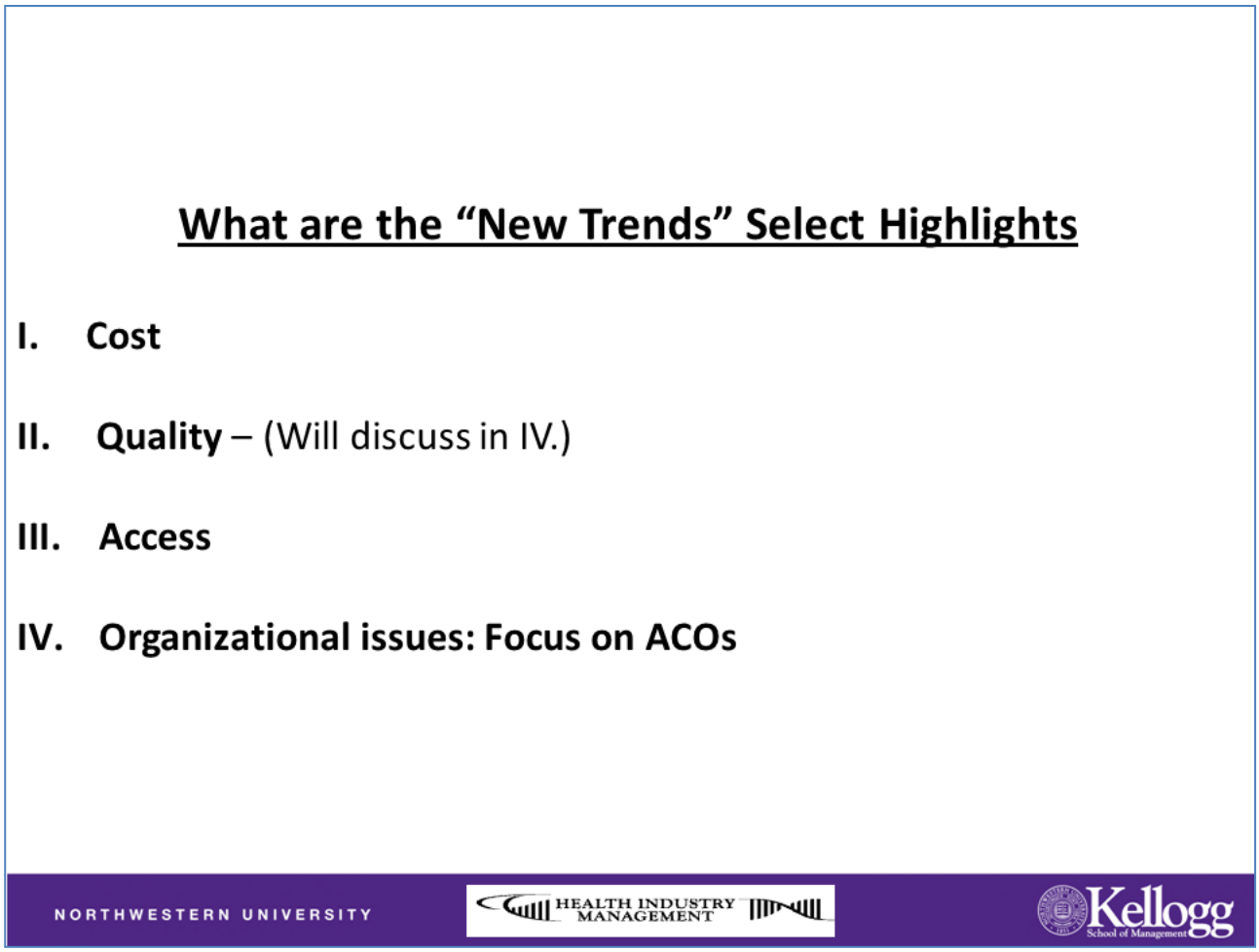
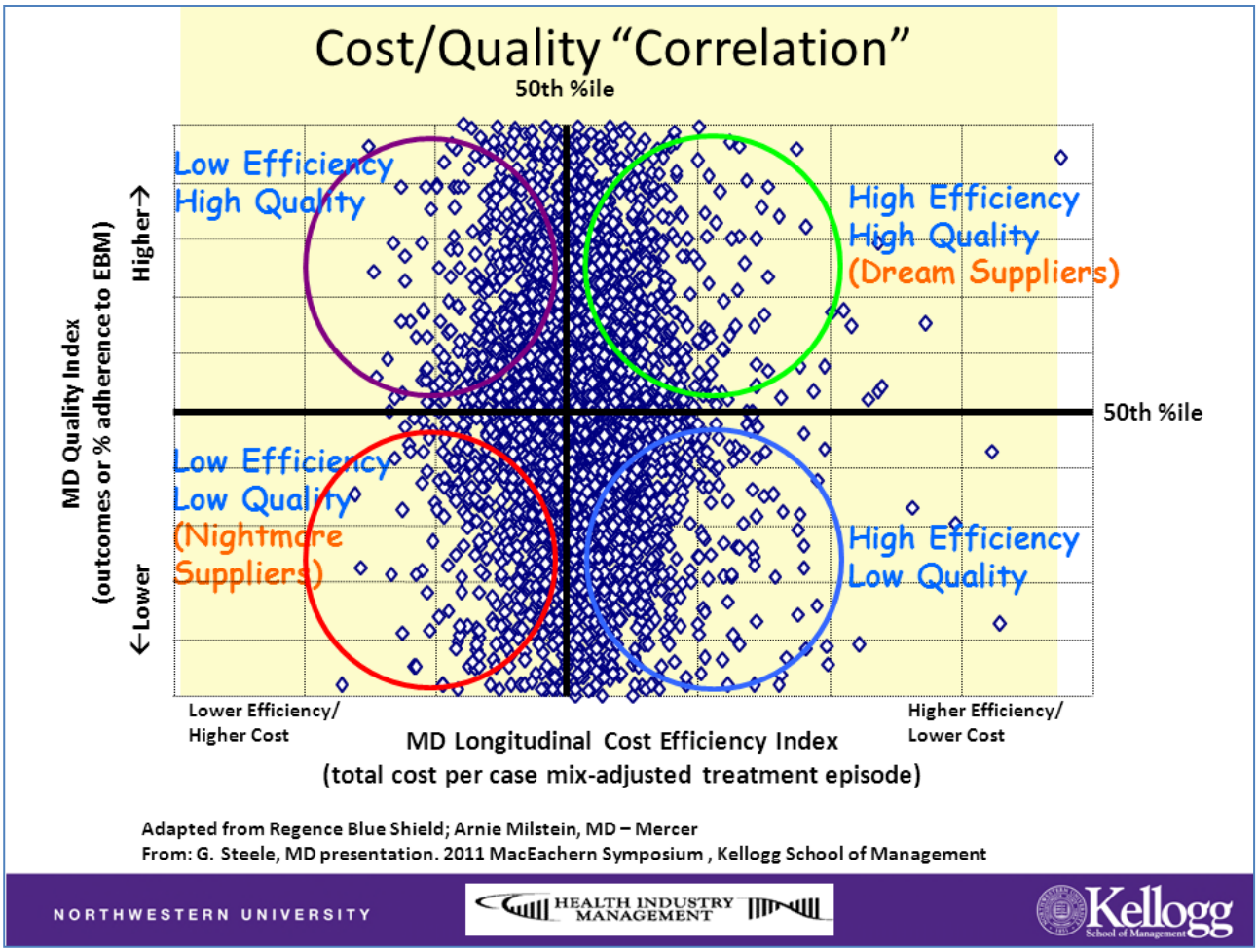
Welcome! Thank you for coming this morning! It's great to be back, this is my third time in Helsinki actually. And Martti Kulvik has been with me for the past six months in Kelloggs', so I've learned a lot about Finland and Finnish system. And just to build on what is said before: if you are really interested in a very nice summary of what is happening here, the OECD just published an economic survey of Finland 2012. The last chapter is enhancing the efficiency and reducing inequalities in healthcare. It is a very nice summary. So I am literally up to date on what is happening here and have been following for several years.

So what I want to do first is give you an overview of what is happening in the US healthcare system to set the stage for later, when we are talking about IT. We call it IT, you call it ICT. We eliminate the communication, the C-part. This is going to set the stage and maybe give you some comparisons what is happening in the United States, how we deal with problems and then perhaps apply it to what is going on in Finland. We organize healthcare very differently.



What are the new trends? There is a lot happening in the United States, so I have had to be very selective on the things that I have chosen.

When we talk about healthcare the first thing that we do, is we talk about a trade-off among cost, quality and access. That alone is about a three-hour lecture, so we are not going to talk about all the details. What I am going to do is talk about what is going on in the US, very briefly, with respect to cost, quality and access. I am not going to talk about everything, but certain selected things. Then, what are the organizational issues, how our healthcare system is being reorganized in the US, given what is going on with cost, quality and access. So that's what we are going to do in the next about an hour. And I hope to have time for questions later. And this being Finland I know you are not typically asking questions – the penalty is: I make economist jokes, if you don't ask questions. So that's the penalty, so you better come up with some questions.



The first thing that we wonder about, this is all over the world, is how do we find the really high efficient, high quality providers of healthcare? Those are the really good people. They all cluster around here. What we don't want, are the low efficiency, low quality, that's very bad obviously. The low efficiency, high quality: well, maybe the academic medical centers fall in here. At least the quality is good, but the cost is not so good. Here are people, who are very efficient, but not very good. So how do we get over here? That is what our healthcare system and I think all healthcare systems are looking for. How do we structure our healthcare system and create the incentives to do that? So what is happening in the US? First, we talk about cost. Remember: cost, quality, access.

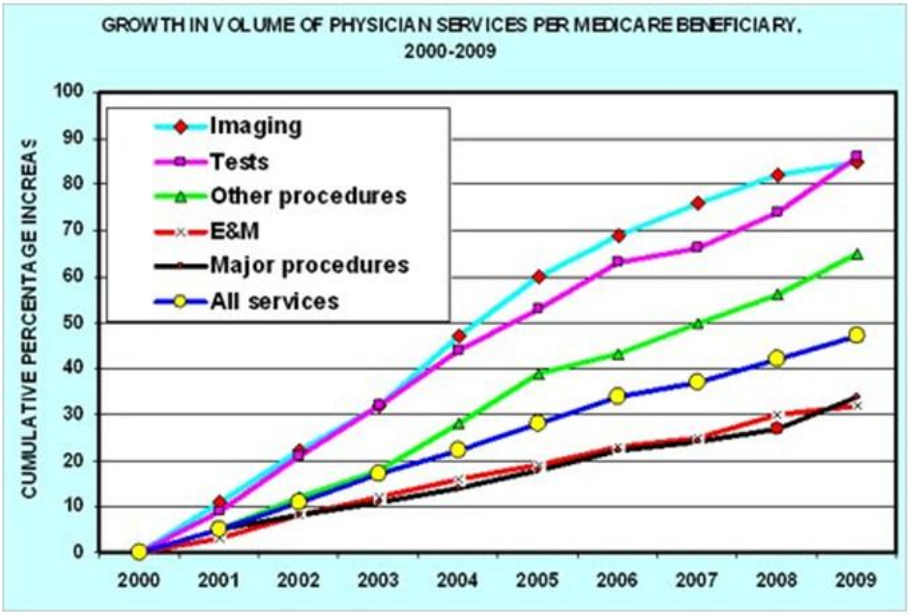
And cost: What do I actually mean by cost? I don't mean the economic value that economists talk about or the accounting value. When I talk about cost I actually mean the money that is paid. The actual transaction cost. Dollars or euros changing hands. Not marginal cost or invariable cost but actual money changing hands. You remember that Oscar Wilder said that the economist knows the cost of everything, but the value of nothing. So what do we mean by cost? The cost is revenue to some providers. But cost is a function of three things:

1. It is the price of the service,
2. it is the number of units and you all know that, but
3. it is also the intensity, that's the level of care that is provided. Do we provide the most expensive care? Is somebody in the intensive care unit, when they - ridiculously let's say - could be at home? Do they belong there? Do we have to use the most expensive medications to treat somebody when a generic, cheaper version would be just as good? That is the intensity part. It is in some cases a substitute for the concept of higher technology.

So in price one of the problems in the US and one of the big problems that the physicians are facing - and it is not something that makes the international news - is something that is called the Sustainable Growth Rate. So let me explain. Back in 1997 our congress passed a law that was called "the balanced budget act of 1997". One of the things that was in the budget act said the cost of doctor services and ancillaries like radiology diagnostics, laboratory tests and outpatient treatments like chemotherapy for example, are going up very, very quickly. And it is unsustainable; we cannot possibly afford to pay for them all. What the balanced budget act said is that we are going to create a formula. According to the formula, if all of these services grow at a rate more than we specify, the next year we are just going to reduce payments. That is very nice to say, but it is sort of like threatening your children: "You better not do that or else…" There has to be an "or else", there has to be consequences. So what happened was, that every year, except one, since 1997, there has been an over cost of the target. What should the congress do? They should be saying that we have to reduce payments to doctors and all these other providers to make up the difference. But instead of doing that they said: "well, maybe next year it will be better". Instead of decreasing, what they have done is made it either budget-neutral and not decreased it or in fact they have actually added extra payments. 1, 2, 3 % on to what doctors can charge and collect. As a result, the deficit on what should have been reduced has been accumulating. If you don't reduce it every year, the amount what you actually should have reduced it, it accumulates. It is not a year by year, it is accumulative. What happens is that we have been accumulating a deficit in this account since 1997. I can tell you how many billions and billions of dollars that is, but after a few billion it does not really mean anything. But just to give you an idea: if congress all of a sudden says: no more increases, we are actually going to implement this law and reduce payments to doctors. If this is not fixed, on January 1st of 2013, there is going to be about a 30 % decrease in payment to doctors across the board. You can imagine what would happen, if doctors all of a sudden had a 30 % decrease. You would have a revolution.

The reason that this has continued is that congress has not repealed the law that put this into place. One of the reasons they cannot repeal the law now, is that our new healthcare law that everybody hears about, the "Affordable Care Act", it depends on there being this reduction of 30 % for doctors. So it is actually double-counting that amount. They say we need to use this money to save federal programs. And, at the same time, we are going to use the savings to fund our new healthcare program. I wish we could do that in private life, use the same money twice. I think that's what they call in finance "a good deal".This is one of the, maybe the biggest issues now that the American medical association is trying to push. This is extremely important to doctors and I am sure that you have not heard of it. It is a little bit complicated to explain, which is why. But this is very, very important and nobody knows what is going to happen to this.
The second thing with price is in the US, unlike in a lot of other countries, we have a very big difference between people who do procedures like sergeants and – since I am internal medicinist I can say this - people who *think* for a living. There is a very big difference between doing a procedure and how much you get paid and actually thinking about doing something. It is not likely, given the power of a lot of physician specialty groups that the difference is going to change.

The third thing that is happening with price is that we are starting to bundle services or go more towards global payments: so one payment for an entire episode. It is similar for the hospital to DRG's, which I think most of you now about. But instead to just saying DRG's, this is everything. It is all the ancillaries, it is the doctor, it is the after hospital care as well. These are global payments per episode of illness. That's what people are talking about and where things are moving in the US, as opposed to just piecework, individual payments.



Fees, Volume and Spending at Medicare
By Uwe E. Reinhardt
NY Times December 24, 2010 http://economix.blogs.nytimes.com/2010/12/24/fees-volume-and-spending-at-medicare/?ref=your-money

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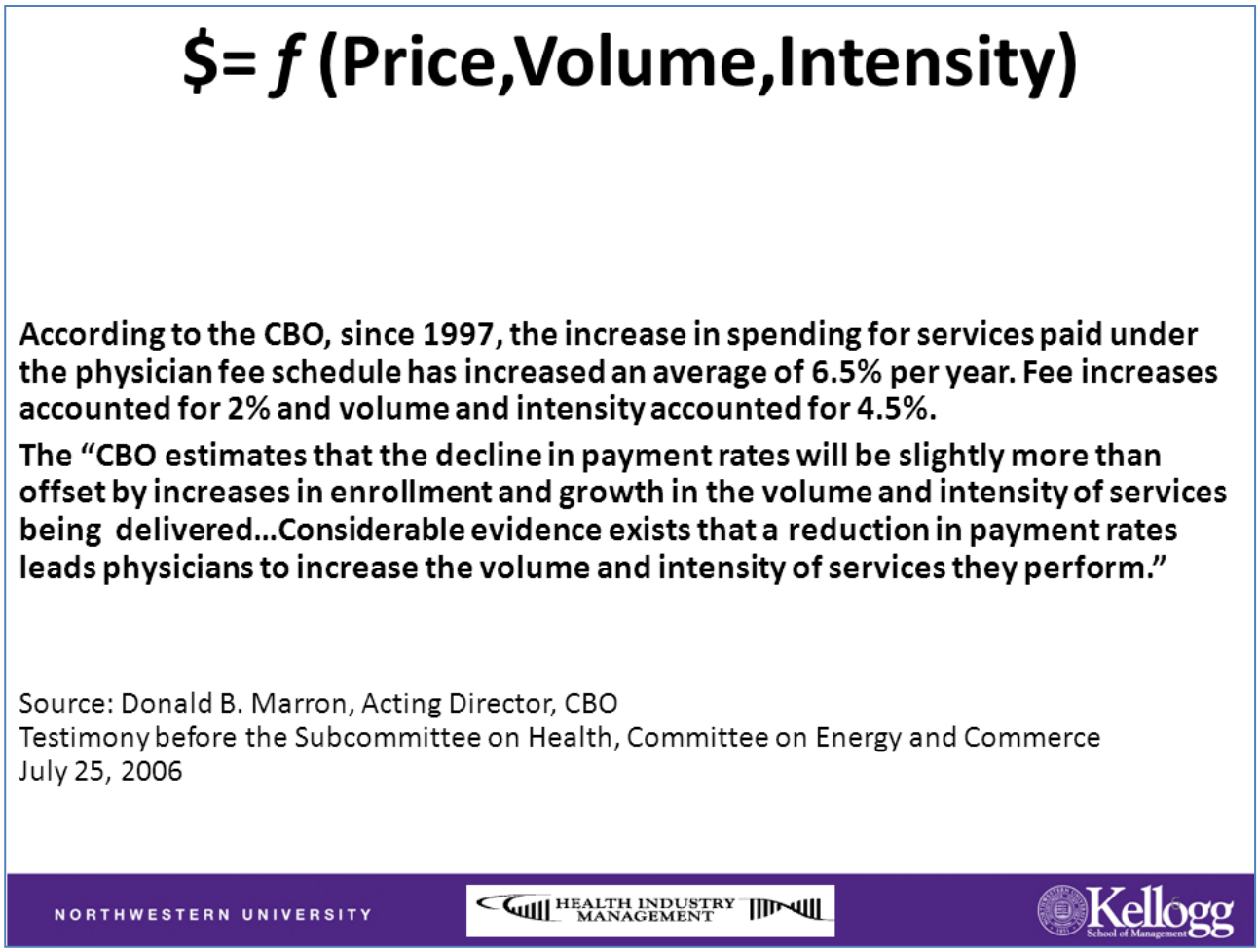
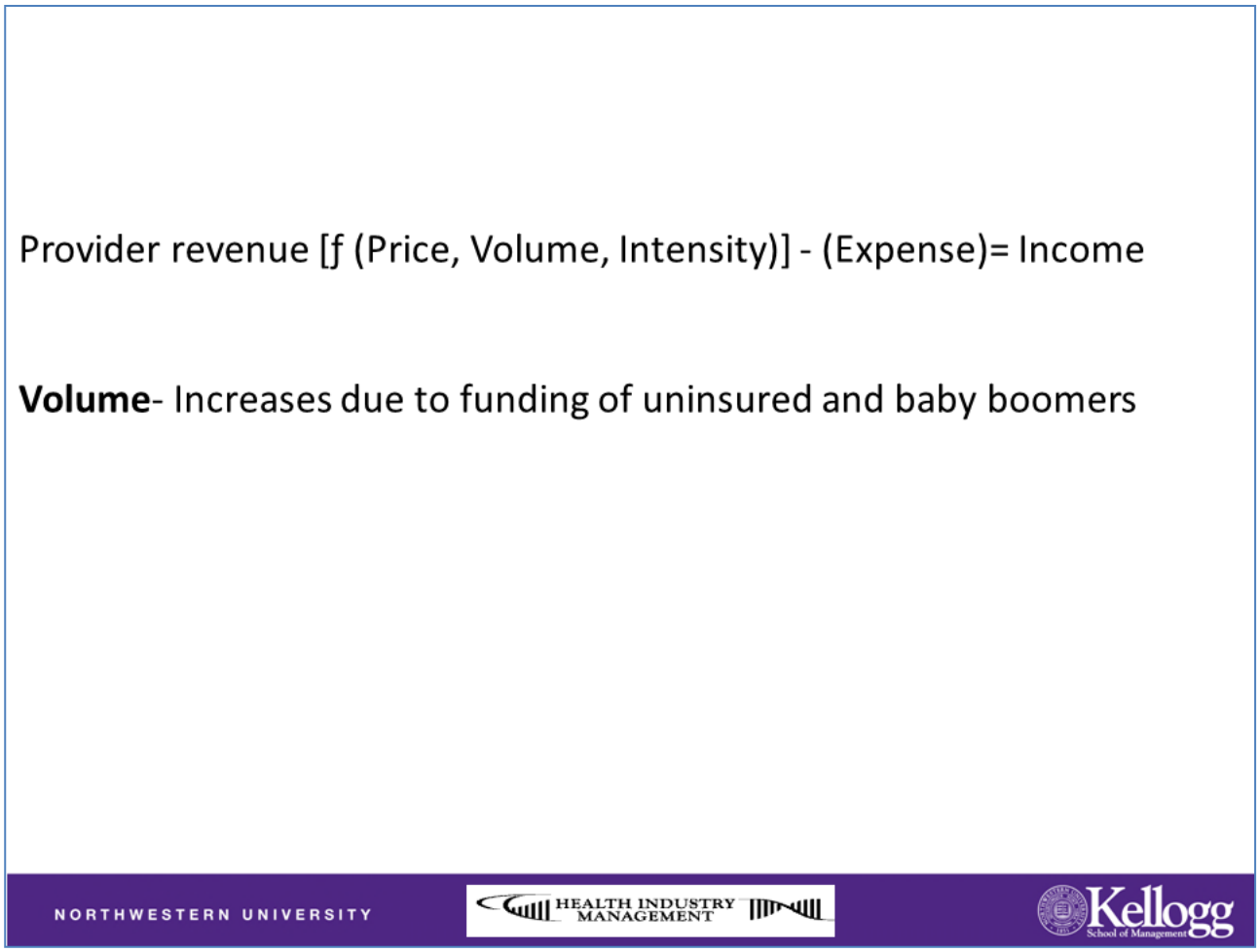
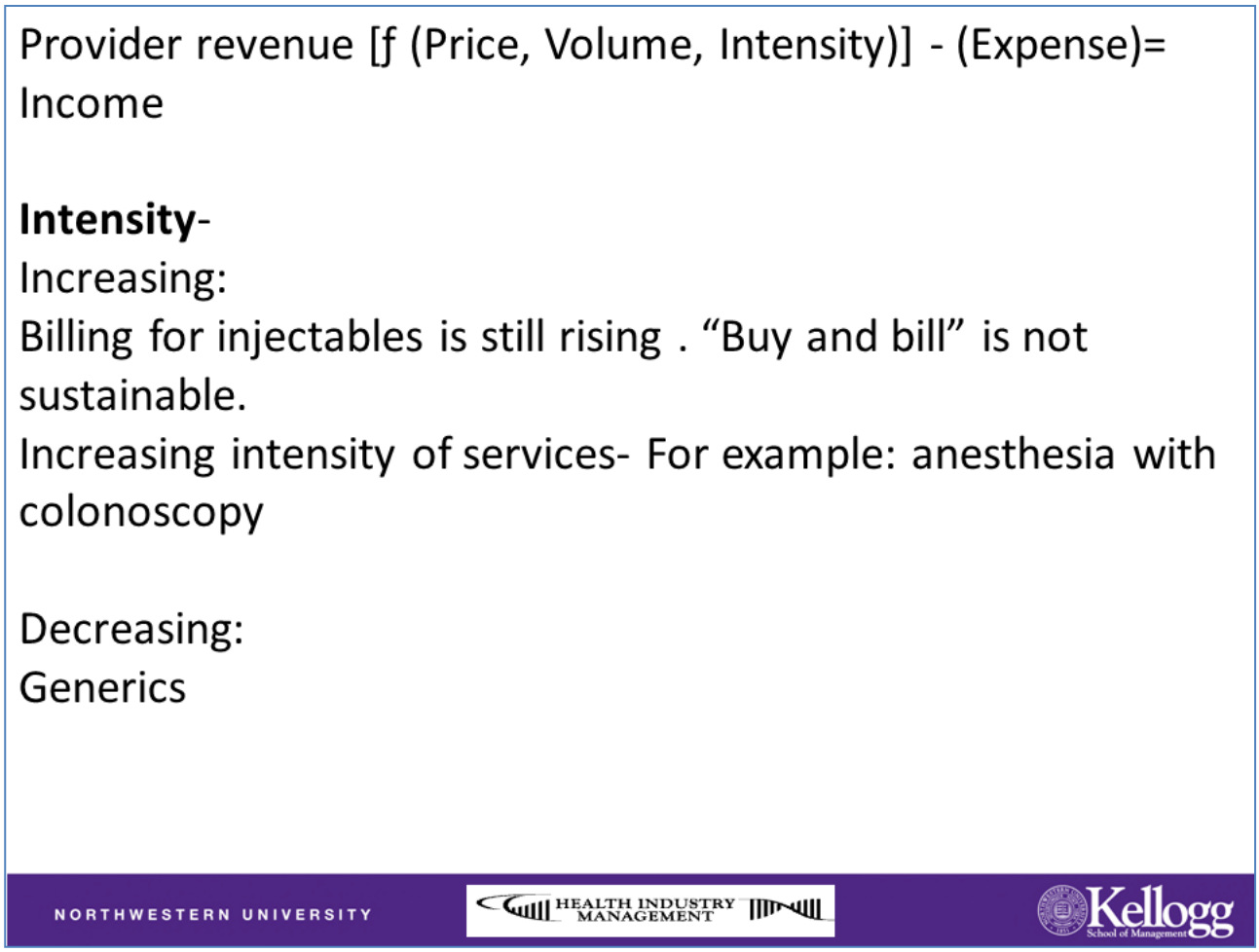
One thing that you have to know is that if you are going to look at cost of healthcare, you have to look at all three of these things: price, volume and intensity. Only looking at one or two of these will not work. Because there is lots of evidence from all over the world, that for example, if you lower prices, what do you think doctors are going to do? They are going to do more, or they are going to raise the level of intensity - that's the technology of delivering services. There's evidence for many, many years from all over the world. And yet, what many countries do is they just look at price regulation. That will never work, never.To give you an example how we are at fault in our county, if you look at why some of these services are going up, it is imaging (like radiology), tests (blood tests and so forth), providing doctor services (the actual doctor encounter). You don't have to be a genius to figure out what is actually causing the increase in costs. It is very obvious.



And yet, if you look at why the costs are going up, two thirds of the costs are volume and intensity. One third of the cost is due to the actual physician services. So where are we putting all of our control? On the physician services, not volume and intensity. Now you are saying, did I hear this correctly? And the answer is: absolutely. So why aren't we putting more effort in controlling the volume and intensity? The answer is – like in many other things - politics. If we control volume, it means we are rationing. Rationing is a very bad word in the US, particularly during the election year. Intensity means that we are going to control technology. And we don't have a in the US, like most of the other countries do, particularly in Europe. It just doesn't exist. There are efforts all around, but there is no centralized technology assessment governmental body in the US, that has any authority at least. We don't do that. So we are just controlling price and that will never work. So that is the price.

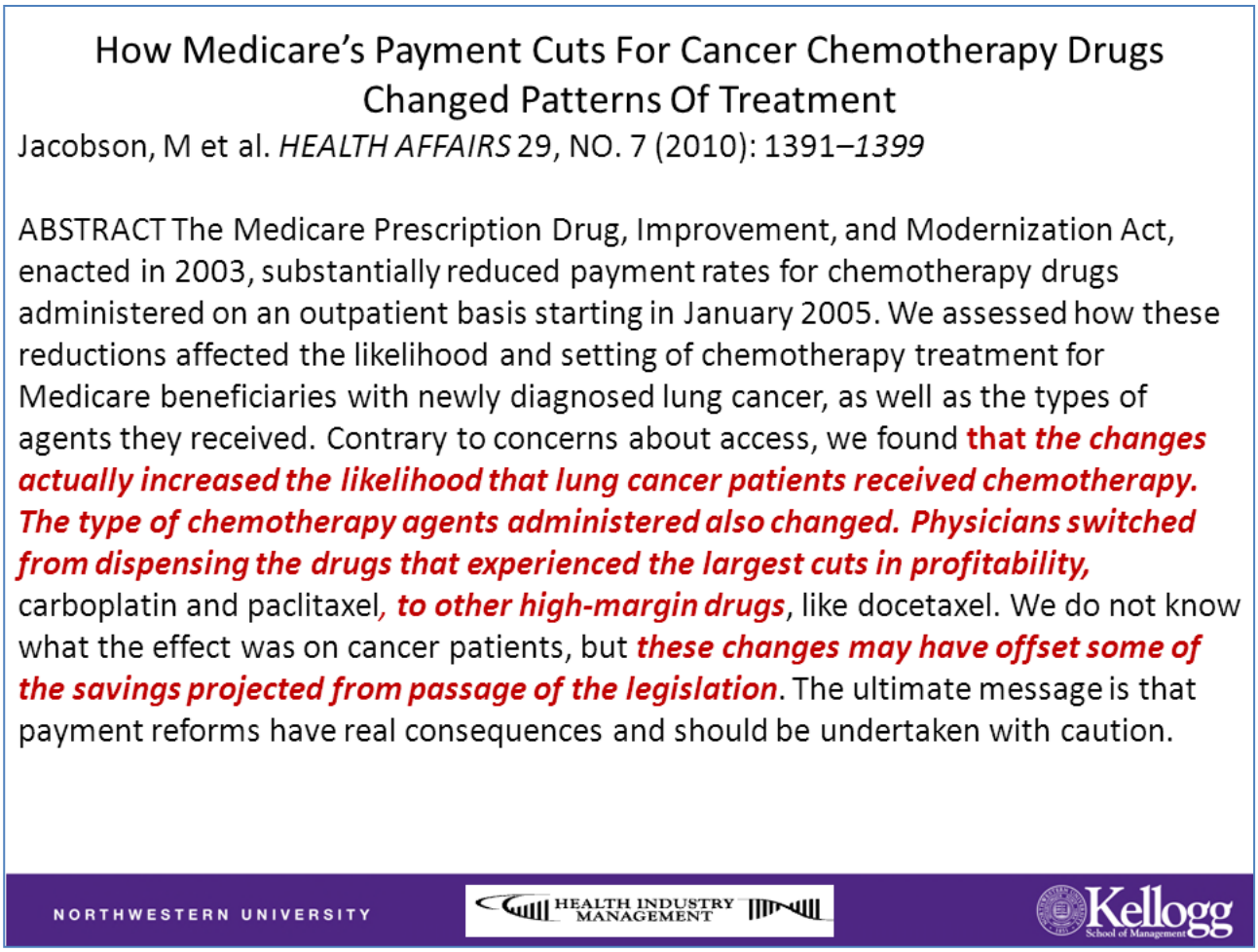


What it is happening to the volume in the US? Well, originally in the past few years the volume has gone down. That is because of the economy: people are not seeing providers. What is starting to happen is that it is starting to turn around a little bit. When the healthcare law becomes fully operational in 2014, which assumes that president Obama will win the election and the congress will be at least somewhat democratic. Then, we are going to have a lot of new people going into the healthcare system. A LOT. Millions and millions of people, maybe 40 million new people into our healthcare system. The volume is going to go up a lot. But that will create problems, which I'll show you in just a minute.



So what about intensity? There are things that increase intensity and there are things that decrease intensity. So what is increasing intensity, are things like the injectable drugs, the chemotherapy or the immunomodulating drugs. I don't know what the trade names here are, but like Remicade, Redoxin, the drugs that all end in AB. These are the monoclonal antibodies. These are very expensive. In the US the way these are currently paid, is the doctor buys the drug either from a wholesale or a pharmaceutical company, delivers the drug to the patient and then bills the payer, for example the government, the average sales price of that drug plus 6 %. So you can figure out - you are all smart people - what kind of drugs you are going to use. Very expensive drugs, because 6 % of a larger number is more money for you than 6 % of a smaller number. It does not take a genius to figure that out. I'll show you something about in just a minute. The second thing is that the doctor says that there is a cost pressure for me to deliver care, I'm not earning this much money. So what they are doing is that they are increasing the level of technology. Not just more expensive drugs, but services as well. For example, there have been articles in the newspapers about this The New York Times and so forth, so what is happening here is, that they are using more services, higher level. So those of you, who have had for example a colonoscopy, previously what happened is that you go to a facility and they give you a little IV-sedation, they do the colonoscopy and you are done. What a lot of people are doing now, a lot of gastroenterologists and facilities are saying: "oh no, we need an anesthesiologist there to administer the anesthesia". Why? Money, that's really the only reason. So that is really increasing the level of technology. In other words, you remember the gastroenterologist, who was able to give a little bit of sedation IV, but now we have an anesthesiologist involved. That has increased that.

What has decreased intensity, are generics. In some cases the overall cost of pharmaceuticals has decreased because the generic use has increased. There are lots of medications becoming generic. And the cost has really lowered. So it's another fact.



So what has been the actual effect of this increase of intensity? This is an article from Health Affairs in 2010, and what they found was that there are certain chemotherapy drugs that are more expensive that were being used instead of the cheaper chemotherapy drugs. This was for lung cancer. And the speculation is that doctors are doing this more and more in order to make more money. As long as the drugs are ok, you might as well use the more expensive ones, because you are going to make more money.

So…who pays the bills?
The new rules for insurance companies:

- States regulate premiums insurance companies can charge.
- States and the federal government (will) regulate the benefits plans must offer
- Plans must offer insurance to all (guaranteed issue)
- Individuals must have insurance or pay a penalty (is it more than buying insurance?)
- Plans have a limit on their margins after paying benefit expenses (80-85%)

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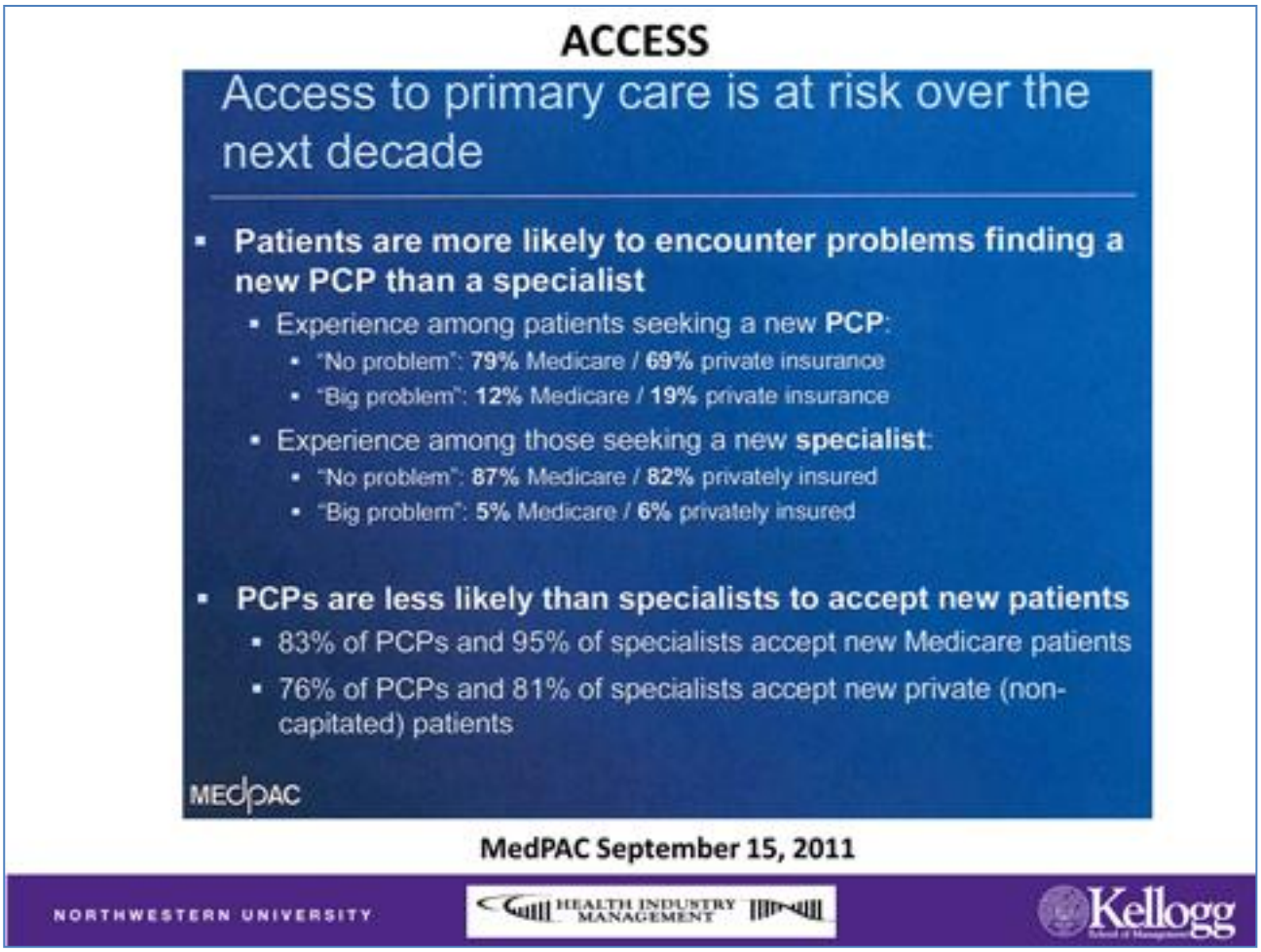
So who pays the bills? These are new rules for the insurance companies, which will become fully effective in 2014. The first is states are regulating the premiums insurance companies can charge. Number two: states and the federal governments will regulate the benefits that these plans must offer. Number three: plans must offer insurance to everybody. But in return, everybody must have insurance, which is fair. Then plans: that insurance plans have a limit of their profit margins after paying all the medical bills. If it is a small company, it is 80 %, if it is a large company, it is 85 %.

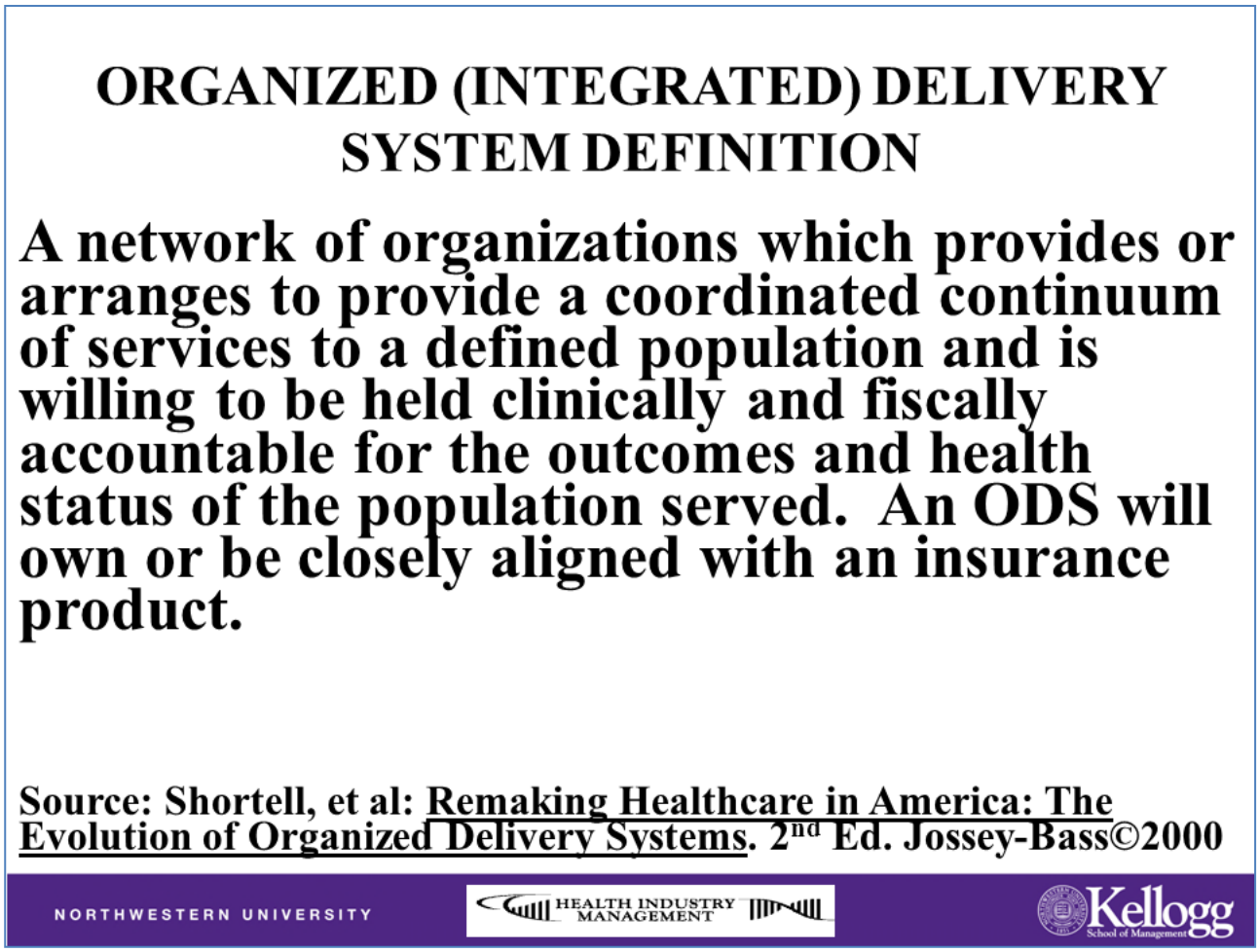
So I ask you a question: would you ever get into this business from the start? Where somebody is telling you how much you can charge, telling you what you have to provide as your product and telling you, that you have a limit on your profit margin. That is capitalism at its best, right? This is very difficult. The problem is these insurance companies have been around for over 100 years, they are not likely to get out of this business. So if you were one of these insurance companies, how would you adapt to the changing situation? What would you do? The reason I mentioned this, is this is one of the things insurance companies are doing, is that they are saying: Why don' we just take the risk, we get the premiums from the individual people, we take our profit of the top and then we give the rest to the providers and let them handle the risk. That is actually a pretty good deal. And this is more and more what the insurance companies are doing. And I'll mention this more, when I talk about the different organizational strategies that are going on in the Unites States. So what is happening is, as far as expenses for providers, the insurance companies are shifting the risk of providing all of these services to patients, they are making the providers more and more responsible.

So I mention immunizations. Those of you who have ever taken care of patients might know that the costs of vaccines go up more than once a year. Maybe twice a year or so. And yet the budget for these is fixed by a contract at the beginning of the year. So you are always playing catch-up with the expenses that you have that are increasing rapidly during the year. And that is a big problem.
The other thing by the way, that the insurance companies are doing, is that in some cases they are just getting out of the actual insurance business. So what they are doing is they are managing healthcare insurance benefits for very large companies who self-ensure. And that is just a different line of business. Also from an expense standpoint – and this we can talk about quickly - there is not likely to be any tort reform - that is malpractice reform - in the US. And that is because, very honestly, the Democratic Party is very heavily funded by trial lawyers who make their living suing people. It is just true. And if we have time I will tell you a personal Obama story, he told me this when he was running for senator. Electronic medical records and E-Prescribing, we'll talk about that little bit later, there is an extra cost. And I'll also mention the cost of US converting to ICD10. We are still on 9 for variety of reasons. So those are the expenses. So we did cost, I'll talk about quality when we talk about the systems, and then access.



What is going on with access? Access to primary care is at risk over the next decade. One of the reasons is that we are not training enough primary care doctors. They are not going into primary care, they are going into specialties. The other problem is that if the new healthcare law does go into effect in 2014 - remember I said we will have some 40 million people suddenly dropping into the healthcare system - we do not have enough doctors to take care of them. And nobody has really thought about it.

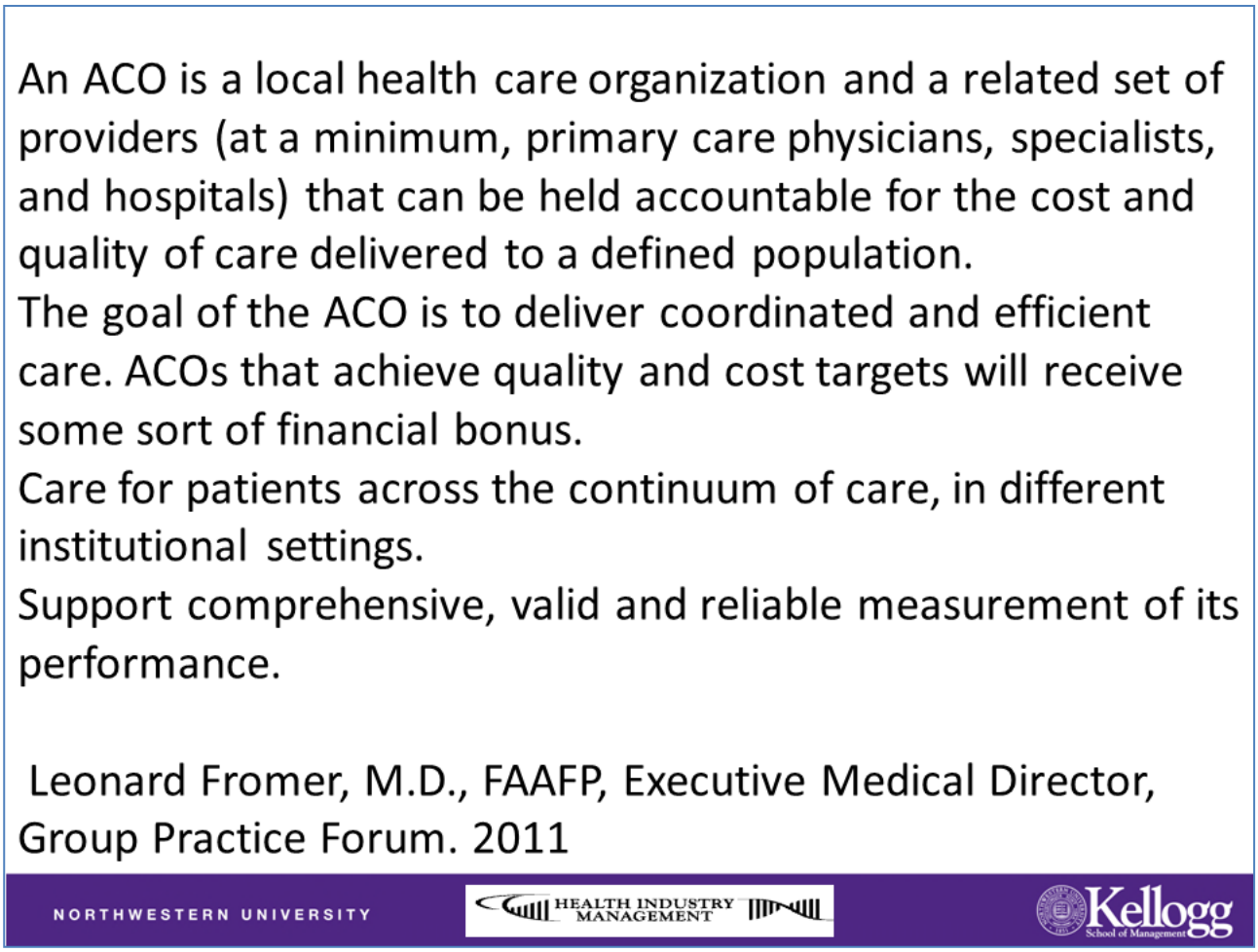
So what people are saying, is well, why don't you have nurse practitioners or physician assistants do it. I know you have that concept here. Well that would be very nice, if we had the capacity in our schools to train new nurses and physician assistants, but we don't. So there is going to be a very large shortage of these kinds of people. August 29th there was an article in the paper that doctor shortage may swell to a 130 000. We are going to have a lot fewer doctors that we actually need.



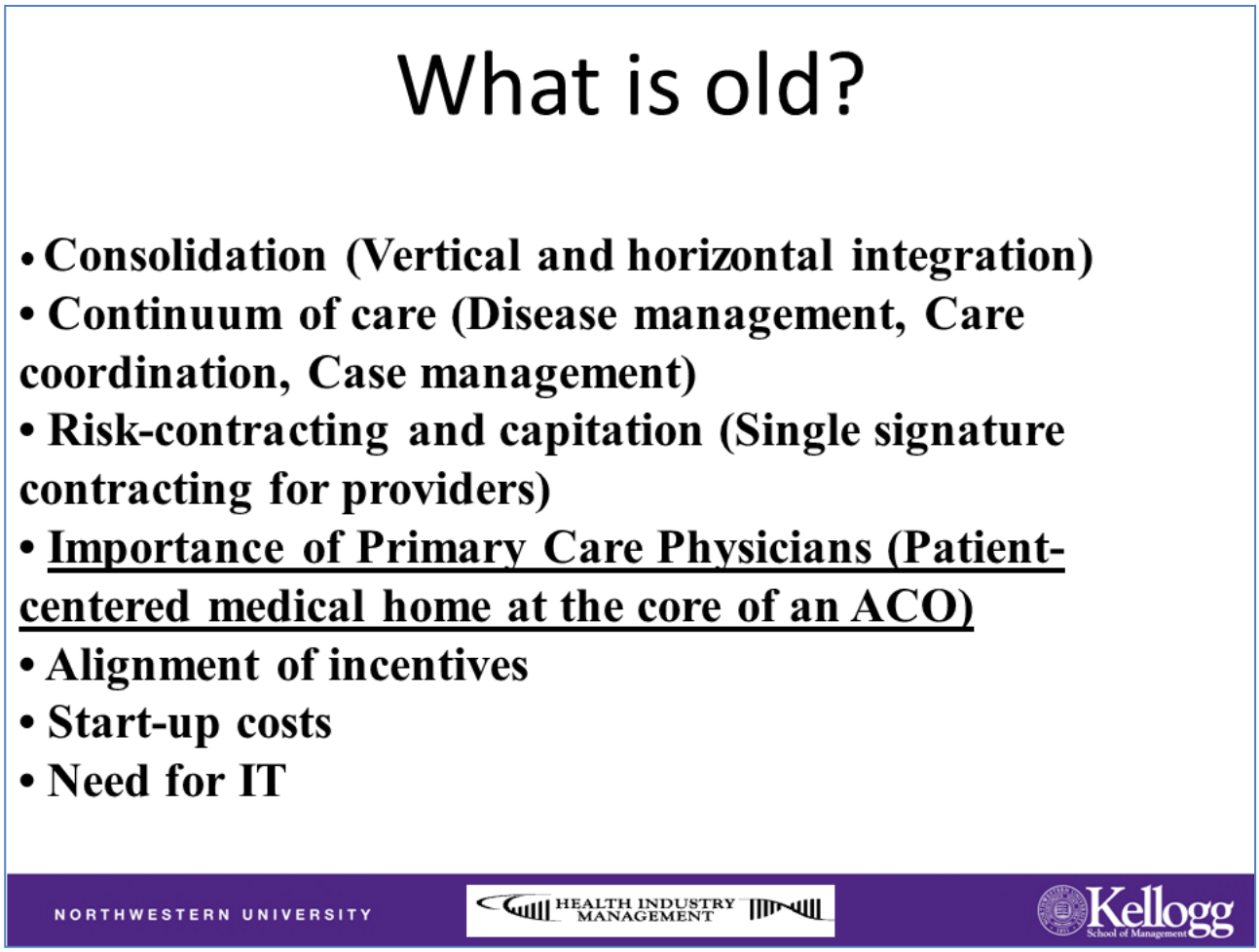
So cost, quality, access. How have we changed the organization of our healthcare system to deal with these issues?

One of the new concepts is called accountable care organization. It says you are looking at the formation of these things to pick a merger between hospitals and physician groups. It is purposely - I hope this translates – murky meaning not very clear and difficult to understand.

So nothing is really new in healthcare. So if you like ecclesiastics “there is nothing new under the sun”. If you like baseball this is like “déjà vu, all over again”. Yogi bear, our famous catcher, said some funny things. So this is what we are looking at today. These are called organized delivery systems. An organized delivery system is a network of organizations. They provide or arrange to provide (which means that they can either own the whole system or coordinate a network, it can be a virtual organization). They provide a coordinated continuum of services to a defined population and they are willing to be held clinically and fiscally accountable for the outcomes and health status of the population. And one of these organized delivery systems will be closely aligned with some type of an insurance product. So it is not just a hospital anymore. They are responsible not only for the clinical outcomes but also the financial outcomes. And they are willing to be held responsible in some meaningful way for both of these.



So this is what many would recognize as an accountable care organization. The only thing is that this definition came in the 1990's based on research that Steve Shortell and some of us helped him to do with Kellogg about things that were called organized delivery systems, not accountable care organizations. So the point is we have been here before. And what have we learned? That is one of the things I want to talk about, that nothing is new. This concept goes back 15-20 years. This is just another definition from 2011 of an accountable care organization that talks about quality and cost targets, continuum of care and so forth. It is basically the same thing, number of years later.



So what is old? What happened before?

- We had vertical and horizontal consolidation among hospitals, physician groups and other types of organizations. That existed.
- We talked about a continuum of care dealing with people from primary care to acute care to rehab care, all through the healthcare system, things like managing cases, disease management, coordination.
- There was risk-contracting and capitation. So what happened is that you took a certain amount of money and you were responsible for a certain set of benefits - that is also old.
- What is really key where we been before is the importance of primary care physicians. These systems do not work without primary care doctors. Absolutely essential. You cannot do it without them. It is just as important now as it was 20 years ago or so, when these systems were first experimented on. And remember what I said about the availability of primary care doctors. They are not there. They weren't there and they are not there now.
- Next thing is you have to align incentives between physicians and hospitals and other parts of the healthcare system. The quality incentives and the financial incentives. That is old, that is an old concept.
- These are very expensive to start. Millions and millions of dollars. We'll talk about this later.
- Really critical the need for IT.

Hospitals' Race to Employ Physicians — The Logic behind a Money-Losing Proposition

Robert Kocher, M.D., and Nikhil R. Sahni, B.S. *NEJM* 364:1790-1792, 2011

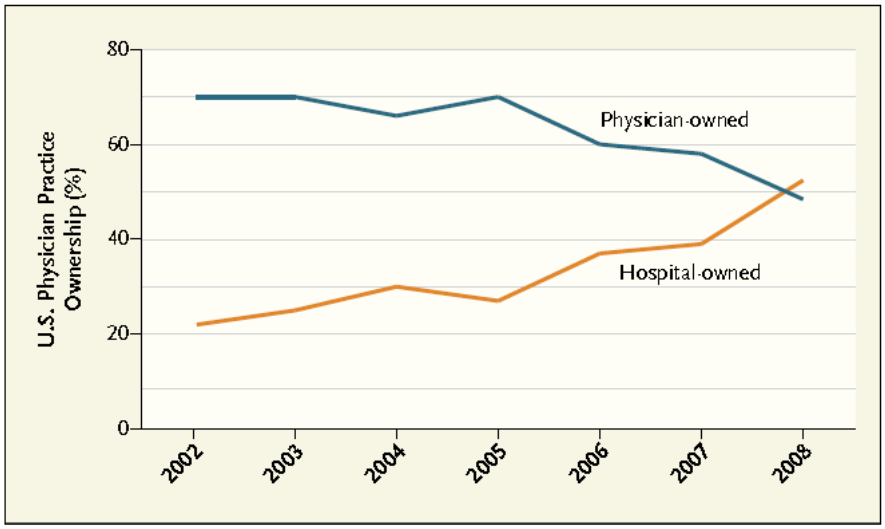


Figure 1. Percentages of U.S. Physician Practices Owned by Physicians and by Hospitals, 2002–2008.

Data are from the Physician Compensation and Production Survey, Medical Group Management Association, 2003–2009.

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So in order to do this, what is happening is that hospitals are buying doctor practices. So this is US physician ownership, that they own their own practices, is going down, hospitals are buying doctors. These are primary care doctors being purchased, these are specialists being purchased. If I said that this was a slide from 1990, nobody would argue with me.

Hospitals' Race to Employ Physicians — The Logic behind a Money-Losing Proposition

Robert Kocher, M.D., and Nikhil R. Sahni, B.S. *NEJM* 364:1790-1792, 2011

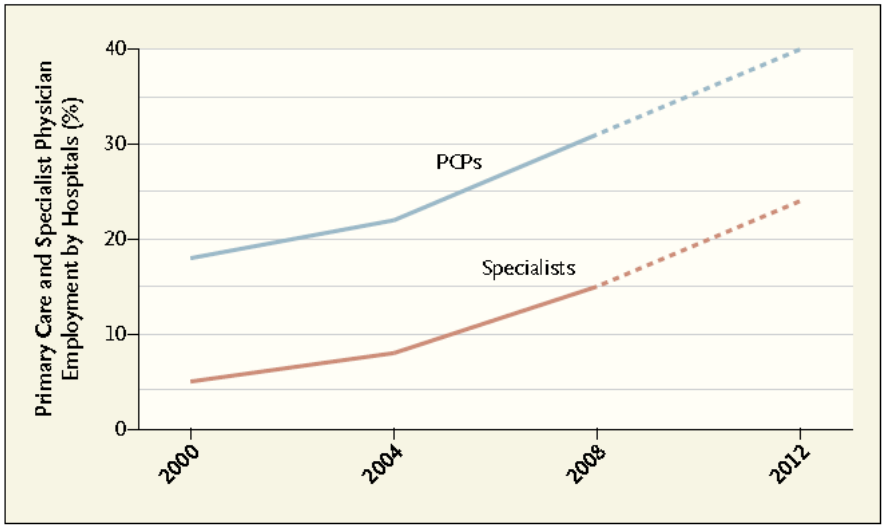

Figure 2. Percentages of Active U.S. Primary Care Physicians (PCPs) and Specialist Physicians Employed by Hospitals, 2000–2012.

Data are from the Physician Compensation and Production Survey, Medical Group Management Association, 2003–2009.

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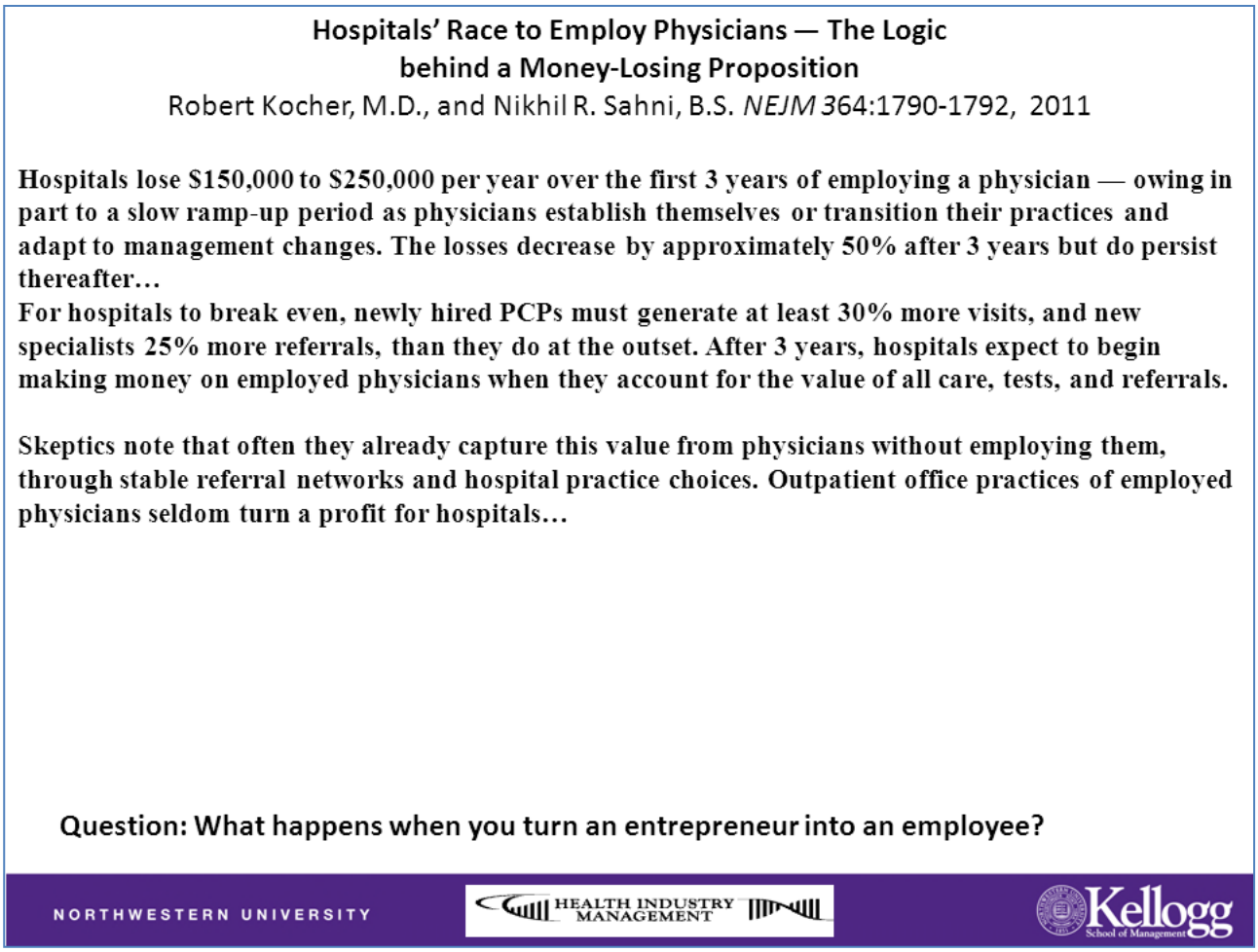
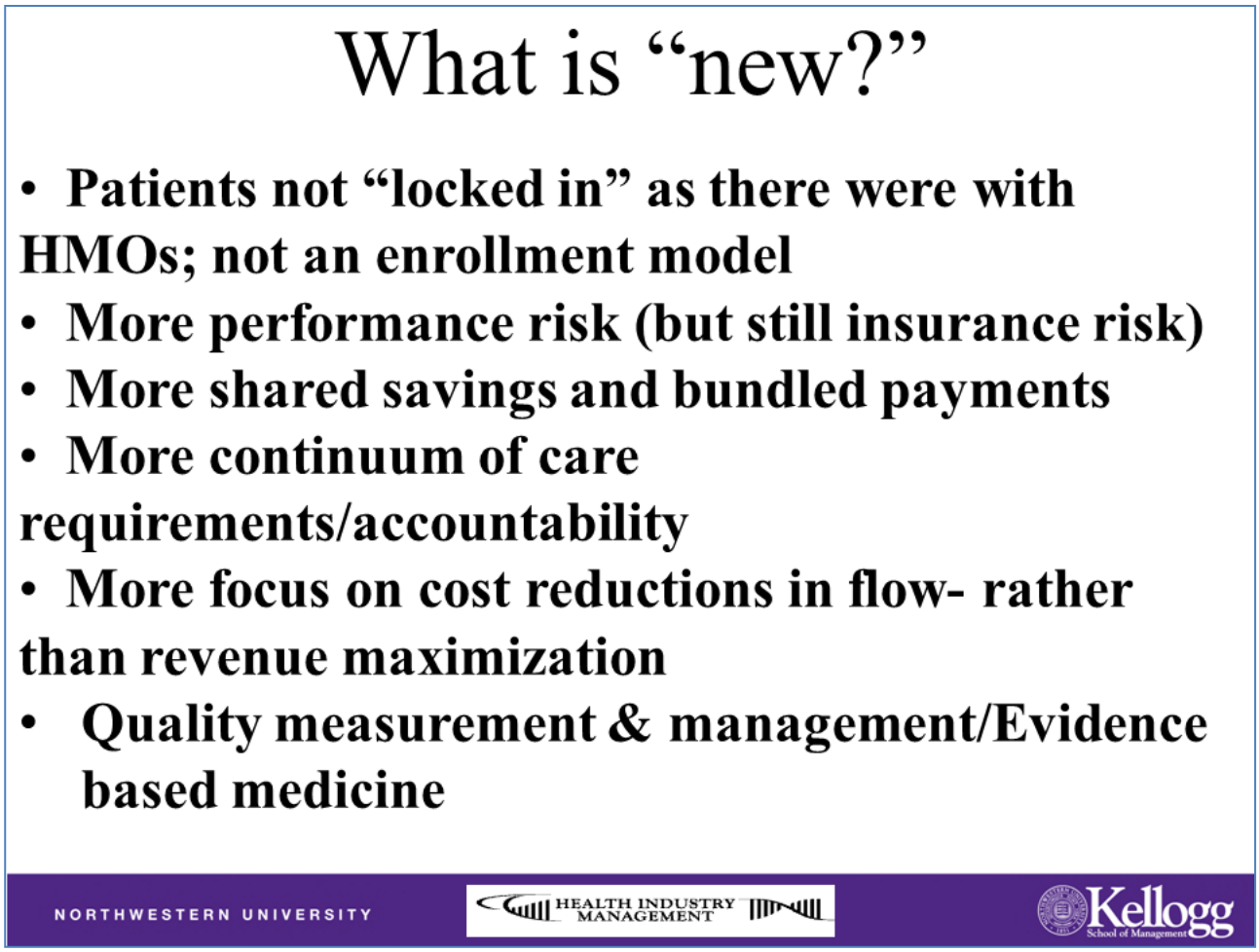


What this says is that hospitals lose 150-250 000 dollars per year for the first three years of employing a physician. To make this up, the doctors either have to be more productive or – guess what - order more things. Order more ancillaries so that the hospital can make more money on those things as opposed to saving money and delivering efficient care. This is really very counterproductive.
So the other thing is what happens in US when you turn an entrepreneur, an individual physician, who owns a practice, into an employee you lose efficiency right there also. That is another problem we haven't learnt.

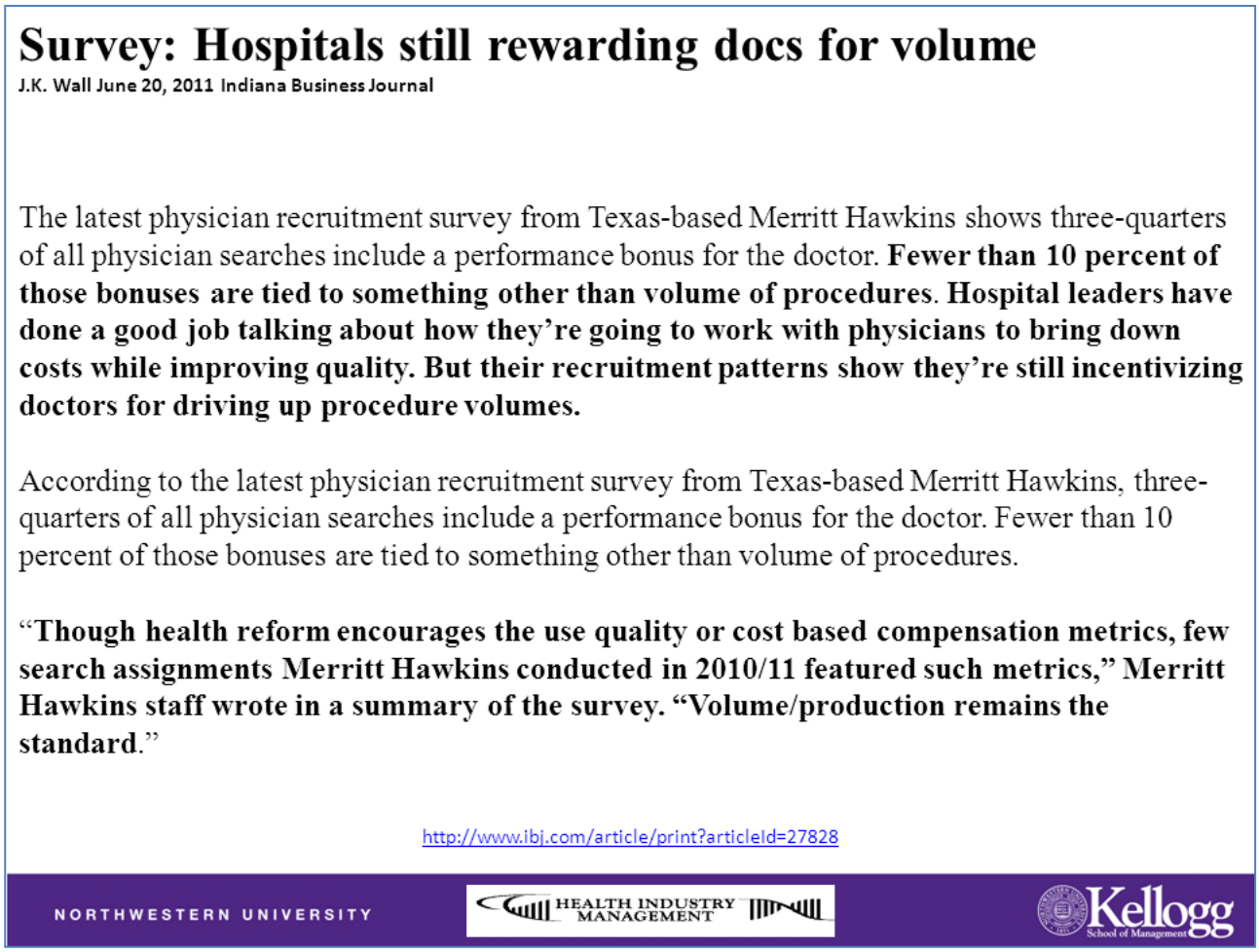


Now what is new about this system? [HMO=health maintenance organization]

- What is new is that at least with the government concept of accountable care, patients are not locked in. What that means is under the old system, if you sign up for a certain healthcare system that is where you belong. Now the only way that you can make an organization or a physician responsible for the quality of care and the financing of care is to assign patients to that provider. And they have to stay within that system. If the patient is free to go where ever that patient wants, there is no way that you can or should make a provider responsible for either the quality or the cost of care. You cannot make someone responsible for things over which they have no control. That is basically what the problem is. And with ACO's the patient can go anywhere. They are assigned to a certain system, but they can go anywhere they want. To me that is an immediate recipe for failure.
- Next is that there is more performance risk. Meaning that how you actually take care of the patient is becoming a little bit more important, not just the straight insurance risk.
- As I mentioned, there is more bundled payments, a little bit more continuum of care requirements, more focus on cost reductions in flow rather than revenue maximization. What that means is that there are a lot of types of reimbursement in healthcare, but the revenue side is rather limited with all of the cost constraints. So healthcare systems - smart healthcare systems - are going to maximize the bottom-line, not by generating more revenue but by minimizing their expenses. And they will do this through higher efficiency and delivering more operational excellence. And that is a brand new way of looking at running a business. I am not saying that you cannot look at other services and try to maximize your revenue and decrease your cycle time on your accounts

receivable. That is all very good. But the real money in the era of global payments is to be made on cost-reductions, increased enhancements on operations rather than revenue maximization.

- Quality measurement and management, evidence-based medicine and pay for performance. This is becoming more important.



Survey: Hospitals still rewarding docs for volume

J.K. Wall June 20, 2011 Indiana Business Journal

The latest physician recruitment survey from Texas-based Merritt Hawkins shows three-quarters of all physician searches include a performance bonus for the doctor. **Fewer than 10 percent of those bonuses are tied to something other than volume of procedures. Hospital leaders have done a good job talking about how they're going to work with physicians to bring down costs while improving quality. But their recruitment patterns show they're still incentivizing doctors for driving up procedure volumes.**

According to the latest physician recruitment survey from Texas-based Merritt Hawkins, three-quarters of all physician searches include a performance bonus for the doctor. Fewer than 10 percent of those bonuses are tied to something other than volume of procedures.

"**Though health reform encourages the use quality or cost based compensation metrics, few search assignments Merritt Hawkins conducted in 2010/11 featured such metrics," Merritt Hawkins staff wrote in a summary of the survey. "Volume/production remains the standard**."

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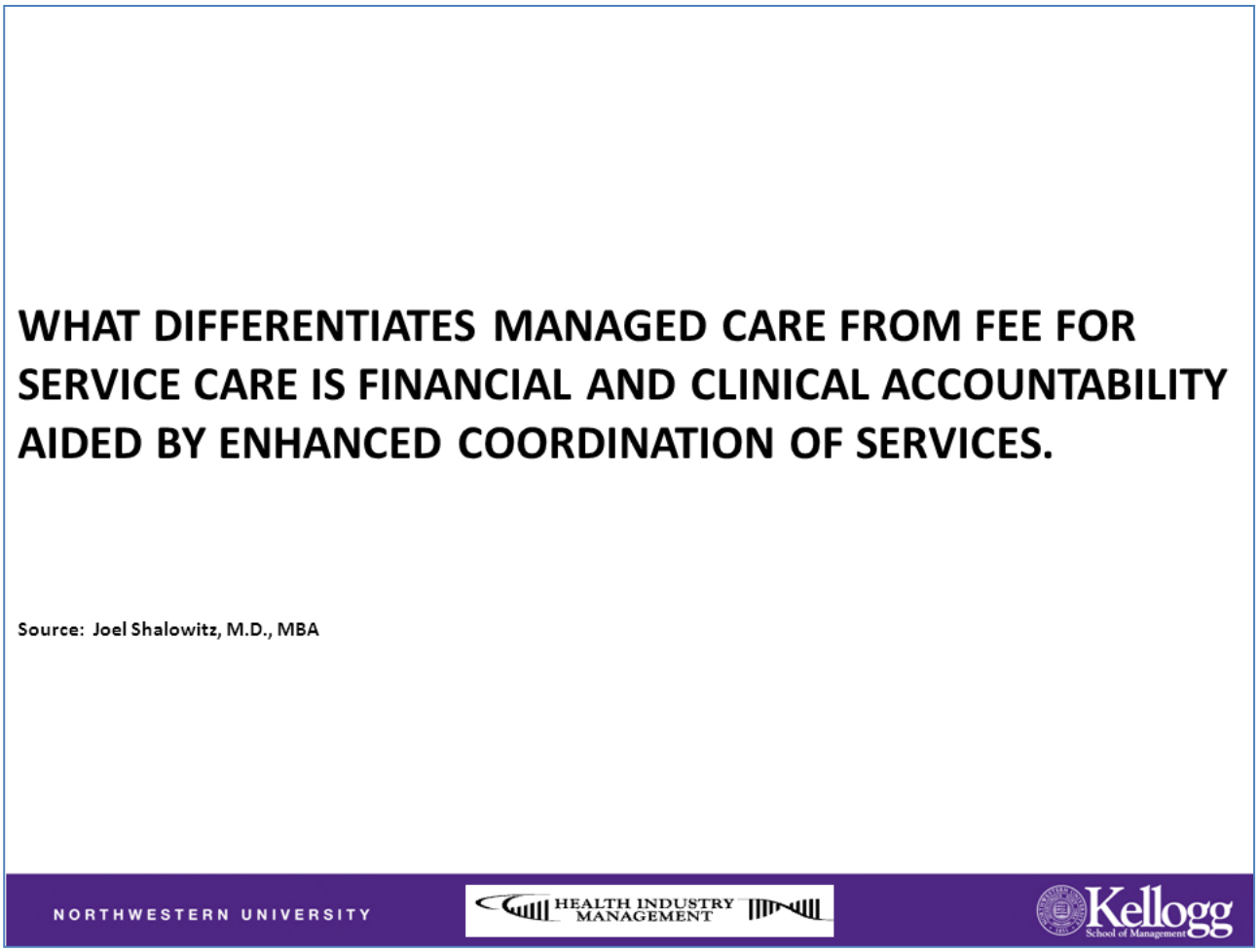
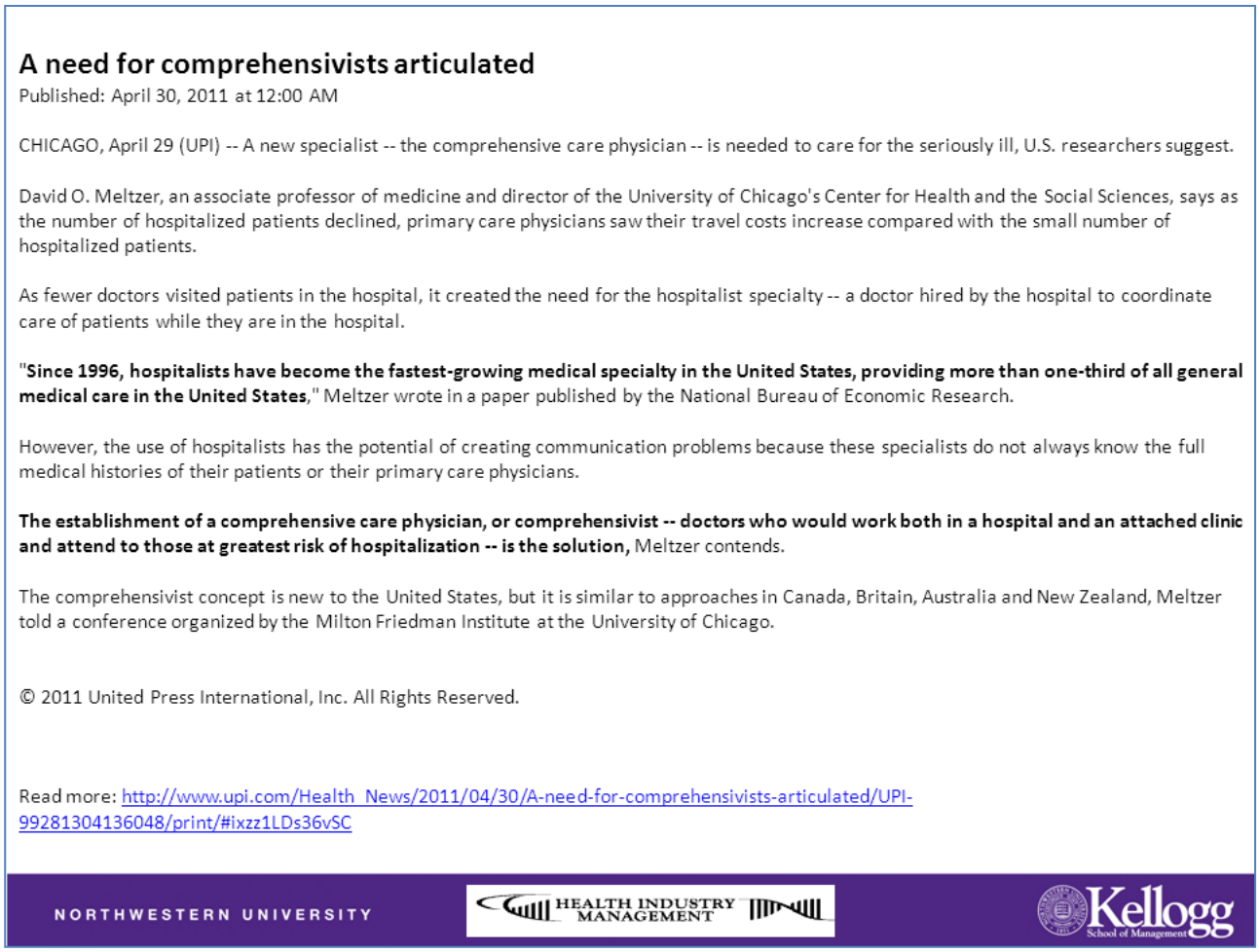
Given all that how should you reward doctors? You should reward them on their cost-savings, on their quality and create those kinds of incentives. What are hospitals doing to recruit doctors and which doctors are they recruiting? Hospitals still reward docs for volume. Fewer than 10 per cent of bonuses are paid to doctors on something other than the volume of procedures or number of visits. So we know what you should be doing, you should be rewarding people for providing high quality, cost-effective care. What are you doing? You are hiring doctors with the promise that the more you do the more you'll get paid. I don't understand it either. If you are confused, I do not understand it either.



So what differentiates this whole managed care organizational system, from a fee for service system, is financial and clinical accountability aided by enhanced coordination of services. So, I have mentioned the coordination of services across the continuum from primary care to acute care, long-term care, chronic care and cycled-in system and I have also mentioned coordinated care with respect to operational excellence. This should not be a surprise. But how do we manage to mess this up also in the US? By the way, the copies of the slides will be e-mailed to you later, so there is more here than I am going to talk about.



A need for comprehensivists articulated

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CHICAGO, April 29 (UPI) -- A new specialist -- the comprehensive care physician -- is needed to care for the seriously ill, U.S. researchers suggest.

David O. Meltzer, an associate professor of medicine and director of the University of Chicago's Center for Health and the Social Sciences, says as the number of hospitalized patients declined, primary care physicians saw their travel costs increase compared with the small number of hospitalized patients.

As fewer doctors visited patients in the hospital, it created the need for the hospitalist specialty -- a doctor hired by the hospital to coordinate care of patients while they are in the hospital.

"**Since 1996, hospitalists have become the fastest-growing medical specialty in the United States, providing more than one-third of all general medical care in the United States**," Meltzer wrote in a paper published by the National Bureau of Economic Research.

However, the use of hospitalists has the potential of creating communication problems because these specialists do not always know the full medical histories of their patients or their primary care physicians.

The establishment of a comprehensive care physician, or comprehensivist -- doctors who would work both in a hospital and an attached clinic and attend to those at greatest risk of hospitalization -- is the solution, Meltzer contends.

The comprehensivist concept is new to the United States, but it is similar to approaches in Canada, Britain, Australia and New Zealand, Meltzer told a conference organized by the Milton Friedman Institute at the University of Chicago.

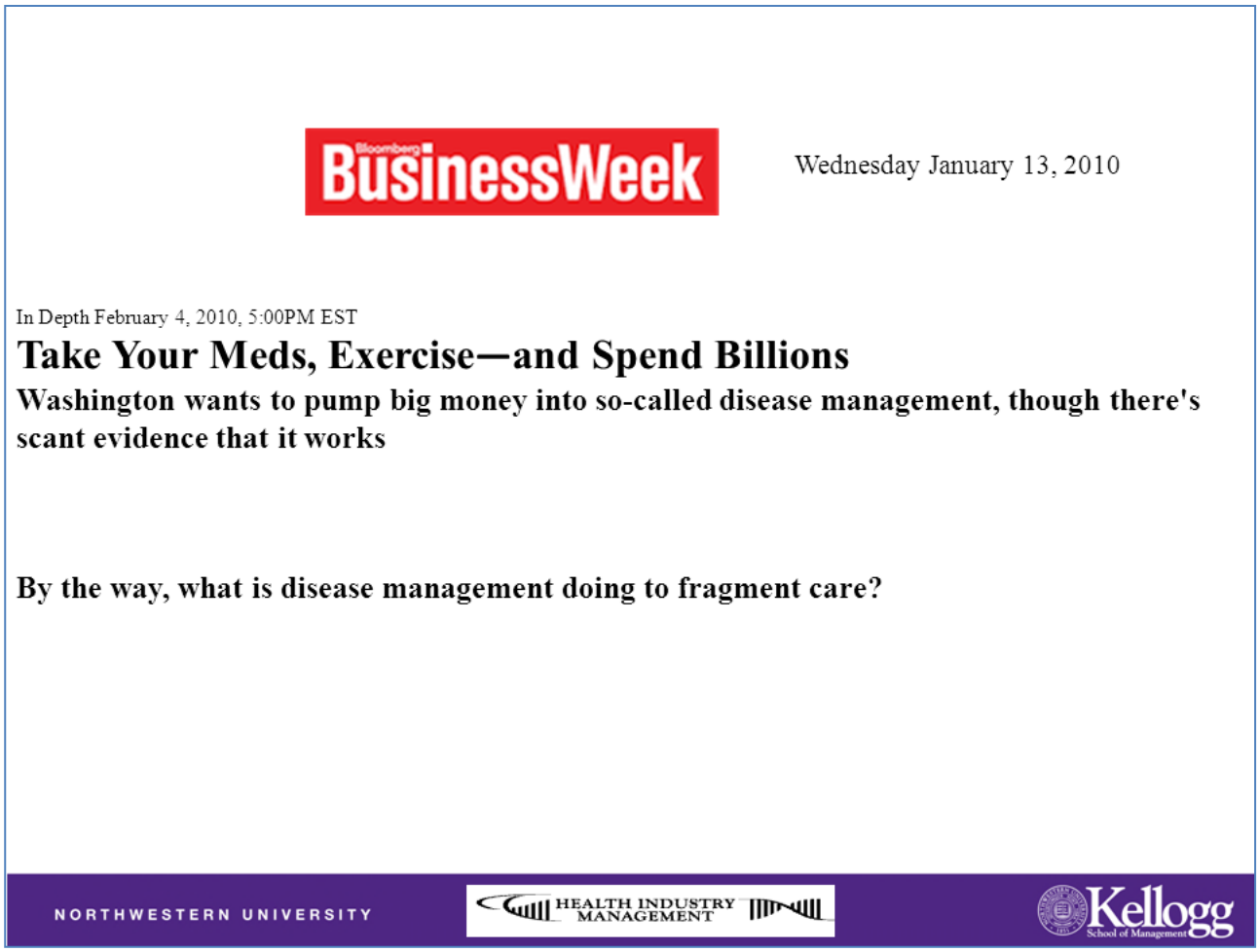
Read more: http://www.upi.com/Health_News/2011/04/30/A-need-for-comprehensivists-articulated/UPI-99281304136048/print/#ixzz1LDs36vSC

But one of the big things in the US is the use of what is called the hospitalists. And hospitalists are doctors who take care of you just in the hospital. It is a little bit like the British model, but we had never had that in the US. Your doctor took care of you in the hospital, your primary care doctor. So now what happens is that your primary care doctor can see you, you need to be in the hospital, they send you to the hospital, a hospitalist takes care of you. The question is why do we need hospitalists? And the answer is because hospitals operate very inefficiently. Tests get lost, they don't get done, things don't happen the way that they should. So we need somebody in the hospital who really understands the system and can navigate all of the problems. So hospitalists are really a fix for a broken system. So instead of fixing the system, we have hospitalists.

What happens with hospitalists? They actually do get people out of the hospital sooner and save days in the hospital. Days in the hospital, that is good, because you have lower costs. But somebody actually asked the big question: what is the overall cost to the healthcare system by putting in hospitalists? Because what happens when they go out of the hospital? They go somewhere else, they go to a skilled nursing facility, they go home, who takes care of them there? It might be the primary care doctor, might be somebody else. But what do you think happened to the overall cost of healthcare? It went up. It actually went up. And the reason is that by putting somebody in the middle of the care, you have broken the coordination of care. As any of you who work in systems know, the more working pieces you have in the system, the higher the likelihood is of some types of error happening. And the way to increase efficiency is to lower the number of steps. People in manufacturing have found this out a long time ago.

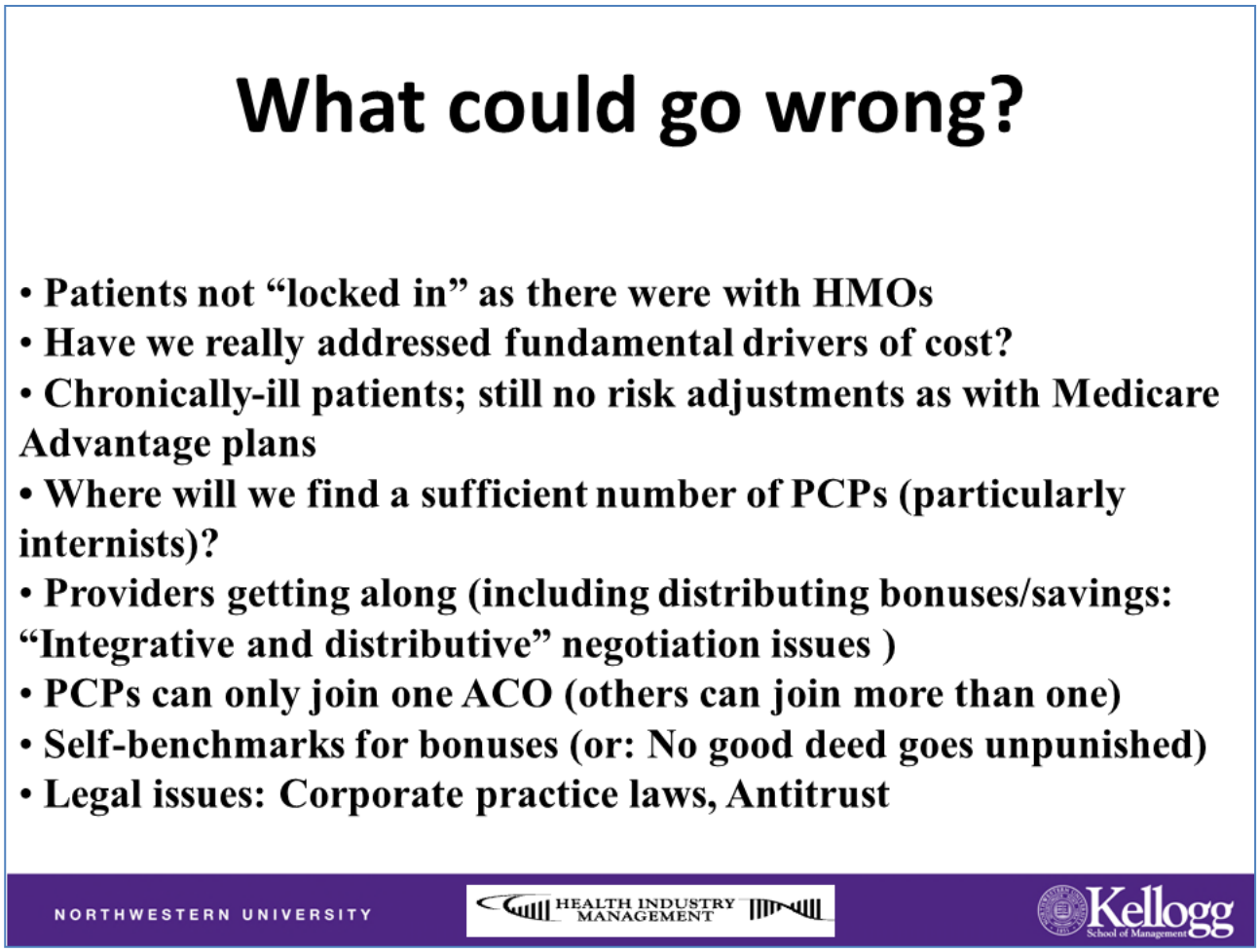
So David Meltzer, who is a very smart guy, he is a MD, PhD at the University of Chicago who has done a lot of writing on hospitalists, said this system does not work for hospitals, we really need to coordinate care. Instead of saying that we ought to return back to the concept of the primary care doctor, you know the

internist or family practitioner coordinating the care, he said: we need yet another person in this system that he calls a comprehensivist - doctors who work both in the hospital and the attached clinic and attend to those at greatest risk of hospitalization. That is the solution. David, we used to call that a primary care doctor. And I am amazed that this story made all the newspapers and this was a big concept. I actually know him and he is a very nice and a very smart guy, but this was a polling that he actually said this.



Now the other thing is that we have something called disease management. These are independent companies that will manage people with certain diseases. Very common diseases are heart failure, diabetes, maybe asthma … but heart failure and diabetes are very common. The real question is do they work? These are specialized companies that focus on people with these diseases. Do they work? Take your meds, exercise, and spend billions. Washington wants to pump big money in to so-called disease management, though there is scant evidence that it works.

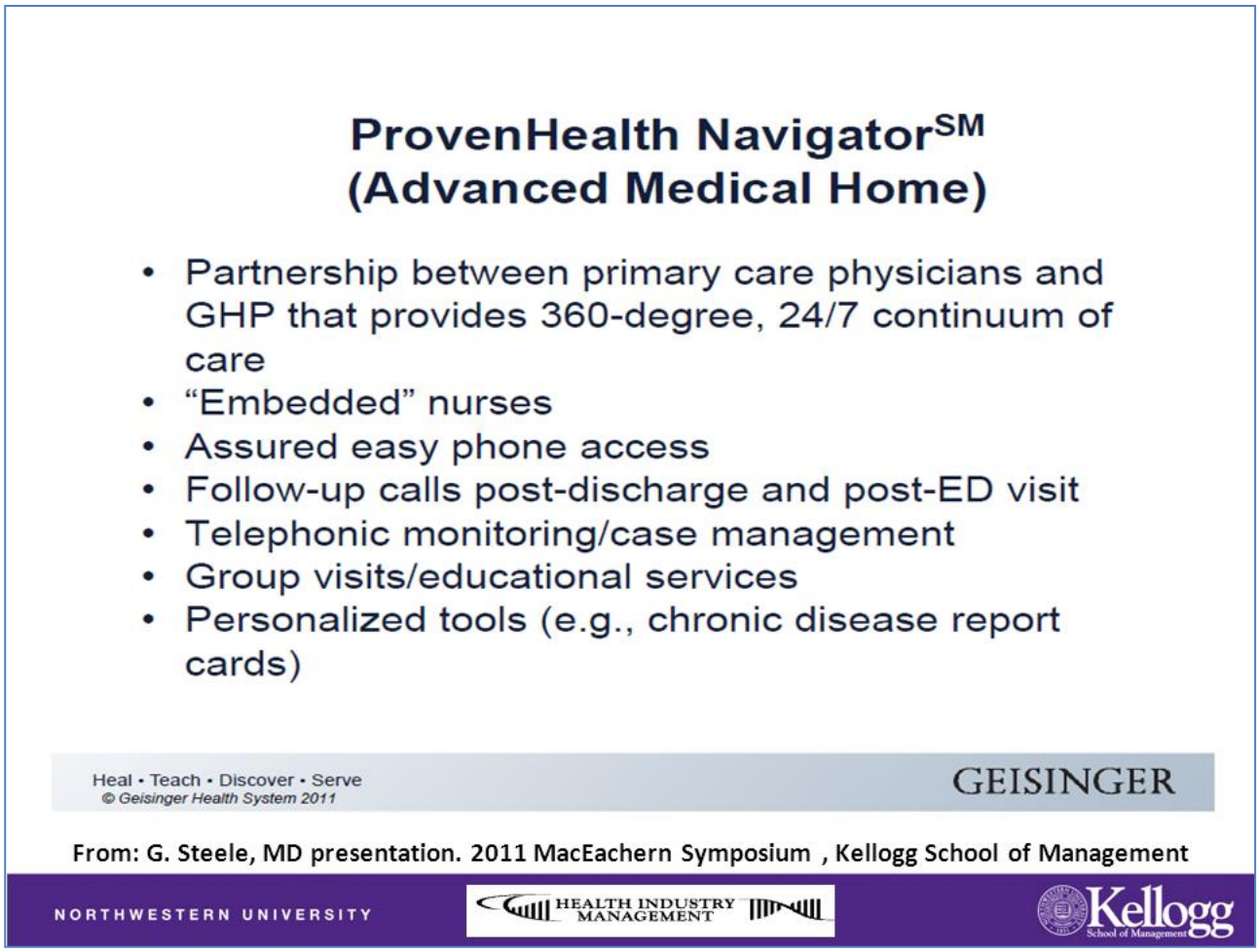
Now why might it not work? Again, what you are doing by putting in the disease management is you are fragmenting the care. You are putting in extra steps. You are un-coordinating it, instead of integrating it and making sure there is a seamless continuum. You are saying here is a patient, oh that is going to go to heart failure, that is going to go diabetes, that is going to go to something else - who is managing the case? There is really very controversial evidence of whether this works or not. Maybe not.



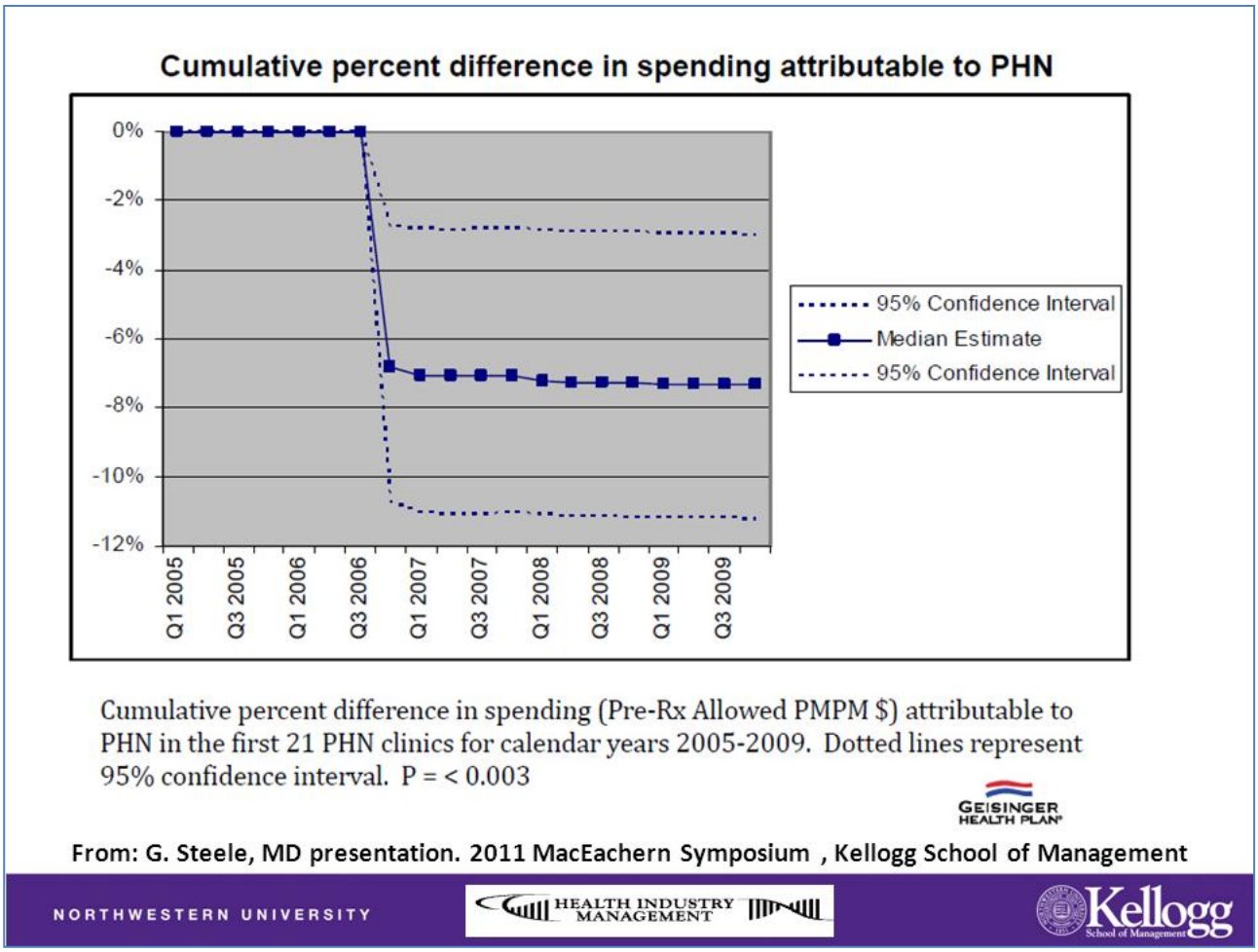
So what could go wrong with these new accountable care organizations?

- Well I mentioned about no accountability actually if patients can go wherever they want.
- Next, have we really addressed the fundamental drivers of cost? For example technology, higher technology. Have we done anything to do that? No, not at all. It is just going to continue.
- Chronically ill patients. Unlike some other countries where there is extra payments if they are very sick, (Germany for example does this with the Krankenkassen) these organizations are not paid extra to take care of very sick patients. So you can imagine that a university hospital-base system is going to attract a lot of very sick patients who are going to want to go there for example from a great distance.
- Where are we going to find enough primary care doctors, particularly internal medicine specialists?
- Once you have a certain fixed amount of money, a global payment for a disease, patient goes in the hospital for by-pass surgery, and here is the money hospital, I don't care how you divide it, this is all I am going to pay you. How much goes to the cardiovascular surgeon? Well, they want it all. But the anesthesiologist says that there is no surgery unless I put the patient to sleep. And then the pathologist says that you need blood from the blood bank and you are not going to do the by-pass surgery or anything without extra blood. It is not going to happen. And nursing services say who is going to take care of the patient after the procedure. Everybody wants money out of this global amount. How are you going to divide up the money? It is a very important question that needs to be addressed.
- Primary doctors can only join one accountable care organization according to some rules.
- How are you going to pay for quality? What has happened is that a lot of the quality bases for paying people have to do with how well you have performed in the past. So let's assume that you are a very good system, like Mayo clinic or Cleveland clinic, and you sign up for one of these. Your bonus for efficiency and quality is going to be benchmarked on your past performance. Now how

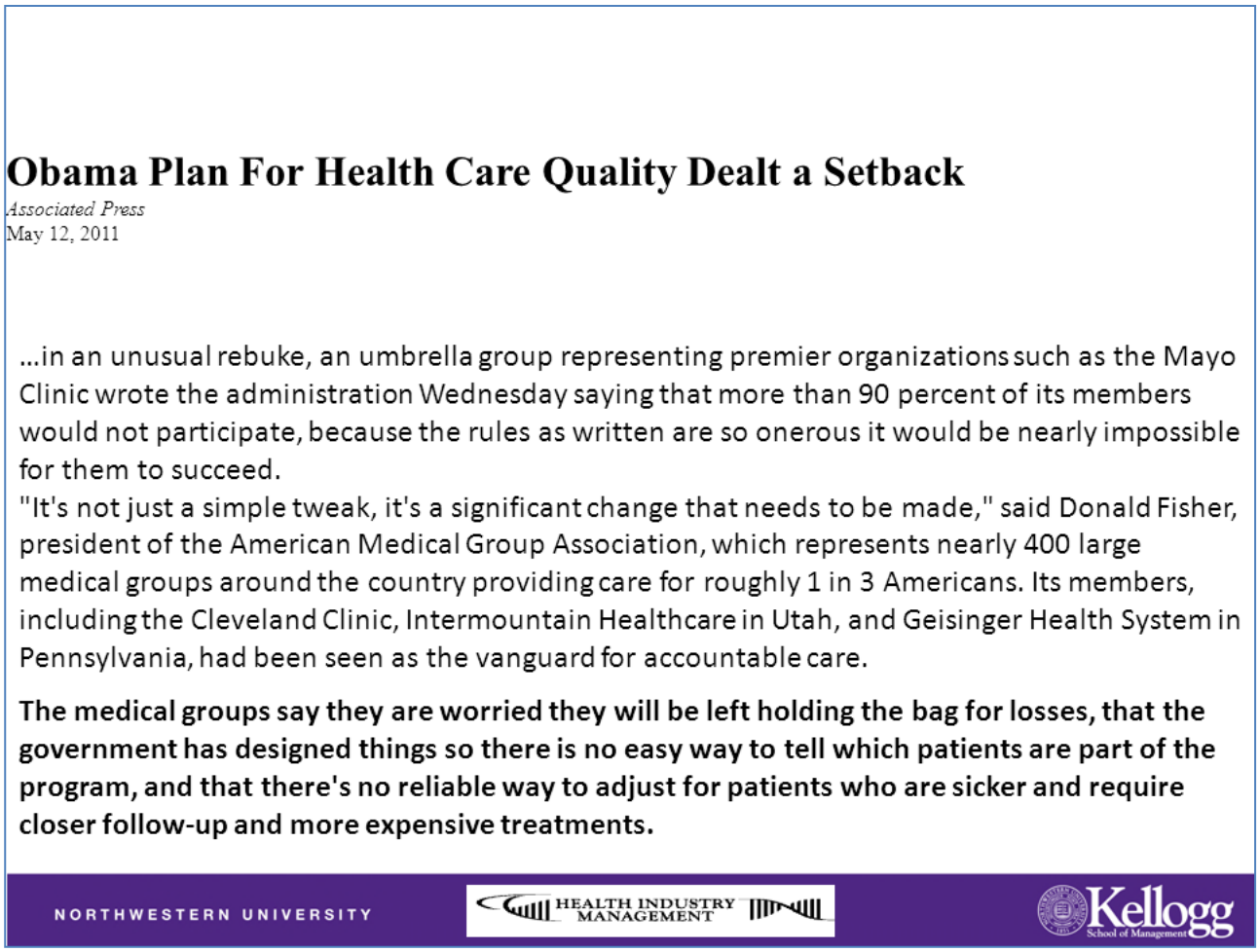
much are they possibly going to improve? Because they are doing really well. Why should they take any financial risk in return for an upside inequality performance, when the upside is so small and the potential downside the financial risk is so great. Why would anybody in his or her right mind want to do that? You would have to be crazy. In some cases people would like to choose their own doctor and sometimes doctors want to do this to their patients. So what have some of the systems done? I will come back to this.



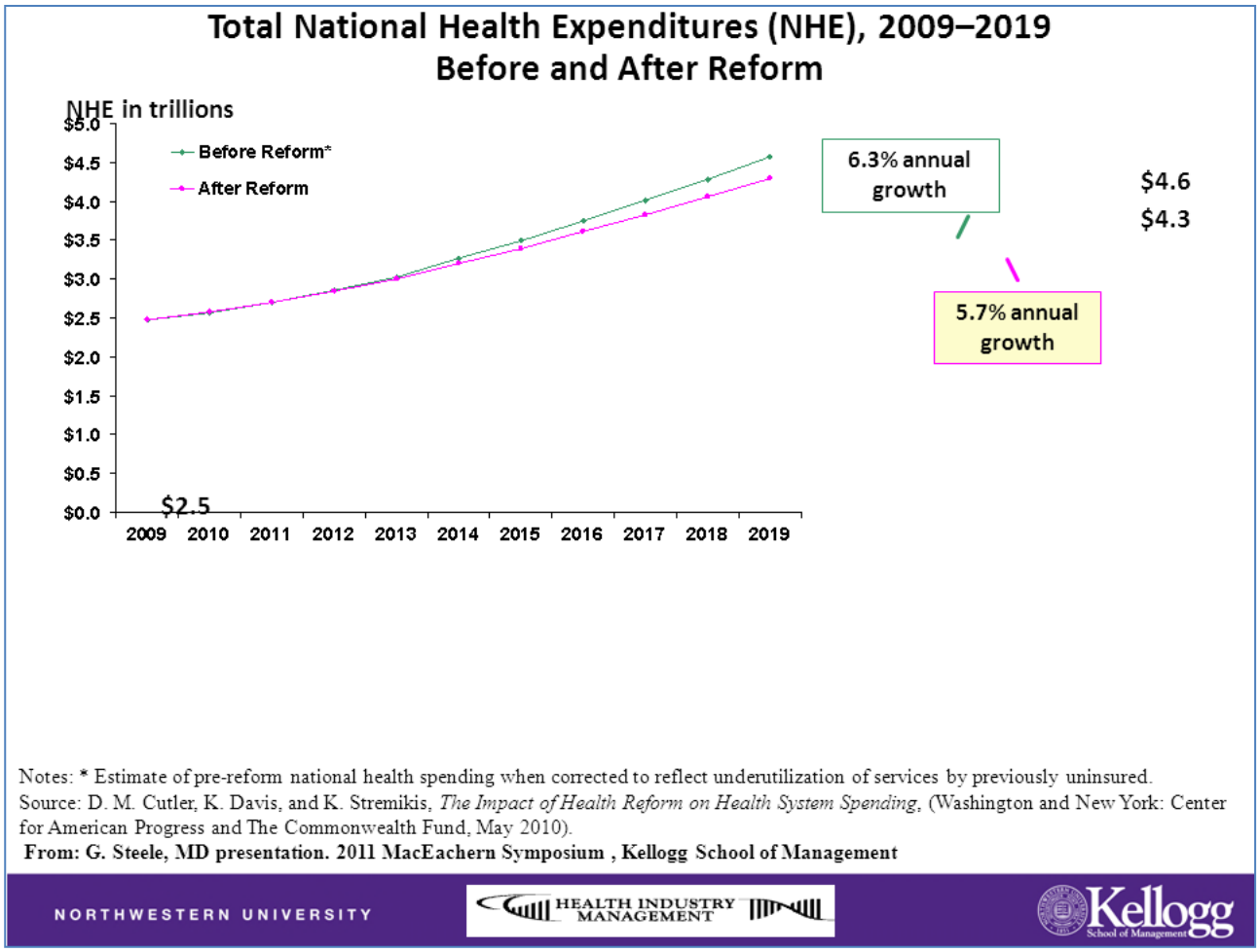
One of the systems that is very well integrated is Geisinger, which is in Pennsylvania. Geisinger has something called the advanced medical home and essentially they did all the things that I've talked about. They have primary care doctors, they have integrated care, enhanced their communication and so forth.



And what has happened is that here is their cost on a zero basis. After implementing this integrated program their costs have gone down rapidly. That is what they say. So if their costs have gone down that rapidly, what is Geisinger's opportunity to participate and get the upside with this new integrated model? And the answer is again: what would you do? You'd say I'll pass; it is not worth taking this much upside potential for this much downside risk. Nobody intelligent would do that.



And in fact that is actually what happened. These big clinics, Geisinger, Mayo, Cleveland clinic and so forth said to the Obama administration: we are not going to participate in government sponsored accountable care organizations. And then they turned around, the government said, wait a second, we have a better deal for you: here is what the better deal is. And then again they said no thanks; we are not going to do it for that very reason. So not everybody is participating in this kind of concept.



And in fact what is going to happen is, after health reform, healthcare is going to go up, was going to go up like this - it is anticipated - it is going to go up like this. And what this actually shows, is something - the concept that has been around for a long time - is that if you eliminate the inefficiencies of the system, you will lower cost but then healthcare cost will go up at exactly the same rate as it did before, unless you address the fundamental reasons why healthcare costs are going up. Technology for example. People gaming the system and using higher technology or increased volume. This is what we are facing. The government relief is improbable, I don't know if this pun actually works. This is what we call "electile dysfunction"… like erectile dysfunction like Viagra… did this translate ok? I don't even want to know. It is the inability to become aroused over any of the choices for president put forth by either party in the 2012 election year. Notice, he is holding Florida, which is a key state.

DISCUSSION

That is what I wanted to say very briefly - I know it does not seem brief - about the US healthcare system. And we do have at least five or ten minutes for questions. And remember if you do not have questions I tell economist jokes.

Question 1: Now that you have established very well that fee for service does not work and everybody seems to agree with that.
JS: By the way not everybody agrees with that. There are many, many doctors, who don't agree, and many hospitals as well. But I agree with you.
Question 1: In spite of the fact that you are a doctor, which is fine. So the solution seems to be that the fee for the performance is the right and one should have outcome-based solution. Would you like to define what you think should be the future the US way? How would you, if you had the power, how would you solve this?
JS: I know the answer, but the answer is about a three-hour answer. So let me briefly answer that. Number one is I think there ought to be capitation and there ought to be responsibility for that capitation for the things that the provider has the control over. And the things that they do have control over you also need some stop loss and excess loss. And I know that works because I've done it. I run a medical group of twenty primary care doctors as well. I know that works because we've been doing it for thirty years or so. So that works. As far as the quality performance … that's a very long answer. And usually the way that it develops – and I am trying to make it applicable maybe to the developing programs here – is that first what you do is you make it confidential and voluntary whatever the units are. And what you do is you make it performance based. In other words – and I am going to be very simple – does the doctor take the blood pressure at every visit. Again I am going to be very simple here. You make it voluntary and confidential and you do it by process rather than outcome. Then when you've established what you want to do, then you move to more of outcomes. And then you move towards more transparency and openness about the results. But first you have to get the confidence of the providers. So eventually let's say with the blood pressure what you should do is you say: ok, we know you're doing the blood pressure, now let's look at the Finnish or international guidelines of blood pressure control. Actually now they are very low, they are 130/80. I remember it was 140/90. But let's say 130/80. And you only reward on outcomes and you publish it by whatever standard: this doctor gets a gold star because 75 % of the high blood pressure patients that he/she takes care of have blood pressure under control. And you can do that with lot of things like cholesterol monitoring: did they monitor the cholesterol, LDL for example, in patients who have diabetes. Did you just do it? I don't care what it was – hopefully not 500 or something – but did you at least do it. And then eventually "oh, is LDL under 100". So that's how I would roll it out. There are some other modifications, but that's probably the shortest one I can get it now.

Question 2: I am an internal medicinist too.
JS: Come to the United States, we need you.
Question 2: My question is: quite a lot of the increasing costs come from the controlling bodies that require that the physicians perform surgeon, investigations, whatever taking x-rays and MRIs etc. for quite let's say not so serious conditions. Because once they get sued they want to avoid being sued for malpractice. We see that in Finland and it is getting worse and we call it "americalization of the system". Has there been discussion on that?
JS: Absolutely. We call it defensive medicine - we don't call it Finnish medicine, we call it defensive medicine. And it is what doctors do prevent getting lawsuits. Because if you are sued and let's say many, many doctors are sued whether it is legitimate or not, you don't want to be at the trial with the lawyer of the patient saying "doctor, didn't you do this test?" And you can argue that the likelihood of finding something was so small. "Yes, but it was not zero, was it? And our patient was harmed because you did not do it." Now the other thing is that the financial system is perverse because the doctor gets paid often to do these unnecessary tests. So this is really very good: you are getting paid to do unnecessary tests, which at the same time might prevent you from getting sued. What are you going to do? Right, it's very logical. One

of the things I have to tell you is that malpractice problems and laws are state by state, it's not federal, it's state by state. So what some states have done is they've said "we're going to establish guidelines for certain conditions. If you follow these guidelines – meaning if you don't order these other tests, the unnecessary, it is ok and you will not be sued because you did not order these tests or it cannot be brought into trial. In some states that's been tried, but the lawyers have a very, very, very (and that's understating) powerful lobby and fight it, because they want to use everything that they can to make sure that their case succeeds. Because whatever they get by the way in settlement whatever the settlement is they get a third right of the top before anything else. So it can be a huge amount. So they don't want to take any of their potential away. So those things have been tried. I think that's actually good, that if you can have some type of criteria – this place very well to the next topic of ICT and that is clinical decision support systems, which will tell you have you done this particular test. Here is a patient with lupus or something, have you done these tests, when is the last time you checked kidney function. And if you've done that and you have these prompts that should protect you and actually your malpractice cause should go down. I don't know if that was very satisfactory answer, but I hope it answered the question in that way.

Question 3: Do you believe any possibility in US healthcare system? This was the trend setting in preventive healthcare education like there was one picture (take your belts, exercise, there was nutrition). Because I do believe: the older I get I believe in education in those fields. So what do you see?
JS: Absolutely. The problem is that people often don't want to do it. There is – actually you are asking the wrong person, this is my youngest daughter's thing, because she is into something called social marketing, not social media, but getting people to do the right thing for the right reason, so she is actually finishing her master's program. She can answer that question of how to do it. But let me give you an example of people not doing it. There was a study by a very large insurance company in the US and they said – and I am just making up the numbers, but you'll get the idea – your insurance policy is going to cost you let's say 100 $. But if you do these preventive things, you exercise and do all these good things, we are going to charge you 120 $, but if you do all these things, your cost is going to come down to let's say 80 $. We are going to charge more up front, but your incentive is if you are going to do all these good things, you'll end up paying a lot less than the traditional policy where you don't have to do anything. And guess what the vast majority of people said they would buy? The 100 $ policy. So it has to also be easy. There is a whole science behind getting people to do these things. I could get reward from my health insurance company Blue Cross, but I have to log in and go through a few different places in the website and find it and enter information: how many steps I walked today and what my diet is. It is not worth it to me. So it has to be made easy. There are ways to do it.Question 3: We did in 1970's this in North Karelia project with the quality of that.JS: Yes. By the way I use North Karelia example in my international healthcare class as an example what to do. All those things: getting people reducing salt, the butter problem these days, smoking and that. Brilliant, it was absolutely brilliant. And so maybe more that needs to be done.

Question 4: The thing I often and mostly think about concerns the quality of work, the performance. And I think the basic issue I have to address is does the doctor for instance reach the correct diagnosis and is the treatment the best possible. How to evaluate this when for instance patients often think that it is very good that they can get to the doctor in for instance three days and the situation from the doctor's or specialist's point of view can be that there is a doctor that sees 6-8 patients per hour never reaching the correct diagnosis. And then there is a doctor that takes 2 patients per hour and usually reaches the correct diagnosis. And you should be rewarding the latter person and not the first one. But we don't really have systems for this. And when I take this up they say: this is so very difficult to evaluate the quality and if actually the real diagnosis was reached, because even doctors don't agree with what is the correct diagnosis. So do you have some kind of medicine for this very big problem?
JS: Maybe you'll have to invite me back again to talk about quality – the quality again is sort of a three-hour issue. One of the big pictures is that often we focus on quality on badly performing doctors and think if we can eliminate them from system everything is ok. One of the problems that I've read about the Finnish healthcare system is inefficiencies. You have to increase efficiencies in what you do. So what I would say – what you said was the first doctor seeing people too fast and making wrong diagnosis, the second doctor

seeing people slowly, but making the correct diagnosis. So my answer would be let's help the first doctor maybe slow down, make better diagnosis. Let's also help the second doctor speed up and be more efficient. Because that's a really good doctor and you want that doctor to see more patients. That's really what you want, because that's actually a good doctor. One other thing is I would say: why is that first doctor seeing patients so quickly, what's going on? Why is the second doctor seeing patients so slowly, why is that happening with the same specialty? Is there financial incentives that are going on, is there organizational pressure that's forcing doctors to do this. Since you have both of them I would say the culture probably – the national culture – is not an issue. Because in Japan it is a whole different culture: they see people in every five minutes and so forth. But it is a very different culture, because they just make very small incremental changes in healthcare, because it is more of the balance – the whole culture and concept of disease is very different.
Question 4: Short comment. Often is so that after a certain time period there comes this good doctor who goes through all the papers or documents that the seven-eight fast doctors haven't minded and build the right picture. So I don't … I must totally agree with you with the fact that you should speed up the doctor that takes care of one patient in half an hour. Because he does the work of seven people in this case.
JS: To answer counter that the next topic is the information technology. And the doctor – by the way I know what it is to go through somebody's chart, who's seen five other doctors and so forth. If I had some type of usable electronic system they would speed my knowledge about what is going on with the patient I would not have to spend all that time, I could do it a lot more efficiently. Now the electronic record – I'm going too much ahead but - is not a cure for speed. As a matter of fact it slows you down for sure. How much it slows you down that's a whole other issue. But for certain things that will speed you up. I don't know why the first doctor is doing what he/she is doing, that's important too.