SPECIAL REPORT

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THE HEALTH OF HEALTHCARE

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Although the *health of our economy and the capital markets* has been the primary focus of our investment team, we have also been following the healthcare reform debate, along with most Americans who will be affected by any ensuing legislation. With Congress back in session, healthcare is at the forefront of the news again. These headlines lead with the *political* perspective of healthcare, which can often be diffusive and divided.

A number of our clients are leaders in the healthcare industry, with impressive accomplishments and a deep understanding of how the system works. Over the years, we have enjoyed hearing their perspectives and wanted to share their insight with the rest of our clients and friends of the firm.



This summer, five of them took time out of their busy schedules to sit down with **Jason Norris, CFA**, senior vice president of research who works with Dean Dordevic in following the healthcare sector for our investment team. Rather than discussing the minutia of the various proposals, they took a step back from the debate and conveyed their thoughts on the opportunities and challenges that lie ahead for patients, healthcare professionals, hospitals, medical schools, employers, insurance and pharmaceutical companies, and last but not least ... the Federal government.

Segments of their conversations have been categorized into six topics for this publication. The complete transcripts and video highlights can be found at http://tinyurl.com/fwhealth

About the Experts



Michelle Berlin, M.D., M.P.H. is vice chair, department of obstetrics and gynecology and interim associate director of the Center for Women's Health at Oregon Health & Science University.



Peter Kohler, M.D. has been vice chancellor of the University of Arkansas for Medical Sciences-NW since 2007. From 1988 to September 2006, Dr. Kohler was president of Oregon Health & Science University.



Robert Lowe, M.D., M.P.H is director of the Center for Policy and Research in Emergency Medicine at Oregon Health & Science University.



Fred "Chip" Masarie, Jr., M.D. is principal of Masarie Consulting and has spent more than 20 years in medical informatics for QMR, Camdat, First DataBank, MedicaLogic and GE Medical Systems.



Bill Ten Pas, D.D.S. is senior vice president of ODS Companies and Dentists Benefits Corporation as well as senior vice president of Dental Services Group.

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What is Good About Our Current Healthcare System

Jason Norris: There is so much discussion about what's wrong with healthcare in the U.S., but some aspects of the system do work well. What are the strengths of the current system?

Dr. Bill Ten Pas: With 85 percent of the population covered by insurance, we have great access. That leaves 15 percent of the population who, "by choice or by condition," do not have access to healthcare. These are the people we need to concentrate on. Technology has been a huge boon, though it's also a great cost driver. We are able to perform procedures faster and less invasively than ever. In general, I think the medical profession has done an outstanding of job caring for people. That's the positive. The negative is cost – which is partly, but not entirely, the responsibility of the medical profession.

Overall, healthcare in this country *can* be outstanding – not everywhere, not uniformly, but it can be excellent.

- Dr. Peter Kohler

Dr. Peter Kohler: One strength of the current system is research, like Dr. Brian Druker's targeted cancer work at Oregon Health & Science University (OHSU), that has led to some great discoveries and new ways to treat disease. On the large scale, that kind of work will increasingly lead to better patient care. There are other examples, simple things that have made a big difference – like how we measure blood oxygen. I remember when we did that with a painful arterial stick. Now you can usually do it by putting a little gadget at the end of a finger. These advances have improved patient care enormously. Overall, healthcare in this country *can* be outstanding – not everywhere, not uniformly, but it can be excellent.

Dr. Michelle Berlin: We've had phenomenal advances in healthcare research. We lead the world in technology and medical devices. So those are among our strengths.

Dr. Robert Lowe: I agree. The U.S. medical care system has great science, an abundance of technology, excellent physician training and a huge assortment of specialists and sub-specialists – at least in our larger communities.

Dr. Chip Masarie: I tend to think about the ways people manage health information. One thing I'm really excited about right now is that people at the highest levels are becoming aware of how we use information technology to help deliver better care and to standardized certain practices. The previous administration understood this, and the current administration understands it – that it's critical for us to be making the advances we are making in this area, in order to manage both cost and quality.

Kohler: Technology is a positive thing, but we've done a better job of implementing it for administrative matters than we have for patient care. We're currently testing a handheld tablet loaded with artificial intelligence to help with patient triage. It can help medical professionals decide who needs to see a doctor, and who can be taken care of by other professionals. That kind of team-based approach would save a huge amount of money.

Norris: How would you put that team-based approach into practice?

Kohler: That's the challenge. There are some good examples of teams that work. We need to create a new kind of healthcare delivery team, so we're looking at how to educate teams to work together. Organizations that protect quality standards tend to look askance at this, so there's a lot of convincing to be done.

Masarie: Triage is critical. When do you kick a medical problem up to the next level? People don't usually address that issue, the handoff from one team member to another. Understanding that decision threshold is key.

Kohler: We're working with an Oregon company called Lifecom that's developing a tablet. It was originally designed by a trauma surgeon to help with triage in rural emergency rooms. Now it has been adapted for use in primary care. It maintains a running differential diagnosis and shows the users when they're in over their heads. For less sophisticated examiners, it offers a prompt of the next appropriate question to ask.



The Practice of Medicine

Norris: What is the best way for physicians to change the way they practice medicine? Do we start with the medical schools? How does someone who has been practicing for 30 years change?

Ten Pas: There are lots of ways: legislation, compensation, education. There's legislation underway, but for some reason they can't come up with a standard. People who have put in electronic medical records (EMRs), and failed, are reluctant to try again because of the cost and the turmoil. We need education from the very beginning, even before medical school. Students need to feel comfortable with technology from an early age. And there has to be some economic incentive. What about an increase in Medicare/Medicaid reimbursement for moving to an EMR? These kinds of incentives for technology may allow doctors to afford treating more Medicare/Medicaid patients.

Kohler: When you're trying to get physicians to adopt something new, they have to feel that it makes their practice better, easier or less expensive. Up to now, the incentives haven't been there. In fact, the very people we need the most right now, the primary care providers, are getting penalized by costs at every turn: the Federal government reimbursement system, EMRs. When healthcare costs go up, primary care physicians are the first to get cut. That drives doctors out of primary care. But when we do something that makes life better and easier, people are likely to adopt it.

Masarie: My daughter just started her third year at OHSU, and she's being trained to use EMRs. That's a sign of the times. When these young doctors start working, they're going to say, "I cannot practice without an electronic chart." They'll be so used to having access to information. And they'll be joining practices with older physicians, so there will be some tension, but also good learning. So I think education and early exposure is really important.



Ferguson Wellman's Jason Norris met with Bill Ten Pas, Peter Kohler and Chip Masarie on July 14.

Norris: How prevalent are issues with tort reform and insurance? Are procedures over-prescribed so doctors can play it safe? Does the referral-based system help doctors become more profitable?

Berlin: The defensive medicine piece is huge. There are plenty of instances where physicians request lab tests simply to avoid liability. I'm in obstetrics and gynecology. Physicians in my field are sued significantly more than those in many other specialty areas. That's where cost effectiveness and practice guidelines intersect and can help us know how best to practice and help avoid ordering studies that may not be needed.

Lowe: In addition to legal and financial factors, the probability that a given patient will receive a procedure is partly a matter of local culture. In one medical community it may be a standard practice to give procedure "x" for condition "y." That may be different in another community.

Norris: To manage spending of our health savings account (HSA), my wife may consider taking our kids to a registered nurse who's employed at a pharmacy and can give general tests, such as throat cultures. Is this a good way to save money on healthcare costs?

Berlin: That concerns me because you lose continuity of care. I would prefer that my patients are seen by their primary care provider or their nurse practitioner than go to different places for care. That way, the provider gets to know the family over time. This is what the concept of a "medical home" is about: minimizing expenses by taking a team approach to providing appropriate care. Medical records are centralized, so families don't have to worry about digging up immunization records. If patients need more care than the medical home can provide, they are referred out. But they always come back to that home base. Medical homes can include other professionals, such as nutritionists, who can help with diabetes management or other conditions.



Access and Affordability

Norris: I'd like to hear your thoughts on access and affordability. Also, what areas do you see as key to keeping costs down? Malpractice insurance? Reimbursement rates? Unnecessary procedures?

Kohler: The three you mentioned are critical. It's true that unnecessary procedures are performed because people worry about being sued, and lawsuits are costly. But I think we focus too much on financing. We need to develop a better healthcare delivery system. That's why I think the team approach may be a way to reduce cost. We also need to look carefully at what procedures are recommended. The decision about whether to refer a patient to a specialist needs to happen earlier in the process – and be made with much more care.

Ten Pas: You can't address accessibility without addressing affordability. Right now, cost is driving a lot of the issues around access. At ODS Companies, we're seeing less than 20 percent of our costs going to medical

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- Dr. Chip Masarie

providers, while another 20 percent go to pharmaceuticals and 40 percent go to hospitals. We're looking at how you control that. There are issues in the way hospitals charge. Patients may pay \$40 for an Advil – that's an example of building-in an infrastructure, rather than a cost structure. And there's so much redundancy. How many MRI machines does Portland need? This city probably has as many as there are in all of Canada. Why do we build more infrastructure for services that are already available? OHSU has a cancer center. Providence has a cancer center. When are we going to realize that we have to control redundancy in order to control costs?

Masarie: As an independent consultant, I pay for our healthcare insurance. My wife and I pay more than \$1,000 a month. We're fortunate that we can afford it, but it's an onerous burden for people with small businesses. One way we can reduce costs is to use more evidence-based medicine. Electronic tools can help, by managing and delivering the data in ways that are useful.

For instance, they can let doctors compare the effectiveness of generic and brand name drugs. Those kind of metrics allow us to make more intelligent decisions and create opportunities for cost savings. In medical school, I learned to evaluate the *usefulness* of a test. Will its outcome change the medical decisions I make? Because if a normal result and an abnormal result lead to the same course of action, why do the test? Nowadays we order tests just because we always have, or because we want to avoid a lawsuit.

Ten Pas: Look where the building is going on now: cardiac care, cancer care, imaging. The dollars aren't going to internal medicine and general practitioners. As Dr. Kohler said, there are medical professionals, besides doctors and specialists, who can perform many services. We've got to start utilizing them more if we're going to significantly lower healthcare costs.

Lowe: Regarding access and affordability, patients these days – to get the best care – would do well to follow Ben Franklin's advice: try to be healthy, wealthy and wise. Be wealthy to deal with the problems of access and cost of care. Be wise to deal with the problems of assessing quality of care, which is very hard to do. And, hopefully, stay healthy enough to serve as your own advocate – in a medical system that, according to the Institute of Medicine, results in 44,000 to 98,000 annual deaths due to medical errors, in hospitals alone. But what if you're not so very healthy, wealthy or wise?

Berlin: Access has different components. Cost is actually part of access – because if you can't afford care, you can't get it. Going forward, the system we develop has to be simple to use, sufficiently and fairly financed, and it has to leave no one out. So the question ends up being, "How do we get there?" These issues of quality, access and cost are really complex, especially for mothers, who more often work part time or in small businesses. That makes it hard for them to get good health insurance. Women are also more likely to have employer-based health insurance through their spouses, so they are vulnerable if their spouse loses his job. Under-insurance, as Dr. Lowe was talking about, has become a bigger issue for women.



Innovations and Technologies

Norris: How can we better standardize procedures through technologies? How can we integrate technology into hospitals and healthcare in general?

Berlin: EMRs are not the be-all-end-all, but they're extremely helpful. Because of this kind of technology, my notes are legible. At my institution, I can access a patient record anywhere - that's helpful. And there are many more examples where technology like this can help. Still, there is room for improvement in how we implement them. In the U.S. we underutilize our mid-level providers, such as nurse practitioners and physicians' assistants, who can provide a lot of basic care. The key is to make sure providers understand what they do and don't know, and that they have good backup. And they must have immediate access to high-level providers as needed. Providing tools for these providers is a way technology can help deliver better, more cost-effective healthcare.

Kohler: Many physicians have resisted the EMR even though they know it has advantages. Frankly it can slow you down, but you also become more accurate. We're still learning, particularly the older physicians, how to use the EMR better. Many features can be improved; for instance, to add new information that may not be part of the usual patient interview. But it hasn't been fully embraced. If somebody pays for it, many doctors are willing to install it. It's clearly the way of the future, and it will be better once it's implemented effectively - including the transfer of information between various doctors and hospitals.

Masarie: In 1997, when I joined a company to build EMRs, there was about 10 percent usage for ambulatory electronic charts - and today, in 2009, it's still about 10 to 15 percent. And some doctors complain that they're going home later because of all the documentation. But there are positive things - like a national effort to standardize the functionality of EMRs. Tablet computers have been touted as a great delivery mechanism, because they let physicians continue to work the way they have been, grabbing the chart at the door of the exam room. That, and voice recognition, are technologies that are improving. But it's not the technology that holds us back. It's all the other issues around changing the workflow of a healthcare organization. There's resistance. But things are changing. When we go into an office that has just made the transition, and we ask, "how do you like your EMR?", they often grumble - but when we say, "OK, can we take it away?" they reply, "No way!"

Norris: What technologies are creating great investment opportunities?

Kohler: There have been many advances in pharmaceuticals and technology. To the best of my knowledge, pharmaceuticals are not in a rapid exploration mode right now, but biological products are coming along. The costs are high, but there are some exciting advances coming. Drugs like statins have allowed people to live longer. We need to manage technology better, but it still represents an opportunity for advancement – if you pick the right companies.

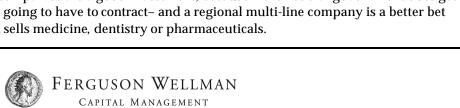
Masarie: There are opportunities in information technology because of the low penetration. You look at doctors' offices, and 100 percent of them have billing systems. And that is a replacement market which still has opportunity. Only 10 to 15 percent have electronic charts, so that is a huge opportunity.

of initiatives, and in conjunction with that demographic change, it might be an interesting area for lowering costs.

Interestingly, the large healthcare IT companies have not traditionally done well in doctors' offices. They tend to grow out of hospital information systems. Also, as we get older, there are opportunities for bringing the prevention and monitoring piece of healthcare to the home. There have been a lot

Ten Pas: Telemedicine is an opportunity, because it lets you consult with rural populations. Consulting with a specialist, without having to physically be there, makes sense. Imaging that's transferable among locations makes sense. In insurance, multi-regional companies are a good investment, because if the Federal government does get into the insurance business, they're going to have to contract- and a regional multi-line company is a better bet than a mono-line company that just sells medicine, dentistry or pharmaceuticals.

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The Role of the Federal Government

Norris: One of the current proposals is to bring the Federal government in as another insurer. But you hear about reduced reimbursement rates and doctors not wanting to take on Medicaid patients. Does it hurt the system if the Federal government plays a larger role? What's the risk in having a single insurer?

Ten Pas: The Federal government already plays a significant role: take Medicaid, Medicare, Armed Services, Federal employees ... they're already at least 25 percent of the healthcare system. When the person making the rules becomes a competitor, it tips the balance away from fairness. A pretty good example is the way the Federal government handles the financing of Medicare and Medicaid. Both are under-funded, providers are undercompensated, and they end up exiting the system because they can't afford to provide that care. We see about a 15 percent shift from Medicaid and Medicare to the commercial system, due to decreased reimbursement to hospitals, physicians and other healthcare workers.

Kohler: I worry about the government gradually taking over healthcare, but they do provide an important safety net function. It's just that they don't do it especially well. It's crazy – if you're dirt poor you're covered, but if you're working poor you're not. We focus on what to do about this gap group because this is where preventive care could be very good. But I'm not sure how these plans are going to play out, and it will be a while before we know. Some parts of government-run healthcare are good. But squeezing out private providers will be a problem.

Lowe: I'd like to question a number of assumptions people make about the government's role in healthcare. One assumption is that it means rationing. We already have rationing. Those without insurance often can't get the care they need. Many rural residents, regardless of their means, have trouble finding providers. So the first question is, what kind of healthcare will reduce these disparities, and can it do so without compromising the health of those of us who like our current medical care? Second, there's no particular reason why a single-payer system, or any other government system, would result in rationing or reduction in reimbursement to providers. In fact, America's worst recent experience with rationing came in the 1980s, when managed care organizations required doctors to call in, sometimes staying on hold for a while just to get pre-authorization for a shot of penicillin. There is also the perception that some countries with government-organized healthcare have rationing of care or long waits. The extent to which that's true depends on whom you talk to. In 2003, Canada spent \$3,000 per person for medical care, while we spent almost twice that. If we continue at that level, we could spread that money around more equitably, spend it more efficiently and have plenty of resources left before we would have to worry about rationing or dropping reimbursement rates.

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– Dr. Michelle Berlin

Berlin: I worry about risk adjustment – making sure that locales with sicker populations get credit for more complex treatment than as places where people are healthier. Reimbursement rates vary dramatically by region, so we have to be careful how we do that. In some countries with a public health insurance system, everyone has basic coverage; purchasing additional coverage gets you faster access to non-urgent procedures. I think of public insurance as a floor. What costs us the most is when people don't have any insurance.

Lowe: Some people ask, "Is this the right time for healthcare reform?" I admit it is a very difficult time, but it truly is the best time for several

reasons. First, so many of us are aware of how vulnerable we are, in terms of getting medical care we need. Remember, 68 percent of uninsured people live in households with one full-time worker. When we all feel vulnerable, there's a real motivation to band together and fix the problem. But let's go beyond that. Let's say I was sure I would always be able to afford medical care, and I'm such a strong believer in personal responsibility that I don't feel I should help people who lack access. It would still be in my own self-interest to see that others have access to care. Here's why: you ride in an elevator with someone who has untreated tuberculosis and coughs on you; because she didn't have access to medical care, you are vulnerable to tuberculosis. Or there is a major transit accident because the conductor has untreated hypertension that led to a heart attack.



Lowe: It's in our personal interest to make sure everyone has access to basic medical care. And, there is economic evidence that medical care can help us dig ourselves out of this recession. Our medical system puts U.S. companies at a competitive disadvantage. Healthcare costs auto companies more than steel does. This is true in Detroit, but not in Japan and Germany.

When you think in those terms, you realize that it is time for reform. Our current medical care system is irrational in many ways – hurting patients, but also hurting providers and the employers who pay for most medical insurance. If we can make the system work better, we'd remove the burden of medical care costs from domestic employers. That alone would create a sizable economic stimulus, which would help many sectors of the U.S. economy. And speaking as a doctor, I believe it is the right thing to do.

Norris: At our firm we can use a health savings account. When I broke my nose, the hospital recommended I get an MRI. I waited to go to my general practitioner for an X-ray, which saved me \$1,000. In addition to the government's role, should consumers also be making more healthcare decisions to keep costs down?

Kohler: A health savings plan is a great idea, and so is an informed consumer. The actual implementation may be difficult for some individuals, but people have to begin to understand that we use technology way too much, at huge costs. MRIs are used all the time, even when they're marginally indicated. People need to know that when the usual exams don't find a problem, they're usually not going to find one with an MRI or CT scan. The broken nose is a good example of something that's pretty easy to take care of without an MRI.

Ten Pas: We do need to have a more informed consumer. Let's compare medicine and dentistry. Dental insurance has an annual maximum, with patient co-pays and prices graduated according to the service. The patient in the chair is told they need a service, so they have a stake in the game immediately – they're going to pay for part of it. When my physician tells me I need an MRI or CT scan, insurance covers most of the cost, so I say, "why not?" I think the question should also include a "why?" A more informed consumer can make that decision.

Masarie: The Internet has been a huge boon to the informed consumer. The downside is the consumer who shows up with a pile of printouts from websites that aren't trustworthy. On the upside, healthcare organizations often direct their members to sites they think have good quality information.

Lowe: Think about what happens when I fix my car. I bring it to the shop, and I want to assess the quality of the service to know if I'm paying a fair price, but I don't know anything about cars. So how do I make my



Jason Norris met with Michelle Berlin and Robert Lowe on July 31.

decision? Do I base it on getting nice paper mats on the floor? Or whether the car was fixed on time? Or whether I got a ride to work? Those things don't have anything to do with the quality of the actual service. Our health is a lot more important than our cars, but most of us aren't in a position to evaluate the quality of care we're getting. So it doesn't seem fair to ask a patient in the emergency department with chest pains, or someone whose child has a high fever, to decide what the most cost-effective care is.

Norris: Perhaps we can loosen regulations to make healthcare more portable, rather than the Federal government offering a public plan?

Lowe: Do we trust pharmaceutical companies, hospitals, doctors and insurance companies to band together to provide high quality care at the lowest possible cost? If not, what are the alternatives? I think we need some degree of government involvement to make that happen, for all the reasons we have talked about.

Berlin: In the long run, when people don't have access to preventive care and services when they need them, it costs society more. Steps to help communities as a whole really do matter.



In Sickness and In Health, Until Death Do Us Part

Norris: A lot of younger people choose not to be insured. Should they be required to become insured through some private or public plan?

Lowe: There is a phrase called the "death spiral." It's a situation where, for example, ten people are covered by a health insurance policy, but one of them gets sick and premiums go up for all. So the healthiest person decides that rather than make higher payments, he'll take the risk of leaving the plan and paying out of pocket. Now nine people are paying in, and on average they are sicker than the ten were. So the premiums go up even more, inspiring someone else to drop their coverage and so on. We need a system with universal coverage and some sort of mandate, so everyone participates.

We also need community rating, so everyone pays the same premiums, because otherwise it's not really insurance. It needs to cover pre-existing conditions. In terms of quality of care, we need patient protections, like technology and financial incentives, to reduce medical errors, and bundling of care, so if a patient has complications due to my oversight, I don't get rewarded. I should have an incentive to make sure the patient gets better as quickly as possible. We need minimum standards, guidelines for care and sanctions for providers who don't follow them. We need standards for third-party payers or insurers in terms of what they must cover.

Although I don't want to argue in favor of a particular plan, what this argues *against* is a voucher system, which puts people in that auto mechanic situation we talked about earlier, where the patient has to make decisions he or

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- Dr. Robert Lowe

she is not qualified to make. Vouchers also don't deal with the death spiral. And we need patient care guidelines to reduce cost, so patients are getting the most *effective* treatment, not the most expensive treatment. That's not ration *ing* – that's ration *al*.

Norris: Regarding end-of-life care, who should manage that huge "cost center"? The doctor? The patient? The insurance provider? Who leads the discussion and makes the decisions?

Masarie: I don't know what's most effective. But I do feel that there are some "soft" issues – around acceptance, around letting go – that are necessary to learn, but hard to teach. How do you work with a

family when prolonging the end of life was not the *patient's* choice, but is the *family's* choice? If the family is not ready to let go, but the patient is... that's a tough situation that needs to be addressed.

Kohler: One really helpful starting point is for everyone to have a living will and durable power of attorney – and good communication about their wishes. Because without that, the family and the medical profession will automatically do a whole bunch of procedures that often no one – especially the patient – wanted. We also need to educate physicians. Many of them remember the time, 30 or 40 years ago, when death was considered failure. And family members, who can't bring themselves to the realization that they're going to lose this relative. Take my own father-in-law. He was a physician, from a family of medical professionals, who went through a terrible three-day period in which all his organs failed. He was treated, at huge expense and in a way he never would have wanted, because he lacked an advance directive. So they did all these heroic and expensive procedures right before he died.

Norris: Thank you for your participation in this discussion. I appreciate all of your views and look forward to sharing your thoughts with our clients and friends of the firm.

Kohler: I applaud Ferguson Wellman for taking on this difficult topic. There are a lot of opinions out there. It's such an important issue; we need to bring attention to solutions that are reasonable to everyone, and not just a small segment of the population.









