Phease



The Magazine for the Wharton Health Care Business Conference | February 2013

Former Pennsylvania Governor Ed Rendell shares his view on the path forward for Medicaid expansion under the ACA.

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Saves Money

Letter from the Editors

It's hard to believe that the Patient Protection and Affordable Care Act (ACA) was signed into law nearly three years ago! Having survived the threat of repeal and a Supreme Court challenge, the Act is here to stay; although just how many Americans ultimately gain health insurance still depends on whether states agree to expand coverage. The Pulse begins the magazine by exploring the current outlook for expansion — and what companies are doing to prepare.

Regardless of where each state comes out, politicians, clinicians, executives and academics agree; we've got to find ways to get more health for our healthcare dollars. The industry is moving – albeit slowly – towards a system that rewards outcomes and quality more than volume. The remainder of the magazine explores some of the ways people are looking to use technology, training, consumerism and coordinated care to achieve this triple aim – the "Iron Triangle" of increased access, reduced cost and improved quality.

In collaboration with the 2013 Wharton Health Care Business Conference, a student-run conference at the Wharton School of the University of Pennsylvania, we interviewed leading experts in the healthcare industry in hopes of providing our readers with the latest insights. We believe that the Pulse provides exciting perspectives from the front line and serves as an informative survey of the opportunities, risks and trends facing the industry.

With thanks for the diligent work of our writers, as well as the generous support of our corporate sponsors, we believe that we have put together a magazine that takes the "pulse" of several industry segments and offers some measured insight as to what the future may hold.

The Pulse staff would like to express our sincerest gratitude to June Kinney, the Health Care Management faculty and prior-year Pulse editors for their continued support. We hope that you enjoy the 2013 edition of the Pulse!

Sincerely,

The Editorial Team

Elissa Bergman, Ben Herman, Rob Varady

Politics and the Implementation of Healthcare Reform

An Interview with Ed Rendell, Former Governor of the Commonwealth of Pennsylvania

By Billy Young

Having survived an intense congressional debate and Supreme Court challenge, the Patient Protection and Affordable Care Act (ACA) finally appears safe following President Barack Obama's 2012 reelection. That said, the details of its implementation – especially as it relates to state support – remain very much up in the air. The Pulse caught up with former Pennsylvania Governor Ed Rendell to try and cut through the political posturing and get the inside scoop on which way states may move forward.

PULSE: What is the impact of President Obama's reelection on how ACA implementation plays out?

Governor Rendell: Barack Obama's reelection means that the Affordable Healthcare Act will remain law. How it is implemented, however, depends on the states. Issue number one is whether states will opt to run their own exchanges, let the Federal Government run them, or opt for a partnership model. We are seeing a lot of Republican governors saying that they do not want anything to do with the exchanges; that the Federal Government should manage the programs. As Governor I would have never made this choice. In fact, when I left office we were beginning to plan for how best to run a Pennsylvania exchange.

Issue number two is whether states will opt to take additional Federal Medicaid funds in exchange for expanding Medicaid eligibility requirements. How politicized this decision has become is ridiculous. Historically most states pay 30 to 50 percent of the cost of their Medicaid program, with the Federal Government paying the remainder. Under the ACA, the Federal Government has committed to paying 100% of the cost of expanded coverage for three years, and then 90% of the cost after that. So basically we have governors turning down the opportunity to cover hundreds of thousands of people at no worse than a 90% Federal / 10% State cost split. It makes no sense.

PULSE: What misconceptions do you think people have about the ACA?

Governor Rendell: Whenever you talk about changing the healthcare status quo you're going to scare people. For example, when Republicans said that the ACA was taking \$716 billion dollars out of Medicare, it scared a lot of seniors.

But this is not the case. The \$716 billion is related to provisions aimed at reducing future provider and insurer spending growth. By slowing the rate of the Medicare Trust Fund spenddown, the ACA is extending the Fund's solvency from 2016 to 2024. The state of affairs is still troubling, but 2024 is better than 2016.

PULSE: What are some problems with the bill that you think will need to be addressed?

Governor Rendell: I think even supporters of the Affordable Care Act agree that the bill doesn't do enough to contain costs. A few provisions – like funding for providers that create medical homes for chronic diseases or incentives for the provision of preventive services – are on the right track. Unfortunately, other provisions – like those related to penalizing hospital-acquired infections – don't go far enough.

PULSE: If the ACA has succeeded in one thing, it's been polarizing the country. Do you see Democrats and

Republicans starting to work together to deal with the issue of rising healthcare costs?

Governor Rendell: If Republicans keep trashing the ACA without trying to address the real problems with the bill, the next move will be towards a single-payer system. I'd be surprised if the bill fails to improve access and quality.

What Republicans need to do if they are genuinely concerned is reach out to the Administration and say, "we disagree with you, but now that the ACA is law we want to work with you to support more cost-containment." I think the President would be very willing to entertain this kind of discussion.

We need to work together not just on healthcare, but on immigration, energy, guns – you name it. Unless we start acting in the best interest of

our country – and stop trying to score short-term political victories – we're toast.

PULSE: What advice would you offer students that will be entering the healthcare industry?

Governor Rendell: My advice is to understand every facet of the ACA, because over the next five to ten years, people who do – whether they are in business, law or government – are going to be in high demand. They'll be positioned to make a meaningful impact on the healthcare sector.

Profile



Edward G. Rendell
Former Governor of the Commonwealth of Pennsylvania

Ed Rendell is the 45th Governor of the Commonwealth of Pennsylvania. Governor Rendell also served as Mayor and District Attorney of the City of Philadelphia and as Chair of the Democratic National Committee during the 2000 Presidential Election. Governor Rendell is a graduate of the University of Pennsylvania and of the Villanova Law School.

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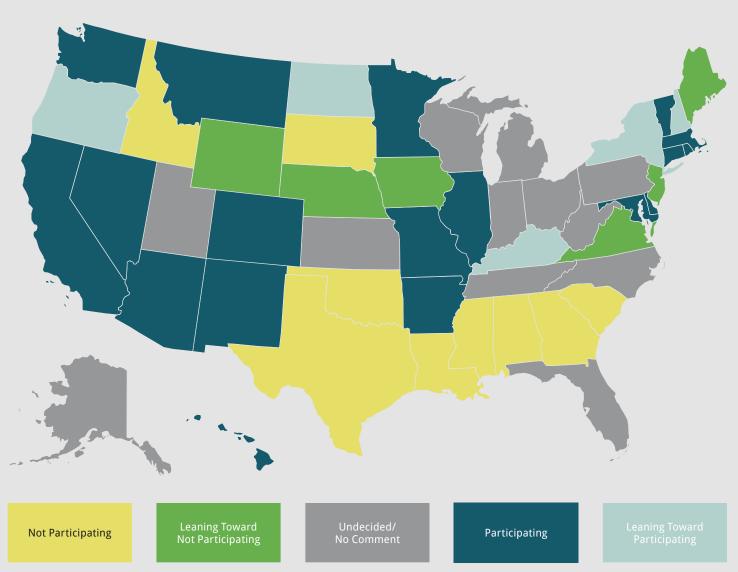
90% Federal / 10% State cost

split. It makes no sense."

The Supreme Court's ruling on the Affordable Care Act allowed states to opt out of the law's Medicaid expansion. Based on unique political, financial and health related concerns, state governors are divided on whether to take additional federal money to expand Medicaid or not.

After Election 2012: Where the States Stand

What are the States Saying about ACA Medicaid Expansion?



Wisdom from Tennessee:

Perspectives from the Director of a Successful Medicaid Program

An Interview with Darin Gordon,
Director of Tennessee's Medicaid Program (TennCare)

By Andrew Shelton

All too often talk about controlling costs and promoting greater value across the healthcare system is limited to the commercial and Medicare-insured populations. But with the Patient Protection and Affordable Care Act (ACA) ushering in as many as 13 million new Medicaid beneficiaries, it's time to stop and ask "what about Medicaid?" The federal government has put a lot of money on the table to entice state agencies to expand coverage, so why have more than half the states not yet signed up?

To gain a better perspective on how Medicaid fits in to our national conversation about improving healthcare coverage and outcomes, The Pulse caught up with Darin Gordon, Director of Tennessee's State Medicaid program, TennCare. In the following interview Mr. Gordon tells us how TennCare has been able to maintain inflationary trends well below the national average for Medicaid programs, improve the quality of care received by Medicaid patients around the state, and increase member satisfaction.

PULSE: Despite the passage of the Patient Protection and Affordable Care Act (ACA) back in 2010, there are still a lot of questions about whether states will expand Medicaid. What are some of the issues states are weighing?

Darin Gordon: Hospitals and businesses are concerned that if states do not expand coverage it will negatively impact the bottom line. I think states recognize that hospitals will take some reduction in uncompensated care payments, although to what degree we're not sure because the formula hasn't been published yet. If hospitals see a reduction in these payments without some offset related to either an increase in coverage or increase in reimbursement from other payers, it could be particularly challenging for some to remain solvent. We're currently looking at and evaluating the issue.

PULSE: In addition to offsetting the cost of uncompensated care, what are some other factors states are considering?

Darin Gordon: One of the big concerns states have is whether the high federal match rate will be sustained over time. In some ways the federal government has sent mixed signals. They're saying "this match rate won't change—this is fair, we intend to fund it." But at the same time the President's budget the last couple of years included proposals to blend the match rates for the traditional Medicaid population, which was scored as a savings. Essentially, the Administration was proposing a reduction in the match rates that have been in place for decades. At the end of 2012, the Administration recognized the confusion this was creating and withdrew the proposal.

I really think each state will go about expansion differently. If you allowed states to use some of the modern tools available to help transform the programs and services we offer, then I think more states would be inclined to expand. However, if the discussion is simply around whether to expand the existing Medicaid program to more people with an enhanced match, it's more difficult for states to get on board.



PULSE: Where do you see the states that have not yet indicated their stance on expansion coming out on the issue?

Darin Gordon: I think states need to see how the legislative sessions play out after the first of the year. If you go back to the 1960s when Medicaid first came on the scene, not every state joined immediately; the last one (Arizona) didn't join until 1982. It's going to vary by state, but I do think many states will eventually expand Medicaid coverage.

PULSE: Changing directions a bit, what do you think of the integrated care proposals for Medicare/Medicaid dualeligibles?

Darin Gordon: The dual-eligible conversation started out ambitiously, but as I have watched the discourse over the

last year, I fear it may not be as successful or go as far as is possible. I worry that different interests around the Medicare program have resulted in a less ambitious, less innovative solution for serving this population. We'll have to wait and see exactly what the demonstrations accomplish, as well as the extent to which they can measure these accomplishments.

PULSE: What caused the move towards a less ambitious solution at the Federal level?

Darin Gordon: I think when stakeholders started hearing some of the state proposals to improve care for the dual-eligible population, there was concern that it was too much change too quickly, and pressure was put on CMS to scale back. In some cases, it may also have been groups trying to protect the status quo.

I am personally indifferent as to whether Medicare or Medicaid is ultimately responsible for serving dualeligible individuals, but I think that as long as two distinct organizations – with a lot of barriers between them – try to serve the same population, care and coordination are going to fall woefully short of what anyone wants or expects. The result is basically an incredibly inefficient use of our limited resources.

I do believe states have found more innovative solutions for unique populations in the past, and that if given the chance could do a tremendous job serving this population more cost effectively, but then again – agreement on this issue is the most important first step.

PULSE: You mentioned that states may be well-positioned to serve the dual-eligible population most efficiently. Can you describe some of the opportunities you think exist to improve the quality of dual-eligible patient care?

Darin Gordon: In government we create multiple programs that do basically the

same thing: in this case subsidize healthcare for different groups of people. We create these programs with their own processes, rules, and way of doing things in isolation; and we even create barriers to prevent them from communicating well with one another. Then, in circumstances where individuals are eligible for more than one program, we wonder why we're not successful. It's a disservice to the members of these populations and a disservice to the providers that serve them to place both sides in such an odd predicament.

We are also unwilling from a health policy perspective to require the types of things that we know could help improve the quality and cost-effectiveness of care. Do we really think that an unmanaged, uncoordinated, fee-for-service system is the best option? And yet, that's where the bulk of the population is served unless they choose a better option.

PULSE: Earlier you mentioned providers who serve the dual-eligible population. Do you see them running the risk of reduced reimbursement for their dual-eligible patients?

Darin Gordon: It's a bit premature to predict the results from all of the demonstrations across the country, but Tennessee's proposed demonstration would not have changed the level of reimbursement for core Medicare providers. In fact, to make the demonstrations successful, I think the primary focus should not be on negotiating lower rates. In the long run, slowing current spending trends is less about reducing perunit reimbursement than it is about being more coordinated

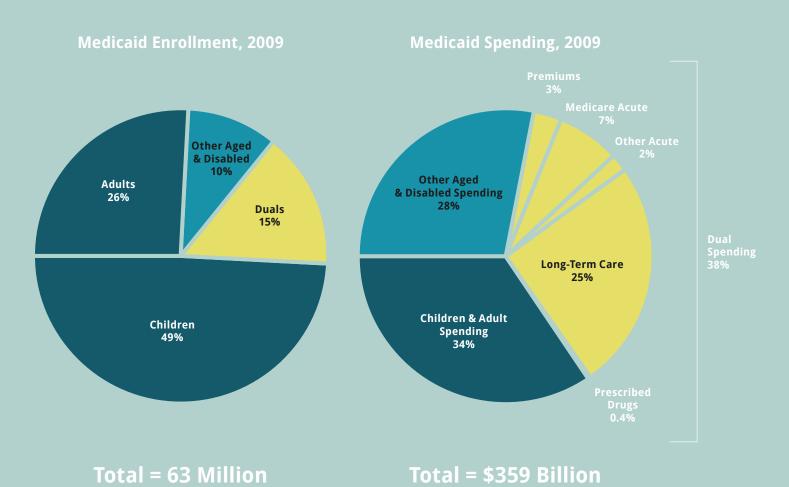
and efficient with the care we provide.

"In general, our goal should not only be to save money and reduce hassle and friction, but to improve quality and satisfaction for both providers and members."

In Tennessee, we think proper integration of care, if done well, can produce savings. And that savings should be used to offer supplemental benefits to individuals, including better access to home and community based care, which has been largely unavailable under Medicare. We should be making it less difficult for providers to offer these options to their patients.

Medicare/Medicaid dual eligible patients account of a disproportionate share of Medicaid spending. More effective care management for this vulnerable population could lead to substantial cost savings and health improvements.

Dual eligible beneficiaries account for a substantial share of Medicaid spending





In general, our goal should be not only to save money and reduce hassle and friction, but also to improve quality and satisfaction for both providers and members. There is a tremendous opportunity to improve the delivery of preventive services, reduce avoidable hospitalizations and increase the number of elderly and disabled people who are able to remain in their homes. This can be a win-win proposition for patients, providers and payors alike if it is coupled with payment reform that rewards quality rather than quantity.

PULSE: Would TennCare like to better engage patients in their care choices?

Darin Gordon: We frequently hear from providers that our members need to be more engaged in their care. We agree; we would welcome greater member engagement. For example, if a member was identified as someone that would benefit from participation in a disease management program, but was unwilling to participate, we could adjust

that member's premium obligation. On the other hand, if he or she did actively engage, we could reduce or eliminate premiums. Without member engagement our healthcare system breaks down. Ideally we would like to offer members incentives to encourage engagement.

States have also looked at ways to encourage informed choices of high value services. If an urban member with access to multiple providers has been advised by a physician that they need an MRI, we'd like to be able to have the member choose the facility that offers the best value. We wouldn't tell the member where to get the MRI, but if he or she chooses the high cost setting then a greater degree of cost-sharing might be warranted.

These ideas are challenging to put into practice, but unless we are given the flexibility to look for creative solutions to improving customer engagement and decision making, it's going to be tough to have the sort of large-scale and lasting impact we are looking for.

Profile



Darin Gordon
TennCare's Director and Deputy Commissioner, Tennessee Department of Finance and Administration

Under Mr. Gordon's leadership since 2006, the state's Medicaid managed care insurance program has retained control of its finances, placed full financial risk back with the managed care organizations and refocused TennCare's management energy on improving the healthcare status of enrollees.

While many Medicaid agencies do enroll some populations into managed care, TennCare is the only Medicaid agency in the U.S. to enroll its entire population into managed care, uniquely enabling the program to learn from challenges as it continues to control costs while providing high-quality care to its members.

State by State: Rolling Out the Health Insurance Exchanges

An interview with Dr. Alan Muney, Chief Medical Officer of Cigna

By Jamie Mumford



Expected to launch on January 1, 2014, Health Insurance Exchanges are arguably one of the most important components of the Patient Protection and Affordable Care Act (ACA). At their core, exchanges are designed to increase the availability of subsidized private health insurance, making coverage accessible to millions of previously uninsured Americans. While the exchanges represent exciting progress for many people who faced challenges navigating the insurance market before, health plans have a lot of work to do to prepare for 2014. Payors participating in exchanges will have to meet new minimum standards and guarantee coverage, not to mention market new products, position themselves competitively, and tackle a host of as yet unforeseen challenges almost sure to arise.

The Pulse spoke with Dr. Alan Muney, Cigna's Chief Medical Officer, to learn more about the exchanges, what insurers are doing to prepare and Cigna's strategy in this new marketplace.

PULSE: Under the Affordable Care Act (ACA), states can select one of three exchange models: State-run, State-Federal partnership, and Federally-facilitated. Can you provide detail on the major differences in the operational structure and oversight of these models and what the respective implications are for insurers, such as Cigna?

Dr. Muney: First off, to provide an overview of each of the three exchange models: under the State-run option, the State will control and run all aspects of the exchange, from contracting with the various health plans and managing the risk, to building the IT infrastructure and maintaining consumer outreach programs. Under the Partnership model the State and Federal Government will partner with each other to run the exchange. As time progresses, the State will take on more functions with the intent of eventually taking full control. Lastly, if the State opts for a Federally-facilitated model, HHS will assume primary responsibility for operating the exchange in that State.

Having three exchange models will result in insurers building multiple options for connection. To make matters even more complicated, HHS delayed the November deadline when states needed to commit to an exchange model. The extended deadlines gave states until mid-December 2012 to decide whether to run a state-based exchange, and until February 15, 2013 to opt for a partnership exchange. These date extensions have created additional complexity as insurers attempt to understand the specific requirements for connecting to the exchanges in preparation for open enrollment in October 2013.

PULSE: Private exchanges are in many ways the precursor to the public exchanges envisioned in the ACA, and many officials are also citing Massachusetts Health Connector (launched in 2006) as a template for rolling out the public exchanges. In what ways is Cigna applying lessons learned from these models to its public exchanges strategy?

Dr. Muney: Today we participate in private individual exchanges such as ehealth.com. Data from this type of exchange provides a good baseline of how individuals may



react to a public exchange. However, private individual exchanges only give us a view into the existing individual market. It is still undetermined how new entrants to the market will respond with the introduction of subsidies.

To better understand the overall buying characteristics of the market, Cigna has been working with an external research firm to perform in-depth simulations. This includes constructing model plans and products and putting them in front of actual customers to better understand how they may respond. Using feedback from the existing exchange models, combined with our simulation activity, hopefully will give us a better view of the entire market as we prepare to launch.

PULSE: With exchanges expected to open for registration in October 2013 – less than one year from now – what are some challenges insurance companies like Cigna face?

Dr. Muney: Most of the challenges faced by insurers in preparing for the health insurance exchanges stem from the compressed timeline. Federal and state delays in finalizing rules and regulations have left insurers and other stakeholders with little time to develop a customer-ready product. Complicating matters further, federal and state governments will have to work together to sort out roles, and as a result states may delay deciding on benchmark plans.

A protracted economic slump or federal default may put further pressure on employers to shift medical costs to employees and the government by dropping coverage, and potentially driving consumers to subsidized or exchange solutions.

Recently, we have started seeing more information sharing, but with less than ten months to go before October 1, 2013, there are concerns in the insurance community that we won't have enough time to get ready.

PULSE: In states that are still undecided about whether to form their own distinct marketplaces or collaborate with the Federal Government, is the compressed timeline affecting whether payors decide to participate in exchanges at all? "The compressed

timeline may also

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intention of reform."

Dr. Muney: The lack of clarity and direction does make it more difficult to plan. This is driving insurers to develop multiple scenarios to be prepared for a wide spectrum of possibilities, which also increases the cost of administering the plans. And yes, the compressed timeline may also limit the number of exchanges a carrier chooses to participate in, which directly opposes the desired intention of reform.

PULSE: What are some of the main factors insurers are considering as they decide the markets where they will participate in public exchanges?

Dr. Muney: One of the main factors that insurers are weighing is overall market attractiveness - factors like addressable market, regulation, demographics and segmentation. Additionally, insurers are likely to consider their ability to succeed in certain markets. This may include unit costs, competitor penetration, market share of the top three competitors, etc.

Right now Cigna is looking to target specific markets and determine what is feasible given the current rules and regulations that are out there. Such efforts involve not only trying to align with our current individual exchanges, but also examining our smaller group markets. We are looking

across our priority markets, from a national and regional perspective, in addition to our large clients. We are also involved in identifying potential anchor hospitals that we may want to do something around.

PULSE: By 2021, the size of the exchange market is projected to more than double, creating the single largest expansion of health coverage in the U.S. since the creation of Medicare in 19651. Can you describe the demographic profile of this new, distinct customer base, and how insurance companies like Cigna are preparing for this newly-insured population?

> Dr. Muney: Today the individual market is made up primarily of self-employed, early retirees, entrepreneurs and individuals between jobs. With the introduction of the subsidy and mandate, the type of consumer in the market will change.

The subsidy provides individuals of lower income that previously went uninsured the opportunity to afford insurance. Additionally, the tax penalty, while not significantly burdensome for some individuals, will still drive people

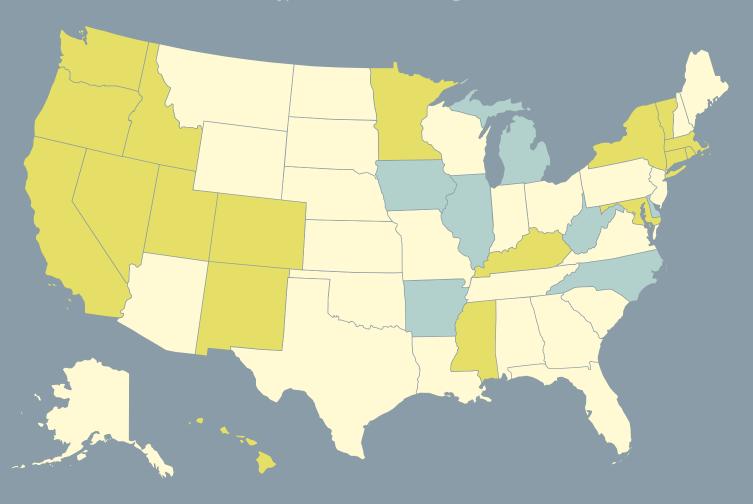
to purchase insurance. A challenge for insurers will be managing pent-up demand for healthcare among this previously uninsured population. People that don't have insurance often delay getting care, so you may see an increased amount of utilization at the beginning. We see this every year in various degrees with Medicare and some of the consumer directed plans (where people get employer funds up front). However, it's still an unknown risk at the beginning.

Studies have shown that premiums will increase significantly as underwriting is removed and essential health benefits are added. Since insurers won't fully know this risk in the beginning, an initial increase in premiums is likely. With time, competition will kick in, and insurers will look for new ways to provide increasingly affordable solutions to customers.

There is still a great deal of indecision on the part of states about which insurance exchange model to adopt.

After Election 2012: Where the States Stand

Type of Insurance Exchange



Federal Exchange

Partnership

Own Exchange

PULSE: More and more, insurance companies are focusing on the end consumer. Recently, Cigna's consumer engagement strategy has included purchasing Kronos Optimal Health (health coaches, health education programs, and lifestyle management systems), and launching Cigna's "Go You" ad campaign and InformedonReform.com website. How does Cigna plan to incorporate this consumer focus into its health exchange strategy?

Dr. Muney: Our consumer focus is consistent whether we're dealing with exchanges or anything else. Cigna will work to support consumers in every way we can. Depending on the consumer that could be through information on our InformedonReform website, with health programs to work on a chronic condition, or being there when they need us through our 24/7 customer service communication channels.

Additionally, we have what we call "collaborative accountable care," our version of accountable care organizations (ACOs). We currently have more than 50, which are focused on achieving the "triple aim" of improved quality, cost and patient experience. In these programs, physicians can earn bonuses that are tied to increasing the quality of care they deliver while lowering costs. We are focused on driving physician-centric incentive based relationships with the patient. The more we can engage and partner with the doctor to support the patient's care, the more we can expect what we call "engagement rates" to go up.

PULSE: With an estimated 25 million Americans seeking insurance through the exchanges², the ACA and the healthcare reform movement offer tremendous retail opportunities for insurance companies. Retail is a relative new territory for most insurance companies; how is Cigna incorporating this in its strategy for the public exchanges?

Dr. Muney: Cigna has been focused on this market shift for several years. Our individual business has a distinct direct-to-consumer division focused on dealing individually with our customers. Additionally, Cigna has brought in expertise



from areas like credit cards and banking to help strengthen the operation. We invested heavily to implement a new platform in 2012, and will continue to invest in the year ahead to revamp our direct-to-consumer efforts.

While states are expected to manage and dictate the consumer experience on the exchange, Cigna will continue to dedicate significant time and resources to focusing on how we can provide additional value to the individuals we serve. This may include interacting with our customers through games, contests, and tools. For instance, on Health Care Reform for You (HCR) there are interactive infographic tools where information is tailored to each individual's answers and shareable through social media. The intent is to offer a comprehensive platform to help simplify complex concepts and provide explanations and resources on the new health reform law.

PULSE: Finally, because of the creation of health exchanges, do you foresee any shifts or changes in Cigna's relationships with physicians and hospitals in the next few years?

Dr. Muney: We see the exchanges driving lots of activity with most large delivery systems and with all payors at the same time. Some hospital systems have decided to obtain an insurance license and potentially play on the exchanges as their own branded delivery system, essentially as a competitor to insurers. Insurers will need very competitive pricing for these exchange products,

similar to how insurers competed in small group markets, with very price sensitive buyers.

We also see potential business partnerships with hospital systems for co-branded products, or "white label" products using the hospital systems' brand. Additionally, we may see joint ventures emerge across the commercial landscape and the development of Medicare products with some price concessions at the lower-exchange end of the market in return for hospitals sharing in profits on the back end. It is yet to be seen how this will all play out, but I think there are a lot of opportunities to work together in ways we never have before.

- ¹ Kaiser Family Foundation, "Medicare: A Timeline of Key
 Developments," Available at: http://www.kff.org/medicare/
 medicaretimeline.cfm; US Census Bureau, "Historical National
 Population Estimates, 1900 to 1999" US Census Bureau, "Projections
 of the Population and Components of Change for the United States:
 2010 to 2050 (Constant Net Migration)."
- ² According to CBO current estimates, from 2016 on, between 23 million and 25 million people will receive coverage through the exchanges, and 10 million to 11 million additional people will be enrolled in Medicaid and CHIP as a result of the ACA.

Profile



Alan Muney, M.D., M.H.A Chief Medical Office, Cigna

Dr. Alan Muney was named Chief Medical Officer in 2011 and leads Cigna's efforts to ensure its customers worldwide achieve the best possible personal health and wellness through programs and services they receive from Cigna.

Dr. Muney joined Cigna in 2010 as Senior Vice President in charge of the Company's health management and contracting

Total Health and Network organization, which includes the market medical and clinical nurse executive communities, total health physician operations, total health clinical operations, dental clinical operations and contracting. As Chief Medical Officer, his broadened role encompasses Cigna's Total Health and Network organization as well as the company's clinical strategy and policy, coverage policy, quality measurement and improvement, value-based purchasing and design of health advocacy programs.

Dr. Muney has more than 25 years experience leading health plan operations and in medical group practice management. Prior to joining Cigna he was Executive Director at The Blackstone Group where he was CEO and founder of Equity Healthcare. Before that he served as Chief Medical Officer for Oxford Health Plans and for United Healthcare in the New England region; Chief Medical Officer for Avanti Health Systems of NYLCare and as Regional Medical Director and Director of Pediatrics of Mullikin Medical Centers in California.

Board-certified in pediatrics, Dr. Muney is a graduate of Brown University, where he received both his bachelor's and medical degrees. He completed his internship, residency and fellowship in pediatrics at Washington University Medical Center in St. Louis and received his Masters of Healthcare Administration degree from the University of La Verne in La Verne, CA.

Dr. Muney has served on the Brown Medical School Alumni Board of Directors and on the Board of Directors of the Fairfield County chapter of American Heart Association. He has also served on the editorial advisory boards of the American Journal of Managed Care and Health Plan Magazine and on the scientific advisory board of the Institute for the Study of Aging.

The Complexity of Compliance in a Post-Reform Era

An interview with Alan Yuspeh, Chief Ethics and Compliance Officer of HCA

By Elissa Bergman

When the Federal Government began investigating the Hospital Corporation of America (HCA Holdings, Inc., or "HCA") for Medicare fraud in 1997, the Company turned to Alan Yuspeh to devise and implement a robust ethics program that would cover all HCA hospitals. In 2002, the Company settled the lawsuit for more than \$2 billion, although since that time – under the leadership of Mr. Yuspeh – HCA has been named by the Ethisphere Institute as one of the world's most ethical companies. Smaller healthcare companies routinely turn to HCA as a model for creating effective, robust ethics and compliance programs. The complexity of the Patient Protection and Affordable Care Act (ACA) now poses new compliance challenges for providers. The Pulse caught up with Mr. Yuspeh to discuss these challenges and HCA's strategy for compliance in an era of regulatory reform.

PULSE: Many hospitals currently face compliance issues related to fee-for-service Medicare reimbursement. As the reimbursement model shifts to bundled payments and value-based compensation, what new compliance issues do you see emerging?

Alan Yuspeh: I do not anticipate a dramatic change in the basic types of compliance issues we face right now. First of

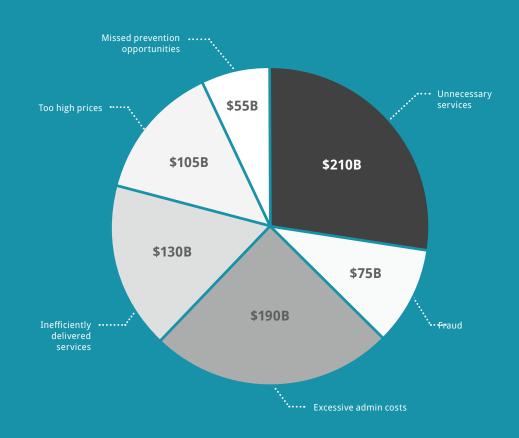
all, I think there will continue to be a substantial component of fee-for-service reimbursement, although it is going to become more complicated as the number of factors that affect reimbursement increase.

I think it's simply too early to know what structure bundled payments will take, or even how big a part of overall reimbursement they will become. I think we will have to

Total Waste in 2009: \$750B

The Institute of
Medicine estimates
that 30% of all
healthcare spending
is waste.

Source: Institute of Medicine



wait to get more experience with these payment models to understand what compliance risks they pose.

PULSE: With regulation increasing as a result of healthcare reform, what do you see as the biggest compliance challenges going forward?

Alan Yuspeh: The complex challenges in ethics and compliance for hospitals have become more and more difficult. Our ethics and compliance program has 41 different compliance risk areas, from physician relationships to medical necessity issues to quality issues to clinical research to privacy.

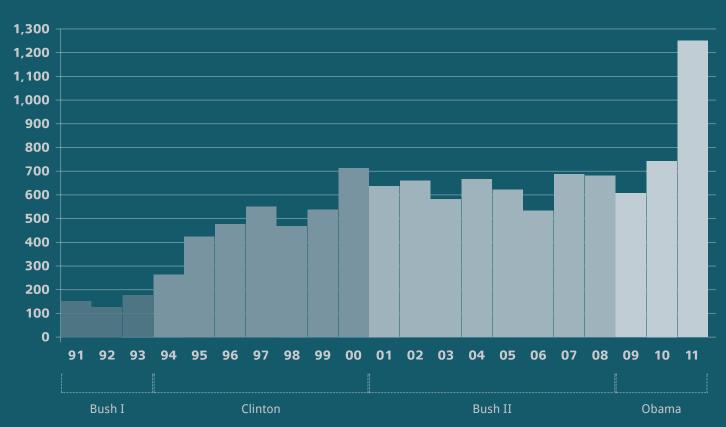
Going forward it is difficult to predict precisely what challenges health reform will present, because many of the key provisions will not be implemented until 2014. Each of the numerous new regulations will pose various challenges. Such an evolution necessitates effective hospital leadership, broad compliance resources, and a commitment to continuous improvement and exceptional performance.

PULSE: How is HCA using information technology to manage, quantify and standardize compliance performance across its 163 facilities?

Alan Yuspeh: There's an enormous focus within the entire HCA network of hospitals on health information technology. We have had excellent system-wide results implementing Phase 1 of Meaningful Use. We work with thought leaders such as Dr. Jon Perlin to guide a comprehensive IT strategy.

Additionally, we recently established a new Information Protection Department at HCA. We intend to lead the industry in information security and protection, as well as privacy. As you would expect, much of this is related to IT issues. The number of health care fraud prosecutions has increased significantly in the last decade. It is becoming essential for hospitals and other health service providers to protect themselves from costly Medicare compliance violations through robust compliance programs.

Healthcare Fraud Prosecutions



PULSE: What about the HCA compliance program makes it especially innovative?

Alan Yuspeh: There are a number of aspects of the program that we regard as distinctive. The first is organizational: compliance permeates the entirety of HCA's corporate structure. We have designated Ethics and Compliance Officers (ECOs) in each facility in order to give our efforts a local focus. We also have 37 functional experts responsible for a particular area of compliance risk. Finally, having a Chief Ethics and Compliance Officer on the corporate leadership team is integral to ensuring compliance issues are appropriately respected throughout the organization.

Further, our annual code of conduct training is exceptionally well done. It is the only training that every employee at HCA receives every single year. We also have a dial-in "ethics line" that employees can call to report an ethics violation. Each call is investigated, resolved, and documented in a process that has received praise from several vendors. Finally, we have a robust compliance process review program, including detailed checklists which ensure that hospitals are conscientiously implementing our broad set of policies and procedures. And, since we feel a sense of responsibility to the rest of the industry, all of our compliance resources are also available on the internet enabling smaller hospital networks to adopt them.

PULSE: You led the hospital system through one of the largest Medicare fraud investigations in the program's history. What has kept you at the organization for the last 15 years?

Alan Yuspeh: Several things keep me engaged and excited about the organization. First of all, I feel there is enormous social value in the work we do at HCA. Knowing that you are part of the day-to-day efforts of 163 facilities that are improving the lives and comfort of thousands of people who are ill is tremendously satisfying.

The other thing that keeps me particularly engaged is the understanding that an empowered, well-structured ethics and compliance program improves the overall performance of the organization. I have had the privilege for 15 years to provide leadership and coordination to a program that has helped ensure that all 200,000 of our employees have the resources each and every day to do what is expected of them in terms of values, laws and regulations. This makes us a stronger and more effective organization that people are proud to work for. It is what keeps me energized and engaged.

Profile



Alan Yuspeh
Senior Vice President and Chief Ethics and Compliance Officer, Hospital Corporation of America (HCA Holdings, Inc.)

Mr. Yuspeh is a member of HCA's senior management team and an executive officer of the corporation. HCA is the largest healthcare provider in the United States. It was named by the Ethisphere Institute as one of the world's most ethical companies in 2010, 2011 and 2012. Mr. Yuspeh worked in Washington, D.C. for 24 years before joining HCA. He held senior

staff positions in the United States Senate; was a management consultant with McKinsey; and was a partner in several large law firms. Mr. Yuspeh received his Bachelor's degree at Yale University and an M.B.A. from Harvard Business School. His law degree is from Georgetown University.

Preparing for Change: How Providers are Turning to Technology

An Interview with Robert Watson,
President and Chief Executive Officer of Streamline Health

By Elena Castañeda

Streamline Health Solutions, Inc. is a leading provider of SaaS-based enterprise content management, business analytics, computer assisted coding (CAC), and clinical documentation improvement (CDI) solutions for healthcare providers. In the following interview, Mr. Watson walks the Pulse through what he is hearing and seeing from his clients when it comes to emerging trends in healthcare technology, reimbursement and consumerism.



PULSE: Many of the provisions of the Affordable Care Act (ACA) have already begun to take effect. What do you see as the biggest challenge facing providers over the next five years?

Robert Watson: The biggest challenge for providers will be managing increased payment complexity across all healthcare markets. Regardless of any near term changes to payment methodologies, most healthcare executives believe that we'll end up with some form of an outcomes-based payment model. I think they also would agree that we're moving to a payment system that will put a much greater burden on the consumer, which will create additional payment-related issues.

PULSE: Can you give an example of how an increased reliance on consumers creates additional complexity for providers?

Robert Watson: On the billing and collection side, the likelihood of collecting from a patient goes down significantly post-discharge. Collecting money owed is an expensive, difficult process that negatively impacts hospital margins. The ACA is going to increase the number of individuals with insurance, but consumers are still going to be responsible for paying for some portion of the care they receive. Being able to accurately predict, bill and collect this amount upfront will be complex, but incredibly important for hospitals.

PULSE: What are providers doing to prepare for the emergence of outcome-based reimbursement?

Robert Watson: We talk to forward-looking hospital CFOs every day; our organization has more than 100 clients representing 450+ provider facilities across North America, so our team is on the front lines every day. And while I wouldn't describe our CFO clients' outlook as panicked, I think it's fair to say that they are very concerned with the negative impact of payment redesign on their margins. Executives are responding by shortening decision-making cycles and investing in technology that will help them adapt to new payment systems. The most forward-thinking

providers tend to be the larger, more complex, urban health systems. In some ways they are facing the most risk, but also have the most to gain.

PULSE: What is driving the shorter sales cycles for technology purchases?

Robert Watson: Compliance with Meaningful Use requirements is a major driving factor. Providers are well on their way to deploying electronic medical records (EMRs), and what they are finding is that many products don't effectively solve all of their problems or get them fully compliant with Meaningful Use. For example, one of the directives for Stage 2 Meaningful Use is the ability to collect unstructured data about the patient experience; many providers are seeking better solutions for this.

Another driving factor that I mentioned earlier is payment reform. Technology is seen as a way to get ahead of that storm; to ensure a health system is ready for that switch. Will the change to outcomes-based payment models happen in 2014? I doubt it, but it wouldn't surprise me if it starts in earnest in 2015.

PULSE: What are other obstacles providers face in achieving Meaningful Use?

Robert Watson: Providers are making good progress. I think the underlying challenge is that fully committing to a new EMR is – in a sense – a complete business process overhaul. Add in the complexity of the pending ICD-10 conversion in October 2014, and a provider's entire billing, coding and collection operation is at risk of being turned upside down. The ICD-10 conversion represents, potentially, an eightfold increase in the number of codes, which will likely necessitate greater reliance on technology. It's a fundamental shift for billing departments, which – despite significant technological improvements over the last 30 years – still rely on a lot of manual processes. Combine this with lean back offices and a lot of outsourced billing and collection services, and there is a significant risk of failure.

PULSE: With so many EMR systems in the market, and patients constantly moving between providers, I'd imagine interoperability is a big issue. To what extent are inter-provider and inter-EMR system connections being developed successfully?

Robert Watson: Perfect interoperability between EMRs, financial systems and billing systems is the Holy Grail of healthcare IT. The reality is that eventually the EMR in your physician's office has to share information with the other healthcare providers



"Perfect interoperability between EMRs, financial systems and billing systems is the Holy Grail of healthcare IT."

you visit. As you alluded to, that's usually not the case today. tec
Frankly I think things will get a lot better over the next
couple years as states start to create HIEs and ACOs start

to take shape. A standard communication language will

emerge.

PULSE: Who do you think will develop that interoperability standard?

Robert Watson: I think the federal government may try and legislate it. Whether or not they're successful remains to be seen, but I think, unfortunately, that legislation is going to be the first major step towards broad interoperability. Another consideration is what payors will do. The government is obviously the largest payor, but all payors want interoperability.

PULSE: Mobile is another area of healthcare technology that is getting a lot of attention. To what extent do you think mobile devices and applications will be plugged into EMRs?

Robert Watson: Health information is going to be viewable and editable via mobile devices. I don't think that HIPAA concerns are any more or less relevant for mobile phones and tablets than for computers. If I can move money securely from one bank account to another with my phone, then HCIT firms will find ways to keep patient information safe as well. I understand the concern with going mobile. If and when there is a data breach, it will be on the front page of the New York Times and on 60 Minutes. The reality is that mobile is convenient, efficient and the

technology to make it safe exists today.

PULSE: How is the interaction between patients, their health and their health information evolving? How are providers responding?

Robert Watson: First of all, I think increasing consumer involvement in healthcare is a good thing. Greater engagement in our own well-being is a positive for everyone. The challenge is figuring out the right level of engagement, especially when it comes to someone controlling his or her own health information. I think consumers are definitely entitled to their health information; the question is how much control they should have.

Providers' commitment to digital patient records has definitely gained strength. It's been going on for at least 20 years, although for most of that period we were only taking baby steps. I can look at my CVS record, for example, and get a good history of all the medications I've been prescribed over the last five years. I think we've finally reached the

point where everyone supports the idea of patient access to health information; I don't think there is anyone still saying "we don't want that."

PULSE: Do you see more robust digital patient records supporting greater provider reliance on telemedicine? Does one bolster the other?

Robert Watson: If consumers are willing to share their health information, they should be able to have a telephonic or video consult. I don't think the resistance to this concept is as high as it was even five years ago. The real problem for providers and payors is figuring out how to monetize telemedicine in a way that works for patients and providers.

PULSE: Is telemedicine a real business opportunity?

Robert Watson: I think providers see it that way. Back in the early 1990s, for example, radiologists in Miami and Idaho



"The problem is that nobody seems to have hit the nail on the head when it comes to monetizing telemedicine more broadly. But there are a lot of people out there working on it."

were interpreting images from South America and across the State of Idaho, respectively. They eventually figured out how to monetize the exchange. The problem is that nobody seems to have hit the nail on the head when it comes to monetizing telemedicine more broadly. But there are a lot of people out there working on it.

PULSE: What advice do you have for Wharton Health Care Program students that are early in their careers?

Robert Watson: Something is always changing in healthcare. Embrace it; change is a good thing. It creates enormous opportunities for career and professional development. I took a nontraditional path into entrepreneurship by starting as a banker, but the skills I learned have helped me along the way. Each and every person in the program should see the path in front of them as wide open.

Profile



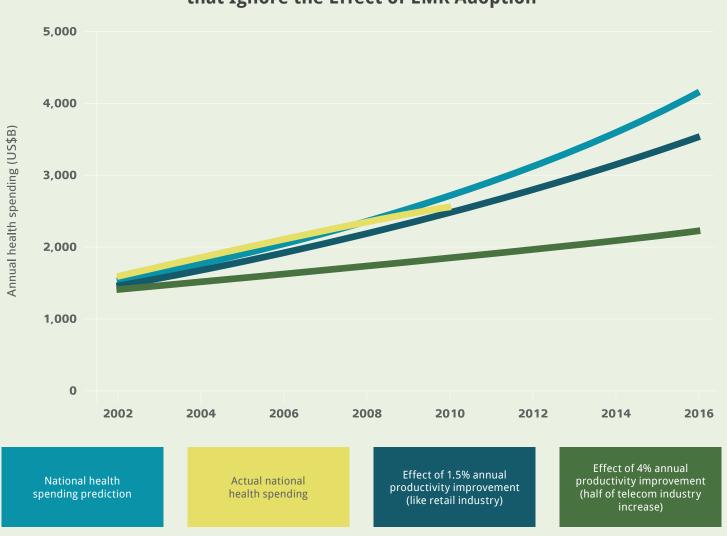
Robert E. Watson
President and Chief Executive Officer, Streamline Health

Robert Watson was appointed President and Chief Executive Officer of Streamline Health in 2011. Mr. Watson has over 25 years of experience in the healthcare information technology industry as a CEO, board member and advisor. Prior to joining Streamline Health, Mr. Watson was President, Chief Executive Officer and a

director of DocuSys, Inc., a leading provider of anesthesia information systems that was acquired by Merge Healthcare Inc. in March 2010. Prior to joining DocuSys, he was EVP of Business Development of Concuity. Before that, he was President, Chief Executive Officer and a director at Concuity Inc, which was acquired by Trintech, Plc. in December 2006. Prior to joining Concuity in 2001, Watson held positions at HealthTrac Corporation and Cerner Corporation. Mr. Watson was a director of Satori Labs, Inc. which was sold to Quality Systems, Inc. in 2011.

Predicted electronic medical record (EMR) driven healthcare cost savings from improved efficiency and safety haven't materialized, although recent momentum around provider adoption and interoperability improvements may finally help bend the curve.

National Health Spending Relative to 2005 Predictions that Ignore the Effect of EMR Adoption



Teaching Leadership to a Modern Healthcare Workforce

An interview with Dr. Sunita Mutha, Interim Director for the University of California San Francisco (UCSF) Center for Health Professions

By Lauren Post

It may come as no surprise given our dynamic healthcare landscape, but the demands of doctors today are very different from those of a generation ago. Modern physicians coordinate teams of practitioners while managing individual and population health needs in an increasingly cost-focused environment. In order to prepare medical students for these accelerating trends, graduate medical curriculums are shifting to emphasize the challenges new doctors face when they enter the workforce.

Dr. Sunita Mutha, Director of the UCSF Center for Health Professions, leads an organization that is creating new training paradigms for the next generation of health professionals. She spoke with the Pulse to explain some of the challenges clinicians face and what skills they will need to succeed in an uncertain future.

PULSE: You've said that strong physician leadership skills are more important than ever before. Can you explain why?

Dr. Mutha: There is a lot of ambiguity in healthcare today. In times of uncertainty, leadership skills are necessary for

success. Healthcare is transforming more quickly than we have seen for decades - just look at the rapid changes in health information technology (HIT). The HIT landscape is completely different from what it was ten, much less five years ago. There has been a marked shift in the way things are done today as compared to how they were done when most practicing physicians were being trained.

"Complete autonomy is not the direction our healthcare system is going, and I do not think our training programs have completely caught up."

Change is occurring at a rapid pace, making the future much harder to predict. Even though policy aims have been advanced through the Patient Protection and Affordable Care Act (ACA), it is not clear what things on the ground will look like when everything is fully implemented. The healthcare system is going to have to serve a dramatically expanded patient population, but the models meant to achieve that, like Accountable Care Organizations and Patient-Centered Medical Homes, are still in early phases.

Finally, the delivery of care is increasingly team-based. Changing patient experience, improving population health and reducing the cost of care all require getting groups of clinicians together to make change. It takes strong leadership skills to convince people to do things differently. Understanding how to influence and use power and motivate groups – even when there is no direct reporting authority –will play an important role in driving change within integrated delivery systems.

PULSE: You mentioned Health IT. How have hospital staffing needs changed with the advent of electronic record keeping? How does this impact medical professional training?

Dr. Mutha: Practicing medicine requires a different skill-set than it did in the past. I would not say that the introduction of new technology has diminished the need for staffing, but it has changed the required skill-sets. For example, familiarity with computers and the ability to navigate between different technological mediums is critical. Some clinicians are still

getting comfortable communicating in these new ways.

There are also instances, because of work flow changes created by the addition of technology, where staffing needs have actually increased. Although increased staffing is not usually part of the long-term plan, it's often necessary to get past the learning curve associated with adopting new technology. That's been our early

experience at UCSF with the implementation of our electronic record solution. From what I understand, our experience is quite comparable to what many other institutions are going through.

To understand what I mean about skill-sets more broadly, take the example of a medical assistant. Traditionally, this role was focused on taking vital signs, transporting patients to examination rooms, and potentially providing some basic information to patients and their families. Today, this role is increasingly focused on monitoring and tracking population health. Our medical assistants need to be able to look across a panel of patients and identify which individuals, whether they come in for a visit or not, are due for preventive services. Medical assistants often weren't trained to handle these types of demanding and complex responsibilities.

PULSE: Returning a bit to your previous comments about leadership, what leadership skills do you think are most commonly lacking in today's clinicians?

Dr. Mutha: It is difficult to generalize, because like any other profession there are effective and ineffective leaders. Though leadership is not often emphasized in most traditional training programs, some people have innate

leadership skills, some learn by observing, and some make the development of these skills a priority.

That said, one challenge I have observed time after time is the conflicting duality clinicians face between the ability to work with a team and the focus throughout their training on individual responsibility and autonomy — to be able do everything alone and think of themselves as being solely accountable for the care of a patient. Complete autonomy is not the direction our healthcare system is going, and I do not think our training programs have completely caught up. As a bit of an aside, it will be interesting to see how the increased number of female physicians impacts team dynamics. Some of the business literature on leadership suggests that females may have tendencies that lend themselves well to team-based performance.

PULSE: In your mind, what can be done to better bridge gaps between physician leaders and leadership on the business or administrative side of an institution?

Dr. Mutha: Though it sounds simple, I think the first step is getting both groups to recognize that they have shared goals. It is only through sustained communication and training that these groups can come to share a vision. In addition, system change happens by design, not by coincidence. I think a concerted effort, including some formal training, is

necessary to form a successful working relationship between these two groups of leaders. Clinicians and administrators should spend time together in a learning environment to give them a common language. Group and team-based training, as opposed to traditional individual leadership training, can be especially valuable.

PULSE: Could you share a leadership training success story from your work at the Center for Health Professions?

Dr. Mutha: We have a program funded by the California Healthcare Foundation which allows a new cohort to go through leadership training together for two years. Each cohort is composed of different types of clinicians, including nurses, physicians and pharmacists. This is an activated group of leaders who understand how to make decisions in the setting of ambiguity and how to motivate teams. We are currently training our 12th cohort.

When I look at the positions graduates of our program have assumed across the industry – positions from which they are able to shape the policy and direct large systems of care – it gives me great hope, particularly in the state of California, that we may be able to successfully address the challenges of healthcare reform in the coming years.

Profile



Sunita Mutha, M.D.

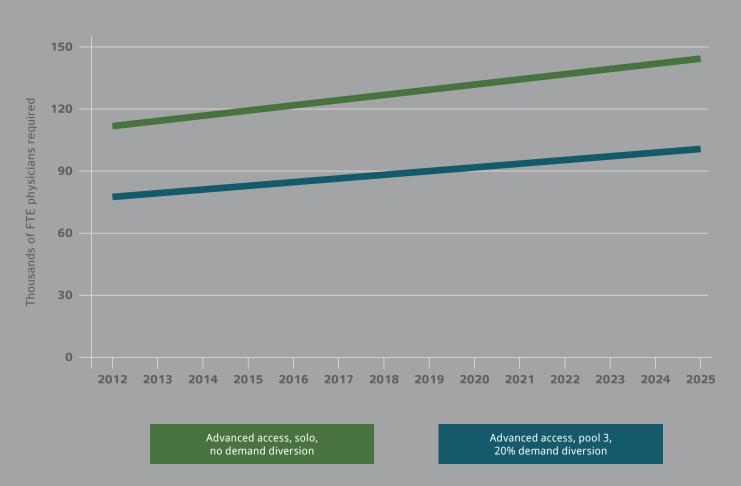
Interim Director for the UCSF Center for Health Professions and Professor in the Department of Medicine

Dr. Mutha is deeply engaged in leadership development for health professionals with a special focus on emerging leaders and interprofessional training. Her scholarly work focuses on educational and organizational approaches to improving the quality of care for diverse populations. She has served on several national committees focused on developing standards

for culturally competent patient-centered care. A practicing internist, she is actively involved in educational activities for resident physicians. Following residency at the University of Pittsburgh, she completed a fellowship in the Robert Wood Johnson Clinical Scholars program at Stanford University.

The impending primary care shortage can be offset – and potentially eliminated – through better use of physician teams, non-physician clinical support and health information technology.

Projected Requirements for Full-Time-Equivalent (FTE) Primary Care Physicians Under Different Physician Productivity Modes, 2012–25



Source: Health Affairs, "Primary Care Physician Shortages Could Be Eliminated Through Use Of Teams, Nonphysicians And Electronic Communication." (January 2013)

Note: "Advanced Access" assumes 75% of patients will be able to secure a same-day primary care appointment; "solo" assumes solo practitioner, whereas "pool 3" assumes three-physician practice; "demand diversion" represents share of patients that can be cared for by non-physician practitioners.

Academic Medical Centers: Headwinds and Strategic Options

An Interview with Michael Strine, Former Executive Vice President and Chief Operating Officer of the University of Virginia

By Billy Young



Academic medical centers (AMCs) are integral to the U.S. health system: they drive medical innovation, train doctors and other clinicians, and provide a point of access for millions of Americans in need. Yet these large institutions face a myriad of challenges including clinical payment redesign, intensified clinical competition, and research and medical education funding uncertainty. To withstand these pressures, AMCs will need to look for innovative (and capital-efficient) ways to collaborate, while at the same time doubling down on their core business – providing quality clinical care to patients.

The Pulse caught up with Michael Strine, former COO of the University of Virginia, to discuss some of the pressures facing academic medical centers, as well as what AMCs are doing to adapt.

PULSE: What are some of the unique challenges currently facing academic medical centers (AMCs)?

Michael Strine: Academic medical centers (AMCs) face a variety of pressures on a number of fronts, largely due to national fiscal challenges and the uncertain health policy environment. It's pretty clear that AMCs will confront compressed revenues to support their three essential missions: patient care, research and medical education. As patient care providers, AMCs are unlikely to see much growth in reimbursement from private and public payors. Health care reform will likely result in a greater number of Medicaid and Medicare covered patients, but reimbursement under these programs oftentimes does not cover cost. Private payors on the other hand are scrutinizing the differential cost of care at AMCs. All the while patient demand for high-end services remains constrained due to the weak economy. On the research side, federal and state funding for medical research - that AMCs rely on to differentiate themselves from many local community care providers - is being pressured. Finally, graduate medical education funding continues to be threatened at a time when the Association of American Medical Colleges projects growing physician shortages.

PULSE: How do you think AMC's will address the need for continued research and medical education in an environment where funding may be reduced?

Michael Strine: Federal and state policy makers understand that investments in medical research and education produce real returns in economic growth, as well as advances in healthcare innovation, quality and outcomes. Yet pressure to reduce real rates of federal funding for research

"Federal and state policy makers understand that investments in medical research and education produce real returns in economic growth, as well as advances in healthcare innovation, quality and outcomes. Yet pressure to reduce real rates of federal funding for research has been building for some time."

has been building for some time.

Academic medical centers and their faculty are increasingly reliant on philanthropy and private sponsors to support research and education. AMCs are also looking for new ways to extend medical education and research despite compressed revenues.

PULSE: Can you extrapolate on the reimbursement risk hospital systems face today? What are AMCs doing to prepare?

Michael Strine: Reimbursement is under pressure in a number of ways. At the federal level, the President's debt reduction plan includes 10% indirect cuts to medical education that begin this year. The Affordable Care Act also includes declining subsidies for Disproportionate Share Payments (DSH) in Medicaid and Medicare. States are also cutting Medicaid, especially for inpatient services as an incentive to

reduce hospital utilization and readmissions. Payors of all types are making a strong push toward bundled payments and population health management. These efforts are aimed at improving quality and decreasing costs; but may put AMCs at a disadvantage unless they are well prepared with strong clinical channels across the care continuum and demonstrable quality and outcomes data. Because AMCs are often perceived - rightfully or wrongly so - as having a higher cost of

care, insurers, employers and patients could also begin seeking tertiary and quaternary care from community hospitals.

AMC leaders have been preparing for these cuts by focusing on contingency planning, aligning clinical channels, increasing clinical differentiation, and being more watchful of payor mix, case mix and quality metrics.

PULSE: A growing number of private equity firms are looking at investing in the healthcare services space.

Specifically, large buy-out firms are becoming more comfortable

with the capital intensive hospital business model. Why do you think this is happening and how can AMCs differentiate themselves from PE-backed hospital systems?

Michael Strine: I can only speculate that the move of private equity into healthcare services reflects U.S. demographic shifts, the projected growth of the health care sector relative to the rest of the economy, and the potential for further industry consolidation. The success of some community hospitals in integrating and moving up the clinical care spectrum to compete with AMCs bolsters this investment thesis. AMCs will have to continue to differentiate themselves by providing high quality and different kinds of care. Various AMCs may also differentiate - or at least bolster - themselves by demonstrating the capacity to partner with community hospitals and others, managing across a broader continuum of care or pursuing a strategy of population health management.

PULSE: Among providers, do you expect there to be a lot of M&A activity in the near future as AMCs





and community hospitals begin to reposition themselves in the market?

Michael Strine: There has already been a notable amount of activity among community hospitals and AMCs that are looking to align or merge in various ways. Some AMCs in particular have been quite innovative in extending their clinical reach in ways that have not required the use of the balance sheet or debt. In some cases AMCs have produced new net revenues resources that can be returned to the "mother ship" and reinvested in faculty and programs. Some facilities have also taken the lead in diversifying into payor-provider relationships, which strengthen the hospital's position as health reform, bundled payments and population health initiatives play out.

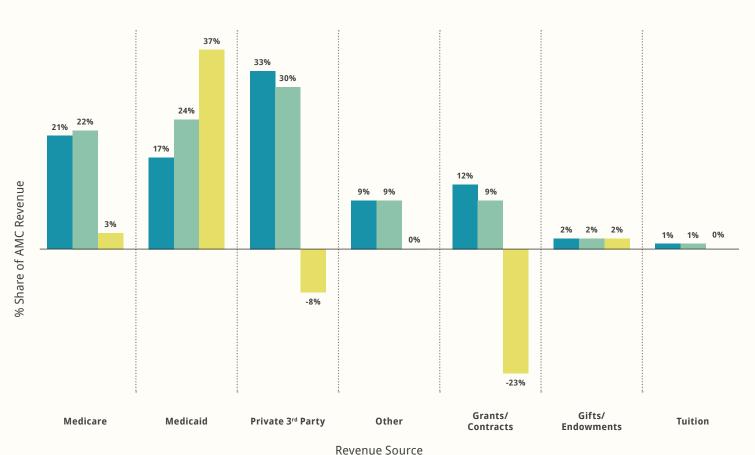
PULSE: You have had experience at a number of AMCs. How do their preparations for the changing healthcare environment differ? In what ways are they the same? Michael Strine: All of the pressure on the healthcare system put a premium on strategy, quality and effectiveness in care delivery. There is no one-size-fits-all strategy for AMCs. Those AMCs most likely to succeed will have strong governance, the ability to demonstrate exceptional quality and clinical differentiation, a clear, executable strategy and a willingness to embrace new types of collaborations.

PULSE: What emerging trends do you see affecting regional and national AMCs?

Michael Strine: Greater emphasis is being placed on research, education and clinical care that translate more directly into better patient outcomes at a lower cost. As health reform expands access, patients and payors expect greater transparency and accountability for quality of care. Our economic, fiscal and demographic trends create pressure to reduce cost.

Shifting insurance trends and the threat of payment reform – combined with pressure on grant funding, state finances, Indirect Medical Education and Disproportionate Share Hospital payments – threaten to challenge Academic Medical Center margins.

Changes in Sources of AMC Funding, 2010–2020



2010 share of illustrative AMC revenue

2020 share of illustrative AMC revenue

% change

"It's a real question at this stage of the cycle whether AMCs will commit to growth as a strategy going forward.

The relative growth of academic medical centers as a share of total academic enterprises has caught the attention of rating agencies, boards, presidents and even the executive leadership at academic medical centers."

It's a real question at this stage of the cycle whether AMCs will commit to growth as a strategy going forward. The relative growth of academic medical centers as a share of total academic enterprises has caught the attention of rating agencies, boards, presidents and even the executive leadership at academic medical centers. Using the balance sheet or taking on more debt to grow given the current uncertain environment and constrained clinical margins is harder to justify with the current pressures on net tuition, research, philanthropic and investment revenues.

AMCs that already have diversified strategically (whether geographically, across the clinical care continuum, into payor-provider relationships or otherwise), demonstrated superior quality data, or have developed

the capacity to innovate are better positioned to outperform as we enter a period of constrained resources.

Profile



Michael Strine, Ph.D.,
Former Executive Vice President and Chief Operating Officer of the University of Virginia

Michael Strine has served in senior finance and operations roles at academic medical centers. He was formerly Executive Vice President and Chief Operating Officer for the University of Virginia. Before that, he served as Vice President of Finance, Chief Financial Officer and Treasurer at Johns Hopkins University, after serving for a nearly a decade in senior financial

roles in state and county government. Strine is a 1986 graduate of the University of Delaware and in 1992 earned a Doctorate from Johns Hopkins.

Your Health Is In Your Hands: Empowering Consumers Through Mobile Technology

An interview with Martha Wofford, Vice President and Head of CarePass at Aetna

By Jane Herzeca

Changing tides in the healthcare industry are forcing patients, providers and policy makers alike to become more cost conscious, value driven and data aware. But perhaps no industry group is leading the charge into new and innovative frontiers quite like payors. Take, for example, Aetna. The company's latest product, CarePass, is a mobile technology platform designed to empower consumers to customize how they navigate the health system. By making healthcare information more accessible, Aetna is aiming to help members become more active participants in their own care. The Pulse caught up with the head of CarePass, Martha Wofford, to learn more.

PULSE: Aetna has been moving beyond its core insurance business to streamline healthcare information collection and promote more informed, proactive patients. I understand that the CarePass platform is playing a central role in this shift. How did this strategy and platform originate?

Martha Wofford: It started with our CEO, Mark Bertolini, whose personal experiences with the healthcare system are

pretty powerful reminders of the importance of our work. His son was very sick with cancer and almost passed away. As a result of the treatment that saved him, his kidneys failed. Mark donated a kidney to him and both survived. But, Mark became very frustrated by how hard it was to get the right information to help his son get the best care.

As a very senior person at a health insurance company, Mark understood how much data was out there; but as a parent,

he couldn't easily access or locate the data he needed. Mark shares stories about the months and months he spent in his son's hospital room with a laptop searching through different medical directories trying to research what care would be best.

Mark is also partially disabled as the result of a very bad skiing accident. Thus, he's been through the healthcare system as a patient, and experienced the frustration with getting the right healthcare information where he needs it, when he needs it.

These experiences, combined with Mark's belief early on that mobile technology would revolutionize healthcare, led him to try and tackle the question "how do we get needed information into the right peoples' hands?" That's the genesis of CarePass—how do we make healthcare more convenient by harnessing mobile technology?

We launched a beta version of CarePass last March and spent much of the remainder of the year building connecting apps and launching a developer side to the platform. We also acquired iTriage, which we thought was a powerful tool to help people access care.

"That's the genesis of

CarePass—how do we

make healthcare more

convenient by harnessing

mobile technology?"

PULSE: CarePass has a number of apps, covering everything from nutrition to fitness to organizing personal appointments and information. How would "That's you characterize the major functionalities of CarePass, and how did you choose which apps to include?

PULSE: CarePass has a number of apps, covering everything from nutrition to fitness to organizing Part of apps, covering everything from nutrition to fitness to organizing Part of apps, covering everything from nutrition to fitness to organizing Part of apps, covering everything from nutrition to fitness to organizing Part of apps, covering everything from nutrition to fitness to organizing personal appointments and information. How would "That's in the covering everything from nutrition to fitness to organizing personal appointments and information. How would "That's in the covering everything from nutrition to fitness to organizing personal appointments and information. How would "That's in the covering everything from nutrition to fitness to organizing personal appointments and information. How would "That's in the covering everything from nutrition to fitness to organize everything from nutrition to fitness to organize everything ever

Martha Wofford: Great question. We looked at the consumer's healthcare journey and thought

about it holistically. The steps we identified included getting information on care options, accessing care and booking appointments, preparing for the interactions at the doctor's office and remembering the instructions given, and then – more basically – staying well and out of the healthcare system.

iTriage helped with the information gathering and care access stages. Some areas we are looking into now include ways to optimize the time spent in the physician's office, other wellness based apps, behavioral health and mental health services, sleep issues and transactional capabilities around pharmacies, refilling prescriptions and medication reminders.

PULSE: I understand that CarePass is still in the beta phase and will be launched later this year. It is free now; do you plan to continue offering it for free after the full-scale launch?

Martha Wofford: We do. At Aetna, we fundamentally believe that we have to try and find new ways to improve the healthcare system. Our theory is that if you can increase consumer engagement, they'll make smarter decisions, stay healthier, and reduce their costs. If we make it easier for people to get information, hopefully it can speed up this process. Similarly, if we can engage developers to create new health solutions by giving them data and services, it will create competition in the market and bring costs down. Keeping CarePass free is a way for Aetna to stay on the "greater good" side of things, to encourage consumers and developers to use our product, and to make the overall healthcare system better. Furthermore, as a useful, convenient and simple solution, we hope it will help our

brand with consumers. Looking ahead to the world of health insurance exchanges, more consumers will be purchasing healthcare directly, and so brand recognition will be increasingly important.

CarePass is ultimately about an individual being able to take control of their health information; to visualize data, set health and wellness goals, and use the apps to reach

those goals. As we evolve into more of a consumer-facing company, these tools will be absolutely critical.

PULSE: One of the largest drivers of cost is chronic conditions. Oftentimes it's seniors that have multiple chronic conditions, but seniors are not generally early







Source: iTriage and CarePass (Aetna)

adopters of mobile technologies. Are you worried that you'll miss patients that have the ability to make a big impact on healthcare utilization trends and costs?

Martha Wofford: That's another great question. On the one hand, mobile health adoption is growing incredibly quickly, faster than what was originally expected. But, I understand your concern; mobile won't reach everyone. Part of our philosophy with CarePass is to develop a broad solution with multiple apps to reach a broad population of people. Individuals are different and not everything is going to work for everybody. We aren't specifically targeting Medicare beneficiaries with CarePass, but it will definitely be a good solution for some Medicare beneficiaries.

The technology is nimble and enables us to provide a more personalized experience, which we think people will value. It is really difficult to get individuals to change their behavior, but we're hopeful that CarePass will positively affect some portion of the population and will help them get on track to living a healthier life.

One of the nice things about CarePass is that it's an open platform, so you can connect different solutions, which is becoming harder to do in today's environment. We think that the ability to connect largely fragmented data in one place provides a lot of convenience. Furthermore, this is not an Aetna-specific solution; the fact that any consumer can use this helps address some of the challenges around the portability of data.

PULSE: What about providers? Do you foresee challenges in terms of getting providers on board?

Martha Wofford: Yes, I think one of the biggest barriers (and opportunities) in the healthcare market revolves around providers. Although the federal government tried to incentivize doctors to transition to digital, being able to openly share information and incorporate it into your medical record is rare. Thus, we're trying to make information sharing more of the norm so that what happens on the 364 days you don't visit the doctor is a bigger part of the discussion. If people can get a care plan from their doctors, and then use apps to track and manage it, they will

be more likely to adhere to the plan and live healthier lives. But getting providers on board is always a challenge.

PULSE: You mentioned that you are exploring how to optimize the patient visit itself. Do you think that's a way to get providers on board?

Martha Wofford: Absolutely. One of the interesting lessons I've learned over the past year working with the iTriage team is how to create win-win situations with doctors and consumers. Thus, one of the features of iTriage is that it helps consumers find doctors that best meet their needs, while doctors can also use the technology to find patients to treat.

If you provide a good match, you can cut some costs out of the system by avoiding the need to go from specialist to specialist to find the right physician. Consumers also benefit from the convenience of being able to book appointments on their phones, while providers are less likely to waste time with patients that they cannot treat, or don't need treatment.

As we pivot into becoming more of a health information company, providers are a key part of who we are serving. We need to keep looking for opportunities to help them manage their patient populations, while simultaneously providing patients and consumers the data and information they need to make more engaged, informed, health decisions.

Profile



Martha L. Wofford Vice President and Head of CarePass, Aetna

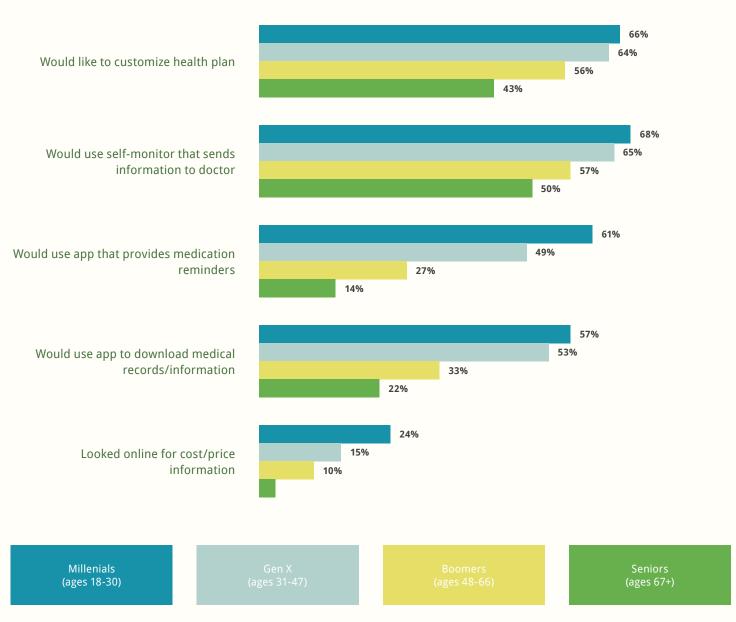
Martha Wofford leads Aetna's company-wide CarePass platform, delivering simple solutions to help consumers navigate the healthcare system. The program reports into Aetna's Chairman and CEO.

Prior to her current position, Ms. Wofford served as Head of Product and Strategy for Aetna's Middle Market, Small Group, Individual Pre-65, Medicare, Student Health, Voluntary and Direct to Consumer businesses; as General Manager for the Northeast Region for Aetna's Consumer Segment; and also had accountability for Aetna's Direct-to-Consumer sales capability, on a national basis. Ms. Wofford joined Aetna in 2005 as Head of Business Development for Medicare.

Prior to joining Aetna, Ms. Wofford was a consultant with Booz Allen Hamilton, and served in the Clinton Administration for six years in communications and legislative positions. Ms. Wofford received an M.B.A. from the Kellogg School of Management at Northwestern University, and a B.A. in History from Swarthmore College.

Younger individuals appear more willing to embrace technology as a means to engage with payors and providers in their care decisions.

Generational Consumer Preferences



Managing Diabetes Prevention with Online Applications

An interview with Sean Duffy, Co-Founder and CEO of Omada Health

By Elena Castañeda

The predicted volume and cost of diabetes-related care is staggering. According to UnitedHealth Group's Center for Health Reform and Modernization, more than 130 million Americans with diabetes or pre-diabetes are expected to spend more than \$500 billion on diabetes-related medical care by 2020. Diabetes very well may test the solvency of private and government payors, even as it lowers the quality of life for a large and growing percentage of the population. Because the causes of the disease are closely linked with deeply ingrained lifestyle choices, successful preventive efforts have been difficult to implement.

Sean Duffy of Omada Health met with the Pulse to discuss operationalizing an evidence-based approach based on the National Diabetes Prevention Program (DPP). The DPP curriculum, which focuses on diet, physical activity and behavior modification, has been shown to reduce the incidence of diabetes by more than 50% (New England Journal of Medicine, 2002). Omada brings the DPP curriculum online through its first web-based product, Prevent. Prevent is for people with pre-diabetes that can't or don't enroll in brick-and-mortar programs. The product is based entirely on the landmark DPP clinical trial. Participants are divided into small online support groups, mailed a wireless scale and pedometer and assigned a professional telemedicine health coach.

PULSE: How did you get the idea for Omada Health?

Sean Duffy: Our company started a little under two years ago when my co-founders and I were exploring opportunities in disease prevention given the changes we saw coming related to the increasing chronic disease burden and Affordable Care Act. We felt that a lot of the web-based behavior modification products out there weren't based on solid clinical evidence, and we wanted to change that. Our goal for Omada is to create beautifully designed software applications and programs for people with various diseases, leveraging evidence-based processes.

Very early on we caught wind of an innovative effort at the Centers for Disease Control and Prevention (CDC) called the National Diabetes Prevention Program (DPP). The goal of this effort is to bring evidence-based lifestyle programs to individuals at risk for diabetes; thereby helping people reduce the likelihood that their condition escalates to diabetes. There are 79 million people in the US with prediabetes and by 2020, it's estimated that half of the US population could either have pre-diabetes or type 2 diabetes. It's really quite tragic. Thus far all of the efforts to implement the DPP have been through classes at brick-and-mortar

locations, and we felt that the opportunity was ripe for a web-based complement that could reach a broader audience.

PULSE: Time Magazine recently quoted Dr.

Lun Ma of the Palo Alto Medical Passages.

Jun Ma of the Palo Alto Medical Research Foundation, who led a trial exploring the use of online tools to implement the DPP program, as saying "we know there are huge numbers of patients out there who need intervention. We just don't have the manpower and resources to deliver [them]." Would you like to comment on the national conversation related to employing behavior modification to prevent diabetes?

"Any intervention with a shot of working has to involve real human relationships and real human touch."

Sean Duffy: It's been fantastic to watch the whole space evolve over the last year. Large corporations, often in partnership with innovative payors like United Healthcare, are now rolling out prevention programs. In the beginning of January there was a frontpage spread in the Los Angeles Times about the increased prevalence of DPPs ("Rx for diabetes not pill, but will," January 9, 2013). These efforts are absolutely needed and very welcomed given the recent trends in type 2, specifically among younger people.

PULSE: Why are are we seeing these programs receive so much attention now? Evidence on the effectiveness of the National Diabetes Prevention Program has existed for nearly a decade.

Sean Duffy: The initial trial evidence wasn't enough, because rolling out DPP's is a logistics challenge and the right channels for potential reimbursement or payment were not yet negotiated. It really took a combination of federal initiative, private partners and increasing acknowledgement of the growing type 2 diabetes crisis.

PULSE: To what extent do you think technology and the rise of mobile online access helps accelerate behavior modification for people with pre-diabetes?

Sean Duffy: Any intervention with a shot of working has to involve real human relationships and real human touch. If you look at the original DPP trial, it was very effective because it was an all-hands-on-deck approach to the patient that participated in it.

My feeling is that technology will enable authentic human relationships of the sort needed to effect behavior change at a larger scale. I view technology as the framework that allows the social relationships to form. These relationships are the key drivers for behavior change.

"In a funny way,
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apartment."

OMODO

We're bringing a fresh new perspective to disease prevention.

Technology has opened up a new frontier of disease prevention, and Omada Health is leading the charge. We aim to make groundbreaking behavior-change programs accessible to everyone, by designing tailored experiences that are intuitive, enjoyable, and achievable.



PULSE: You are an alumnus of Rock Health. To what extent do accelerators and incubators help entrepreneurs get a company off the ground?

Sean Duffy: Accelerators can be helpful in a number of ways; one is simply to provide a reason to take the leap into the startup world in the first place. In a funny way, it feels safer to quit your job and jump into an accelerator than to quit your job and jump into your friend's apartment. There's an ecosystem there with support and structure. Additionally, especially on the health side, it's great to have access to people that can help fill in gaps in knowledge and form partnerships. There is a great deal of camaraderie in the healthcare entrepreneurship world.

PULSE: To what extent do you still interact with people you met through Rock Health?

Sean Duffy: I made so many friends through Rock Health. When you're in digital health, even in San Francisco, you're bound to see Rock Health alumni or staff there, and you kind of feel like a family. Rock Health continues to support Omada in whatever way they can.

PULSE: What advice do you have for people that may be thinking about starting their own healthcare business?

Sean Duffy: I would say that any aspiring entrepreneur at Wharton who is looking to build a company in healthcare should really work to understand how the dollars flow in the US Healthcare system.

Building a company is very hard work, and I would argue that building a business in healthcare is even harder. I would imagine that the average successful healthcare entrepreneur is likely older, and has more established industry relationships, than founders in other industries. Fundamentally, healthcare is an incredibly partnership-driven segment of the economy.

Coming from Wharton can be a big advantage. Wharton has an incredibly good healthcare program – one of the best in the world. Whether you're just starting at Wharton or are already an alumni, don't forget how amazing the network is. Take advantage of it!

Profile



Sean Duffy
Co-founder and CEO of Omada Health

Mr. Duffy co-founded Omada Health, a Silicon Valley startup that has brought evidence-based diabetes prevention to the web. He withdrew from Harvard's joint MD/MBA program and is passionate about creating new health care delivery tools and systems through software technology. He has previously worked for both Google and IDEO, is an editor at Medgadget.

com, and was recently named as one of the "40 Under 40" top Med Tech innovators by MDDI.

The cost of diabetes and pre-diabetes reached an estimated \$218 billion in 2007. This includes \$153 billion in higher medical costs and \$65 billion in reduced productivity. Among people with diagnosed diabetes, average medical costs are 2.3x higher at nearly \$10,000 per year.



Challenging the Adage that Preventive Care Saves Money

An interview with Dr. Louise Russell, Chair of the Division on Health Policy and Professor of Economics at Rutgers

By Ben Herman

The concept that preventing a costly disease or medical event will improve health and reduce medical spending is intuitive. The problem is, according to the New England Journal of Medicine, only about 20% of studied preventive measures actually saved money. Preventive care can certainly improve health, but in an age where everyone is looking to spend less on healthcare, not all measures are created equal. The Pulse touched base with Professor Louise Russell of Rutgers to learn more about how to assess relative value in preventive healthcare.

PULSE: The idea that preventive care improves outcomes and saves money receives a lot of attention in the press, but your research indicates that this oftentimes is not the case. Could you run through some of the main reasons preventive care does not save money?

Dr. Russell: In fact, I would say that in the huge majority of cases preventive care does not save money. People often focus on areas where preventive care can save money, like hospital admissions. But they forget to factor in how much prevention costs.

An example I like to use is a study of a new method for managing asthma. The new method resulted in better control of patients' symptoms, which saved money in the ways you would expect. People who used the new method didn't go to the hospital or see the doctor as often, and yet, nonetheless, the new method cost more because of the cost of the required counseling and peak-flow meters to measure lung capacity – the costs necessary to prevent problems.

People also tend to focus on individuals who actually get a disease and think, "oh gosh, if they'd received preventive attention they could've saved so much money on treatment." This ignores the fact that not everyone who is at risk for a disease will get it. And not everyone who gets prevention will avoid the disease.

Consider blood pressure medications or statins. To reduce the risk of heart disease everyone with elevated blood pressure or cholesterol should begin these drugs early. But not all those people would have a heart attack even if they did not take medication. And some who take the medication will have a heart attack anyway. And all of them will be on these medications for many years, sometimes decades. So the cost of one person's medication for one year relative

to the cost of a heart attack isn't the right comparison. We need to consider all of the people who need to receive medication for all the years they receive it in order to prevent one heart attack.

In the U.S. we're very reluctant to think in terms of how to spend our money to the greatest effect.

PULSE: What about efforts to identify people who are at the highest risk?

In cancer care, for instance, researchers are looking for biomarkers that identify individuals that will be most likely to respond to certain therapies.

Dr. Russell: Yes, it makes a difference. If you can focus on groups that are at particularly high risk, you end up spending less to get the result you want. For example, if you focus on people that are at extremely high risk of heart disease – smokers with high blood pressure and high cholesterol – you will get more good health per dollar spent than in a group with only one risk factor.

PULSE: Is our health system good at allocating preventive dollars to where it will have the greatest positive impact?

Dr. Russell: Various medical specialty groups make recommendations for particular areas of prevention. One group that puts out recommendations across the whole span of clinical prevention, and even a little bit into lifestyle prevention, is the U.S. Preventive Services Task Force (USPSTF, www.ahrq.gov/clinic/uspstfix.htm).

Over the years it's become a group with rotating membership; if it's something related to prevention and doctors, they probably have a recommendation about it. It's important to note that the Task Force has never explicitly taken the cost of an intervention into account in making recommendations. In the U.S. we're very reluctant to think in terms of how to spend our money to the greatest effect.

PULSE: So what are some very cost effective measures and some very cost ineffective measures?

Dr. Russell: How much health an intervention brings for the money depends not only on the intervention, but also on program design, intensity and frequency. At the same time,

an intervention can be good value for one person but not another.

Drawing from the studies cited in a paper I wrote for the National Coalition on Health Care ("Prevention's Potential for Slowing the Growth of Medical Spending"), an intervention that

provides very good value for money is smoking cessation. In an analysis of smoking cessation programs, researchers estimated that you can get about 190 life years for every million dollars spent.

An example of a much less cost effective intervention would be statins for people that don't have heart disease. In high risk middle-aged men we can get 12 life years for a million dollars; but in low risk middle-aged men whose only risk factor is elevated cholesterol, we only get two years for a million dollars. It's the same intervention, but the characteristics of the individual that is getting the treatment matter a lot.

Another example is Aspirin for heart disease. Aspirin is quite cost effective in middle-aged men with an elevated risk for heart disease and can even be cost-saving if the risk is high enough. But the evidence so far indicates that it is not useful for women because the side effects outweigh any useful health effects.

PULSE: The concept of side effects seems to be underemphasized. How do researchers go about incorporating these into their calculations?

Dr. Russell: You're right. People often don't think about the fact that everything has risks. However, the U.S. Preventive Services Task Force does consider how to weigh the adverse effects against the good ones. It's these adverse effects that

help explain why the Task Force advised against routine mammograms for most women in their 40s; there's real risk! For one thing they are a source of radiation. For another, they end up falsely "diagnosing" problems that lead to unnecessary treatment and follow-up care, which has a health as well as a monetary cost.

PULSE: You mentioned certain preventive actions that are more cost effective when received in a certain dosage or frequency. Do you have an example?

Dr. Russell: Screening for cervical cancer is an example I use frequently. If you compare the benefit of screening for cervical cancer every three years with not screening at all, a million dollars of screening will bring roughly 24 years of additional life. If you screen a little more often – say every two years – a million dollars of spending will bring less than an additional year of life. And if you screen for cervical cancer every year instead of every two years, the additional life gained from a million dollars spent on screening is only about a third of a year.

So it makes a huge difference. The tests still cost the same, but we're just not going to catch that much more disease when we test more frequently. If we test every year instead of every three years, we're going to spend three times as much, but not catch a lot more cases. Where you draw the line, though, differs from person to person. It's not up to economists to say how much is too much to spend.

PULSE: With the passage of the Accountable Care Act, it seems likely that U.S. consumers' access to primary care will increase. Do you have any policy recommendations that you think would impact the amount of health we can get per preventive dollar spent?

Dr. Russell: We have a lot of people who have been uninsured – who haven't had access to good regular care – and they could probably use a bit more preventive care, focused on things that bring the most health for the money. In other cases, we need to cut back on the amount of care we're giving. The U.S. spends more of its gross national product on health than any other high-income country, and yet our life expectancies are below those of most other high-income countries. This suggests that we're not allocating our dollars in the best ways to keep people healthy. A lot of us could probably use a little less preventive medical services and not notice the difference. The money could be spent instead on aspects of life outside of medical care that make a bigger impact on good health.

Profile



Louise B. Russell, Ph.D.

Chair, Division on Health Policy, Institute for Health, and Professor, Department of Economics, Rutgers, the State University of New Jersey, New Brunswick NJ

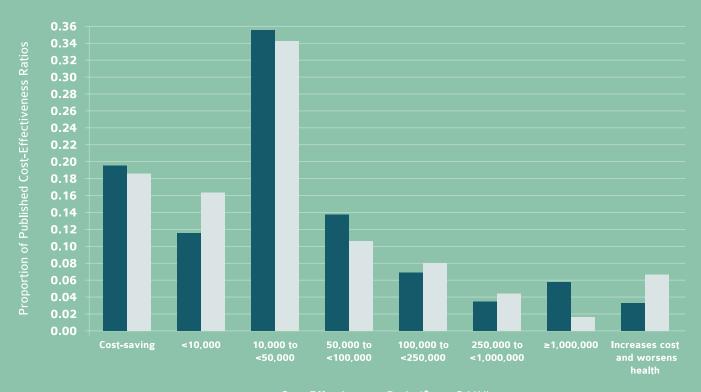
Dr. Russell's research focuses on the methods and application of cost-effectiveness analysis. Before coming to Rutgers, Dr. Russell was a Senior Fellow at the Brookings Institution. Elected to membership in the Institute of Medicine (IOM) of the

National Academy of Sciences in 1983, she has served on several IOM committees, including the National Cancer Policy Board (2001-2005) and the Committee on Valuing Community-Based, Non-Clinical Prevention Policies and Wellness Strategies (2011-2012).

Dr. Russell co-chaired the U.S. Public Health Service Panel on Cost-Effectiveness in Health and Medicine, which published recommendations for improving the quality and comparability of cost-effectiveness studies. She was also a member of the first U.S. Preventive Services Task Force (1984-1988). She is deputy editor of the journal "Medical Decision Making" and has published many articles and seven books.

Dr. Russell received her Ph.D. in Economics from Harvard University.

A survey of 279 preventive measures and 1,221 treatments revealed that less than 20% of preventive interventions are "cost-saving." What's more, preventive measures – by and large – offer minimal benefits over traditional treatments in terms of cost per quality adjusted life year (QALY).



Cost-Effectiveness Ratio (\$ per QALY)

Preventive measures

Treatments for existing conditions

Health in the Workplace: Innovative Corporate Health and Wellness Programs

An interview with Dr. Fikry Isaac Vice President, Global Health Services, Johnson & Johnson

By Jamie Mumford

Ongoing management of the health of populations, and not just treatment of sick patients, is a hot topic for both payors and providers. It is the explicit aim of Accountable Care models, and it may well be the future of the American health system. In line with its corporate Credo, Johnson & Johnson has been looking after the health of its employees for more than three decades. The Pulse spoke with Dr. Fikry Isaac, Head of Johnson & Johnson's Global Health & Wellness Program, to learn more.

PULSE: In the late 1970's Johnson & Johnson's Chairman (Mr. James Burke) established two health-related goals for the company: encourage employees to become the healthiest in the world and reduce the cost of healthcare for the firm. Today, Johnson & Johnson has a reputation for innovative and extensive employee health and wellness programs. To begin, can you describe Johnson & Johnson's "culture of health?"

Dr. Isaac: Mr. Burke had the vision more than 30 years ago to have the healthiest workforce in the world. In acting on that vision, he wanted to offer employees tools and resources

they could use to take responsibility for their own health. He realized that a healthier, more productive workforce was not only good for employees, but would in turn reduce business healthcare expenses as well. The culture of health within Johnson & Johnson is woven into the fabric of our business. Johnson & Johnson's Credo – our value system – clearly states our responsibility to the men and women working for us around the world. As people spend a majority of their time at work, that responsibility evolved from engaging people more in their health and well-being, to making good health practice the default choice for employees.

PULSE: How did Johnson & Johnson initially go about designing its health and wellness program focused on prevention ("seven deadly interventions"), behavior modification and sustaining results over the long term?

Dr. Isaac: The original concept from the 1970's was called the "Live for Life Program." The main strategy was to take a holistic approach to help improve the well-being and safety of our employees. The program included wellness offerings, onsite health clinics, employee assistance, and exercise facilities, in addition to solid safety measures and integration with benefit design. Our philosophy throughout the years has been to address the spectrum of care, from keeping the well healthy to taking care of the ill and injured, to managing the people with chronic conditions.

PULSE: What impact has the health and wellness program had on curtailing healthcare costs and the corporate bottom line?

Dr. Isaac: Many organizations implement health and wellness programs and measure efforts. However, we think it is crucial to measure outcomes and utilize independent

"Many organizations

implement health and

wellness programs and

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measure outcomes."

third party evaluations to look at the total health picture. We performed a detailed claims analysis looking at disability data, productivity impact, absenteeism, presenteeism, etc. This is important because healthier employees are also more engaged and productive; it's not only about lowering healthcare costs. We look for areas where we have done very well and identify opportunities where we can do better. We also look at our

highest health cost claims and look for ways to link benefit design and reward and incentive systems to achieve better outcomes. This information is shared with the CEO and Board of Directors on an annual basis.

We completed a large-scale independent assessment of the program (for the period from 2002 through 2008) in conjunction with Thomson Reuters and Emory University, and found that over a six year period, our employees benefited from a significant reduction in the rates of obesity, high blood pressure, high cholesterol, tobacco use, physical inactivity and poor nutrition. The average annual per employee savings added up to \$565. Interestingly, Johnson & Johnson's average rate of growth in medical and pharmaceutical costs were 3.7% lower than industry benchmarks. Our projected return on investment was between two and four dollars for every dollar spent on wellness and prevention related services.

PULSE: What is the current participation rate of U.S. employees in Johnson & Johnson's health and wellness programs? What combination of rewards and penalties have you found most effective at influencing health behaviors and outcomes?

Dr. Isaac: One of the key changes to our wellness program design occurred in 1995 when - before it really became mainstream practice - we introduced a way to link benefits to participation. The incentive in our benefit design involved a \$500 discount towards each employee's medical

> contribution. In order to retain the discount, employees needed to complete a health risk assessment to determine if they were at risk. And if they were, they would be invited to enroll in a health coaching/advising program. However, if the employee did not participate in the risk assessment or health coaching/ advising (based on their risk category) the \$500 discount would come out of their paycheck. In other words, the

benefit if he or she does not participate. We found that the strategy worked, and continues to work. The participation rate in the health risk assessment process before 1995 was around 30% in the U.S. population, which back then was considered high. We implemented the incentive approach, and within three to five years saw participation rates rise to around 90 to 93%. Over the last two to three years we have added additional rewards tied to specific behaviors. For

employee actually losses monetary



example, when an employee participates in a preventative screening, a dollar is put into his or her health reimbursement account.

PULSE: What types of limitations exist around an employer being so actively involved in their employees' health?

Dr. Isaac: Privacy and confidentiality are always sensitive issues. We have very strict policies that have been in place for many years, so our employees' level of confidence and trust is very high. As a result, this is not one of the biggest challenges we have encountered running the programs.

Every year we identify what we can do differently to sustain health risk assessment participation rates and engage more employees in the interventions and programs we offer. There is a great deal of data to support the idea that engagement is the most critical success factor for any wellness program. Regardless of how great the program is, if you don't have employees and families motivated to take care of their own health and wellbeing, the program won't work.

PULSE: What is the most challenging "healthy behavior" to address? What steps is Johnson & Johnson taking to try and improve in this area?

Dr. Isaac: Within our employee population, and really the country as a whole, the top health issues stem from three things: unhealthy eating, physical inactivity and obesity – the combined result. In some places we also see stress and mental health as a fourth key issue.

Unhealthy eating is an area that is challenging to address. Half of the U.S. population reports not eating the daily recommended amount of fruits and vegetables. This is

"In deploying these programs in different countries, we have learned that you have to think globally but act locally.
The bottom line is that preventive and lifestyle health issues are actually very similar around the world."

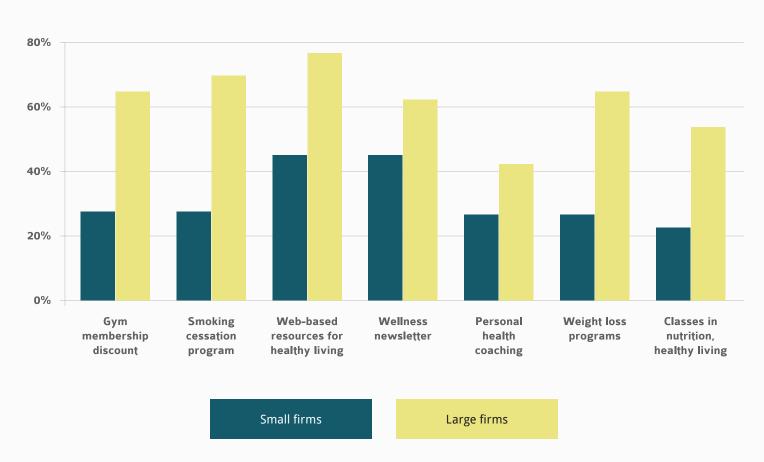
an area of focus for Johnson & Johnson's health and wellness programs, and we are seeing improvement. We address it in a very targeted and systematic way. We developed a program called Eat Complete to promote healthy eating among our employees. We work with our cafeteria vendors to look for ways to incorporate key performance indicators in their catering service offerings. We want vendors to make healthy choices more apparent than the unhealthy ones. We also believe that creating an environment conducive to healthy eating can impact behaviours outside the work place.

A key challenge is maintaining a high level of participation and engagement in our health risk assessment process.

On average, corporate wellness programs have been shown to reduce medical costs by \$3.27 and absenteeism costs by \$2.73 for every \$1.00 spent.

Source: Health Affairs, "Workplace Wellness Programs Can Generate Savings." (February 2010) **Note:** Based on a survey of 36 peer-reviewed studies.

Percentage of Companies Offering a Particular Wellness Program to Their Employees, by Firm Size, 2012



Source: Kaiser Family Foundation and Health Research and Educational Trust, "Employer Health Benefits: 2012 Annual Survey." (September 11, 2012)

Note: "Small firms" are those with 3-199 workers; "large firms" are those with 200 or more workers.

PULSE: What is Johnson & Johnson's strategy for rolling out wellness programs to employees globally? Do the programs vary dramatically from one country to the next?

Dr. Isaac: We have rolled out a global health strategy over the last five to six years that covers more than 125,000 employees. In deploying these programs in different countries, we have learned that you have to think globally but act locally. The bottom line is that preventive and lifestyle health issues are actually very similar around the world. Globally, the top health-related issues we see include unhealthy eating, physical inactivity, obesity and mental health. Even though the concept is the same, the same solution doesn't work everywhere. For example, we want to help employees choose healthy eating options, which will vary whether you are in China, India or the U.S. You have to adapt programs to offer solutions that make sense culturally.

PULSE: Is Johnson & Johnson looking to pilot any new health and wellness programs in the coming year?

Dr. Isaac: One of the new programs we are currently rolling out is called Energy for Performance in Life. A performance training pioneered by the Human Performance Institute, a Johnson & Johnson company within our Wellness & Prevention business. This innovative approach teaches participants how to get physically energized, emotionally connected and mentally focused to better meet the demands of their day at work and at home. We have rolled it out to more than 20,000 employees across Johnson & Johnson, with the goal of reaching 50% of our population by 2015. Through this program, a coach works with each employee to help them identify what really matters to them, and then support that individual in working towards his or her mission by addressing individual health and performance needs. The practice of energy management can lead to significant improvements in employee engagement and resiliency, as well as the potential for increased creativity and optimal performance. Health and performance is really where we are putting a lot of emphasis these days, and we are very excited about the difference this new program can make in the lives of our employees.

Profile



Fikry Isaac, M.D., M.P.H., FACOEM
Vice President, Global Health Services, Johnson & Johnson

Dr. Isaac leads the development of health & wellness strategies, policies, guidelines, and services worldwide (Occupational Medicine, Employee Assistance Program (EAP) and Wellness). Dr. Isaac has been with Johnson & Johnson since 1989, and for the past 10 years, he has been driving the comprehensive Total Health programs that have reduced the Company's

healthcare costs and improved the health of employees.

He also serves as the Chief Medical Officer, Wellness & Prevention, Inc., a Johnson & Johnson Company. In this role, he provides Health Management expertise, strategic direction and supports customer acquisition and lead generation. In addition to his M.D., he received his degree of Master of Public Health in Occupational Medicine from the Medical College of Wisconsin in May 2001 and is a Fellow of the American College of Occupational and Environmental Medicine where he chairs the Pharmaceutical Section and the Corporate Health Achievement Award. Dr. Isaac is the industry Co- chair of the Life Science and Innovation Forum- APEC. He also serves on several boards including the Partnership for Prevention, the Global Health & Benefits Institute and the Health Enhancement Research Organization (HERO).

Efficient Post-Acute Care Management: Good for Seniors, Good for the Economy

An interview with Dr. David Friend, Chief Clinical Officer of Golden Living

By Lauren Post

The Pulse caught up with Dr. David Friend, Chief Clinical Officer of Golden Living, to drill down into one of the most common maxims in healthcare: "an aging population will drive demand for healthcare services." In the following article, Dr. Friend delves into – among other topics – why mobile matters, the growing importance of the post-acute continuum of care and the entrepreneurial opportunities around senior health and consumer innovations.

PULSE: Why do you think the senior care market gets so much attention?

Dr. Friend: The number of Americans over age 55 will nearly double by 2030 from 60 million today to over 105 million. Not only is this a large demographic that will need a variety of health-related services, but it's an affluent group that will be able to pay for them. These people have a lot of wealth and a lot of needs; physical and non-physical.

Nowadays healthcare is good enough that people are living a lot longer. But they're also developing chronic conditions like arthritis, diabetes, orthopedic problems, etc. What this group wants is to live as active a life as possible despite these chronic illnesses. Therefore, more and more resources and technologies are being developed to help treat chronic conditions and compensate for the effects of aging. There is huge worldwide demand for these resources – it's not just a U.S. phenomenon.

PULSE: What are some new healthcare offerings for this 55+ group?

Dr. Friend: With the move to mobile there is a tremendous opportunity to change the way people live, to improve overall wellness. One huge issue for seniors is loneliness and boredom. Mobile applications for social networking, video and chat communication, and entertainment are also very exciting.



Secondly, mobile technology provides an unprecedented opportunity for health monitoring applications.

Wearable devices and other technology will enable medical professionals to track patient vitals, sleep patterns and quality, and even activity and movement patterns. These advancements can be used by clinicians to manage chronic conditions like diabetes and high blood pressure, as well as to identify and address potential life-threatening events.

PULSE: How is Golden Living providing healthcare to this market?

Dr. Friend: Golden Living offers a variety of post-acute services to seniors,

including rehabilitation therapy, living services and hospice care. This is in-line with the trend to move patients out of the hospital and into more comfortable and less expensive settings of care.

Golden Living's goal is to provide people the right level of care at the right time for the right cost. This is possible since we are involved with all aspects of the post-acute care continuum. Moving individuals through the continuum of care efficiently is critical; most seniors will only need to spend a couple weeks in a hospital during their last twenty-five years of life. Figuring out how to help them spend as much time as possible in the home, or the next best setting of care given their

medical needs, is very important from a quality of life and cost perspective.

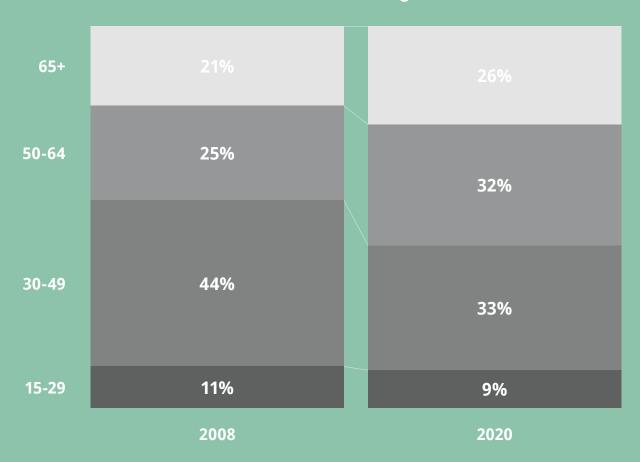
PULSE: Golden Living has received numerous awards for providing high quality care. How do you ensure and maintain this quality?

Dr. Friend: First, we work to meet or exceed CMS' "Five Star" Quality Rating System standards, since this designation is so nationally recognized. We also focus on re-hospitalization rates. The goal is to have as few inappropriate readmissions as possible. Since we recognize that some readmissions are not preventable, it is important to distinguish between appropriate and inappropriate readmissions.

In the developed world, older individuals are accounting for a growing percentage of not just the total population and healthcare expenditures, but consumer spending power as well.

Increasing Purchasing Power of Older Generations

Distribution of Purchasing Power in G7



By 2020, people ages 50 and over will control 58% of global consumption power, making the monetization of this group increasingly relevant.



Finally, we focus on the proper use of medications, including opiates and anti-psychotics. This is an indicator of quality care that we expect will receive increased government attention going forward.

PULSE: What entrepreneurial opportunities outside of direct health care do you see within the senior market?

Dr. Friend: There is a ton of opportunity to design products specifically for the 55+ demographic. It is a discriminating

consumer group, but one with a huge amount of accumulated wealth and available leisure time.

Most U.S. advertisements and products are designed for the 21 to 54 demographic. However, as product design and marketing efforts shift to focus more on seniors, innovative products like Google's self-driving car could be very successful. A twenty-eight year old that knows how to drive may think a self-driving car is a cool idea, but not a "must have" technology. However, for older seniors

that may otherwise be unable to drive, it could result in increased activity and freedom.

The trend towards more senior-targeted consumer goods is fairly clear. Design firms are coming out with products for people with declining dexterity or vision. Things like simple can openers designed for seniors are helping people remain independent longer. The education and travel markets are also experiencing a shift. Companies like Coursera (online education) generate much of their business from retired consumers with lots of leisure time that want to continue learning. Evolving trends in travel - like cruise ships designed for people on dialysis - are another example of the growing influence of senior targeted innovations.

There is huge unmet need across the spectrum of business industries. Those who recognize and take advantage of these opportunities will be extremely successful.

Profile



David Friend, M.D.
Chief Clinical Officer, Golden Living

Dr. David Friend is CCO for the Golden Living family of companies with responsibility for leading and overseeing the company's clinical practices. Previously, Dr. Friend was President and Chief Medical Officer of AseraCare, a Golden Living company. Prior to that, Dr. Friend served as Chairman and CEO of the Palladium Group, and as Managing Director of the

Healthcare and Restructuring practice at Alvarez and Marsal.

Dr. Friend has served as an industry leader, Board member, and advisor in a variety of capacities throughout his career. He currently serves on the Board of Directors at Health Integrated, and has served on the Board of Directors at The University of Connecticut School of Medicine, the John Dempsey Teaching Hospital, and the Schneider Institute of the Heller School at Brandeis University.

Dr. Friend earned an M.D. from the University of Connecticut School of Medicine and an M.B.A from the Wharton School

Giving Systems Away for Free: A New Approach to Electronic Health Records

An interview with Lauren Fifield, Senior Policy Advisor at Practice Fusion

By Lauren Post

Most clinicians and healthcare professionals recognize the importance of electronic health records (EHRs): for data capture, data transfer, and even data driven medicine. Yet when it comes right down to it, most professionals complain about their EHRs cost, complexity and interoperability issues. Against this backdrop at least one company seems to have discovered a solution physicians are eager to embrace. In the following article, the Pulse gets the inside scoop on Practice Fusion's recent success from Lauren Fifield.

PULSE: What electronic health record (EHR) capabilities and features do you think are most important? What are EHRs currently missing?

Lauren Fifield: An important capability for any EHR is the ability to adapt quickly to change. For example, if meaningful use requirements evolve, payor policies change or new research influences treatment protocols, the doctor needs to know and incorporate that information. Something else that is currently lacking in many systems is the ability to aggregate information across providers.

PULSE: What are the main challenges for smaller practices when adopting an EHR?

Lauren Fifield: Adopting an EHR involves a big cultural shift. It not only impacts clinicians, but everyone at a practice. One of Practice Fusion's main value propositions is the ability to go live within five minutes of signing up with in-application training. We don't believe that providers should be forced to go through a six to twelve month installation and training cycle, which is not uncommon in the industry. Technology is supposed to speed things up; to increase efficiency. Not the other way around. We focus a lot on customer service;

on making the tactical transition as easy as possible so that providers can focus on the more difficult cultural transition.

PULSE: What are some of the changes associated with Stage 2 of Meaningful Use? How have you prepared?

Lauren Fifield: At a high level, there are some exciting changes: the focus on greater patient engagement, improved health information exchanges, and elevated quality measures are all great.

On the other side, there are some Meaningful Use requirements that result in added complexity and require a great deal of standardization. These added costs and delays can be frustrating to innovators, as the cumulative cost in time and money is tremendous. Creating physician information exchanges, for example, is significantly less straightforward given Stage 2 requirements. This is the innovator's dilemma. Yes, we are spending time to ensure compliance with Meaningful Use, but what we really want to do is think beyond the confines of the requirements to challenge the status quo.

PULSE: How are you able to offer your EHR platform to providers for free? How did Practice Fusion arrive at this decision?

Lauren Fifield: We do have some ads that show up in the periphery of the EHR screen, like Facebook or Google.

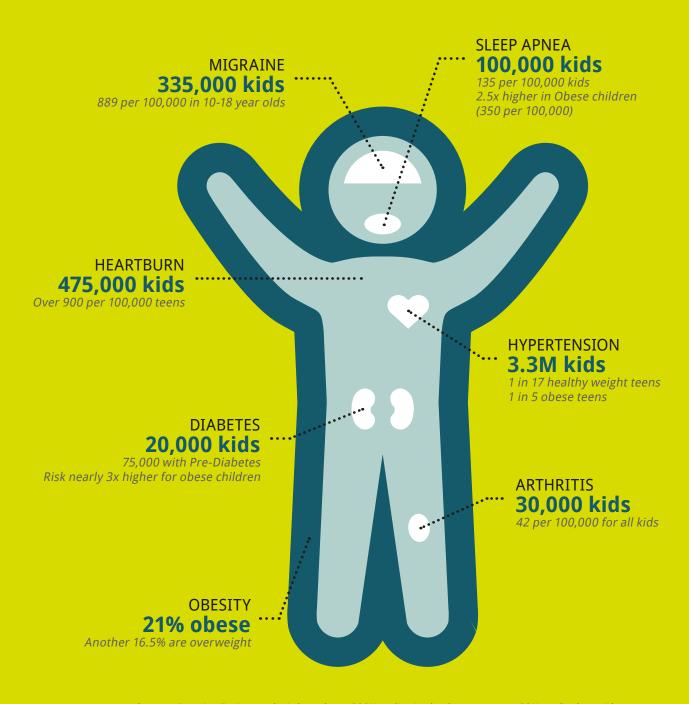
Doctors can pay to opt out of the ads, although very few do. I would say that about 99 percent of our doctors use our platform with ads. Many doctors – especially in rural settings – enjoy access to the information presented in the ads. In terms of our revenue, however, ads are just the tip of the iceberg.

We currently have about 150,000 medical providers using our product. We are able to use that volume to shift cost from providers to other stakeholders across the healthcare industry. For example, a lab is willing to pay for connectivity to such a large volume of care providers. Accountable care organizations are also willing to partner to give doctors access to our network.

Currently, providers are bearing most of the cost of healthcare reform. When it comes to EHRs, they typically have to pay to purchase, install and maintain the technology,



Broader adoption of health IT enables improved quantification of health-related trends: for example, the incidence of adult-onset diseases in kids is increasing.



not to mention the added cost of electronically inputting all of the extra data. Unlike large-group providers, small-group providers are less likely to share in the long-run financial benefits from the technology. Government, labs, payors and hospitals benefit from the rich data and improved efficiency

associated with electronic transactions. By not charging our customers we are trying to redistribute the cost of implementing technology from providers to other – more appropriate – stakeholders.

PULSE: How do you think a company like Practice Fusion should balance having healthcare expertise on its team with start-up/tech experience?

Lauren Fifield: As a healthcare technology startup on the west coast, we haven't focused as much on uniquely healthcare dynamics. But I view this as an incredible advantage; some EHRs are over-architected to align with the status quo in healthcare.

The healthcare expertise definitely needs to be there, but it should be managed in such a way that the product people are not constantly being bogged down. We want our developers to feel free to innovate; which is difficult if you ask them to

build a system around 1,400 pages of regulation. Of course, we believe that it's important to ensure compliance during the development process but not develop with regulatory compliance as the only goal.

"We want our developers to feel free to innovate; which is difficult if you ask them to build a system around 1,400 pages of regulation." PULSE: What are the main challenges for Practice Fusion going forward?

Lauren Fifield: A key challenge is making sure our technology does not interfere with the provider/patient relationship. As EHRs require and track more data and quality measures, maintaining this relationship becomes increasingly difficult.

As we continue to expand the scope of our services, we want to make sure that we don't lose sight of our core business and customers. Our mission is to empower physicians to save lives by making patient information available anytime, anywhere. That said, we want to continue to increase and improve our offering; there are a lot of problems with the healthcare system that can be reduced through technology.

Finally, I think staying ahead of regulation in areas like privacy and security will continue to be a challenge. There are certainly lots of challenges, but big opportunities as well!

Profile



Lauren Fifield Senior Health Policy Advisor, Practice Fusion

Lauren Fifield manages government relationships and monitors an ever-changing landscape of legislation, regulation and health industry antics. She advocates for policies that promote the transformation of health care delivery through innovation in health IT and serves on the Executive Committee of the Electronic Health Record Association. Before

joining the team, she managed health policy and government affairs for athenahealth, Inc., a provider of web-based software and services to ambulatory providers. Lauren is excited by Practice Fusion's ability to empower independent physicians, everywhere, with equal access to cutting-edge health IT and the opportunity to bring Silicon Valley ideas and her passion for improving healthcare to Washington, D.C.

Integrating Care Delivery in a Post-Reform Era

An Interview with Dr. Ron Paulus, Chief Executive Officer of Mission Health

By Jane Herzeca

Dr. Ron Paulus made a name for himself at Geisinger (one of the few organizations to successfully establish a cost-effective integrated health network), first as Chief Innovation Officer and later as Executive Vice President of Clinical Operations. Yet in 2010 he decided to leave to become CEO of Mission Health – a regional health system based in Asheville, NC. In the following interview the Pulse sits down with Dr. Paulus to understand why he left, and how he's going about trying to replicate Geisinger's success in western North Carolina.

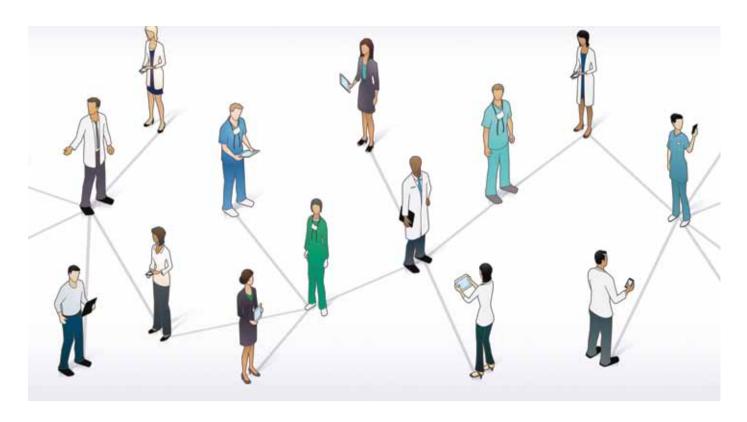
PULSE: You were previously the Chief Innovation Officer at Geisinger. What did that role entail?

Dr. Paulus: I initially came to Geisinger to help establish and grow a venture capital operation. Over time, that morphed into the Chief Innovation Officer role, which included oversight of internal projects such as the ProvenCare bundle and medical homes. Once I became responsible for running clinical operations as well, I was in a position to embed innovation directly into operations, so that it would be part of the fabric of the institution's daily routine. That mentality was a robust way to grow, develop, and embrace change.

PULSE: Subsequently, you left that position to become the CEO at Mission Health. What prompted this move?

Dr. Paulus: My team's work at Geisinger was stupendous and the team that remains is superb. But as we went out to the rest of the country and talked about what we were doing, the response was almost universally, "That's really cool; that's great, but it's not applicable because Geisinger is not like anywhere else." So our work was discounted, and sometimes even viewed as irrelevant. I wanted to see what I could do in the "real world." I thought that if I could replicate some of the same results at Mission, then at least people couldn't say "what you accomplished at Geisinger's was just because it was Geisinger."

When I first visited Mission I saw a population, geography and tertiary/quaternary medical center that largely resembled Geisinger Medical Center, yet Mission didn't



have the same infrastructure that resulted in Geisinger's successful integrated delivery system.

Immediately, I could see that the work would matter a lot. The Mission clinicians were superb, but the population was vulnerable—older, with more chronic disease, worse lifestyle habits, and a disproportionately bad payor mix. The community and region also really depended on the health

system. Not only was Mission the key health care provider, but it was also responsible for one out of every 16 jobs in Buncombe County, and one out of every 39 jobs in the entire region. So Mission was an economic engine, a health care delivery leader, and yet had a lot of factors working against it. Some people might ask "why would you choose a place where it's so hard?" I would say "why not." If you're going to go to work, you might as well try and make a difference. The area is also a great place to raise a family.

"Some people might ask 'why would you choose a place where it's so hard?' I would say 'why not.' If you're going to go to work, you might as well try and make a difference."

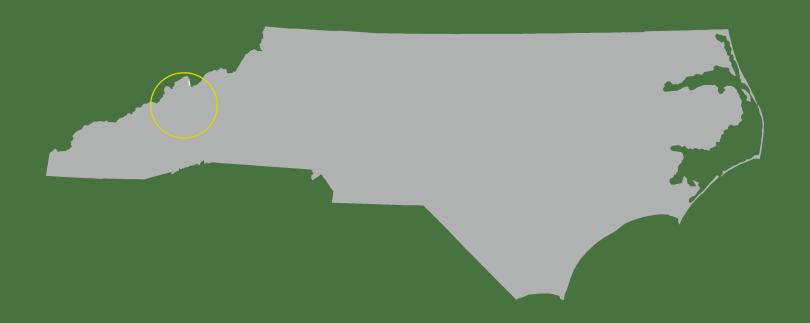
PULSE: What's your agenda at Mission? What are you looking to tackle first?

Dr. Paulus: As the new CEO, the first order of business is to assess the organization; to listen and try to understand the underlying issues. It's important to not do too much or too little too soon. Two areas I have identified as being priorities, though, are quality infrastructure and value stream

mapping.

My first hire was Bill Maples, our Chief Quality Officer who joined from the Mayo Clinic. I decided we should make tangible, public and deep investments in quality infrastructure. We've done a lot of work in quality already. Our team recently went to the Mayo Clinic in Rochester to present our patient safety event analysis, where we look at the precursors to safety events, and then do root cause analyses to determine how to re-engineer processes to make them safe, efficient and effective.

The estimated economic impact of Mission Health System includes the creation of more than 12,500 jobs and nearly \$1 billion in annual regional economic activity.



The second area of work we're focused on is value stream mapping, which is an observational technique to identify efficient and inefficient processes by following a patient through his or her course of care. Importantly, we're not only observing what's happening, but we're also asking patients how they feel about it. This work is elevating the patient experience, as well as our quality, efficiency and clinical engineering.

These efforts have been transformative. When I arrived at Mission we were about 60th percentile nationally in patient experience. 18 months later we are at the 90th percentile. We only have five units below the 85th percentile anywhere in the hospital. The graph of improvements in infection rates and patient experience is striking. Every single quality metric is significantly changed from where it was two years ago.

PULSE: What are you doing at Mission to prepare for health reform and accountable care?

Dr. Paulus: We are starting to evaluate and work towards ACO integration models. We kicked off the effort with a Primary Care Summit, where we engaged both employed and private practice physicians on the gap between where we are and where we need to be. We also brought our competitors into the discussion. I said, "Whatever we think about one another, we're all here to serve the population and the region. So how can we best do that? What are the barriers? And how can we break them down?"

In the course of the Summit, we combined speakers from successful ACO's (like Gary Stuck from Advocate) with data and observations from our clinicians about the barriers and opportunities they see. We are in the midst of further analyzing that data and following up with respondents to find partners on specific initiatives. If we can show tangible change related to the feedback we received, we can build a reservoir of trust with practitioners in the area. Then and only then can we begin a real discussion with our partners and competitors about accountability.

Profile



Ronald A. Paulus, M.D.

President and Chief Executive Officer, Mission Health

Dr. Ron Paulus is the CEO of Mission Health, a multi-hospital system in western North Carolina. Prior to joining Mission in September 2010, Dr. Paulus served as Executive Vice President, Clinical Operations at Geisinger Health System. Dr. Paulus also served as Geisinger's Chief Innovation Officer, where he was responsible for ensuring system-wide innovation. Prior

to joining Geisinger, Dr. Paulus was co-founder, President and CEO of CareScience, Inc., a health informatics startup, and Vice President of Operations at Salick Health Care, Inc. Dr. Paulus received his MD degree from The School of Medicine, University of Pennsylvania, and his MBA, concentration in healthcare management, and BS in Economics from The Wharton School, University of Pennsylvania. He has published numerous peer-reviewed articles and speaks regularly on the topics of health care quality and efficiency, innovation, physician leadership, and new models of care.

Managed Care in a Consumer-Focused Market

An Interview with Dr. Steven Udvarhelyi, Executive Vice President, Health Services, and Chief Strategy Officer, Independence Blue Cross of Philadelphia

By Rob Varady

Independence Blue Cross (IBC), a leading health insurer in the Philadelphia area, has made significant investments in innovative strategies to address the changing healthcare landscape. The Pulse spoke with IBC's Chief Strategy Officer, Dr. Steven Udvarhelyi, to discuss innovation within IBC and trends across consumer-based healthcare and health information technology.

PULSE: What is the most exciting innovation or change that Independence Blue Cross is working on in 2013?

Dr. Udvarhelyi: First, we are working to emphasize a culture of innovation throughout the company. Along these lines, we want to partner with interested organizations to make Philadelphia a national center for healthcare innovation, and have begun to make some investments to make this happen. Last summer we launched the "Game Changers Challenge," a business plan competition for start-ups that improve and promote healthy living for Philadelphia citizens. Winners were awarded grants of \$50,000, free consulting and mentoring services, and resources from a local, healthcarefocused incubator.

We also just launched the first healthcare-focused accelerator in Philadelphia in partnership with DreamIt Ventures and Penn Medicine. As our business model becomes more consumer-focused, we expect to see more activity like this in 2013. We need to find new ways to engage with individuals and help them take charge of their healthcare experience.

PULSE: What does innovation mean to insurers? What role is there for innovation from within IBC, and what innovations do you expect to come from IT and consumerfocused startups?

Dr. Udvarhelyi: Innovation at IBC is similar to innovation in other industries. It is about creating new and different ways to achieve the results you want. Our goal is to provide our

beneficiaries with higher quality healthcare delivered at a lower cost. We are looking for ways to do this while providing our customers with the opportunity to manage their own care more effectively, and to empower physicians and other health care providers with actionable information to take better care of patients.

In the technology space we see a few key areas of focus. First, we want to find the best way to understand the massive amount of data we collect, and then to share this information with consumers and providers. We are currently working with large hospitals and other local providers to connect them to a regional health information exchange, the Healthcare Exchange of Southeastern Pennsylvania. The exchange will share standardized information across a fragmented delivery system.

"The concept of cost

sharing does not

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positive behavior change."

In early 2012, IBC and three other companies (Highmark Blue Cross Blue Shield, Horizon Blue Cross Blue Shield, and Lumeris), acquired a Boston-based company called NaviNet, the nation's largest network connecting physicians and hospitals. It connects about three-quarters of the providers in the country. We are working with Lumeris to deliver actionable clinical information to physicians at the point of care through the NaviNet network. For example, when a physician's office logs onto NaviNet to check insurance eligibility for a patient, we can push

alerts to the physician that the patient may be at risk for an adverse interaction between medications. Further, using the Navinet network, the physician can find out whether the patient has been renewing prescriptions on schedule or if the patient has recently been to the emergency room.

The ultimate goal is to provide better care coordination and a population-based approach to healthcare. The data enables providers to be more proactive with their patients, and it gives their patients—our members—better self-management tools. If we can identify gaps in care using the data we

have collected, we can alert both physicians and patients to ensure that appropriate care is provided.

PULSE: Could you speak about any changes IBC is making in terms of cost-sharing plans with consumers?

Dr. Udvarhelyi: We believe it is important for patients to understand the value of the services they are getting. The concept of cost sharing does not necessarily mean putting a greater financial burden on patients, rather it means creating appropriate incentives for positive behavior change. For example, we decided to introduce a "no pay co-pay" policy for generic drugs. We make generics available with no cost sharing at all for patients. This initiative has been especially focused on our beneficiaries with chronic diseases. Interestingly, the "no pay co-pay" has not only increased the use of generics, but it has also increased the

adherence rate, lowering costs and complication rates. This program is a great example of an innovative approach to changing the incentive structure.

PULSE: How about on the providerfacing side? What programs do you have that involve a similar set of

incentives or cost sharing?

Dr. Udvarhelyi: We have introduced an incentive model into almost all contracts with hospitals and health systems. A few years ago this model was

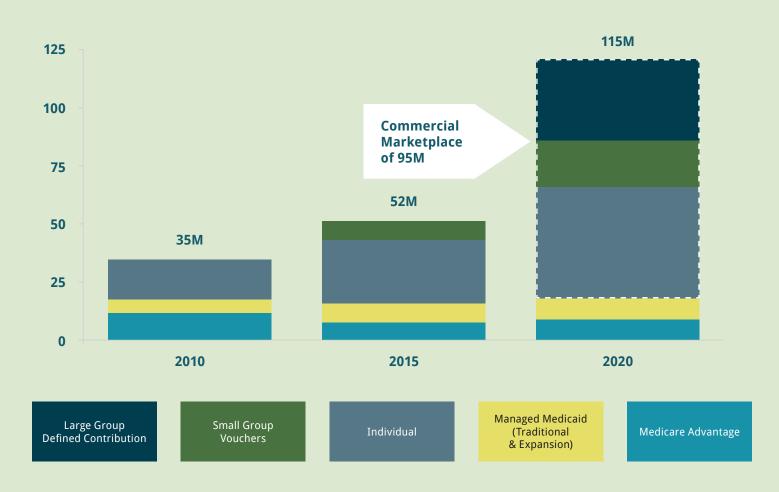
pay-for-performance, but we have shifted to an accountablecare model. This system rewards hospitals and the physicians that work in them for reducing readmission rates and improving alignment with employed and contracted specialists.

For our primary care physicians, we have an incentive structure that gives them the opportunity to almost double their base-pay if they are highly effective at managing and improving the quality of care while also controlling health care costs for their patients. This includes recommending

By 2020 the US commercial and government-funded retail market is expected to expand to nearly 100M consumers, wielding almost \$530B of purchasing power.

Retail Marketplace

Consumers selecting their healthcare plans





preventive services and screenings and providing appropriate care for chronic disease management. The incentive program, when combined with the clinical intelligence capabilities described earlier, has been well received by our contracted physicians.

PULSE: Does the accountable-care model in IBC physician contracts differ from the Medicare model under the ACA in any way?

Dr. Udvarhelyi: There are some differences. In private plans, particularly our HMO product, members pick their primary care physician. This choice creates a stronger relationship between the physician and the patient. It also creates a stronger sense of accountability for both parties. These

dynamics are not always present in Medicare's claimsbased assignment process. That said, both models focus on population-based approaches for health promotion.

PULSE: The evolution towards a consumer-centric system is a common headline today. What is driving this trend?

Dr. Udvarhelyi: There are a number of reasons for this shift. Technology has enabled immediate access to information. For example, we can access our bank account at any time of day from a computer or smartphone. These expectations have begun to move into the healthcare space. Consumers have started to demand the ability to interact with healthcare providers and access their healthcare information electronically from a variety of places at any time of day. Consumer-driven health has also come to the forefront because of changes stemming from healthcare reform. The ACA will significantly increase an individual's responsibility to choose their health insurance plan. This means that our business must shift to not only include an emphasis on risk management, but also to focus on service and overall customer experience. The dynamic of direct consumer purchasing will bring enormous changes to our industry.

Profile



Steven Udvarhelyi, M.D.

Executive Vice President for Health Services and Chief Strategy Officer of Independence Blue Cross

Dr. Udvarhelyi is responsible for clinical services (medical management, pharmacy management and quality management), provider contracting and provider relations, and informatics. Dr. Udvarhelyi is a board certified internist and has more than 20 years of experience in the managed care industry. He received an A.B. degree from Harvard College, an M.D.

degree from the Johns Hopkins University School of Medicine, and a Master of Science degree in Health Services Administration from the Harvard School of Public Health.

Prior to his career in the managed care and insurance industry, Dr. Udvarhelyi was a faculty member at Harvard Medical School and has published numerous articles on quality in health care. Dr. Udvarhelyi currently serves as Chair of the Board of Directors of NaviNet, and is on the Board of Trustees for Devereux, the External Advisory Board for the University of Pennsylvania Center for Bioethics, and the Board of Directors of the Health Care Improvement Foundation. He is a past member of the Board of Directors of NCQA, Institute of Medicine (IOM) Roundtable on Evidence-Based Medicine and the IOM Committee on Comparative Effectiveness Research Priorities, as well as other IOM Committees.

Innovation and M&A in the Medical Device Industry

An interview with Rob Fredericks,
Vice President of Global Marketing, Research & Development and Strategy
in Medtronic's Spinal and Biologics Division

By Andrew Shelton

The Pulse caught up with Medtronic's Rob Fredericks to get a quick update on market conditions and the state of innovation in the medical technology industry.

PULSE: Where do you see device innovation occurring today? What is Medtronic doing to keep up?

Rob Fredericks: There is a lot of work being done to come up with incremental improvements to existing devices.

I see scientists and entrepreneurs partnering with experienced surgeons to come up with better products and procedures; there's still a lot of room for innovation.

Medtronic is actively soliciting new ideas from around the world. The magnitude of idea generation out there is immense. We are still refining our model, but the goal is to screen ideas as they come in, and then engage with

the inventors of the most promising ideas to co-develop products. In medical device innovation, the people with the best ideas are not usually the same people that end up bringing those ideas to market.

PULSE: How are you allocating your division's R&D budget across internal projects and external M&A and joint venture opportunities?

Rob Fredericks: Generally speaking, we believe the ROI on organic development is higher than the ROI we can achieve through M&A or JVs. To the extent we have a promising in-house technology, we look to fund that first. If we are looking at a new, higher risk

technology, or a market segments outside our traditional "sweet spot", we are more likely to consider M&A or formal partnerships.

PULSE: What is the typical size of an external deal that you'd consider?

Rob Fredericks: Ten years ago the US medical device market was growing rapidly. Start-up companies could secure venture funding, and midsized companies with innovative technologies were being sold for high multiples. Significant premiums were paid for growth as recently as five years ago – in 2007 Medtronic paid \$4.2 billion for Kyphon, a technology-focused minimally invasive spinal

business. Today there are far fewer opportunities to make large investments in cash flow positive companies with steep revenue trajectories. Over the last couple years Medtronic's Spinal business acquired one company for just over \$100 million and another for about \$30 million.

The returns on investing in organic R&D are relatively more attractive than what we see in the market. That said it's a good time to be a large company, because we feel like we have the opportunity to sit back and selectively invest in interesting technologies that offer substantial patient and economic benefits.



Profile



Rob Fredericks

VP of Global Marketing, Research & Development and Strategy in Medtronic

Rob Fredericks, VP of Global Marketing, Research & Development and Strategy in Medtronic's \$3.3 billion Spinal and Biologics business. Prior to his current role, Rob held leadership positions in Research and Development and Finance for Medtronic's Spinal business. He has also worked in Medtronic's Cardiac Rhythm Management, Diabetes and Corporate

divisions, serving in U.S.-based and international roles. His previous experience includes McKinsey & Company management consulting and Simmons & Company investment banking. He received his MBA from Wharton, and holds undergraduate degrees in Civil Engineering and Economics from Rice University.

Medical technology M&A volume is up, although value is down sharply as only eight deals of more than \$1 billion closed in the 12 months ended June 2012.

M&As in the US and Europe (US\$M)



Total value of M&As

Total deal value of mega deals (>US\$10B)

Number of M&As

Another Year, Another Successful HCM Alumni Conference

By Ana Crespo



Huntsman Hall was once again the setting for a gathering of Health Care Management (HCM) Program alumni on October 27, 2012. The 2nd Annual Wharton Health Care Alumni Association Conference brought together 145 professionals from across all sectors of healthcare. Attendees engaged with speakers, moderators and each other on the broad, timely and oftentimes provocative topic: "The Restructuring of our Healthcare System to Improve Accessibility, Quality, and Cost Effectiveness."

The day kicked off with a presentation from Gary Phillips, M.D. (WG'91) who is Head of Healthcare Industries at the World Economic Forum. Dr. Phillips discussed how public/private partnerships can improve access to health care globally.

Next, Wharton HCM professor Skip Rosoff discussed universal health care and the implications of the Supreme Court decision on the Affordable Care Act. Professor Rosoff suggested that the U.S.'s high level of health care expenditures — 18% of GDP vs. a global average of 9% — may in part be due to excessive deregulation; a controversial topic in an age when many businesspeople are concerned with overregulation. He noted that each Western European nation featured at least one vertical that catered to the entire population and did not have an explicit mandate to generate a financial return on investment. He went on to question the severability (saving clause) of the ACA without the individual mandate, since it is unlikely that Congress would have passed the law without the mandate. As he noted, "insurance companies would never have come to the table [...] due to adverse selection."

The conference continued with panels on Accountable Care Organizations and "Payor/Provider Perspectives on Innovation." On the ACO panel, Donna Lynne, Group President of the Kaiser Foundation Healthplan, and Keith Pitts, Vice Chairman of Vanguard Health Systems, discussed their views on best practices for integrated insurance/ services systems. Mr. Pitts discussed Vanguard's push to focus on managing population health and increasing patient engagement in advance of healthcare reform. "We want to change from being a trusted partner in sickness to being a trusted partner in wellness and preventative care." Both panelists also mentioned the need for payment reform, but emphasized the differences in comparing their plans to the familiar HMO model. "The challenge of being in the insurance business is that you need capital and you need actuarial expertise and a

claims-processing infrastructure." Ms. Lynne said. "Most hospital systems are not sitting on huge cash reserves – and they don't have the insurance skill set – so I think insurance companies will have to partner with hospitals." The panel discussion on payor/provider innovation featured Jonathan Blum (CMS), Terry Booker (Independence Blue Cross), Michael Restuccia (Chief Information Officer, Penn Medicine), and Seth Frazier (Evolent Health), and focused on how "big data" in the payor space could be used in real time to make care delivery more efficient.

The second set of panels covered "Physician Restructuring" and "Personalized Medicine". Mark Blatt (Intel), John Blair (Taconic IPA), and Holly Miller (MedAllies) discussed the successes and best practices of the Hudson Valley Initiative (HVI), an integrated delivery network that has leveraged IT innovation and the Patient Centered Medical Home model to improve care. "The workflow [in health care] is broken," Blatt noted. "Instead of having IT support current workflow, change it!" The panel seemed in agreement that (1) the future of HVI and other integrated delivery networks would depend on their ability to get reimbursed for positive outcomes and (2) this shift in reimbursement would continue to drive increased use of healthcare IT as a way to improve results. HVI uses Direct Solutions from MedAllies to transfer information among disparate IT systems. This has the dual-benefit of enabling specialists to access full patient histories when they evaluate a new patient, while also

"We want to change from being a trusted partner in sickness to being a trusted partner in wellness and preventative care."

allowing PCPs to access post-discharge information before their patients leave the hospital. "In order for physicians to adopt this new technology, it has to be easy," John says. "Information has to be pushed [to the doctors]. It needs to be a tailored message, not the whole medical record." Beyond a good IT infrastructure, HVI's success has been attributed to its communitysourced nonprofit governing body, the use of Patient Centered Medical Homes, a shared savings model, and a transparency strategy that surveys quality, cost, utilization, and patient experience. The morning session on "Personalized Medicine" discussed the need for identifying the right care for the right person at the right time. Jay Mohr, President of the WHCMAA, argued that if the U.S. system can reorient itself from providing care for the masses to providing individualized care, it will be able to eliminate a massive amount of spending on care that – at best – does not affect an individual's health and - at worst harms patients.

Paul Starr, Professor of Sociology at
Princeton University and author of
Remedy and Reaction: The Peculiar
American Struggle over Health Care
Reform, delivered the keynote address.
He emphasized that the battle over

health policy would not end with the November 2012 election. During an engaging review of the history of healthcare reform in America, he emphasized how the implementation of partial measures throughout the system's development has made it harder to make significant changes today. He also stated that the true significance of the current healthcare debate would not be evident to the general public until much later. The final set of concurrent panels covered restructuring insurance and outpatient services. The Insurance panel highlighted what well developed insurance exchanges are doing, how medical homes are evolving under payors such as IBX, and what Geisinger Health Systems is doing around bundled payments. These organizations are at the cutting edge of insurance restructuring efforts. The Outpatient Restructuring session highlighted highly successful organizations' efforts to provide care in the right place, at the right time, by the right provider, at the right price. Matthew Cook discussed CHOP's asthma initiative as a good example of managing a pool of potentially high-cost patients by stratifying and triaging them to the right care location using phone, satellite sites, or inpatient admission processes. CHOP has achieved a reduction in referral rates to specialists from 6-7% to 2-3% in their South Philadelphia clinic. This translates to thousands of dollars in savings per patient.

A key factor in the sustainability of this initiative is an agreement with payors to get different reimbursement levels

for patients covered by the initiative. Payors are accountable. When asked about the biggest barriers to access at their institutions, several panelists pointed to scheduling as a significant challenge. "We have very specialized faculty," Cook said of CHOP, "so we don't have a lot of general cardiologists." Dr. Gottlieb focused more on the necessity of certain follow ups. "We have been performing a redesign of scheduling because the schedule we currently use is not evidence-based. For example, we schedule post-MI follow-ups every six months forever."

The closing cocktail reception was a jovial affair, with many attendees remarking on the quality of the discussions and their desire to return the following year. Jeff Voigt (WG'85), conference organizer and WHCMAA "The workflow [in health care] is broken," Blatt noted, "Instead of having IT support current workflow, change it!"

board member, commented on the value of this conference for the alumni community. "Since the inception of the Health Care Management program at Wharton back in the early 1970's, we have had over 2,000 people graduate. Our graduates are doing some really innovative things around making the health care system more efficient. The nicest thing about our alumni conference, however, is the opportunity for us to network with each other and

to establish ongoing relationships. While the alumni conference will continue to be a major part of the alumni association's lifelong learning initiative, keep an eye on our other regional and web-based events. These offer a tremendous opportunity for us to learn from each other and will remain a valuable resource for all."

The 2013 WHCMAA conference is tentatively scheduled for either Saturday, October 19th or 26th, 2013. Mark your calendars!





Wharton Health Care Management

Program Overview



The Health Care Management Department is one of the oldest, most distinguished, and most comprehensive in the health care field. Graduating its first class of MBA students with a specialization in Health Care Management in 1971, the department was in the vanguard of educating health care executives and leaders within the general management curriculum of a business school, breaking from the traditional public health and health administration models. The doctoral program was established in the mid 'eighties, broadening the department's mission to encompass the training of future health care management and economics scholars. The creation of the undergraduate concentration, also in the mid-'eighties, provides Wharton students and students throughout the university with education and training in health economics, management, and policy. Offering more course electives in health care than any other business school-based program, every important sector of health care is covered in depth.

Today, the department is a vital community of internationally renowned scholars who have spent their careers following the evolution of health care services and technology, domestically and globally, and researching important management and economic questions arising from all aspects of this complex enterprise. The HCM faculty collaborate with medical, engineering, nursing, and other faculty from around the university to create interdisciplinary research and knowledge. HCM students have countless opportunities to work with faculty and health-related research centers throughout the university. Health care executives, entrepreneurs, consultants, investors, and other practitioners are involved as part time lecturers who bring the world of practice to the classroom. The Annual Wharton Health Care Business Conference organized by HCM students attracts more than 600 alumni, health care professionals, and national health care leaders from every subsector of health care. It has become a nationally recognized forum for the exchange of ideas about issues in health care business and management innovation. A vast network of alumni who hold leadership positions in every part of health care work in close partnership with the department in activities such as guest lecturing, recruiting and mentoring students, and providing access to business data and practices to faculty engaged in research projects. This close-knit community of scholars, students, alumni, and practitioners is widely considered a leading source of talent and leadership for the health care field.

Wharton Health Care Management

Student Organizations

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 healthcare 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 MBA candidates who are personally and/or professionally interested in healthcare social sector leadership. Program participants will gain first-hand experience as Board Observers on the boards of socially responsible nonprofit organizations dedicated to healthcare pursuits. The program also serves to meet the needs of non-profit healthcare organizations seeking access to the Penn and Wharton communities, as well as the professional experience and training of current Wharton MBA students.



Wharton Global Health Volunteer Program (WGHVP)

WGHVP is designed to give Wharton Health Care Management students the opportunity to participate in global healthcare related projects with limited resources. WHIVP trips are student organized, student run, and student led. Projects give participants exposure to healthcare 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 operations.



The 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.

Editors-in-Chief



Elissa Bergman

Elissa graduated Phi Beta Kappa from the University of Virginia with a BA in American Studies and History in 2009. After graduation, Elissa joined FTI Consulting's Health Solutions practice based in Washington, DC. At FTI she worked with various healthcare providers facing Medicare compliance and regulation violations to identify medically unnecessary care, quantify exposure to risk, and prevent future litigation. Elissa is studying Health Care Management at Wharton and hopes to work in the provider space after graduation.



Ben Herman

Ben graduated from Yale University in 2007 with a BA in Economics. After graduation, he joined the UBS Healthcare Investment Banking Group in New York where he covered healthcare services, REIT and life sciences companies. After two years with UBS, he moved to Chicago to join Cressey & Company – a private equity firm that invests in mid-market healthcare services businesses. Post-graduation, Ben plans to return to the healthcare services sector, likely in an operations or investing role.



Rob Varady

Rob graduated from Harvard College in 2006 with a bachelors in applied mathematics and economics. After university, he worked for Goldman Sachs for four years in their Quantitative Investment Strategies unit, researching and designing strategies to algorithmically trade global equities. He subsequently moved to SAC Capital, a Connecticut-based hedge fund, where he served as a risk manager for two years. He is currently pursuing an MBA in Health Care Management at the Wharton School. After Wharton, he hopes to pursue a career in health care payor and provider strategy.

Staff Writers



Elena Castañeda

Elena graduated from Harvard College in 2008 with a degree in Biomaterials Engineering. She then moved to New York City and worked at the boutique life science consulting firms Insight Strategy Advisors (ISA) and the Frankel Group. At ISA, she focused on pricing and contracting, marketing strategy, payor segmentation, and emerging market drug value propositions for pharmaceutical, medical device and biotech clients. At Frankel Group, she focused on early stage portfolio optimization. Elena did her pre-MBA summer internship at the San Francisco venture firm Kapor Capital, where she focused on reviewing new opportunities and assisting portfolio companies with operational and business development initiatives. Elena is currently pursuing her MBA at Wharton with a focus in healthcare management.

Jane Herzeca

Jane graduated cum laude from Duke University in 2009 with a BA in public policy studies and economics. After college, Jane moved to Washington, DC and joined The Advisory Board Company. At the Advisory Board, she specialized first in working with hospital and health system's oncology programs, focusing on operational efficiency, referral strategy, clinical quality care redesign, and regulatory change and reform. She then worked more closely with hospital and health system CMOs and COOs on optimizing clinical efficiency and partnering with non-hospital providers to streamline care coordination and patient transitions.

Jamie Mumford

Jamie Mumford graduated from Stanford University in 2005 with a Bachelor's in Science, Technology, and Society and a Master's in Communications. Upon graduation Jamie worked at Triage Consulting Group, and later joined BlueCross BlueShield. In these roles she specialized in provider revenue cycle activities, payment review and recovery, and payor contract analysis and negotiation support. In 2010 Jamie joined PricewaterhouseCooper's Healthcare Advisory practice. Currently she is a Wharton partner (married to Martin Mumford) and hopes to apply her keen interest in health policy to helping support the provision of sustainable, affordable, and efficient healthcare throughout her career.

Staff Writers



Lauren Post

Lauren graduated from University of California, Los Angeles in 2008 with a degree in Economics and Political Science. Prior to Wharton, she was an Associate for Mercer Human Capital consulting. In this role, Lauren worked on a diverse range of client work, including executive incentive plan design, sales force effectiveness initiatives, and competitive benchmarking. Her numerous healthcare projects included redesigning an incentive plan for a children's hospital and developing a physician recruitment and compensation strategy for an academic medical center. Lauren is currently studying Healthcare Management at Wharton and plans to work in healthcare technology and services to improve the provision of quality and efficient care.

Andrew Shelton

Andrew graduated from the London School of Economics in 2008 with an MSc in Economics and from Tufts University in 2004 with a BA in Political Science. Andrew started his career as a journalist covering pharmaceuticals and biotechnology for The Pink Sheet. He subsequently worked at The Advisory Board Company, researching best practices in the US hospital industry. Most recently Andrew worked for 3 years as a consultant at a boutique strategy-consulting firm, 2020 Delivery, serving hospitals, regional insurers and physician practices in the UK's National Health Service.

Billy Young

Billy graduated from the University of Pennsylvania in 2008 with a B.S. in Bioengineering and a B.A. in Economics and was a member the Track and Field team. Prior to Wharton, he was an Associate Consultant at the Chartis Group providing strategic advice to executives of healthcare systems, including Catholic Healthcare West, University of Virginia and Children's Hospital of Philadelphia. Billy is studying Healthcare Management at Wharton. After his MBA, Billy hopes to get a better understanding of the capital drivers of healthcare firms, and in the long term, he wants to find opportunities to provide low cost healthcare services and products to the marketplace.

Notes				



Pulse