened to be on the board -- all that happened. But it was managed, and it was managed by a very fortuitous group of people. Marty Lipton, one of my lawyers and one of the great business lawyers in the world, was chair of the board, his great buddy, Ken Langone, was put in place to be the head of the board of the medical school, and Langone chose Grossman to be his guy, and Langone is one of these guys who supports his guy and had enough clout to beat up the

other billionaires on the board. That is one of the ways it happens. That's the actual story of how it happened.

Now, can other places do such a thing? There are other circumstances where you have independence, but I think that this is a story in some ways was unique because it was a bankrupt institution, a financial wall was put between the finances of the medical school and the hospital and the university, and you had people who had a lot of clout which were able to protect, support, and nurture the CEO. And I don't think the CEO understands all the things the University did for him. He understands what Langone did for him, I don't think he necessarily understands all the thing the University allowed him to do.

But I think those are very important lessons for anybody who wants to make these kinds of changes. You need to have very determined leadership. And it's not just the leader you pick, it's the overall environment that you allow that leader to function in, which is a critical element of success.

Now, there's a book that I read called "Partners in Command". I don't know if you've ever read that book. I'm sure our esteemed leader has. It's on Marshall and Eisenhower. You want to talk about that kind of relationship, it's the kind of leadership between Langone and Eisenhower in the European field. There's really that kind of relationship. It's empowering, protective, at the same time.

MR. GINSBURG: Okay. You know, you mentioned the book about all the physicians that had been attending at NYU Langone who were made -- you know, recruited to be employees. And that's not very different from many other hospitals which also brought a lot of attending physicians in as employees. But what is different is that NYU Langone had success with it in a sense, and most of the hospital has found it raises their costs, they are not getting the quality benefits they had hoped for.

What stood out for that to be successful?

DR. HASELTINE: I think there are a couple of points you raised in that question. His questions are very deep and multilayered, I've discovered.

The first is there's a major transformation in American medicine from the power of the individual practitioner to the system. Whether you like it or not, it's happening. There is a wonderful book called "The Social Transformation of American Medicine" by Paul Todd[sic]. Great book. One of the great books of all time. And that book sort of traces the rise of the power of doctors in medicine. Well, that era is now ending and it's ending because it's just too expensive to be on your own with all the new technologies, it's too cumbersome with all the paperwork you have to do, and it's more attractive if you put it into a system that seems to function. Now, the question is does it really function and does it make a difference to the doctors. And because much of these -- where the doctors are, they're not in hospitals now, they're in outpatient facilities.

So what does an outpatient facility look like? I'll just give you an idea of a couple. I went through a head and neck cancer about two years ago and I picked NYU because I was studying it and knew how good they were. It's one building, it's a group that's been together for 30 years. They were out on their own, they were brought in. One building equipped with the latest in every kind of gadgetry you can imagine. One floor is for patient groups, the next floor is for chemotherapy, the next is radiation therapy, the next is diagnostic radiation, on the basement floor, it's an infusion floor, the next floor -- everything is integrated with the most amazing equipment and the information systems.

I went in for a biopsy, sat in the chair, they did the needle biopsy, and five minutes later they gave me the results -- five minutes. How long do people wait for biopsy results. I got up out of the chair, I said I want to see it. I'm a scientist, a pathologist, amongst other things. I looked at the slides and said, yeah, you better do something and do it quick. And then you see all that, by the time you get home it's real time. So that's the

advantage of these doctors. They have all the right equipment, they have the most wonderful information systems, and it's working for them it's not working against them.

Now, if they don't perform to their agreed standard, they get remediated and if they don't then perform, they're out, and that's part of their original contract. And so there is pressure to perform, but there is help. There's both peers that are willing to help them and the system is willing to help them. And the system is designed to make it easier for them to do less paperwork. And people always trying to -- there to ask them, what don't you like about what's going on and what can we do to make it better for you. That's an unusual thing for an organization to ask. And I think that's the kind of system that you need to get modern information systems to work for you.

There's an interesting quote I heard about AI. Will AI replace the doctor? Only those doctors that don't use AI. (Laughter) And that could be true for almost any other field, including policy research.

MR. GINSBURG: Good. You saw the story about how NYU Langone acquired this bankrupt safety net hospital in Brooklyn -- I think it was called Lutheran -- and were able to turn it around, you know, partly by the information system. And of course because they had the resources to do it.

Do you think there will be many other examples of this happening elsewhere? Is this the potential salvation of many struggling safety net hospitals?

DR. HASELTINE: The answer is yes, but it's a complicated yes. NYU made a very strategic decision, different from all the other big hospitals in New York, right from the beginning, which is we're not going to acquire a hospital for size. And so they were offered many of the mergers that went over the last 10 years, and turned them all down. They opted for a different strategy, which is building outpatient services. They built 100 of them in Brooklyn, and only then developed the need to have a local hospital. So it was very,

very different origin from most acquisitions. It was a local hospital that served the needs of the 100 existing outpatient services. And so they already had a clientele to work with that.

Now, there are other ways to get to the same point. And what is now happening is there are big groups that are being put together -- and I understand that's one of the things that this sort of mysterious Warren Buffett, Jamie Dimon, Jeff Bezos group is going to be doing, is doing what NYU Langone is doing, but taking it one step further. Not forming it around the core of a hospital, but rather creating a massive patient system in areas not that are heavily urbanized, but less urbanized areas where they're putting their emphasis on outpatient and primary care and home care, and then using a hospital as needed. And I think that is a very interesting direction.

My instinct is to say they're going to have to have a way to integrate all that knowledge through a hospital. So if they can do that without having that integrated knowledge through the hospital, it's going to be interesting. But the major trend is going to be out of the hospital into the community. That is where medicine is going. And whoever does that best and does it most efficiently is going to be successful. But it's not an easy thing to do, because it requires superb management, information, and discipline. And it requires a huge amount of work on human interface with the system as a whole if it's going to deliver high quality.

Quality means you have to watch everything you're doing all the time. And without a strong central authority I think it's going to be difficult. You can solve some of the problems -- access, cost, you can solve, but quality is a harder thing to manage in a less centralized system.

MR. GINSBURG: This would be a good time to get questions from the audience.

MR. GAGLIANO: Lou Gagliano, Coalition to Transform Advanced Care.

I have a question about advanced care and going back to the community model that you talk about and what your views on how we can serve the people with serious illness in a way that doesn't bankrupt Medicare, Medicaid, and families, in a way that's more compassionate, family focused, and the will of the patient.

Thank you.

DR. HASELTINE: Well, let me get your card first and we can have a conversation about this.

But I think the answer is home care and community care to the extent now. Strangely, where we operate in China we see some of the best examples of that. And let me just give you an example of what's in the outskirts of Shanghai that we see. We see an elder care wellness center in the middle of a housing block that is both a recreational center, a social center, and has hospital beds, and a series of people -- it's got doctors, but it's got a series of social workers and we'd call them med techs or nurse practitioners, that then integrate into people's homes. Now, that isn't a central system. There's no central system that's controlling that. And if they get really ill, where do they go, they have to go to one of these massive public hospitals, but I think that's the right direction. That is we have the technologies -- and there are groups now in the U.S. that are building the equivalent of a hospital room in somebody's home. They're actually building -- there's seven or eight -- actually there are about seventeen different kinds of units you need to put in to make the equivalent of a hospital. And they're making those mobile so they can go to somebody's home.

And they are addressing two issues. One is a major issue of how many people are ill, are at home, and the demographic change. Another fact that I think is sort of curious is 60 percent of disability dollars don't go to the old, they go to the young, because if you're young and you have a disability you need to be cared for your entire life. And so it's

the same problem, it's not just elderly disabled, it's all disabled in these kinds of systems.

So I think the systems that I see are ones I prefer at this point, until I see they actually work well, organized around a hospital, but one that is peripheralizing care and does much of the care.

Now, from a cost point of view, 50 percent of our total healthcare budget is those patients. It's 5 percent of patients that need very intensive care. And if you can make a dent, let's say cut those costs at half, you've already taken a -- divide $3.2 trillion by 4 and you've got the amount of money you've saved by just doing that. So there are major savings that we can get, and there are many advocates for aging in place, aging at home, or I would argue, we should have it a broader category and include the disabled, not just focus on the aging, but make sure that the disabled -- and that's a powerful political point, as well as a reality because, in fact, the -- I say that as having a son who requires 24 hour home care, and he's a young person. And that's not different from an aged parent. It's the same kind of care you need.

MR. GINSBURG: Yes, sir. And then over there.

QUESTIONER: So one of the thing you didn't talk about was the --

MR. GINSBURG: Who are you first?

QUESTIONER: Howard Striker.

MR. GINSBURG: Yeah, okay.

QUESTIONER: One of the things you didn't talk about was the role of technology, technological innovation in both improving care and reducing costs. And you can think of lost of examples, ulcer care, for example, has changed dramatically. What role does that play in this kind of system, which seems to -- at least from what you've presented -- research is different from applying technology. It's not -- it's a dollar oriented --

DR. HASELTINE: First of all, these transitions -- I think the -- the one thing

Grossman realized early on is that you don't need to treat most patients in hospitals. And that's technology. Technology makes it possible to do at least 80 percent of surgeries -- and I'm told 90 percent of pediatric surgeries -- on an outpatient basis. Why? Because you do laparoscopic and non -- you do invasive surgery, but you do it -- that's all technology and it's imaging as well. And you can control what's going on from an information point of view, again by technology.

So if you actually look at those things -- you know, about five weeks ago now I had a gallbladder surgery, again at NYU. It was one of the two things I went through. It's based on like a litany of disease, but it happens to us. So I went in in the morning, I was home by noon minus a gallbladder, was playing with my grandchildren by 3 o'clock. Departed for Egypt a week later and did my post-surgical consults by telemedicine from Cairo and Luxor.

QUESTIONER: My mother was (inaudible).

DR. HASELTINE: So there you go, that's all technology. So the answer is cheaper, I had no time in the hospital, not a single pain pill. Okay, so that's technology and it made a huge difference. And the costs are much different. I wasn't in the hospital, I wasn't hospitalized at all.

MS. LEWIS: I'm Maureen Lewis, Aceso Global. So I work globally and I know you do as well.

DR. HASELTINE: I just had a very nice chat with your boss.

MS. LEWIS: My partner.

DR. HASELTINE: Your partner? Excuse me.

MS. LEWIS: That's all right. So I have a couple of question. One is just totally domestic, and that is how do you put the NYU Center compared to say Cleveland Clinics and the movement towards the ACOs, which are growing quite quickly in the U.S.?

That's one question.

The other question is this IT issue is really important. I totally agree with you and I sort of see this transition happening outside the U.S., but this interoperability is becoming an incredible barrier. So it is here in some places too. So I'd be really interested in your perspectives on both.

Thank you.

DR. HASELTINE: Well, first of all, I'd like to recognize Aceso Global as a good partner for Access Health. And we're working very closely together in the Philippines and I've watched you develop. And actually I knew Gerry when he was the World Bank in India. He was a good partner for us there. And you do very, very good work.

The question again is? Say it very briefly.

MS. LEWIS: So the first one had to do with how is NYU different than sort of the movements -- the ACOs and these other kinds of --

DR. HASELTINE: The answer is that NYU is a hospital like the majority of hospitals in America in medical care where you come in when you want. You're not a captive population. That is the majority of the care in the U.S. And this shows that you can do it even there. The Kaisers and others, people know you can do better. That's the one example, but everybody sort of carries a hair, why can't Kaiser work anywhere else. They've tried and they've tried, and it works a little bit in the Northeast, it works in California, which is a little bit different, and it can't seem to work other places. I don't know why it doesn't work other places. They must have thought and analyzed why it doesn't, but I haven't studied that in particular.

What we're talking about is, is it a walk in or do you have a captive population where you cover all of their healthcare needs. Those seem like reasonable systems, they are systems that should work. Why we don't build them, it's a long historical

story. Will the ACA, the Affordable Care Act, drive health in that direction? So far it hasn't to any great extent. It may, but it hasn't yet. And when you look at the numbers that come out, it's questionable whether the way we are organized now, outside of the Kaisers, are going to give us the answers we want in terms of quality and cost. It's a toss-up in fact. In fact you don't see the savings you were hoping for at this point, and you don't see the quality improvements you were hoping for.

So whether it's a process in transition or whether it will ever get there, I can't tell you.

MR. GINSBURG: Actually if I could follow up on that. Is NYU Langone seeking out participation -- opportunists to participate in accountable care organizations, or is it really staying away?

DR. HASELTINE: I can't answer that definitively. I don't think they are opposed to taking on that task. It isn't what they've done yet, but as they begin, and as they've acquired these safety net hospitals, there's some aspects of accountable care in safety net hospitals that they've encountered.

When I talked about their future, I see them integrating into primary care and into home care. But that's sort of stage three and four of their transformation.

MR. GINSBURG: Yes, over there.

QUESTIONER: Hi, Eva Havas. I know you don't want to talk about costs and who pays for it, but I'm wondering how the huge role that insurance companies play in the healthcare in the United States impacts whether you could have the kind of changes you're talking about.

DR. HASELTINE: You know, that's a -- I'm happy to talk about costs, because that drives a lot of things. But I would say that this book should have a lot of resonance because whether it does or not depends on a lot of things, but one of the things

that's happening is people who are running healthcare systems, whether on the board of they're the CEOs, are under tremendous pressure. Demographics is one pressure which is inevitable, and that is many people are aging into Medicare. And that means they're going to have to cope with Medicare costs. And the government is going to have to really analyze is Medicare really paying enough to get the kind of healthcare service we want, are they going to have to increase some of those costs, because right now in many costs the real cost is at cost or even below cost for the service they're paying for and getting delivered. So there's a question there. So there's a cost pressure.

The other pressures are CMS is now putting pressure for value-based medicine. What are we getting? We're not going to just measure what you've done and pay you for what you do, we'll either bundle the payment -- but we will certainly measure what you've done, and if you make mistakes we're going to penalize you and you're going to have to repair those mistakes on your own nickel. Those are really important changes that are putting pressure on the whole system. And I think it's those pressures that are going to force more people toward the NYU model.

Already they're scrambling -- the big hospitals in New York are scrambling to think of what we're going to do for outpatient. They are about 10 years late, but they now know they've got to do it. And they don't know how to do it. I was just up talking to some of my mentors at Harvard at one of these Boston Brahmin mansions on Commonwealth Ave. that's been a club for god knows how long, and part of that club is a bunch of people talking about healthcare. And, you know, a man I really respect, and in some ways sort of saved an institution that I was working with, was really at a loss to imagine how Harvard could adapt to an outpatient setting. Really at a loss. And this is a brilliant, brilliant man who's managed hospital systems. He managed All Children's Hospital, for example. But he was having trouble seeing how are we going to -- how can you really do that. You can do it, you can do

it with the mindset, the previous mindset.

So think the answer is you can get to better quality and lower cost, but you have to do it differently.

MR. GINSBURG: We have time for one more question.

DR. POPLIN: Hi, I'm Dr. Caroline Poplin. I actually have two questions.

I'm a primary care physician. That puts me at the bottom of the food chain. I wonder if with all your metrics and quality requirements and micro managing, if I would come in in the morning and find I had a list of 30 patients to see and 12 quality measures I had to meet, maybe for every 1. That's one question.

Another question is you've been talking about surgery. Surgery is actually very easy to measure, it's a mechanical process, most of the time you don't talk to the doctor because you're anesthetized. You can see if something doesn't work, you know, you thought you had your leg fixed and you still can't walk. But how would it be if you had say a blood cancer, say multiple myeloma? There is one procedure, you can have a bone marrow transplant, and that works for a while. And there are drugs -- very expensive -- that we can give you and then each one works for a while, and then eventually you die. You never recover, you just keep -- and your quality of life declines. You can stay at home, maybe until the end, and then you can go to hospice.

How do you measure quality that way? I mean the way to keep costs down is I really don't need to see you at all. All I need to see is your blood work after the first time, and maybe after the bone marrow transplant, which is done by a surgeon.

Is that what you want, the sort of minimal contact, but the correct drug? Especially in a 15-minute appointment.

DR. HASELTINE: I think you're talking about a very important part of medicine, which is the human interface with your caregiver, with the hospital. And I think

there's a lot of work to be done on how we actually deal with those issues.

I wrote a book on the problems of elder care in Sweden. Now, everybody knows Sweden has got a great healthcare system, so why would I write a book about a problem? Well, they have a big problem, it was big enough to cause a government default. And there are about six issues I uncovered, but the biggest issue was integration of medical care and social care. Social care is a really important part of community, family, medicine, especially in many of the issues you just discussed.

So does it have to be a doctor? In some cases yes. Does it have to be a person? Absolutely. Not a robot, not a computer, it's got to be a person talking to a person, a person caring for a person. And I think that is a big area for change in how we handle our medical care for everyone.

DR. POPLIN: (Inaudible) social determinants of health.

DR. HASELTINE: Well, social determinants of health may mean are you an immigrant, are you black, are you -- social determinants is better. This is a bigger issue, is a different issue. It's not social determinants so much, it is how you deliver care. And integrating social care and medical care is one of our biggest challenges.

So let me end there and thank you all for your interest.

MR. GINSBURG: I want to thank Dr. Haseltine for coming and talking about his book, "World Class", with us. And please join us for the reception in the back. And if people would like to purchase the book, that's available there too.

Thank you. (Applause)

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