The Pure Sch

The Magazine for the Wharton Health Care Business Conference - February 2010



#### **Insurance Innovations**

The CEO of Aetna offers insight into the future of the industry. PAGE 4

### **Health Care Reform**

Thought leaders weigh in on the future of health reform. PAGE 26

#### The Numbers Driving the Health Care Debate

The director of The Dartmouth Institute talks about their initiatives. PAGE 29

#### The Boom of India's Hospital Industry

The heads of the two leading hospital chains provide their perspectives. PAGE 32

### booz&co.

## **Booz & Company** *is proud to be the sponsor of the Pulse magazine*

At Booz & Company we work closely with our clients to create and deliver essential advantage in any situation. We bring unique foresight and knowledge, deep functional expertise, and a practical approach to building capabilities and delivering real impact.

This philosophy has been at the heart of our company since its formation in 1914. It's lived every day by more than 3,300 Booz & Company people across 60 offices in over 30 countries. And it's more relevant today than ever before.

Booz & Company—serving the senior agenda of the world's leading institutions, public and private.

Visit www.booz.com to learn more.

### CONTENTS

#### HEALTH INNOVATION

- 4 Assurance from the Insurance Industry
- 7 Is Prevention the Solution?

#### **HEALTH IT**

- 11 Refining End-of-Life Care
- 15 HIT: a Home Run?

#### IMPROVING HEALTH CARE DELIVERY

- 19 The Changing Role of The Pharmacist
- 22 A Leaner System for Health Care Delivery

#### **HEALTH REFORM**

- 26 Hopes for Health Reform
- 28 Recent Alumni Spotlight
- 29 The Data Driving the Health Care Debate

#### **EMERGING MARKETS**

- 32 India Hospitals: On the Map
- 36 Alumni Spotlight

#### PHARMA STRATEGIES

37 The Pharma/Payer relationship – Strategies for the Next Two Years

#### **ABOUT THE PULSE**

- 2 From the Editors
- 42 Editor Bios
- 44 About Wharton's Health Care Management Program

The Wharton Health Care Business Conference is an independent student-run conference at the Wharton School of the University of Pennsylvania.

#### FEATURED CONTENT



#### **RONALD WILLIAMS**

The CEO of Aetna shares his thoughts on the potential impact of reform and emerging trends in the insurance industry. PAGE 4

#### **ALEXANDRA DRANE**

The head of Eliza and Engage with Grace discusses the value her organizations bring to patients and their families. PAGE 11





#### **DAVID RORISON**

The CEO of Cerner explains the nuances of the Health IT incentives in the Obama stimulus program. PAGE 15

#### **KERMIT CRAWFORD**

The head of the pharmacy business for Walgreens discusses the changing role of the pharmacist. PAGE 19





#### **INDIA HOSPITAL SYSTEMS**

Executives from Apollo and Fortis, the leading hospital systems in India, describe the attractive health care landscape and opportunities in India. PAGE 32

### FROM THE EDITORS

Pictured (left to right) Jay Desai, WG'11 John Voith, WG'11 Marina Tarasova, WG'10 Neil Parikh, WG'10 Michael Westover, WG'11

Not Pictured Jessica Aisenbrey, WG'11 Angus McWilliams, WG'11



Since our last Pulse publication one year ago, significant changes have swept both the U.S. health care system and the economy. We have seen unprecedented progress for comprehensive health care reform ebb and flow with surprising twists. The reform developed into one of the most intense and tumultuous health care debates since the creation of Medicare in 1965. We saw supporters of health reform and universal coverage lose their pioneering figure as the world said good bye to Senator Ted Kennedy. Three major pharmaceutical players increased their scope through acquisitions, and we watch as they manage through their integration pains. Comparative effectiveness research continued to gain momentum as \$1.1 billion dollars were allocated to the cause. With President Obama's \$19 billion earmark for health information technology, this sector of the industry continued to evolve, although no clear direction on electronic medical records has yet been determined. The insurance industry is among the many anticipating the direction of reform as are millions of Americans who stand to gain coverage. Finally, leaders in health care delivery are emerging from outside the U.S. with new best practices that might soon cross borders.

So where has this health care roller-coaster ride left the students, professionals, practitioners, and consumers of health care? Is the direction of reform the best one?

This is what our issue of the Pulse has set out to explore. In collaboration with the 2010 Wharton Health Care Business Conference, a student-run conference at the Wharton School of the University of Pennsylvania, we interviewed leading experts in various sectors of the health care industry in hopes of providing our readers with the latest insights and perspectives. With thanks to the diligent work of our writers and editors, the generous sponsorship from Booz and Company, Oliver Wyman for their thought leadership, June Kinney and the Health Care Management faculty for their continued support and Krista Baker from Morningstar Multimedia for our new design, the 2010 Pulse reflects on a seminal year in health care, takes the "pulse" of several industry segments and inquires into the future of our health care system.

Sincerely,

Marina Tarasova

Moura Jerason

Editor-In-Chief

Neil Parikh

Failul

Editor-In-Chief

### **HEALTH INNOVATION**

### \$30,083

Estimated average amount that health insurance will cost one family annually as soon as 2019, which is an increase of 166 percent from current averages. (Kaiser Family Foundation)

### 117,600

Estimated amount of additional lives that would be saved by increasing the use of just five preventive services available through a doctor's office. (Partnership for Prevention)

### **EXPERTS SHED LIGHT** on Simple Solutions in Insurance and Prevention

### ASSURANCE FROM THE INSURANCE INDUSTRY RONALD A. WILLIAMS CEO, AETNA



Ronald A. Williams is Chairman and Chief **Executive Officer of Aetna** Inc. Joining Aetna in 2001, Mr. Williams focused on creating innovation in the industry and increasing transparency in the health care system. He also serves as chairman of the Council for Affordable Quality *Healthcare and is a trustee* of the Conference Board and the Connecticut Science Center Board. Mr. Williams is a graduate of Roosevelt University and holds an M.S. in Management from the Sloan School of Management at the Massachusetts Institute of Technology.

Recent developments on Capitol Hill suggest that the insurance industry will experience turbulence over the coming years. Ron Williams, CEO of Aetna and a vocal leader in the reform debate, discusses his thoughts on the impact of health care reform on the industry and the future of health insurance.

Pulse: I know you originally supported health care form, but I haven't heard your thoughts recently. What are your feelings on the current state of health care reform?

Health care reform done right can be tremendously positive for the country. Health care reform done wrong can be a huge problem and can actually decrease the affordability of health care services. Health reform is a very complicated area and I would encourage all elected officials to listen to their colleagues who have practical, real world experience. Many of the elected officials have been insurance commissioners and bring other experiences that make them experts on the topic. I think that one of the opportunities for Congress, in general, is to recognize that every action has potential costs.

We have an insurance system with almost 180 million people, and the employer-sponsored system is working reasonably well. We have to be mindful of that and build on its strengths rather than undermine it. That's the tight rope we walk. It is important that we get something done and support the country, but we have to do health reform the right way. My only hope is that the health care reform debaters stop demonizing one another, take a bipartisan approach and get back to a factbased discussion that can help us do the things necessary to make thoughtful improvements. Pulse: Health care reform may not have a strong individual insurance mandate, but may still force insurers to offer coverage to everyone regardless of health status. How will the insurance industry adapt to these new circumstances?

What we have to recognize is that the insurance industry's job is to price the health care services that people use. We have the ability to price just about anything. New Jersey has a requirement that insurance premiums cannot be adjusted for health status. Anyone can buy insurance anytime they want and they can drop it anytime they want. So what happens in New Jersey is that an individual health policy is almost four times more expensive than next door in Pennsylvania. We sell these policies and we know how to price them appropriately, but it's really the consumer trying to buy an insurance policy who bears the burden.

But what you really want in an insurance pool is some people who need services today, some who need them tomorrow and some who won't need them for quite some time. When you can buy insurance anytime you want or need it, no one who needs it in the future buys it today. So what you end up with is only people who need insurance today are in the system. This makes an insurance product enormously expensive because no amount of premium can cover their need for immediate health care services. Pulse: What are your thoughts on bundled or value-based payments in which the insurer pays a single rate for all hospital and physician services associated with a medical condition and some follow-up services?

Hospitals will have to set up a reserve and manage their whole infrastructure very differently with a value-based payment system. Otherwise, when people come back for follow-up medical services, there will be no resources set aside for them. We need to gain more experience with these new payment systems, but we have to recognize that these have an insurance-like component. They will work best with physicians and hospitals working in collaboration with firms that have insurance-related expertise.

We have about 18 different pilot programs across the country in which we are working collaboratively with physicians in medical settings to get experience with different payment approaches and different incentive mechanisms. We are interested in trying to reward those physicians who are doing a better job of taking care of their patients. Right now, physicians are paid the same regardless of the degree to which they stand out in their specialties. What we want to do is give higher reimbursements to those physicians that do a better job of following guidelines, applying their own judgment and producing better outcomes.

Pulse: Adjusting insurance premiums according to someone's weight or smoking habit is a polarizing issue. How do you see the insurance industry's role in promoting personal responsibility?

We do need to recognize that there is an important component of personalized responsibility, but I think we need to figure out how to approach this in a positive way that's not punitive. For example, in [the Aetna's employee] health plan, a non-smoker will receive a discount for their health plan. All that implicitly means is that the smoker will pay more. But, what we will do is pay for smoking cessation. Should you stop smoking during the year, we would give you the non-smoking rate for the year.

#### Pulse: What are some of the other exciting things Aetna is doing to help change patient behavior?

We also want to get the member or the patient engaged in their own wellness and fitness with incentives because preventative behavioral decisions can dramatically reduce health expense.

One of the most important things we can do is get the patient active and engaged, give them support to do more of the things that lead to a positive outcome, increase the quality of life and reduce costs.

#### Pulse: Have you found that Aetna has been effective in changing people's behavior?

Yes. What we see in working with employers is that you can have a very positive effect by doing small things. For example, with our own employee population, we had a program called Get Active Aetna and about 60 percent of our employees signed up. They agreed to walk the equivalent of 2,000 steps a day. We have heard numerous stories of people where it just changes their lives. I was with a woman last week who works in one of our service centers. She took the initiative and lost 90 pounds as a result of getting engaged in the program.

Pulse: In your opinion have consumerdirected health plans and health savings accounts been successful, and where do you expect health care consumerism to go in the future? If you look at a category of products that did not exist over six years ago



Enrollment in Consumer Directed Health Plans in the U.S. has grown by 150 percent from 3.2 million to 8 million from 2006 to 2009. Source: America's Health Insurance Plans

and today has millions of members nationally, we could say that it has been successful. We've learned that, like most products, consumer-directed health plans need to evolve. I think what we will see in the next generation is a combination of consumer-directed and value-based plans. What that means is that an individual's health conditions, status and circumstances will be taken into account. So if you have a particular condition, the medication and office visits for your condition may very well be treated as preventative. Someone else who goes to the doctor and receives very similar care, but doesn't have the same diagnoses, might face

### "What we want to do is give higher reimbursements to those physicians that do a better job following guidelines, applying their own judgment and producing better outcomes."

higher deductibles and more aggressive cost sharing.

One of the things we will be looking at for these products is broadening the definition of prevention and making it highly applicable to individuals of differing circumstances. We are also looking to place the responsibility for more discretionary care with the patient in circumstances where there aren't financial hardships.

#### Pulse: Insurers have much of the information desired for personal health records (PHRs) and electronic medical records (EMRs). Where do you see the role of the insurer in PHR/EMR technology in the future?

The thing I'm excited about most is the continuing ability to apply health information technology to improve quality and reduce the cost of care. As the country makes investments in applications like health information exchanges, we will see a huge opportunity for us to make better use of the data to provide physicians with patient-specific decision support.

It's still going to be quite some time before every patient has an EMR that is fully integrated - not just with the hospitals and physicians' offices, but with all health providers nationwide. Until that happens, being the one place that knows all the medical encounters a patient has had is not helpful. What you will find is that companies like Aetna are investing a significant amount in health information technology, and they are able to, with their patients' permission, share that data with physicians. For example, physicians are informed of all the medications the patient receives or the patient's lab results.

Physicians don't really want a medical record. They want the information that the medical record can provide and that is relevant to the particular circumstances of the patient. We've invested a lot in one of our subsidiaries called Active Health, which is focused on clinical decisions. It takes the data in a patient's claim history and searches the clinical science database for gaps in care. It then presents information to the physician in a patient-centered way.

### Pulse: What do you see as the future of medical tourism?

I have been to India and other parts of the world and have looked at many health delivery systems. Some are first-rate institutions with world-class surgeons. But I believe we are more likely to see domestic tourism in the U.S.

The variability in cost and quality is enormous in the U.S., so if you are having a particular procedure done in Philadelphia, it's possible that it might be better for you to get on a plane and have that procedure done in Cleveland at lower cost and higher quality. I believe we are more likely to see domestic tourism in that context. In other parts of the globe, though, I think international medical tourism is more likely.

#### Pulse: If you had supreme control over health care form, what would you do?

The first thing I would do is build on the successes that we have had in the current system. I would focus on the individual insurance market and get those people who are uninsured but eligible for existing programs into the system. For example, of the 45 million or so uninsured, approximately 11 million are already eligible for Medicaid or the Children's Health Insurance Program but simply don't enroll. So there is a huge opportunity to identify that cohort and get them enrolled in an existing program, which would immediately reduce the uninsured by a substantial amount.

Next, I would take the things that have worked well in the employer-based system (i.e. wellness and prevention) and import those into the individual market. I would change the individual market so that insurers would have to issue insurance to anyone regardless of their health status. That only works if everyone has to have insurance or if everyone who can afford insurance has insurance. For those who can't afford it, there should be some form of subsidy so we don't have to create more infrastructure and expense to form a new system.

### IS PREVENTION THE SOLUTION? ROBERT J. GOULD, PH.D. CEO, PARTNERSHIP FOR PREVENTION

Health care reform focuses on achieving one or more of the following: saving costs, improving access and improving quality. Prevention is often suggested as one possible strategy to save costs and improve quality. This interview discusses what prevention is, why prevention might be a good strategy and what support there is for using prevention and wellness to reform the U.S. health care system.

### Pulse: In simple terms, can you explain why a national focus on prevention is important?

When we talk about prevention, the first thing we ask is, "Does prevention save money?" We never ask that question, however, about general medical treatment. This is because general medical treatment doesn't save money. Instead, the real question we should focus on for both prevention and treatment is, "What service provides the biggest bang for the health care buck?" When you ask the question this way, prevention becomes important.

#### Pulse: Recently, the Congressional Budget Office (CBO) suggested that a national focus on prevention and wellness would increase health care spending.

Yes, the CBO has its own, rigid requirements for scoring that have some unusual consequences. The CBO strictly calculates how much cost can be saved from federal health expenditures, including Medicare, Medicaid and Social Security. Their own report says that it is difficult to justify spending on highly cost-effective prevention because people live longer. Thus, the government will pay more in federal benefits in the long run.

### Pulse: Does this mean that there is a broad national disagreement regarding the costs

#### versus benefits of more focus on prevention?

Not at all. There is a lot of agreement between prevention advocates and the CBO. Even the CBO study suggests that 20 percent of preventive services save money and 60 percent of other recommended services are highly costeffective. So even though the CBO draws a conclusion that not all prevention saves money, that doesn't mean prevention is not worth doing.

When looking specifically at clinical preventive services, the U.S. Preventive Services Task Force found that six services save money while eleven are cost-effective. The Task Force also found that if our country just took five of those clinical preventive services, which are all currently underutilized, and increase their utilization to 90 percent, we could save an additional hundred thousand lives a year. There is no debate about that.

### Pulse: Are corporations beginning to realize the benefits of prevention?

Fortunately, yes. Leaders of companies like Pitney Bowes and Safeway are beginning to understand that prevention delivers tremendous organiational value. What they are finding is that prevention and wellness programs help manage employee health and



Prior to assuming the position of President and CEO at Partnership, Dr. Gould served as the Director of culture/ brand integration at Crispin Porter + Bogusky Group.

Previously, he was a partner at Porter Novelli. Dr. Gould served as leader of Porter Novelli's Health and Social Marketing practice, working on anti-tobacco accounts that included the award-winning 'truth' campaign. Gould was the lead researcher on the iconic Food Guide Pyramid for the USDA. He received a Ph.D. in social psychology at the University of Maryland.

Partnership for Prevention is a membership organization of businesses, non-profit organizations and government agencies advancing policies and practices to prevent disease and improve the health of all Americans.



"Each company will keep an absolute, meticulous matrix on workplace wellness and prevention programs."

improve productivity. CEOs tell each other compelling stories and make the business case for seeing prevention as an investment to maximize, not a cost to minimize.

But managing health expenditures is only part of the benefit of a focus on prevention and wellness. Companies are looking at the numerator of the benefit/ cost equation and the improvements to productivity that they are gaining. They are taking a more holistic approach because their business is about profits.

#### Pulse: Which companies are most involved with providing prevention and wellness programs to employees?

Some of the most active companies are Dow Chemical, Pitney Bowes, Safeway, Pfizer, Johnson & Johnson, Citibank and Union Pacific. Pulse: How do these companies demonstrate that they have productivity gains or cost savings as a result of these prevention programs?

Each company does this in their own way. Each company will keep an absolute, meticulous matrix on workplace wellness and prevention programs. They each have different metrics for the data they collect.

#### Pulse: Are there best practices from these companies that might be implementable across companies?

It's still early, but the most successful efforts are those that focus on health education and lifestyle change. The programs provide employees with a supporting environment to foster a healthier work culture. For example, companies that have benefited from a focus on prevention offer employees nutritious foods and implement programs to help them quit smoking.

Most importantly, these companies integrate health programs within the organizational structure by promoting exercise and encouraging healthy behavior. This focus on health is ideally linked with their health benefits plan.

#### Pulse: When companies implement wellness programs and focus on lifestyle change, do carrots work better than the sticks?

Well, we don't really know. That question has been debated a lot recently in Washington because of some issues with company incentive structures. There are questions about whether carrots for some actually create sticks for others. If companies give incentives to achieve certain targets (i.e. not smoking, reducing body mass indexes, etc.), then the employees who don't achieve those targets may pay higher health care costs, which, in turn, could discourage them from getting the necessary care they need to stay healthy. Therefore, the jury is out on whether carrots or sticks are most effective.

#### Pulse: Are there any political drivers that may additionally incentivize prevention in the near future?

My initial reaction to this question is that this is an area where the business leaders are instructing the policy makers on the benefits of prevention. When business leaders speak, policy makers listen. Business leaders are the ones who are looking at the bigger picture of how prevention can create healthier and more productive employees and increase company profits.

#### Pulse: Are there any drivers within the business community that are pushing prevention and wellness?

Businesses are discovering that it's in their employees' best interests and in the interest of the sustainability of the business to get engaged.

Some companies are even extending wellness to their local communities, partly because of corporate responsibility and partly because of their interest in creating a sustainable community. They realize the local communities will serve as the recruiting ground for future employees and the marketplace for their products and services.

Partnership for Prevention spreads the company's prevention successes through our "Leading by Example" initiative. (See chart below.)

#### Pulse: If there is one thing you would like to see come from health care reform, what is it?

We believe real health care reform starts with prevention and that real health reform will create a health care system instead of a sick-care system.

#### **Workplace Wellness and ROI**

A review of 56 published studies of work-site health promotion programs<sup>\*</sup> found an average 27 percent reduction in sick leave absenteeism, an average 26 percent reduction in health costs, an average 32 percent reduction in workers' compensation and disability management claims costs and an average \$5.81 to \$1 savings-to-cost ratio.

Partnership for Prevention's "Leading by Example"<sup>\*\*</sup> reports detailed results for specific corporations, including the following:

#### **General Motors**

Blood pressure control program returned \$3.10 for every dollar invested in terms of reduced absenteeism in Year 2 and \$3.90 for every dollar invested in Year 3.

#### Aetna

"Simple Steps to a Healthier Life" initiative improved presenteeism by 9 percent and reduced absenteeism by 2 percent for employees who improved just one risk factor.

#### **Pitney Bowes**

Diabetes/asthma management programs reduced 2004 health care costs by \$1 million; 10 percent co-insurance for diabetes, asthma care reduced median health care costs by 12 percent and 15 percent, respectively.

#### **Union Pacific**

Demand management program yielded a 12.5 percent reduction in unnecessary physician visits and a return \$2.78 for every dollar invested in terms of reduced outpatient costs.

\* Chapman LS. "Meta-evaluation of worksite health promotion economic return studies: 2005 Update." Am J Health Promotion. 2005 Jul-Aug;19(6)1-11 \*\* "Leading by Example" information is available online at www.prevent.org

### HEALTH TECHNOLOGY

#### **43.9%**

Of physicians surveyed reported using all or partial EMR/EHR systems (not including systems solely for billing) in their office-based practices. (National Center for Health Statistics survey)

### GETTING CONNECTED: Two companies discuss technology at the personal and national level.

### REFINING END-OF-LIFE CARE ALEXANDRA DRANE CEO, ELIZA CORPORATION



The recent debate over death panels has proven that end-of-life care is a very sensitive issue. Alexandra Drane, President and Co-Founder of Eliza Corporation, talks about death and the importance of communication in health care.

### Pulse: Can you tell me why you started Engage with Grace?

Near the end in caring for my sister-in-law, Rosaria Vandenberg (affectionately called Za), the doctor said to us, "She's probably very close to the end. What do you want to do?" My husband stepped in and said, "We want to take her home." The doctor said, "You can't. Her case is too complicated." I rolled. I caved. I went belly up in less than three seconds. I said, "OK, we'll keep her here then."

My husband, who up until that point had been embarrassed at how I would question the doctors and bring in alternative research and get second opinions on everything, stood up so tall and strong and said, "Absolutely not. We are bringing her home." And we did. It changed everything about her situation.

She had a little girl, my niece Alessia, who was almost three. As her mother got sicker, Alessia had a hard time even getting close to her mom because of all the medical paraphernalia. And for Za, it was worse than death to watch her daughter drifting away. So when we got back home that night, Alessia climbed onto her bed, snuggled next to her and fed her mom her medication. Za, who had been almost in a coma state for the week before, woke up, opened her eyes and fully looked at her daughter. They had an amazing moment. The next day, Za died.

Not only did that change Za's experience, but

Alexandra Drane is President and Co-Founder of Eliza Corporation, a firm that engages people in tailored, one-on-one conversations about their health – primarily through the company's interactive, automated phone calls.

Alexandra is also a Co-Founder of Engage with Grace, a nonprofit movement, aimed at helping people understand, communicate and have honored their end-oflife wishes. She received the Boston Business Journal's "Champions of Healthcare: Community Outreach" award for her efforts in this area. now we also can tell Alessia that story for the rest of her life - that she was there with her mom and supported her when her mom needed it most. I tell her that story whenever I can. Alessia turned eight on December 3<sup>rd</sup>.

Sometime later, we were out to dinner with a friend, Matthew Holt from The Health Care Blog, and got into a debate about end-of-life care. Matthew kept saying over and over again, "You can't touch this topic because it's so divisive. It's untouchable." But we kept saying, "Well, that's not OK. We can't say that the right answer is to do nothing." Because in addition to the incredibly beautiful outcome that happened with Za, the hard reality is that she probably would have had two more weeks of the most intensive care, which costs an arm and a leg. We wanted to take her home. We wanted to care for her. It was better for her that we did. And incidentally, it actually cost a lot less money.

#### Pulse: What is The One Slide Project and how does it work?

Well, 70 percent of people want to die at home, and only 30 percent actually do. What we're asking of folks is to have this conversation. You have to not only know what your loved ones would want but also be ready to stand up in the face of the system telling you, "No, you can't have it," and say, "Yes, I can, and I'm going to."

The reason why Engage with Grace takes this form is that the idea of death is so fraught with intensity. People think it's going to be an impossible conversation complicated by living wills and advanced directives. They don't even know how to get started, so they forget it.

And yet, a lot of people really want to talk about how to care for their loved

ones. For an aging parent, for example, what people need is a tool. You don't have to get all the way to advanced directives. Just get people to start talking about it.

Once that initial barrier is broken down, most people will start talking. Why not just start with five straightforward questions? Why not remind people that this isn't a conversation that has to happen when you're dying? There is great value in having the conversation many times through the years.

The One Slide Project is, literally, a slide (see next page) with five crucial questions everyone should be thinking about. It has one goal: to help ensure that all of us - and the people we care for - can end our lives in the same purposeful way we lived them.

In a review of millions of records, the 2008 Dartmouth Atlas of Health Care found that, on average, \$25,358 was spent on each Medicare patient in his or her last six months of life. According to Dr. John E. Wennberg, Founding Editor of The Dartmouth Atlas, "Some chronically ill and dying Americans are receiving too much care — more than they and their families actually want or benefit from."

In addition, according to a 2005 Massachusetts End-of-Life Care Survey, 83 percent of those questioned said they didn't want to be a burden on loved ones at the end of their lives. But only about half said they have spoken with their spouse or partner about their wishes for end-of-life care, and 57 percent indicated they had spoken with family. A mere 10 percent had discussed the issue with their primary care physician.

The One Slide Project gives patients and their loved ones a tool to openly discuss

their wishes about how they want to spend their last days.

#### Pulse: How can doctors help patients and their loved ones discuss end-oflife care options?

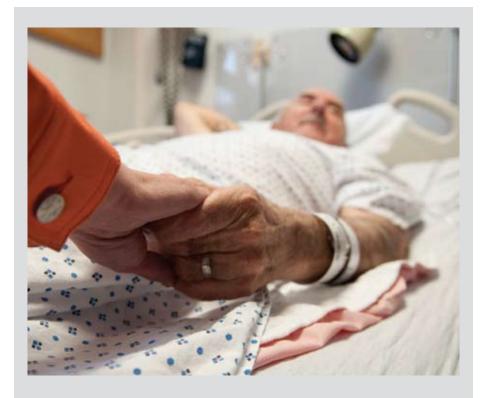
It's been gratifying to see the number of physicians who have taken our tool and run with it because it's so noncombative. They just hand their patients this piece of paper and say, "This is something that we're really encouraging all of our patients to do. It might be a conversation that you want to have as a family." It's a way to bring tension out.

Originally, we did not think of Engage with Grace as a teaching tool. But we repeatedly get feedback from hospice workers, nurses, psychology teachers and medical schools that are making Engage with Grace part of their curriculum because it's a very easy way to get the process started.

Pulse: Some seem to view their health as a personal matter, but Eliza emphasizes communication, interactions and relationships. Why does Eliza favor a more interactive view of personal health?

Whether broaching end-of-life care conversations or encouraging people to have preventive cancer screenings, we've learned over and over how important it is that the communication be engaging. Other industries figured that out long ago. On average, the food, tobacco and alcohol industries spend about \$80 per person annually communicating with, marketing to and seducing their customers. The health care industry spends about 33 cents.

We just gave a presentation in Nashville about the future of health care. For fun, we put up a picture of how the food, tobacco and alcohol industries



#### The One Slide: Can You and Your Loved Ones Answer These Questions?

1. On a scale of 1 to 5, where do you fall on this continuum?



Let me die in my own bed, without any medical intervention

Don't give up on me no matter what, try any proven and unproven intervention possible.

2. If there were a choice, would you prefer to die at home, or in a hospital?

3. Could a loved one correctly describe how you'd like to be treated in the case of a terminal illness?

4. Is there someone you trust whom you've appointed to advocate on your behalf when the time is near?

5. Have you completed any of the following: written a living will, appointed a health care power of attorney, or completed an advance directive?

are spending their \$80 per person marketing budget. Carl's Jr.'s had a commercial where Padma Lakshmi basically makes love to a bacon double cheeseburger. The point we made to the audience is that the health industry's competition is a couch, a bacon double cheeseburger and ice cream. It's what we all love to do. And that is why we're having a hard time.

We see Eliza's platform as the opportunity to sidle up next to somebody, to speak in an inclusive way, to add joy and soul and humor, to be their pal and to help them make those daily decisions to be healthier. Every now and again, when they make the bad decision, we don't blame them for it. We let them know, "Of course that happens. Here's how you get back on track."

Pulse: You have a customer-centric perspective that I don't see very often in the health care industry. How does your focus on the customer affect the way you do business?

When you think about it, do you know anyone who has ever lost weight because he received a weight management brochure? No. That's not how people decide to lose weight. Do you know anybody who's been excited about a doing a diabetes disease management program when the invitation that they get is a picture of a diseased kidney? No. So, when you come in from work exhausted and strung out and there's a picture of a diseased kidney with a big "We Want to Help You" headline, I just don't prioritize it. In fact, I ignore it.

People aren't sitting around waiting to be told what to do. You need to tickle them. You need to seduce them. You need to beguile them. You should make it worth their while. They have to want to get it. There's a lot of stuff out there

### "On average, the food, tobacco and alcohol industries spend about \$80 per person annually communicating with, marketing to and seducing their customers. The health care industry spends about 33 cents."

pulling at people. Blathering on to that person about all the things they should do. "Go to the doctor. Go do this. Go do that." Maybe what we should do early on is develop a relationship with the person. Then, once you build that relationship, you can come back later with ideas reminding them to care for their health. We call that a primer. Don't think about what you want from people when you're reaching out to them. Think about what they need. Give them something that's relevant to them. And then, once you've earned their trust, then they're going to listen when you reach back out.

For example, we had an auto refill program where the first call had nothing to do with auto refill. It was just to give them something. The second call talked about auto refills. When we do that, we've been able to see, for example, a 400 percent bump in the number of people who sign up for auto refills for a prescription compared to the other cohort where we called them only once and said, "Hey, do auto refill."

Our partners have predictive models that kick out lists of people with diabetes. But that's not how those people see themselves, right? A mother of three who has two jobs and whose husband has lost his job. A grandmother who still runs marathons. A 22-year-old guy who knows he's going to live forever, and he has zero interest in hearing that he's got a chronic condition. And once you take that perspective, then you can start inventing ways to pass on genuinely important information to those individuals about taking better care of themselves.

People will never see themselves as sick. They never see themselves as the patient, even when they have diabetes or congestive heart failure. You need to reach out to that part of them that sees themselves as individuals first.

#### Pulse: There's a lot of talk about Personal Health Records (PHRs), but how are patients actually using them?

We were asked to moderate a panel on PHRs. First, we said that 80 percent of U.S. consumers think PHRs are a good idea. Over 50 percent think they could add a lot of value, but the actual penetration of PHRs is 2.7 percent! And we asked this group who work in the health care space, "How many of you have a PHR?" And about 3 percent raised their hands. I don't have a PHR, and I've been in the health care space for 18 years.

I think the challenge with PHRs is

twofold: One, it's boring. And two, it's disjointed. It's not connected. It's not relevant to me. When you look at the only example of PHRs that are really working, you look at Kaiser Permanente. Kaiser doesn't just store your information. They actually link it to what matters. "So, here are your lab results. Here's what it means for people like you. Do you want to email your doctor a question about it? Here is an online program that will help you get better."

### Pulse: What are your thoughts on health care reform?

This is the only question that we do one of those elegant little sidesteps for, and here is why: we work with health plans, PBMs, employers, hospitals and pharmaceutical companies. There is so much diversity across that spectrum of perspectives on who's going to benefit and who's not going to.

The reform we hope happens includes folks wising up to the reality that since most people are not thinking about how to make healthy choices in every minute of every day, our job within the health care space is to find a way to make the pursuit of good health a great adventure and not an onerous, complicated bore. We're looking forward to helping our partners make it clear to individuals what reform means for them.

### HIT: A HOME RUN? DR. DAVID RORISON CHIEF MEDICAL OFFICER, CERNER CORPORATION

Through the 2009 Obama stimulus program, incentives were defined for the installation and adoption of Health Information Technology (HIT). This interview examines incentives related to "meaningful use" of HIT and explores the challenges and implications of the adoption of HIT for the broader health care system.

### Pulse: For our readers that are unfamiliar with Health IT, can you briefly define it?

HIT is the use of computer hardware and software to manage, store, retrieve and share health care information. It forms the basis for an electronic medical record (EMR), which then supports clinical, financial and operational output and analysis.

#### Pulse: Can you tell us more about the Obama Stimulus Program's incentives for the installation and adoption of Health IT?

The program is called the American Recovery and Reinvestment Act of 2009 (ARRA) and was signed into law on February 17, 2009. Within the provisions in the Act, \$19 billion of HIT-related funding was provided.

It is important to differentiate that this bill has already been signed into law and is different from the more recent debate on health reform, which is more related to health care coverage not the infrastructure to support it. While HIT will support the redesign of how health care is provided, it is a very different body of work.

Pulse: Can you describe the intent of the AARA act under the stimulus?

The Stimulus Program was meant to drive and accelerate the investment and adoption in HIT by health care providers – both physicians and hospitals. With this large investment in HIT, there are high expectations on the value it will derive to the health care system and the patients it serves. The value would be delivered from productivity and efficiency gains through automation, the sharing of data and better coordination of care and providing measured results on performance, especially in the areas of preventative care and chronic disease management. In short, the cost of care would be reduced and efficiency, safety and health would be improved.

### Pulse: What were the first implementation steps after ARRA was signed into law?

Two committees were formed – the HIT Standards Committee and the HIT Policy Committee. The Standards Committee was charged with making recommendations to Dr. David Blumenthal, the National Coordinator (NC) for HIT, on standards, implementation specifics and certification criteria for the electronic exchange and use of health information. Their recommendations were finalized and submitted on August 20, 2009. The HIT Policy Committee was charged with



Dr. David Rorison is **Chief Medical Officer** for Cerner Corporation's academic and pediatric segments. Prior to joining Cerner, Rorison was CMO and SVP for Medical Affairs at the University of Maryland Medical Center. In addition, Rorison served as Chief Executive Officer of UniversityCARE, which provided management services to primary care and multispecialty sites in the Baltimore area. Rorison received his bachelor's degree from the Johns Hopkins University, his medical degree from the University of Maryland and an M.B.A. from Loyola College in Baltimore.

recommending a policy framework for developing and adopting a nationwide health information technology infrastructure for the electronic exchange and the use of health information technology.

The Policy Committee had two subgroups, Certification/Adoption and Information Exchange, and their process will be released at a later date. A public comment period will then follow during the next 60 days.

#### Pulse: How would you define "meaningful use" for those unfamiliar with the term?

As defined by the HIT Policy Committee, "meaningful use" was organized information on the web, and (4) population health management.

#### Pulse: How are the 2013 and 2015 objectives expected to be different from the 2011 objectives?

While these expectations are likely to evolve, there may be a patient portal strategy which layers upon the patient

### "Cerner gives free Personal Health Records (PHRs) to any juvenile diabetic. This has been a \$20 million investment to support the disease."

recommendations were finalized on August 14, 2009. Both the HIT Policy Committee and the Standards Committee provided recommendations to the NC for HIT on what is "meaningful use" of HIT but they are non-binding. On December 30, 2009, Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator (ONC) published two of the three rules in an interim-final status. (CMS rule and HHS rule.)

### Pulse: Can you tell us more about the CMS and HHS Rules?

The CMS Rule is 556 pages and covers most of the requirements for hospitals and eligible providers participating in the Medicare/Medicare Advantage/ Medicaid programs looking to receive incentive payments for the "meaningful use" of certified EMR systems. As expected, the content of this rule largely follows the recommendations put forth by the Federal Advisory Committees in July of 2009.

The HHS/ONC Rule is 136 pages and covers the requirements for certification. A related rule for the certification

around five health policy priorities: (1) improving quality, safety and efficiency and reducing health disparities, (2) engaging patients and families, (3) coordinating care across the fragmented delivery system, (4) improving population and public health, and (5) ensuring adequate privacy and safety of data.

Incentives are tied in to achieving "meaningful use" and are to be phasedin beginning in 2011. Questions certainly remain if this is achievable. Using a stepwise and phased approach, there are increased requirements in 2013 and again in 2015 with incentive payments being phased in over time. Actual penalties would then kick-in beginning in 2015. These penalties will occur under Medicare reimbursement.

#### Pulse: What are the most critical objectives in 2011 for achieving "meaningful use"?

The highest priority objectives are (1) collecting health information and data, (2) physician order entry management, (3) results management, which involves patients being able to view the health

access. Additionally, a big part of 2013 is expected to be what we refer to as "point-of-care clinical decision support." And what that means is that as health care providers place the orders at the computer, or as they do something at the bedside, they have clinical decision support. In all of these areas, to what extent that clinical decision support is deployed, and what level of support it provides, is what needs to be defined.

In 2015 it is likely to be taken to the next level, but the focus will likely be more on outcomes and proactive monitoring than just decision support. So you'll get a higher level of sophistication around condition management and improved clinical dashboards for outcomes reporting. You may also get automated real-time surveillance, which is what we're doing already with H1N1. And, finally, there will likely be additional improvement in clinical decision support.

Pulse: Given the recent "meaningful use" incentives, what are Health IT vendors doing to differentiate themselves in the market? Some of the areas where things are moving have to do with improving how data is captured, displayed and analyzed. This includes medical device integration, such as having infusion pumps that can be programmed through the medical record, and connectivity to things like ventilators or even a hospital bed. You then have a broader input of data that's done automatically and without error, so that more than just lab reports and dictated reports are contributed to the chart or the electronic health record.

Once that data is in the record, the real promise is to then use it in ways that close the loop for new discovery and research, and then applying that information back into how future care is then defined. So the trend is definitely going from a static record to where you have improved ways to support standardization of care and advanced decision support, where you get feedback at the time of placing an order such as information about drugs and allergies at the time that orders are being placed.

Other trends have to do with having different ways to approach that record. An example of this is a patient portal where a patient can actually schedule or request appointments, view results, communicate with their physicians and get feedback in terms of chronic disease management.

For example, Cerner gives free Personal Health Records (PHRs) to any juvenile diabetic. This has been a \$20 million investment to support the disease. Through this program, Cerner has worked with several professional football teams to engage kids in more effective management of their diabetes, which includes the use of new technologies.



### Pulse: How will payers leverage the information that Health IT provides?

What's becoming more prevalent is what is referred to as "Pay For Performance," where insurers and external agencies actually look at physicians' abilities to meet quality guidelines, such as how well the doctor manages particular chronic conditions such as diabetes. So there's now a growing trend for providers to have to submit quality data metrics of particular conditions. Based on their ability to meet certain thresholds and performance measures, it actually affects the provider's and hospital's reimbursement. With this growing trend, HIT companies such as Cerner have been developing an expertise that will facilitate and monitor compliance with those data elements and your ability to submit them directly to the various external entities.

It's a whole different body of work to extract discrete data elements from within an electronic record and then have the ability to not only monitor and analyze these particular quality measures, but to actually submit them directly and electronically to the payer. And then based on your quality report cards, so to speak, your reimbursement will be modified. This reimbursement model is becoming more and more the case and it's clearly going to be how providers will get paid in the future, based on outcomes and not just based on fee-for-service, as we now get typically paid.

Pulse: Currently, there are many different Health IT vendors that sell Health IT systems that do not necessarily communicate with one another. As Health IT becomes more pervasive, will there be increased pressure for standardization across Health IT systems?

Yes. Based on the expectations of data exchange and the movement of information between these systems, there's going to have to be the requirement that standards exist. It's incredibly complex. And if it were simple, it would have been solved long before now. This obviously places another incentive for certified and standard interfaces. To fulfill the requirement of data exchange, enabling standards will certainly need to exist.

If there will be a national or a federal health network, as is expected, it can not exist without standards. There is an entity called the Health Information Technology Standards Panel (HITSP), which was created in 2005. They have already started to look at ways to cross-walk and deal with mandated categories within "meaningful use." It's incredibly difficult and complex, but it has to happen. One problem is that vendors have historically not been willing to participate or cooperate with each other. Most likely it will be driven through incentives or even mandated. Certainly, if you're going to include standardization as requirement for certification, then it's really going to change the game.

### HEALTH TECHNOLOGY

#### 600%

Increase in retail clinics in the U.S. from 2006 to 2008. (Merchant Medicine)

# Entering a New Era of Health Care Delivery

### EVOLVING ROLE OF THE PHARMACIST KERMIT CRAWFORD SVP, PHARMACY SERVICES, WALGREENS

The fact that health care costs are rising is no mystery. As legislators draft reform bills to reign in costs, one often overlooked sector is aggressively re-defining its role in the health care value chain by providing innovative solutions to reduce the cost of health care. This interview discusses how the retail pharmacy industry is driving what some call a "retail revolution" by giving patients access to critical health care services right in their corner pharmacy. Walgreens has been leading the industry change by up-training its pharmacists to administer vaccines and immunizations, building retail clinics staffed with nurse practitioners to handle a variety of conditions and operating work-site clinics to conveniently treat patients.

### Pulse: How has the role of retail pharmacies been changing?

We are redefining the way we practice pharmacy. Our strategy involves pursuing both our target customer groups: the customer who walks in our store and the ultimate payer, such as third-party managed care plans, the government, PBMs, etc. While our previous business model focused on the patient who walked into the store, our current business is more focused around the ultimate payer.

Traditionally, we described the pharmacy environment as "production and transactions." We provided a prescription to a patient. Today, we provide better service and experience for the patient while providing outcomes for our payers.

For instance, we have immunized over 5.2 million people with this year's flu shots and have over 17,000 pharmacists that are certified immunizers.

Pulse: I read that Walgreens can handle 75 percent of treatments that doctors have handled historically through the nurse practitioners in their clinics. How much are you handling right now and what do you have in place to treat that 75 percent in the pharmacy in the future?

We have over 350 Take Care Health Clinics staffed with nurse practitioners. I was reading an article from the American Journal of Pharmacy Benefits and it described how the primary care physicians are under high service demands. At Walgreens, we handle things like upper respiratory disease, earaches, physicals and immunizations. So today in our Take Care Health Clinics, our primary business is screening and acute episodic care, and not necessarily chronic care.

The proposed health care reform bill will create an influx of 20 to 40 million people. This will put a large burden on the primary care physicians, and where Walgreens will play a key role is on



Kermit Crawford is Executive Vice President of Pharmacy for Walgreens. Crawford joined Walgreens as a pharmacy intern in 1983. He was a store manager and a district manager for Walgreens before being named Vice President of store operations in 2000.

In 2007, he was named Senior Vice President and Executive Vice President of Walgreens' Health Services. In September 2007, he was named Senior Vice President of pharmacy and was promoted to his current role in January 2010. Crawford serves on the national boards of directors for the American Diabetes Association and the National Association of Chain Drug Stores. the health care team. For example, not only can pharmacists now screen patients for elevated glucose or potentially even diabetes, but they also can do counseling around the disease state and drug therapy. a retail pharmacy, a physician in an on-site clinic and a nurse practitioner in a Take Care Health Clinic. How can we tie together their continuum of care? A patient may go to our worksite pharmacy and may get care at our

#### Pulse: Do you have any metrics on profitability or growth from any of the pilot sites?

We have seen prescription volume increases and increased compliance and

### "People don't think of Walgreens as a place to go for urgent care, right? They think of us more as a retail pharmacy. But I think we are changing that image."

Pharmacists today have much more clinical training than in the past. While they have always been drug experts, they now also work and train on clinical teams with nurses and physicians. And schools are now certifying pharmacists on immunizations and illnesses like diabetes.

We hope to take advantage of that education. One way we are doing that is by centralizing tasks outside the pharmacy so that pharmacists have more free time to do patient counseling and deliver clinical services.

Pulse: Help me understand what this change looks like: are there teams of health care providers sitting behind the counter to work with the patient when he comes to Walgreens? Does every pharmacy have a Take Care Health Clinic inside?

Because we have stores located within two miles of one another, we don't need to have the Take Care Health Clinics in each store. Instead, we will create a hub and spoke model so that each marketplace will have at least one store with a clinic and several stores around that hub without clinics, similar to what we do with our 24-hour stores.

Imagine you have a pharmacist in

retail store because they live in the neighborhood.

We will have the technology that delivers patient information at each point of contact within Walgreens. Electronic Medical Records (EMRs) will provide pharmacists with the required information they need to become integral members of the health care provider team.

#### Pulse: That sounds really interesting. Do you have any pilot sites currently implementing this program?

Absolutely. In our Florida and Arizona markets, we have piloted what we call the PCRx Community Pharmacy Model. There, we have centralized most of the tasks associated with the day-today filling of prescriptions. We have incorporated models from the banking industry into the health care industry.

For example, we centralized our phone calls and non-acute prescription refills. We also centralized data entry and third-party insurance verification. By doing that, we freed up labor for pharmacists to spend time with our patients. We have an employer work-site in the Epcot parking lot at Disney for their employees. And we have Take Care Health Clinics in many of our stores. adherence to drug therapy medications, which helps our overall business. But ultimately, what will help the payers is to reduce overall health expenditures and that is more of a long-term endeavor.

For example, a patient with diabetes is able to get some of their generic products with zero co-pay as long as they are in the Diabetes Chronic Care Management Program. But the increase in drug spend really shows a decrease in the overall medical expenses.

If you looked at just the work site health centers, the employers are seeing a return of between \$2 to \$4 for every dollar they invest.

#### Pulse: Right. But I read the retail clinics lost \$100 million last year. How do you view the future of these retail clinics? Are you going to continue to make a bet on them?

Absolutely! I think that the in-store clinics will play a significant role in our overall corporate strategy. When you think about the proposals under health care reform and providing more access and better quality at a lower cost, these in-store clinics fit right in. I can tell that with our flu shot programs – we administered over 5 million flu shots – over 42 percent of those patients



were new to Walgreens. Our clinic volume literally tripled during the flu season. So as you see us increase the number of services that are delivered by pharmacists, you will see a natural growth in patient count in our clinics.

I can also tell you from experience that somewhere in the neighborhood of 50 percent of the patients that we see in our clinics do not have a primary care physician. As we refer these patients who have more complex disease states or problems to physicians, I think you're going to see these clinics become more and more accepted by everyone. The physicians are going to accept it because we will be taking care of the more acute and episodic diseases. I think we will be sending patients that require specialty care to physicians, and I think you're going to see these clinics bring huge value. I think we could also take pressure off emergency rooms.

If you go down to some of these areas on the south side of Chicago, some of our Medicaid patients are using the emergency rooms as their primary care physician. We can significantly lower the cost of the Medicaid programs by using clinics as kind of a first line of defense – almost a triage.

So I'm confident that this model will work long-term. It's a new model. People don't think of Walgreens as a place to go for urgent care, right? They think of us more as a retail pharmacy. We are changing that image. The public and other health care professionals look differently at pharmacists that are part of the Walgreens team. I think they look at them differently today than they did just two months ago because of our flu program and how they saw pharmacists respond. We will be the only retail provider in most states this year that is able to give the H1N1 vaccine. And I think the public will have a completely different view of pharmacists.

We can play a significant role in health care reform. Think about the access, think about the quality of care.

Dr. Robert Mecklenburg

is Medical Director for Virginia Mason Center for Health Care Solutions. He has served in the FDA, as a National Board member of the American Diabetes Association. He has authored over 50 scientific articles including two published in the NEJM.

#### J. Michael Rona

is the Founder and Principal of the Rona Consulting Group, a Lean *management consultancy* serving the health care industry. He has been a *health care executive for* over 20 years. At Virginia Mason, Mr. Rona was the chief architect of introducing the Virginia Mason Production *System. He is certified in Lean Training by the* Shingijutsu Corporation and has spent eight years *applying the tools of the* Toyota Production System in the health care setting.

#### John Ryan Jr., M.D.

FACS, is a surgeon and 33-year veteran of the Virginia Mason hospital system. He completed his internship and residency at Massachusetts General Hospital, where he served as chief resident and served as Staff General Surgeon in the military.

### CHALLENGING THE STATUS QUO A LEANER SYSTEM FOR HEALTH CARE DELIVERY

The Japanese "Lean" production and manufacturing system in the automobile industry, pioneered by auto manufacturers such as Toyota, presents a compelling model for improved health care delivery in the United States. The experience of Virginia Mason Medical Center in Seattle highlights the potential for improved quality and lower costs that are possible through the adoption of Lean principles. Through conversations with three Lean experts, Dr. Robert Mecklenburg, medical director for Virginia Mason Center for Health Care Solutions, J. Michael Rona, founder of the Rona Consulting Group, a lean health care consultancy and is former President of Virginia Mason and Dr. John Ryan, a surgeon and 33-year veteran of Virginia Mason, we explore Lean's potential to fundamentally change health care delivery, to save lives and money and to increase access to needed medical services.

#### Lean's Impact at Virginia Mason

Over the last seven years, Virginia Mason has widely implemented Lean processes throughout its medical center. It is well documented that this adoption has yielded millions of dollars in savings, freed up hospital space and deferred the need for expensive capital expansions, reduced infection rates and medical errors and significantly improved patient satisfaction.

Dr. Mecklenburg highlights treatment of back pain as the poster child for Virginia Mason's successful implementation of Lean. Back pain is among the highest heath care costs for American employers, consuming \$90 billion per year. Virginia Mason found that the most effective back pain treatment for most people was physical therapy, but before the implementation of Lean, many patients did not receive it, at least not until they incurred time and expense-consuming appointments, drugs and sometimes even unnecessary surgery. Beyond this, there was a significant backlog of patients waiting up to four weeks to be seen, which yielded many additional phone calls from patients requesting care for back pain each day. According to Dr. Mecklenburg, "If you eliminated that backlog, you could start the day with a schedule that is two-thirds empty, and it will fill up easily because people will call you for back pain the way they do every day."

Virginia Mason reworked doctor schedules and rerouted calls directly to the spine clinic. Now, patients usually get an appointment within one day. Employers have good reason to be happy with these developments. Dr. Mecklenburg acknowledges that physicians are among the most costly of suppliers for employers and that the catalyst for initiating the spine clinic was the high cost of care at Virginia Mason. As a result of Lean, employers now face lower direct and indirect costs. With direct costs, he says, "The tool is evidence-based medicine." Lean has helped standardize evidence-based medicine, adherence to which is improved by normalizing processes, and consequently, reduces expensive medical errors and redundant, unnecessary care.

Dr. Mecklenburg points out, however, that these direct costs are dwarfed by indirect costs, which often go unrecognized. "The docs and the health plans had never really focused on these indirect costs before," he says. "But this was the

number one concern for employers." Recognizing that the indirect costs for certain conditions often outweigh the direct costs by a factor of five, Virginia Mason's marked advantage in returning employees to healthy function helps employers minimize costly disability time and absenteeism. Not surprisingly, patients have noticed and appreciated these changes. Dr. Mecklenburg notes, "Big retailers have had the ethic of 100 percent satisfaction for a long time; doctors haven't had this ethic." But Lean has signaled a change, and patient satisfaction at Virginia Mason is now high. A big part of this improvement is coincident with the dramatic reductions in patient waiting times and the availability of same-day access. "As we improved our efficiency, we found that we could, in fact, arrange our schedules

new piece to the Lean story," says Dr. Mecklenburg, "We do better financially." A big part of Lean is that the cost of production is much less, and this is one of the key points to reducing the cost of U.S. health care. Essentially, Virginia Mason recognized that much of the care it provided was relatively uncomplicated and could be better handled using less expensive providers. "In the spine clinic, we found that the most effective provider was the physical therapist, so instead of the patient seeing the neurosurgeon, instead of them seeing the internist, they saw a physical therapist, and the cost was about a guarter of what a neurosurgeon would be." This pattern would repeat itself across virtually every uncomplicated value stream, which in total represents over 50 percent of Virginia Mason's

which specializes in applying Lean principles at health care organizations, weighs in, "If you think about it, a lot of payments to hospitals are already on fixed reimbursement schemes, like case rates, per diems and DRGs. Lean actually lowers your unit cost and when this happens, you have a fixed payment and your margin goes up." Furthermore, says Rona, even under a fee-for-service system, hospitals and physicians stand to make more money per procedure or diagnostic test due to these lower per unit costs. Rona argues that there is no system where it isn't better to take defects out of processes and reduce unit costs. Ultimately, he says, "If you reduce the unit cost for providing your service relative to the competitor, eventually you'll bring the business to you, and eventually, the payers will make a

### "If there's one thing Lean has taught me, it's how much waste we have, and how hard it is to get rid of." - Dr. John Ryan

so that people could be seen on the same day. And when we achieved sameday access, coupled with elimination of wasteful content, our access improved a great deal, "Dr. Mecklenburg points out.

#### Lean's Bottom Line

While these results are music to the ears of patients and employers, what did they mean for Virginia Mason and its bottom line? Did these savings translate to improved financial performance, or did more efficient delivery of health care actually undermine the financial performance of a hospital, whose reimbursement system is often at odds with a Lean model? "That's the business. Dr. Mecklenburg points out that despite a challenging economic environment, 2009 was Virginia Mason's best financial year yet.

#### **Reimbursement Concerns**

So what forces are impeding broader adoption of Lean across the health care industry? On the surface, it might appear that the reimbursement system is a significant barrier to the implementation of Lean principles. Why would hospitals want to create value under a reimbursement system that rewards them for doing excess procedures and tests? J. Michael Rona, founder of the Rona Consulting Group, difference between what they pay you and what they pay somebody else."

A few years ago, Virginia Mason attempted to partner with employers and insurers to align interest around "paying for value". Reimbursement, however, remained a challenging issue. "Aligning reimbursement with value has not happened in a substantive fashion," Dr. Mecklenburg acknowledges. "The health plans may not have much incentive to change their reimbursement model. It's not their money. It's often the money of the big self-insured company", he continues. Dr. Mecklenburg highlights that health plans have a complex, transactionbased infrastructure, and that changing such a system would take substantial energy and effort. He says, "So as long as they're not required to pay for value by the employers, they will be slow to change." Virginia Mason is not operating in a marketplace based on payments for quality, but has been sufficiently rewarded through its improved volumes and margins resulting from more efficient care delivery. Nevertheless, Dr. Mecklenburg laments, "Things would move a lot faster if we were paid for quality and people would buy on that basis. Then you would see health care begin to straighten out within five years. We'd have enough money and access to take care of all of our citizens."

#### **Physicians and Lean**

A second suspected point of resistance for the adoption of Lean principles is the physicians. In Virginia Mason's case, physicians were employees of the hospital, and were paid a salary, a portion of which was tied to their performance on Lean-related and teamwork metrics. This undoubtedly helped foster their alignment with Lean. At other hospitals, given their hectic schedules, autonomous nature and self-employed status, how could the physicians be bothered to support Lean? "There are all sorts of things that people say about clinicians, but what we've found is that clinicians are actually the most engaged, understanding and interested in this system," says Rona. He points out that physicians are constantly suffering in terms of their ability to deliver the quality they want to deliver to patients. Rona continues, "No clinician wants to be in as situation where defects occur, because even though a physician may execute a perfect procedure, due

to errors in the process, if something bad happens to the patient, it's often attributed to the doctor." Moreover, doctors have the same economic pressures that the hospitals have. Rona notes, "For them time and efficiency is very important, but they're relying on systems and processes they cannot control. Therefore, doctors are very interested in being involved in doing the data gathering and helping the teams innovate around best practices."



We spoke with Dr. John Ryan, a surgeon who has practiced at Virginia Mason for 33 years. Dr. Ryan speaks highly of many of the changes that have come about as a result of Lean and believes many of his colleagues do as well. "People see the value of standardized work," he asserts. "Most defects are caused by bad processes, not bad people. We want to make sure that we do the right operation on the right patient on the right body part on any given day. It sounds simple, but it's not always." Dr. Ryan also points to important efficiency gains, "If I am waiting to operate, that's not good. We've made strides. We've

cut turnover time for the outpatient operating room from 45 minutes to seven." Nonetheless, Dr. Ryan does acknowledge some shortcomings, "You send folks away for a week to talk about a problem, and they come up with solutions. Sometimes the solutions are helpful, but sometimes they add a layer of bureaucracy." Dr. Ryan recognizes the latter point represents the antithesis of Lean principles. Nonetheless, he believes most of what comes out of

Lean to be very positive and would like to see it expanded across the industry. He concludes, "If there's one thing Lean has taught me, it's how much waste we have, and how hard it is to get rid of."

#### **A Call to Action**

More than just a health care production system, Lean is a call to action for hospital leadership across the country. As Rona asserts, "Implementing Lean is actually a point of integrity around recognizing that every single day hospitals and group practices knowingly create defects, but they are not doing anything about it."This is a viewpoint shared by Dr. Mecklenburg, who adds, "There is a huge amount of

variation and waste in the way we deliver health care. Of course this is not a new finding, but it's striking to measure this in a medical center and find that a substantial proportion of what you are doing for a condition may not be value added. We discover this repeatedly." Whether Lean is ultimately a viable solution to health care reform remains up for debate, but the experience of Virginia Mason proves that applying the principles of the Toyota production model to an individual health care setting can increase quality, lower cost and improve access within a local community. It's not a bad place to start. 📕

### HEALTH CARE REFORM

# Healthcare reform

Quality in health care needs to be defined. We have a hundred, two hundred definitions of quality. And when people talk about quality, it quickly blows away in the wind because there's no simple, uniform definition.

**Dr. Robert Mecklenburg,** Medical Director for Virginia Mason Center for Health Care Solutions

The first thing I would do is build on the successes that we have had in the current system. I would focus on the individual insurance market and get those people who are uninsured but eligible for existing programs into the system.

Ronald Williams, CEO, Aetna

## WHAT DO YOU HOPE TO SEE FROM HEALTH CARE REFORM?

We ask our distinguished set of interviewees about their hopes and predictions for the future of health reform. We believe real health care reform starts with prevention and that real health reform will create a health care system instead of a sick-care system.

#### **Robert Gould,** CE0, Partnership for Prevention

I would like to see improved safety and efficiency in the healthcare system. Certainly improved preventative care and better chronic disease management needs to be part of the equation.

Dr. David Rorison, Chief Medical Officer, Cerner Corporation

The reform we hope happens includes folks wising up to the reality that since most people are not thinking about how to make healthy choices in every minute of every day, our job within the health care space is to find a way to make the pursuit of good health a great adventure and not an onerous, complicated bore.

#### Alexandra Drane, CEO, Eliza Corporation

I would advocate for transparency as a tool to transform the market place. I'd like to see measurements of value-based health care, where patients receive information to help make their health care decisions.

**Dr. James Weinstein**, Director, The Dartmouth Institute for Health Policy and Clinical Practice

As a provider, we agree with the Obama administration's principles for health care reform of increased access, affordability and quality. By encouraging innovative health care solutions that will drive these goals, we believe health care reform can promote quality, accessible solutions such as our Take Care Clinics and an expanded role in health care reform for cost-effective services from pharmacists.

Kermit Crawford, SVP, Pharmacy Services, Walgreens

We need to figure out a better way. Reform plays perfectly to an adoption of Lean [health care]. The nice thing about Lean is that it helps us operate in a logical and sane fashion. It ends up producing a great product for the customer and a delightful work environment for the workers which is what we in leadership should aspire to.

> **J. Michael Rona,** Founder and Principal of Rona Consulting Group

### RECENT ALUMNI SPOTLIGHT JOHN BARKETT, WG'09

A fellow Whartonite is in Washington D.C. helping craft health care reform. He shares with the Pulse his experience transitioning from Huntsman to the Hill.

#### Pulse: Tell me about your background and how you found your way to Capital Hill?

I graduated college in 2004 as an unenthusiastic economics major but very enthusiastic health policy minor. I worked for a start-up Medicare HMO. I had the not-so-glamorous job of evaluating contracts, but in doing so I got an in-depth view of how providers get paid. My interest in health policy was heightened, and I committed to being in the business of arming health care decision-makers with information. That was my focus when I came to business school. Barack Obama became President the following Fall, and I won a fellowship that gave me a chance to go to Washington and work in health policy. I couldn't pass it up.

#### Pulse: What would you like to see from health reform?

I don't think you can solve the cost question without solving the coverage question. The extreme solutions to the cost question – heavy consumerism or heavy government involvement – haven't been successful politically. In the middle is delivery system reform, which left to its own devices, only happened sporadically. Encouraging delivery system reform is the way to go. What I'd like to see from reform is what we are seeing in Massachusetts. Massachusetts was already a high cost state, and yes, since reform was enacted costs have risen. But if you look closely, Massachusetts created solutions in creative ways. On the public sector side, the state legislature is encouraging a move away from feefor-service payments towards paying for quality and value. On the private sector side, the Blue Cross Blue Shield of Massachusetts–Caritas deal exemplifies a business case for cost control.

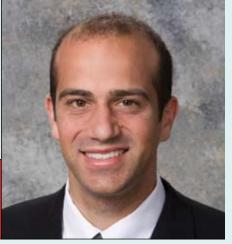
### Pulse: So are you suggesting a mandate to have insurance?

I think being your own risk pool is a no-win situation for consumers. The bills in Congress have adopted the mandate as a way of creating a large risk pool for those who would otherwise be disenfranchised, which is probably the least radical solution.

#### Pulse: So how big of a deal is the Brown victory over Coakley?

It changed the game in that going forward no bill will achieve a filibuster proof majority. That doesn't mean health reform is off the table, it just means that what's possible has changed. Otto von Bismarck is reputed to have said, "politics is the art of the possible." He was also the first head of state to enact a form universal insurance for accidents and health. That's probably not a coincidence.

Pulse: How did the Wharton M.B.A. prepare you for your current role?



John Barkett is the 2009-2010 David A. Winston Health Policy Fellow. He works on the staff of the Ways and Means Subcommittee on Health in the House of Representatives. He received his M.B.A. from Wharton in 2009.

It gave me two years to learn about how stakeholders in health policy make money. Wharton gets you thinking about the interplay between business models and markets. It also introduces you to a cohort of students who have worked in health care, and whose experiences help sharpen your understanding of how these firms make decisions. That knowledge has been quite useful in understanding policy proposals and the reactions they prompt among stakeholders.

### Pulse: What has been your most challenging experience so far?

Before I came here, my understanding of the legislative process was best approximated by the "How a Bill Becomes a Law" cartoon. Jumping in and trying to learn the parlance and procedures of the Hill quickly was hard and doing that in the context of this bill – which even 25 year-veterans of the Hill have said they have never seen anything like – has been overwhelming at times.

#### Pulse: Where will we see John Barkett in 20 years?

Hopefully not trying to ensure universal coverage in this country.

### THE DATA DRIVING THE HEALTH CARE DEBATE DR. JAMES WEINSTEIN DIRECTOR, THE DARTMOUTH INSTITUTE FOR HEALTH POLICY AND CLINICAL PRACTICE

For more than 20 years, the Dartmouth Atlas Project has documented striking variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide comprehensive information and analysis about national, regional and local markets, as well as individual hospitals and their affiliated physicians. Its data forms the foundation for many of the ongoing efforts to improve health and health systems across America.

In recent months, the Dartmouth Atlas has moved to the forefront of the national debate about health reform. This interview investigates the issues raised by the Atlas from the perspective of one of its authors, Dr. James N. Weinstein.

#### Pulse: Can you give us a brief history of how and why the Dartmouth Atlas project was started?

The Dartmouth Atlas began in 1973 with my colleague and mentor, Jack Wennberg. Jack began looking at rates of tonsillectomies in two adjoining Vermont towns. One of them was the town where he and his family lived. He noticed that children from the neighboring town, Town A, were getting their tonsils removed with much greater frequency than the kids in his town, Town B. The children all attended the same school and it was obvious that kids from Town A were no sicker than kids from Town B, so what explained this huge variation in the number of surgeries? That was the beginning of what is now called "small area variation."

We were seeing tremendous variation across the country, but we felt it wasn't getting the kind of attention it deserved. It seemed to us that this could be an underlying problem for the American health care system. Publishing the Atlas was an attempt to work with various organizations to make people more aware of this information. We felt that if they were aware of it, they would probably try to do something about it. In many ways, we have a very chaotic health care system, and there is no clear alignment between what we do and what we get. Interestingly, Jack submitted his first article to the major medical journals and they rejected it. They said this was not that important nor very scientific. Finally, Science published it.

When you have disparities in something like health care, you need tools to explain them. You then need to develop tools to narrow



Dr. Weinstein serves as the Director of The Dartmouth Institute for Health Policy and Clinical Practice, succeeding its founder, Dr. John Wennberg. He is a spine surgeon and Professor, and Chairs of the Departments of Orthopedic Surgery for Dartmouth Medical School and Dartmouth-Hitchcock Medical Center. He was a lead author of The Dartmouth Atlas of Musculoskeletal Health Care and has published over 230 papers.

the coefficient of variation within those systems.

Pulse: Is there a correlation between treatment patterns and the type of delivery models in a region? Are there specific models that appear optimal for delivering high quality, low cost health care?

Geography is destiny. What you get depends on where you live, whom you see and what system you're in. Organized systems – the best examples would be Intermountain in Utah, Geisinger in Pennsylvania and Kaiser Permanente – are capitated systems that manage populations of patients in a different financial model and do so quite effectively. These systems have better care. This is counterintuitive to everyone of course, but it's true. There are very large academic medical centers that provide care in relation to their capacities; it seems that once there is capacity they just seem to fill it and not necessarily do so with any added value.

#### Pulse: Have you looked at whether there is cost shifting to the commercial population?

There's definitely cost shifting. That is not even questionable. Systems survive on cost shifting in some ways because reimbursement by Medicare or Medicaid doesn't necessarily cover the cost for delivery of care. It is an economic supply issue. Hence, large organizations definitely cost shift

#### for relative disease burden?

It's nice to finally have criticisms because for a long time nobody was listening. Now that the data may actually affect someone's financial well-being, we are getting criticized. When people say for example, "You don't know how hard it is to take care of the poor," we've looked at that question, and there is no data to support the notion that we are not accounting for those issues.

I think we should be open to criticism and accept the criticisms that are appropriate. Where there is serious debate about the data, we try to answer those questions in an academic way. But I haven't seen anything yet that dissuades me from believing that we

### "Geography is destiny. What you get depends on where you live, whom you see and what system you're in."

health plans that can be anywhere from 25 to 40 percent less expensive with no reduction in quality. In fact, they often deliver greater quality for lower cost and lower utilization. Therefore, it's clear that there is a correlation between the system, the delivery, the cost and the quality of care.

#### Pulse: And what about the other end of the spectrum? What are the biggest culprits in excessive spending areas?

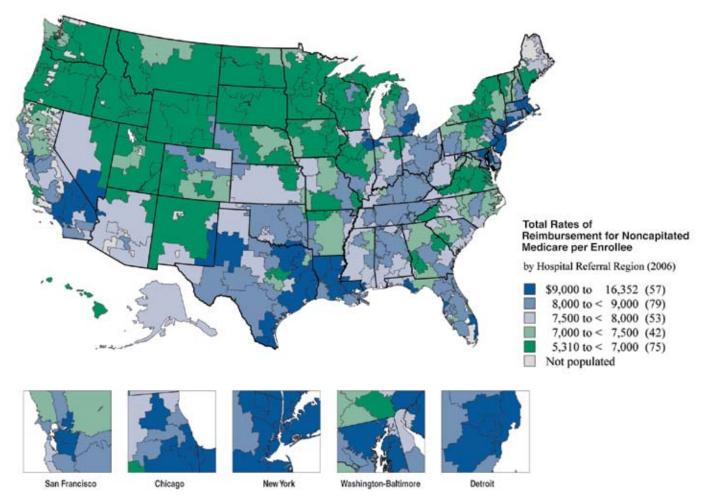
Many places believe they're providing care based on what the patients need, but more often it is based on what the system offers. The real issue here is that there is a lot of supply-induced demand. From an economic perspective, patients who live in high-supply systems get more care but not necessarily because private payers pay more per unit of service. In the current health reform discussions, they are talking about cutting Medicare reimbursement to save millions of dollars.

Either there is going to be more cost shifting or everybody is going to have to absorb the cut. If it's the latter, some hospitals are going to go out of business because they won't be able to make it financially. Maybe some hospitals should close. Where you have too much capacity, this is probably a good thing. But we have to be careful that we don't throw out the good places for the bad just because they can survive.

Pulse: How do you respond to provider or other policy expert objections to the Atlas data, for example that it does not compensate are correct. It's wonderful to have the criticism now after so many years, but it has to be valid.

#### Pulse: Do you see the public understanding that more care is not always better?

I hope so. The Atul Gawande article in the New Yorker (June 2009) certainly did a great job of gaining a lot of people's attention, including the President's. We are talking about something that is very counterintuitive to the average person – how could more health care not be better? The real problem is the spending that occurs in places where we have tremendous amounts of care. There's overutilization of resources: too much testing, too many visits and too many subspecialty visits. On the other hand, we have a whole group of people



Used with permission from the Dartmouth Atlas, Spending Brief February 2009

who are uninsured or underinsured who aren't getting anything. We have to balance the scales. We have enough money in the system; we just need to use it the right way.

### Pulse: Do you think your research is impacting the health reform debate?

I wish it weren't a political process, because you have legislators who are trying to satisfy their constituents. I worry that we are not really dealing with the issues related to the delivery of care. Everybody having insurance sounds great, but just having insurance doesn't mean you have good health care. Better computer technology is great, but having a computer doesn't mean you have better health care. The delivery system is important to measure, and we have very few measurements in health care.

I often give the analogy of an airplane. We are flying the health care system with no instruments. You couldn't fly a plane that way. You would crash. We haven't put measurements in place to actually quantify values in health care. We need to do a better job in measuring so that people can objectively and transparently see the data for their own doctor, their own hospitals and their own system. As we make this data more transparent, I think people will see its value. If patients can be better informed and can make better decisions, the system will get better.

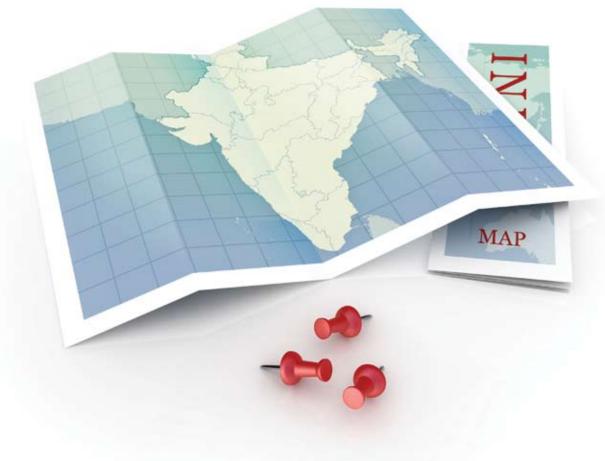
### Pulse: What would you like to see emerge from health reform?

Right now the Atlas data is the only data out there that people can access, and that is sad. I would advocate for transparency as a tool to transform the market place. I'd like to see measurements of value-based health care, where patients receive information to help make their health care decisions. I'd like to see the infrastructure to measure these things on a national level with benchmarking and transparency across the system. I'd like to see transparency so patients can better understand their co-pays. I could go on for hours about how we can make the system better. That desire is what started the Atlas.

### **INDIA HOSPITALS**

### INDIA HOSPITALS ON THE MAP STRATEGIES OF THE COUNTRY'S TWO LEADING HOSPITAL SYSTEMS

BY JESSICA AISENBREY, WG'11



Top hospitals in developing countries are offering world class health care at a fraction of the cost at which they are offered in the West. In India, booming economic growth and increasing demand for quality health care have led to rapid expansion in hospital systems and spurred a flood of investment from abroad. Already, many hospitals are internationally accredited. Health outcomes rival those at western centers of excellence and procedures cost a fifth of what they do in the United States.

In this article, two heads of India's rival Hospital systems comment on health care and hospital systems' growth in India. Suneeta Reddy is the Executive Director of Finance at Apollo Hospitals, India's largest hospital system. Daljit Singh is current President of Strategy and Organizational Development and Chief Executive-Projects and prior CEO of Fortis Health care, India's second largest hospital system.

#### Pulse: What has driven Apollo's remarkable success and what are Apollo's plans for future expansion?

Suneeta: We own and manage 8,000 beds and we have plans to add another 2,000 beds in the next 24 months at existing facilities and at new locations. Apollo's success stems from the fact that we have added a number of revenue streams to our business. As a result, our multi-income inflow has helped cover fixed investments faster than other companies in the sector. Our strategy has been to focus on the delivery of quality health care services in key locations and develop businesses related to our core competencies, such as franchised clinics, secondary care hospitals, advanced diagnostics, pathology labs and retail pharmacies. These complimentary businesses lead to substantial synergies.

#### Pulse: Fortis recently acquired Wockhardt hospitals which significantly increased its number of beds. How does the acquisition fit into Fortis's growth strategy?

**Daljit:** There are several strategic fits with respect to our acquisition of Wockhardt hospitals.

One, both Fortis and Wockhardt are corporate entities and subscribe to good management practices. Our vision is to be a globally respected health care organization, known for clinical excellence and distinctive patient care and we believe that there is a wonderful match between the value systems of the two organizations.

Second, the two organizations complement one another geographically. Fortis is largely a North Indian organization. Wockhardt has an extremely strong presence in the South. Our vision was to have a pan-India presence with 40 hospitals, and with this acquisition, we established a strong presence in all the metro areas of the country.

Third, there is significant similarity in the medical programs that are offered between the two organizations. At Fortis, about 45 percent of our revenue is generated through cardiac work and approximately another 10 percent comes in through specialties like orthopedics, neurosciences and renal sciences. If you examine Wockhardt's service revenue mix, it is very similar easing the integration.

Finally, if you look at the price at which we purchased Wockhardt, we received a good deal. If you look at the EBITDA multiple, at Fortis, it's 15 to 16 percent, and we purchased Wockhardt with an EBITDA multiple of about 8.5 percent. So from all points of view, we couldn't have asked for a better fit.

### Pulse: As your respective hospital system continues to grow, are you



*Mrs. Suneeta Reddy* is the Executive Director of Finance of the *Apollo Hospitals Enterprise Limited*, with over 8,000 beds across 44 locations. She held leadership positions including co-Chairperson of the health care subcommittee - confederation of Indian industry (CII) and a member in national committee on health care. Mrs. Reddy received her Bachelor of Arts degree in Economics, Public Relations and Marketing. She holds a diploma in Financial Management from the Institute of Financial Management and Research, Chennai and has completed the Owner / President Management Program at Harvard Business School.



Daljit Singh is the President of Strategy and Organizational Development and Chief Executive-Projects of Fortis Healthcare Limited (FHL). Prior to joining FHL, Mr. Singh was the Director in charge of Human Resources, manufacturing, external relations and communications with ICI India Limited. A gold medalist from the Indian Institute of Technology in Delhi, Mr. Singh was a Commonwealth scholar to the Senior Management Programme at the Manchester Business School in 1995.

#### concerned that expansion may compromise the quality of care?

Suneeta: We pride ourselves in being a quality organization, and the group is consistently trying to maintain and share best practices. Seven of our hospitals have been accredited by the Joint Commission International. Our quality and patient-centric approach has improved our operational and clinical efficiency and led to numerous accolades in the medical arena in India. We have implemented clinical governance measures that have gone a long way in ensuring and improving the quality of clinical care at all levels of health care provision in Apollo hospitals. We do not foresee any challenges in maintaining a high level of quality of care.

**Daljit:** Early on, as an organization we invested heavily in the building blocks of the organization. We invested in quality, and quality is a part of our daily performance monitoring system.

to have an organization that is driven by very strong systems and processes.

#### Pulse: In the United States, health care technology often translates to higher health care costs. Why is that not the case with your hospitals?

Suneeta: In India the large volumes enable us to recover the cost invested in health care technology. At Apollo, we look to optimize the utilization of medical equipment thereby bringing down the cost to the end user. We also look at other ways of funding technology such as leasing or outsourcing.

#### Pulse: India's cost advantages are well advertised. What has led to this advantage and what lessons can the West learn from hospitals in India?

**Daljit:** I think one of the fundamentals in India is that we are compulsive about costs. We don't see the same obsession in the western world. This [obsession]

### care providers as they grow and as the country develops?

**Daljit:** I have no doubt. A large part of our population is still not covered under health insurance and we think that cost drivers are going to be very important going forward. Today a patient [in India] will actually shop and decide to which hospital he wants to go, so even if you are a high quality player, you can be 10 to 20 percent more expensive, but you cannot be 200 percent more expensive. We think this will give India a leading edge.

#### Pulse: Do you think increased penetration of health insurance will pose problems for Apollo Hospitals going forward?

*Suneeta:* In the current wave of modernization of health care systems, there is a need and an opportunity to expand in the area of health care insurance. India is perhaps one of the most attractive destinations for

# "India is perhaps one of the most attractive destinations for health care businesses."

- Suneeta Reddy

Second, we have invested significantly in all patient-facing processes with the express purpose that we should have a "Fortis way" of running hospitals. We would like 40 hospitals run in a Fortis way so that the patient experience is uniformly good, and we have set performance metrics so that we ensure that our promise to our patients is being delivered time and again. We are acutely aware that as we become larger and as our facilities become spread out across the country, we need enables us to do a cardiac surgery in a center of excellence for about \$5,000 as opposed to anywhere between \$50,000 to \$100,000 in the U.S. for the same type of surgery. Our wages are significantly lower but the productivity of our people is considerably higher. You want to turn over your assets faster to provide a cost effective solution to people.

Pulse: Do you think hospitals in India will be able to maintain a low cost advantage over western health health care businesses. There are lot of opportunities due to increase in lifestyle diseases, phenomenal growth in income levels, 300 million population of middle class, increases in educational levels and increases in government, private and insurance driven spending. Yet the current penetration of health care insurance is less than 10 percent. Estimates suggest that private health care spending in India will rise from \$17.3 billion to \$39 billion in 2012. This figure could rise by another \$9.8 billion

## "There are three things we are chasing all the time: accessibility, affordability and reliability."

- Daljit Singh

if widespread health insurance becomes available to the upper and middle class. The increasing use of health insurance will only compliment Apollo's business.

Pulse: According to the World Bank, approximately 450 million people live under the poverty level (\$1.25/ day), despite India's robust annual economic growth. In addition, health care providers are often concentrated in urban areas, leaving millions of people with limited access to health care. What are your "bottom of the pyramid" strategies and are these models sustainable?

**Daljit:** We have deliberately taken on projects which will force us to think with an entirely different paradigm. We have a management contract to look after a hospital in a rural area, and we have approached this project from the perspective of learning what model would actually work in that area. We ask ourselves how should we deliver care in a rural setting where people will not pay high amounts and what is the model that will actually generate a selfsustaining proposition? We believe that the business model is there, and we will crack it over the next year or so.

### Pulse: What do you envision for the Indian health care system's future?

Suneeta: I believe that there are a few key growth sectors. Medical touristism have increased 20-fold from 2000 to 2007. Diagnostic, imaging and catheterization labs are today estimated to be a \$500 million industry and are is growing at a CAGR of 20 percent. Insurance companies expect 44 percent growth this year and the premium revenues are expected to be \$38 billion by 2012. Finally, medical device businesses are the fastest growing in the world and are expected to reach \$1.7 billion by 2010.

**Daljit:** I think the greatest challenge [to India's health care system] is that there are three things we are chasing all the time: accessibility, affordability and reliability. If I were to set up a hospital in a rural area, that would not be adequate unless people are able to pay for the services. There has to be a mechanism, either through microinsurance programs or other specialized programs through the government that would enable people to access facilities that will provide them at least primary care and a certain level of secondary care delivery. To think about equity in health care delivery is going to be extremely challenging in our country, but will happen in a matter of time.

India has a unique advantage in that we have excellent clinical talent, we understand quality and we understand low cost delivery. Now we must learn from your part of the world, but we must understand that spending more on health care is not the answer. The U.S. today is spending so much of their GDP on health care, and 15 percent of the people are still not insured. I think we have to learn from the developed countries, from the mistakes or the things that have not worked well. In developing India's health care model, we must address our unique needs: the model must be affordable, and it must be sustainable in the long term.

### BY JESSICA AISENBREY, WG'11

### ALUMNI SPOTLIGHT SANDEEP NAIK, WG'04

Six years ago, he won the Wharton Business Plan competition. Now, he is co-leading the India office for one of the largest private equity players. He shares his thoughts on India's health care space.

In 2007, Apax Partners acquired a significant minority stake in Apollo Hospitals, one of India's most respected hospital chains.

Pulse: Private equity firms are expected to invest \$1 billion in India's health care system over the next five years. Why are Indian hospital systems so attractive to investors?

When you think about a new market, you look at all the macro drivers, and in India you see several factors developing clearly: rising per capita income as a result of economic growth, and a middle class that is expected to grow from 30 percent to 50 percent of the population by 2010. With rising disposable income as well as an increased health care awareness comes increased demand for private health care. India needs to build its infrastructure to meet that demand.

India has very low bed penetration as compared to any other country. If you look at the number of beds per 10,000 people, the U.K. has about 40 beds, U.S. has about 33 beds and even countries like Brazil and China have 26 and 23 beds, respectively. India has 7 beds for 10,000 people. For India to get to even the Chinese level, it needs to invest \$75 billion in its hospital infrastructure.

From a purely macro standpoint, there is clearly a need for more hospitals

beds in India, and there is the right mix for continued growth, making an investment in the space attractive.

Pulse: There are estimates that the number of Americans traveling abroad for health care will increase to 6 million in 2010 and 10 million in 2012. What is the potential for growth in the medical tourism industry in India and what are hospitals doing to capture market share in this market?

When new hospitals are being built, we typically include high-end suites so we could cater to the medical tourist population. But to be honest, given the wealth creation happening in India, all those high end suites are filled by domestic demand, because people have the capacity to pay and they want the best facilities.

Medical tourism in India is happening but the gate hasn't fully opened yet, primarily because the insurance companies in the West haven't actually started endorsing medical tourism and telling their patients to go abroad for care. If the big insurance companies in the West start focusing on the cost element, then we will see much larger growth in medical tourism.

Medical tourism is still growing in terms of absolute numbers but its potential is not completely tapped and there's a lot more room for growth.



Sandeep Naik is co-founder of Apax Partners' India office and leads their investments in Health care, Financial and Business Services, and Retail and Consumer Sectors.

### Pulse: What do you envision for the future of Indian health care?

I think that step one should be to build out more tertiary care hospitals catering to the demand. There is an immense pent up demand and not enough good facilities in which people can get affordable medical care with good outcomes, so there is clearly a need for tertiary care. As the tertiary care system is built, you will then see the focus on specialty care.

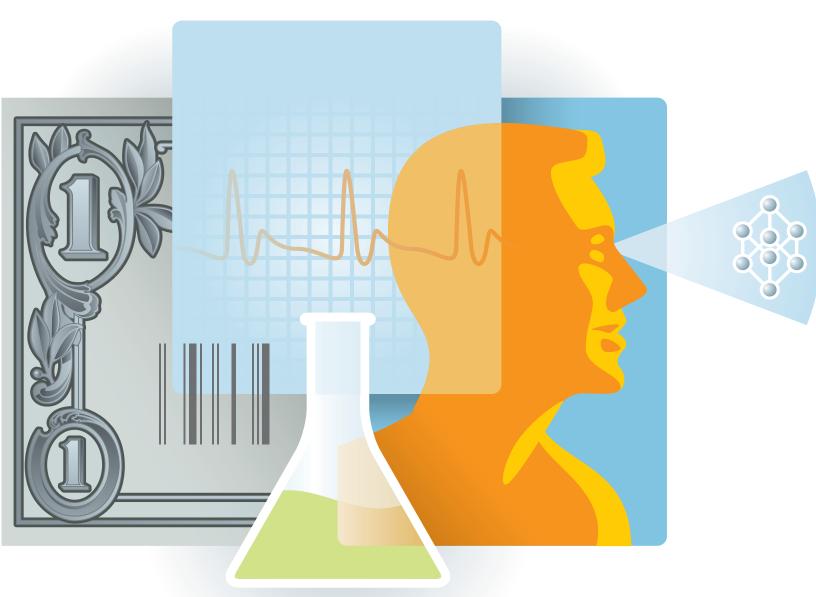
Phase two of the growth of India's health care infrastructure will be primarily around diseases and around certain conditions that require specialized facilities where you can receive quality care at affordable prices.

I think slowly and steadily you will see demand being met by enough supply in the market at which point hopefully the market will be primarily self-paying. Right now, the insurance penetration is very low, but as the insurance market increases its penetration, people will be able to submit insurance claims and hence be able to afford quality outcomes. That will be the third phase where you go to the models in the West to copy insurance processes.

### **PHARMA STRATEGIES**

### 10%

The industry began the decade with revenue growth close to 10 percent, and it starts 2010 with a growth rate of barely 1 percent. (IMS Health)



# WHAT LIES AHEAD FOR PHARMA?

# OLIVER WYMAN

### SPONSOR ARTICLE: THE PHARMA/PAYER RELATIONSHIP STRATEGIES FOR THE NEXT TWO YEARS

The power to determine what pharmaceutical products are bought and at what price has shifted dramatically in the past decade from physicians to institutional customers. For pharmaceutical executives, who have long allocated 80 percent of their spending on sales and marketing toward prescribers, while basing their relationships with institutional customers almost entirely on unit price, this change is a wake up call.

It isn't easy to develop new strategies for dealing with health plans, PBMs, CMS, state Medicaid agencies, and emerging customers such as retailers. These segments face their own challenges in securing a position in the health care system of tomorrow, and it is not clear how long it will take for that system to evolve. The anticipated shift to outcomesbased contracting, for example, is taking place much more slowly than anticipated: only a handful of deals are in place today, rather than the several hundred many observers expected.

In time that will change, possibly spurred by health care reform. In the meantime, however, it is difficult to create the aligned incentives and support capabilities between payers and pharmaceutical companies to make outcomes-based deals work. Equally important, it is difficult to discern when and how that situation will change. The pharmaceutical industry doesn't just have to hit a moving target; it has to figure out when to pick up the gun and shoot.

That said, nobody believes the pharmaceutical industry can approach the

next ten years using the methods of the last ten. Change is imperative, and a new approach to institutional customers needs to be part of that change. Today's unit price– based relationships are not only adversarial, but less and less able to produce useful results for either side. But in trying to go beyond them, the industry has continually been frustrated by regulatory constraints. Marketing has plenty of great ideas on how to partner with payers to create value. The trick is to get any of them through legal.

In the short run, Oliver Wyman believes the challenge is to develop customer strategies that work in today's market but create a pathway toward a model based on patient outcomes. As a starting point, consider four key questions:

1) What are the **key trends that got us here** and are we ever going back?

2) Which trends require immediate response, and which trends are evolving?

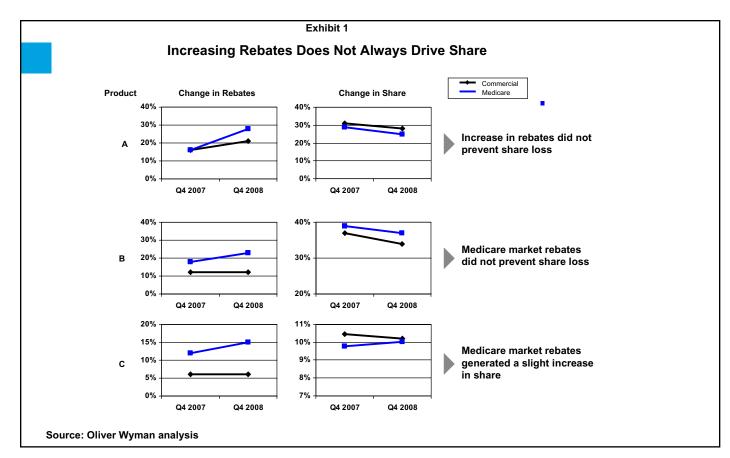
3) What is the **role of PBMs** (and other intermediaries) in the value delivery chain over the next few years?

4) What will be the **domino effect of reform** on our customers—where are the opportunities and challenges?

This article will delve into these questions and provide suggestions on how pharma should respond to the likely market dynamics of 2010-11, with an eye toward 2013 and beyond.

About Oliver Wyman With more than 2,900 professionals in over 40 cities around the globe, Oliver *Wyman is an international* management consulting firm that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, organizational transformation, and leadership development. The firm helps clients optimize their businesses, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is part of Marsh & McLennan Companies [NYSE: MMC].

Oliver Wyman's Health & Life Science's practice serves clients in the pharmaceutical, biotechnology, medical devices, and payer sectors with strategic, operational, and organizational advice. Deep health care knowledge and capabilities allow the practice to deliver fact-based solutions.



### 1) WHAT ARE THE KEY TRENDS THAT GOT US HERE, AND ARE WE EVER GOING BACK?

It is tough not to see a link between the growing influence of payers and the dramatic drop-off of new product approvals in the past ten years. When products are not strongly differentiated, formulary choices don't really deprive patients of choices. The converse is true as well: Where differentiation and need are high, physicians are largely free from stringent prescribing guidelines, and manufacturers continue to enjoy tremendous margins.

Today, perhaps the best example of a marketplace with strongly differentiated products and great unmet patient need is oncology. As a result, oncology products command great access, and oncologists have the latitude to prescribe the right product for the right patient in the right quantity. Other similar areas, where unmet need is high, include rheumatoid arthritis (RA) and multiple sclerosis (MS). Many therapies in these areas are physicianadministered biologics with unique supply-chain requirements. These factors also enable physician leverage.

But areas like these are scarce. Many therapeutic areas—cardiovascular disease, ulcer treatment, allergy and asthma, even diabetes—have had few recent breakthroughs and are becoming commoditized. Overall, 70 percent of prescriptions written today are for generics rather than brand products.

### 2) WHICH TRENDS REQUIRE IMMEDIATE RESPONSE AND WHICH TRENDS ARE EVOLVING?

Many aspects of reform will not be implemented until 2013. We still do not know what impact they will have or what strategies payers will employ to rein in costs. For the next few years, companies need to be on the lookout for clues to help answer the questions reform raises: How can pharmaceuticals help manage disease costs? (The alternative, of course, is to be regarded as a source of excess spending.) What aspects of comparative economics will be most significant in the near term, and how should development and marketing functions respond? What role will employers and consumers play?

But reform is just one trend reshaping the pharmaceutical marketplace. Several others are already considerably advanced, and companies should be taking action to respond to them:

### The industry is becoming

**commoditized**, which means that companies should revisit the practice of rebating. The idea of rebates is to gain preferential formulary position with reduced patient co-pays in order to boost sales volume. But that logic falls apart when generics enter the picture. With generics, patients have low copays, the plan pays low prices, and the clinical benefit is similar if not identical to the branded alternative. Pharma companies spend 12 to 15 percent of gross sales on managed-care rebates, but our analysis shows that their marginal value is decreasing (see Exhibit 1). Cuts to rebates in selected markets or products could free up money that could otherwise be invested elsewhere to produce higher returns.

### Stakeholders are demanding more evidence of comparative or cost

effectiveness for new drugs. This is especially true in heavily genericized indications or for high-cost therapies. FDA has in some cases deprioritized review of new drugs that did not offer significant improvement over available therapies. Forward-thinking companies are already integrating economic and comparative measures into their clinical programs. This will help them be more persuasive with the FDA and better prepared for possible future regulations extending these requirements into the promotional realm. Most companies reach only a small share of the potential market. In an Oliver Wyman analysis of a wide variety of therapeutic areas and products, typically only 20 to 50 percent of the value of a product market was realized (see Exhibit 2). The causes are many: failure to diagnose, failure to treat a diagnosed condition, or poor patient compliance with a treatment regime.

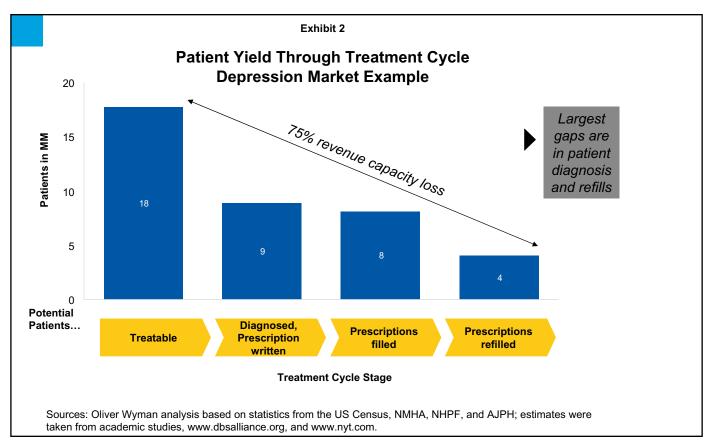
Compliance is a complex issue. The best approaches require segmentation, high-touch interventions, and multichannel strategies. Results to date have often been mixed, with many programs being suspended after 6 to 12 months. That said, improved treatment and compliance rates would have tremendous value to pharma companies and payers alike. We believe companies should give a high priority to the following efforts:

 Leverage the pharma company's disease-based skills to develop ideas for partnering with payers. The challenge here is to provide value while staying within regulatory and legal requirements.

- Understand your customers' motivations. Different health plans have different exposure to shortterm and long-term disease costs.
  For example, a state Medicaid program has a different horizon than an employer covering a highturnover group of employees.
- Begin to understand what you can do independent of payers to invest in partnerships and programs to maximize market potential.

### 3) WHAT IS THE ROLE OF PBMS (AND OTHER INTERMEDIARIES) IN THE VALUE DELIVERY CHAIN OVER THE NEXT FEW YEARS?

Prescription Benefit Managers have tremendous influence on the pricing



and prescribing of pharmaceuticals. They command significant relationships with employers (who pay most of the health care bill for about 180 million Americans). PBMs have interesting strategic advantages relative to pharma. Many have evolved into megapharmacies. They are substantially free from regulatory constraints that keep pharmaceutical companies from extending their relationships with patients: They maintain patient-level data and can realize value for providing clinical services in compliance, lifestyle management, and other forms of clinical intervention.

Like pharmaceutical manufacturers, PBMs are threatened by the commoditization of pharmaceuticals, which could ultimately render formularies obsolete. Moreover, just as pharma companies have endured their "patent cliff" of branded products losing exclusivity in the U.S., the generics industry will face its own cliff—a sharp decline in the number of products going off patent, starting in about 2013. This is bad news for PBMs, which create value partly by shifting patients from branded to generic drugs. Also, larger retailers such as Wal-Mart and Target, and traditional retail pharmacy giants like Walgreens, are looking to enhance pharmacy sales by expanding their health and wellness offerings. These big players have already encroached on the employer market and in a few cases disintermediated PBMs. The most notable example: Wal-Mart's arrangement with Caterpillar, which established a price list and co-pay policy on commonly used generic and branded drugs.

PBMs for their part have been fighting back. They have built their mail order businesses, focused on specialty pharmacy offerings, and in the case of CVS/Caremark, played a role in the retailization of health care. They are ready to capitalize on other health care trends and find new ways to leverage their assets. Large PBMs such as Medco, CVS/Caremark, and Express Scripts have tremendous reach to individual patients via mail order, resource centers, and retail outlets that cover a growing percentage of the U.S. These assets, combined with a growing set of relationships with employers, may help PBMs survive their current challenges and remain a force in the marketplace for years to come.

The fact is that pharma is unlikely to win if it attempts to compete with PBMs for the attention of payers and employers; pharma's regulatory disadvantages and lack of infrastructure are almost impossible to overcome in the near to medium term. Pharma needs to embrace this reality and seek ways to guide the PBMs' agenda toward patient outcomes. For example, PBMs want to drive prescription volume and compliance. Pharma should support those efforts, directly or indirectly, in areas where both sides' interests are aligned.

### 4) WHAT WILL BE THE DOMINO EFFECT OF REFORM ON OUR CUSTOMERS — WHERE ARE THE OPPORTUNITIES AND CHALLENGES?

The Obama administration is having difficulties in passing its health care bill, but it still seems likely that we will see some sort of reform in the near future. The sooner it happens, the sooner health plans, patients, providers, and government entities will begin to understand their new roles and needs. Meanwhile, pharma's priority in a post reform world will be to define a new method of engagement with payers and providers. A good first step for companies will be to map stakeholder needs to product portfolios and the opportunities they afford. For example, if reform brings a more intense focus on the disease costs of the Medicare population, there may be areas of a pharma company's portfolio that could produce new partnering opportunities. If FDA policy becomes even more focused on the economic value of new products, that could have implications for pharma over a broad range of therapeutic areas. The goal is to assess and respond to challenges and opportunities in a proactive manner.

### SUMMARY

While there is much we do not know about how the pharma/payer relationship will evolve over the next ten years, we do know that the market forces enabled by health care reform will dictate change. There are clear opportunities today to engage institutional customers in new and productive ways—revising contracting strategies, challenging how pharma engages PBMs and retailers, and understanding the reform-based needs of customers. Efforts in these areas won't not just lay the groundwork for the new marketplace that will begin to emerge over the next few years; they can also drive value in the short term.

Oliver Wyman has experience on both sides of the pharma / payer relationship as we assist health plans and pharmaceutical and biotech companies navigate these changes toward the similar aim that needs to be the centerpiece of the new paradigm improved outcomes for patients.

For more information, please contact:

Mark Mozeson, 212.345.3048 mark.mozeson@oliverwyman.com

Nipon Das, 212.345.9934 nipon.das@oliverwyman.com

# **EDITORS-IN-CHIEF**

Marina graduated cum laude from the University of Illinois Urbana-Champaign with a degree in Business Administration and Management Information Systems. Following graduation, she completed a two year Information Technology professional development program at Abbott Laboratories. With her interest peaked for the commercial side of the pharmaceutical industry, Marina transitioned to Abbott's sales organization. Before going back for her M.B.A., Marina was Senior Immunology Sales Specialist in Abbott's immunology division, where she was responsible for a 40 percent increase in sales volume within her first year. She also served as team leader for a 6 person sales team, winning a leadership award, and secured the role of a regional field trainer for newly hired representatives. After graduation, Marina will work for Johnson & Johnson's Experienced Commercial Leadership Development Program with the long-term goal of leading a commercial organization within a developing country.

Neil graduated from the University of Southern California with a BA in Biology and a BA with Honors in Journalism. Currently he is an M.D./M.B.A. candidate with degrees from the Wharton School at the University of Pennsylvania and the Keck School of Medicine at the University of Southern California. Neil most recently interned with the IKP Center for Technology in Public Health in India where he analyzed the medical diagnostics landscape and developed innovative methods to finance and field test technologies with global health implications. Neil also has significant experience in medical journalism including time with the CNN medical unit and the American Medical Association's ethics journal. His previous research experiences include investigating barriers to HIV treatment in India, carcinogenic impact of oxygen radicals, and prosthetic elbow development. After Wharton, Neil will pursue his residency with long term ambitions of integrating expertise in clinical medicine and business to develop health care systems that improve access.



Marina Tarasova, WG'10



Neil Parikh, WG'10

The Wharton School of the University of Pennsylvania — founded in 1881 as the first collegiate business school — is recognized globally for intellectual leadership and ongoing innovation across every major discipline of business education. The most comprehensive source of business knowledge in the world, Wharton bridges research and practice through its broad engagement with the global business community. The School has more than 4,700 undergraduate, M.B.A., executive M.B.A., and doctoral students; more than 9,000 annual participants in executive education programs; and an alumni network of 85,000 graduates.

# **EDITORS**

#### **JESSICA AISENBREY, WG'11**

Jessica graduated magna cum laude from Princeton University with an AB in Comparative Literature and certificates in Latin American Studies and Creative Writing. After graduation, Jessica worked at a public health nonprofit before traveling to Argentina on a Fulbright fellowship. After returning to the United States, she worked in the Clinical and Community Health Programs division at Public Health Solutions, a public health nonprofit organization in New York City. Jessica is currently pursuing a joint M.B.A./M.P.P. with Wharton Business School and the Harvard Kennedy School of Government. After graduation, she is hoping to pursue a career in health care consulting in the short-term with a long-term goal of working to improve global public health at a nonprofit or social enterprise organization.

#### **JAY DESAI, WG'11**

Jay is a first year M.B.A. candidate with a double major in Health Care Management and Entrepreneurship. He graduated with high honors from the University of Michigan with a major in Business Administration. Prior to Wharton, Jay completed the Coro Fellowship in Public Affairs. Prior to his fellowship, he worked in business development for Triad Isotopes, a radiopharmacy network. Jay also held positions a private equity associate at Parthenon Capital and as an investment banking analyst at Lehman Brothers. After graduation, Jay plans to pursue a career in health care services entrepreneurship.

#### **ANGUS MCWILLIAMS, WG'11**

Angus is a summa cum laude graduate of Pomona College, where he earned a Bachelor of Arts degree in economics. Following graduation in 2004, he joined Mercer Consulting where his primary client was the State of Washington. Angus analyzed Washington's health policy initiatives and insurance program operations, updated and maintained the state Legislature's health care cost projection models (tracking \$1.5 billion in state funds), and spearheaded an assessment of the state's disease management programs. In 2007 Angus joined Providence Health & Services, a 27hospital, five-state Catholic health care system headquartered in Seattle. At Providence, Angus was responsible for systemwide performance reporting and analytic support for strategic initiatives and projects. These efforts helped to foster a 51 percent improvement in clinical quality outcomes and a \$43 million growth in charity care. Angus looks forward to continuing a career with mission-based provider organizations with a focus in community health.

#### **JOHN VOITH, WG'11**

John graduated from Harvard University in 2007 with an AB degree in Biology and Public Policy, a unique major he created. While in school, he interned at the White House and founded a non-profit organization focused on reducing the costs of a college education. Following graduation, he joined IMS Health Consulting, New York, NY, a strategy consulting firm focused on understanding payer and provider incentives in order to optimize pharmaceutical product commercialization. He is currently pursuing a joint degree from Wharton Business School and The Harvard John F. Kennedy School of Government. At Wharton he is a Health Care Management major and at Harvard he is studying health care policy. In the longer term, John hopes to be a health care entrepreneur while also working to shape policy and be part of the solution to the health care crisis in the U.S.

#### **MICHAEL WESTOVER, WG'11**

Michael graduated with honors from Brigham Young University in 2004 with a B.A in Communications. He then worked for Milliman as a Health Care Consultant from 2005 to 2009. He advised state and municipal governments on their health care plans and worked closely with employers, insurance companies, unions, business leaders and elected officials. After Wharton, Michael is interested in working in health care services. He is married and has three children, all girls.

## ABOUT WHARTON'S HEALTH CARE MANAGEMENT PROGRAM

Central to the Wharton Health Care Management student experience is each individual's ability to shape and participate in a number of dynamic student-run initiatives. We have highlighted some of these activities below. For more information about the Program and its student-run initiatives, please contact June Kinney, Associate Director of the Health Care Management Program (kinneyj@wharton.upenn.edu).

### Wharton Health Care Club

The Health Care Club organizes professional and social activities for all Wharton graduate students who are interested in exploring opportunities in the health care industry. Members share their knowledge and perspectives in addition to interacting with current industry leaders to develop an understanding of the issues facing hospital, physician, managed care, pharmaceutical, biotechnology, and medical device organizations.

### Wharton Health Care Board Fellows Program

Wharton's Health Care Board Fellows Program strives to cultivate and enhance mutually beneficial learning relationships between Wharton's Health Care Management Program and the nonprofit board. The program serves to meet the needs of Health Care Management M.B.A. candidates who are personally and / or profressionally interested in health care social sector leadership. Program participants will gain first-hand experience as Board Observers on the boards of socially responsible nonprofit organizations dedicated to health care pursuits. The program also serves to meet the needs of non-profit health care organizations seeking access to the Penn and Wharton communities, as well as the professional experience and training of current Wharton M.B.A. students.

### Wharton Global Health Volunteer Program

WGHVP is designed to give Wharton health care management students the opportunity to participate in global health care related projects with limited resources. WHIVP trips are student organized, student run, and student led. Projects give participants exposure to health care challenges in the developing world as well as the opportunity to work closely with organizations on the ground to develop viable strategies to improve their organizations.

### Penn BioTech Group

The Penn Biotech Group is a cross-disciplinary club with a mission to promote careers related to the biotechnology and medical device industries through practical experiential learning. The club draws members and expertise from graduate programs at Penn, including The Wharton School of Business, the School of Engineering and Applied Sciences, the Law School and the School of Medicine, as well as the larger life sciences community of Southeastern Pennsylvania.









# Did you know...

...that on a daily basis, BD associates around the globe are helping battle some of the most challenging diseases and healthcare problems?



As a global leader in the medical technology industry, we provide students with the opportunity to be fully immersed in the life-changing work we do every day.

> Find out about BD career opportunities at www.bd.com/careers



BD (Becton, Dickinson and Company) is an equal opportunity/ affirmative action employer.

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2009 BD





# Accelerate your learning curve

Booz & Company succeeds because our people continually do the extraordinary. We work closely with each other and with our clients. We see results and are measured by them. Each experience better prepares us for the next challenge.

If you're interested in learning about career opportunities with Booz & Company, please visit us at www.booz.com.