

Global Leadership

Findings from the CEO/Innovators Roundtable: Reform, Transition and Transformation Are at Hand

89

Percentage of attendees at the CEO/Innovators event who said they support the full implementation of the Affordable Care Act.

In October of 2013, we gathered for our most recent CEO/Innovators Roundtable, and the healthcare crisis was front and center in the public eye. On October 1, just a few days before we met, the federal government's health insurance exchanges opened for business and almost were instantly beset by technical glitches. By the time we gathered in Chicago, during the second week of the month, the website woes nearly were completely overshadowed by a federal shutdown brought on by members of Congress intent on thwarting the implementation of the Affordable Care Act. In many ways, it seemed like a perfect storm for healthcare reform.

The government reopened its doors just after the middle of October, but the problems at healthcare.gov were just beginning. Consumers simply couldn't complete the application process without the system crashing. And yet, despite the technological problems with the web platform, many took the demand-driven problems as a positive sign: Consumers actually were trying to enroll. A bigger problem would have been if nobody bothered to sign up for the new insurance plans. Indeed, in a poll of our attendees at the CEO/Innovators event, 89 percent said they supported the full implementation of the Affordable Care Act.

Over the past several years at our CEO/Innovators events, we've been examining how managed care payers, physicians, hospitals and academic medical centers, and vendors plus pharmaceutical companies and related suppliers will manage the transition from a fee-for-service payment structure to alternative capitated models. Not only will the reimbursement system change, but new delivery models also must provide higher-quality care to more people—using fewer financial resources. Yet, today, healthcare expenditures still are growing at a projected annual rate of 3.9 percent compared with 2.5 percent for the economy as a whole.

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**\$250
million**

**Projected annual
savings as a result
of the state of
Arkansas' Health
Care Payment
Improvement
Initiative**

The United States continues to lag far behind its counterparts in the developed world when it comes to healthcare efficiency and quality. A recent analysis by Bloomberg put the cost of healthcare in the United States at \$8,608 per capita, accounting for 17.2 percent of our gross domestic product. Life expectancy in the United States sits at 78.6 years. Those figures place the country 46th on the Bloomberg list of Most Efficient Healthcare Countries—just ahead of Serbia. Japan, by comparison, has a life expectancy of 82.6 years with a per capita healthcare cost that is less than half of that in the United States.

One reminder of the challenges facing the national healthcare system is a recent study by the Leapfrog Group, which revealed that preventable hospital errors have become the third leading cause of death in the United States. More than 440,000 Americans are killed annually by these facility errors.

On the financial front, the combination of the tepid economy, industry changes and possibly health insurance exchanges has stanching—at least temporarily—double-digit premium increases in certain states and localities. In California, Massachusetts, New York, Oregon, Rhode Island and Vermont, exchange officials can turn away insurers whose rates aren't deemed competitive. Even while the vast majority of our Roundtable participants believed in implementing the exchanges, many also expect that the exchanges will fail to take hold in certain states. Even in states that aren't using their exchanges to leverage down premiums—and ultimately prices—there exists an intense pressure to reform the healthcare payment model.

The Arkansas Pilot

In Arkansas, the state is launching a unique Health Care Payment Improvement Initiative within its existing fee-for-service framework. While still early in its rollout, the initiative already is having an enormous impact on provider rates, insurance premiums and savings. The plan primarily targets providers that serve the state's Medicaid population, but, importantly, any private insurance company that participates in the state's healthcare exchange also must agree to implement and take part in the Payment Improvement Initiative. This means that physicians and all providers that work with the state's leading private insurance payers also are being included in the program.

To initiate the plan, Arkansas' health regulators, private insurers and the federal government created cost guidelines for five medical episodes, including upper respiratory infections, late pregnancies, attention deficit hyperactivity disorder, congestive heart failure and total joint replacement. Each of these five incidents has its own average cost that includes medication, office visits, hospitalizations, surgeries and any other related procedures.

Providers, for their part, continue to treat patients as deemed necessary, and the providers continue to submit fee-for-service invoices as they normally would. The major change to the reimbursement system is that at the end of the fiscal year, providers' costs are audited against the established guidelines. Providers whose average costs exceed the accepted guidelines will have to return a portions of that excess money. Providers whose average costs fall below the accepted cost guidelines will receive a bonus at the end of the year, thus incentivizing efficient care. Physicians whose costs are in line with the guidelines will see no change.

As a result of the nascent program, Arkansas healthcare spending has slowed to zero percent growth compared with 6 percent growth projections. That translates to a \$250 million savings annually and \$1 billion over four years, according to an article in the July 2013 issue of *Governing*.

The Near Future of Healthcare

While there was widespread agreement among our poll of attendees that the Affordable Care Act should be fully implemented, there were highly divergent views on whether health insurance exchanges would work on a national basis. Almost all participants agreed that the next three to five years will be an incredibly tumultuous period, with exchanges working in some states but not in others. The Arkansas paradigm is a reminder that there will be different solutions in play in various parts of the country. Other attendees suggested that by 2020, this patchwork of solutions likely could evolve into a national system in which there is a single collector of premiums—if not exactly a single payer.

To be certain, there are positive signs in the industry, and those include an increasing number of partnerships between payers and providers. Consumer awareness and engagement also are on the rise, as are new tools to help enable those processes. The medical loss ratio rule, which now requires private health plans to spend between 80 percent and 85 percent of premium dollars on healthcare, is forcing discipline and efficiencies on the healthcare marketplace.

While the underlying economic and quality statistics are troubling, they reveal an enormous opportunity gap. To that end, on our first day, we asked our panelists to focus on what successful healthcare delivery platforms will look like in the future. In addition, we explored the enormous opportunities and challenges that the industry faces as it tries to leverage healthcare Big Data while not compromising consumer privacy. On the second day, we tackled the issue of how to manage and care for the high-risk populations that are responsible for an inordinate share of healthcare costs. We also looked at the increasingly prominent role that venture capital, strategic investors and private equity are playing in creating innovative healthcare solutions.

If you weren't able to make it to Chicago in October, we hope this report will help bring you up to speed on some of the new solutions emerging from industry innovators. We also hope you will be able to join us at the next CEO/Innovators Roundtable later this year. As we lock down the details, we'll keep you posted.

Finally, a brief note about the write ups that follow: Each session during the event was moderated by experts in the field—those listed at the top of each summary—but the discussions included lively debate, input and dialogue from the entire group of attendees.

Designing Healthcare Delivery Platforms for Scalable Innovation

- Ray Herschman, President, xG Health Solutions
- Earl Steinberg, M.D., Chief Executive Officer, xG Health Solutions
- Mark Shields, M.D., formerly Senior Medical Director, Advocate Physician Partners

Mergers and Population Health Foreshadow Future Business Models

While healthcare costs and premiums continue to rise, it's also true that almost every major hospital system in the country is in the midst of painful cost cutting. These hospitals are in the very early stages of transitioning from a fee-for-service business model to capitated payment and population health business models, as well as sustainable cost patterns. Nonetheless, the fee-for-service model still is deeply entrenched in U.S. healthcare, and shifting away from it will take time. Today, just 14 percent of Americans currently are enrolled in some form of an accountable care organization.

Independent hospitals and large systems alike already are preparing for population health. In 2012, there were 109 mergers—many involving multiple facilities—compared with just 50 in 2009. One estimate is that 20 percent of the nation's 4,500 hospitals will seek out mergers—and thus greater scale—in the next five years. In just one recent example of this phenomenon, Catholic Health East and Trinity Health combined in early 2013 to form an 82-hospital system in California, Illinois, Massachusetts, New York and 17 other states.

Data Integration Will Be Essential to Success

A major impediment to scalable success is imperfect patient data systems. Healthcare data comes in two primary formats: 1) clinical data that are collected by providers and 2) claims data that typically are housed with payers. Combining the two data sets holds incredible promise in terms of comparing treatment models and quality and identifying new solutions that can be scaled across a large organization. Integrated data analysis promises to shed light on a system's heavy users and highlight cost-effective treatment solutions. Assuming partnerships can be formed to share data, sourcing a system, or a vendor, that can analyze and organize it holistically will be a major technological challenge. In addition to the two conventional types of data—clinical and claims—socioeconomic data will play an increasingly important role in analyzing large population groups. Many costly chronic diseases, including depression and diabetes, have strong correlations with socioeconomic status.

Some attendees argued that without industry-wide standardization, healthcare data will remain too siloed within different organizations to provide effective population health solutions. Yet even if there were a zero-cost data standardization solution available today, many suggested it would lead the industry into controversial areas. For example, how will providers manage the treatment of end-of-life care if data suggest late-stage care for a particular disease almost is never successful? A 2012 *Wall Street Journal* analysis of end-of-life care showed that while just 6.6 percent of Medicare patients who were hospitalized died, treating those patients accounted for 22.3 percent of total hospital expenditures.

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Many cautioned that while organizations must pursue data integration to enable innovation, those same organizations also must address these challenging issues around cost vs. results that are part of the equation.

The Cycle of Needs

Beyond data, one panelist offered a Cycle of Needs that would be necessary for developing scalable innovation (see figure below): Architecture of a Scalable Platform). The cycle includes:

Culture. An organization must be culturally aligned. A shared vision and mission will be necessary in order to effectively deliver high-quality and cost-efficient care.

Governance. Organizations need rules and procedures to thrive. This applies to physician groups, other provider organizations and provider-payer hybrids that may yet emerge.

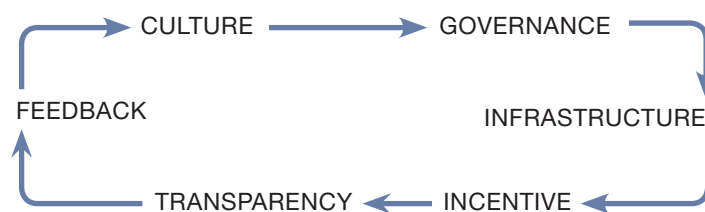
Infrastructure. Organizations looking to innovate on a large scale will need support with information technology (IT) infrastructure and sophisticated management teams and principles.

Incentive. Without proper incentive and scale, provider groups simply won't shift their model away from fee-for-service. Otherwise, physicians simply are being asked to do more for less on their own accord.

Transparency. This speaks to the data issue. Organizations will have to form alliances in order to have access to comprehensive data—claims, clinical and socioeconomic—to be successful.

Feedback. Physicians and other providers will need a mechanism to know how they are performing in order to make adjustments and improvements.

Architecture of a Scalable Platform



Strange Bedfellows in the Drive for Triple Aim

- James Buntrock, Vice Chair for Information Management and Analytics, Mayo Clinic
- Andy Slavitt, Group Executive Vice President, Optum

While much of the preceding discussion—Designing Healthcare Delivery Platforms for Scalable Innovation—focused on the complications of merging and analyzing clinical and claims data, a unique partnership between Mayo Clinic and Optum has been launched to do exactly that. While less than a year old, the program now is actively bringing in other partners from across the healthcare spectrum to collaborate on solutions that can address the triple aim of enhancing the individual patient experience, improving population health and reducing the per capita cost of healthcare.

Mayo Clinic is one of the most trusted names in the world when it comes to delivering high-quality patient-centered care. It also is one of the largest integrated not-for-profit medical group practices, employing more than 4,000 staff physicians and scientists plus another 50,000 administrative, support and allied health staff. Last year, Mayo cared for more than 1 million patients at its facilities in Minnesota, Arizona, Florida and other locations. Importantly, it is an organization that in its 124-year history never has shared patient data outside of its own ecosystem. Patient data are not only protected by federal healthcare privacy laws but are considered sacrosanct at Mayo Clinic.

Optum, a for-profit subsidiary of UnitedHealth Group, has 35,000 employees around the world and offers care solutions such as benefits and claims support, employer consulting services and collaborative care tools like electronic health records and patient portals, as well as financial solutions to the healthcare sector, including billing services and electronic payments. Optum's business makes it a huge repository of healthcare claims information, but, like Mayo, the company has aggressively guarded its data.

Getting these two organizations to mutually agree to make a substantial financial investment in stripping the data of any identifiable markers, securing the data, and then combining the data sets into a single database that can be accessed by authorized third parties was not a simple process. But the early success has highlighted how two seemingly different healthcare organizations can form an unlikely partnership to solve healthcare problems and attract other organizations that share these goals.

Bringing Clinical and Claims Records Together in an Open Environment

The Mayo-Optum collaboration will bring together more than 5 million blinded clinical records from Mayo Clinic and merge them with similarly blinded claims data from Optum that cover 100,000 patients reaching back 20 years. Further highlighting the drive to publish and share solutions, the new joint venture, Optum Labs, is located in Cambridge, Mass. That puts it more than 1,000 miles east of the Minnesota headquarters of both Mayo and Optum and adjacent to Massachusetts Institute of Technology and many of the region's leading bioscience firms.

Global Leadership

As the partnership was explored, Mayo Clinic went through an extensive internal review process with its stakeholders. Physician groups were asked to review the program and raise concerns, especially around safeguarding patient privacy and data. Legal experts were brought in, as were data security and privacy experts. Only when Mayo Clinic was convinced that sharing blinded patient data could lead to improved health outcomes across the country did it continue. The next phase included an intensive period with Mayo Clinic's IT department to organize, safeguard and strip any identifiable patient information from the data. Optum, for its part, went through its own equally intensive due diligence and data de-identification process.

When Optum Labs officially opened, it was guided by three core principles:

- Research is open for others to review and from which to benefit.
- Research must be collaborative with a goal of advancing medicine.
- Results are non-exclusive. Any organization can participate, including the government, health plans, private enterprises, consumer groups, academic medical centers and others.

Optum Labs: Core Principles

- 1. Research must be open to review.**
- 2. Research must be collaborative with the goal of advancing medicine.**
- 3. Results are non-exclusive. Any organization can participate and benefit from the results.**

The joining of the data will enable research projects that can identify optimal treatments and also will allow researchers to begin understanding variations in care across regions and facilities and zero in on the most effective, cost-efficient and replicable solutions. Researchers will be able to compare the cost and effectiveness of various medical devices. Initial projects, for example, may test treatments for chronic myelogenous leukemia and analyze how to improve the diagnosis of hepatitis C.

As promising as the joint venture is, some participants, particularly from the provider field, raised concerns. Highlighting how complicated this joining of data can be, several attendees expressed concern that blinded patient data inadvertently could be revealed as data points are added. Others asked how new partners and future projects would be selected. At the moment a scientific advisory panel reviews all proposals before they can be adopted.

The fundamental question about the collaboration, however, won't be answered until the early projects approach completion. Will this joint venture improve patient-centered medicine and will it help reduce costs? The early signs are extremely encouraging, and if the Optum Labs model is a success, it likely will spawn other data-sharing partnerships in the drive for triple aim.

High-Risk Populations and Healthcare Costs

- **Five percent of the population accounts for nearly 50 percent of costs (\$87,500 per person).**
- **One percent of the population accounts for 22 percent of healthcare costs (\$203,000 per person).**

Source: AHRQ

Employing the 95/5 Rule: Managing High-Risk/High-Cost Populations

- Georgia Maheras, Executive Director, Green Mountain Care Board, State of Vermont
- Charlotte Yeh, M.D., Chief Medical Officer, AARP Services
- Glenn Braunstein, M.D., Vice President of Clinical Innovation, Cedars-Sinai Health System

Despite the early difficulties with the Affordable Care Act's healthcare.gov site, there seems to be little doubt that eventually an additional 20 million to 30 million Americans will become enrolled in health insurance—many for the first time. Two enormous questions facing providers and payers in a population-health system are: How many of these newly insured people also will prove to be some of the most costly to treat? No longer able to preclude high-cost patients, how will health systems and other providers manage that high-cost population while still staying solvent?

The most recent data from the U.S. Agency for Healthcare Research and Quality (AHRQ) confirm that just 5 percent of the population accounts for nearly 50 percent of total national healthcare expenditures. Put another way, that means 16 million people, out of a population of 314 million, are responsible for \$1.4 trillion in annual healthcare costs—or approximately \$87,500 per person.

The further you venture down the patient-cost spectrum, the bleaker the outlook. The same AHRQ study found that just 1 percent of the population is responsible for almost 22 percent of total healthcare costs. That translates to an average cost of \$203,000 per person—for a population of 3.14 million people—and a total of \$638 billion in expenditures.

When coupled with Center for Disease Control and Prevention (CDC) research that suggests that 75 percent of all U.S. healthcare expenditures come from treating chronic diseases, a picture emerges of a very unhealthy subset of the population that is battling multiple chronic diseases. Many of these diseases have behavioral components that are highly intractable. Lung cancer is the leading cause of cancer death in the United States, and, despite years of cigarette taxes, advertising restrictions and other outreach programs, an estimated 20 percent of the country still smoke. Obesity is a major concern. The CDC estimates that one in three Americans is obese, and this leads to other serious chronic disease complications, including heart disease and diabetes.

Managing Costs and Health Populations at the State Level

On the state level, the cost of healthcare is putting many economies at risk. Earlier in this report, we discussed Arkansas and how its payment reform plan was spurred by a \$400 million shortfall on its Medicaid budget. In Vermont, as in other states, the situation is equally dire. If current spending trends continue unabated, healthcare costs will consume the entire Vermont state budget by 2050.

Working in its favor, Vermont has several unique characteristics compared with many other states. The state has only two major health insurance carriers, and 70 percent of its doctors are employed directly by hospitals. However, Vermont's 650,000 residents make up the second fastest aging population in the United States—a population that is spread widely across the state. Despite residents' relatively high age, Vermont has the healthiest population in the United States according to the United Health Foundation's America's Health Rankings.

To address its upwardly spiraling healthcare costs, Vermont's legislature created the Green Mountain Care Board in 2011 and chartered it to:

- Improve the health of Vermonters.
- Oversee a new health system designed to improve quality while reducing the rate of growth in costs.
- Regulate hospital budgets and major capital expenditures, as well as health insurance rates.
- Approve plans for health insurance benefits in Vermont's exchange program, as well as plan to recruit and retain health professionals.
- Build and maintain electronic health information systems.

The state Legislature's mandate means the board has oversight over everything from hospital budgets to health insurance rates, as well as capital investments in health professionals and healthcare technology. In most states, this authority typically is spread over different agencies. The care board currently is piloting tests across its payer spectrum. These include bundled payments to providers targeting specific medical conditions and capitated budgets to hospitals and their employed physicians. The care board also is testing global payments to fully integrated provider systems that supply a complete spectrum of care to their patient consumers.

In addition, Vermont is exploring grassroots options to improve health and reduce hospital visits. Citing research from Spain on the health benefits of simply playing games, Vermont is considering similar ideas. The research suggests that these games, which increase socialization and connect residents to the community, have led to improved psychological health and decreased number of hospital visits. This could be particularly helpful in Vermont, where extreme winter weather and long nights can keep people indoors for long stretches of time.

Containing Costs and Improving Care at a Large Nonprofit Medical Center

Cedars-Sinai is the largest nonprofit academic medical center in the western part of the United States. The facility has approximately 2,500 full-time, part-time and affiliated private-practice physicians on its staff, as well as another 10,000 employees, including 2,800 nurses. Cedars currently is running five programs targeted at reducing costs and improving the quality of care with an eye toward a future of bundled payments and population health.

- **Frailty Program.** Aging patients often are admitted at Cedars with one ailment, but, in reality, often are coping with multiple conditions. The frail patients particularly are susceptible to infection and other risks, and if these risks are left unaddressed, patients can be exposed to long and costly hospital stays. Cedars developed a program to identify these patients as frail within 24 hours of admission using an assessment tool that catalogs sleep disorders, incontinence, confusion, evidence of falls and skin breakdown. If a patient has two of these criteria, he or she is examined more closely for conditions that frequently trigger longer hospital days. These conditions include anemia, inappropriate or conflicting medications and hospitalization within the last 30 days.

At this point, a frailty team consisting of a geriatric registered nurse, a social worker, a pharmacist and a physician examine the patient. This group consults with the physician in charge and the patient and develops a set of recommendations for the patient's ongoing care.

The program has led to a:

- One-day decrease length of hospitalizations.
- Fifty percent decrease in intensive care transfers and related complications.
- Thirty-three percent decrease in discharges to hospice care.

- **Enhanced Care Program with Skilled Nursing Facilities.** An analysis revealed that 50 percent of Cedars-Sinai's discharges were to just seven skilled nursing facilities (SNFs) in the Los Angeles area. Cedars sent a nurse practitioner to work with the medical staff at these facilities to try and keep the patients at the SNF and out of the Cedars emergency department. Before this program was instituted, the baseline hospital readmission rate from SNF patients was 24 percent. After the program was implemented, that figure dropped to 16 percent.
- **Enhanced Home Care Program.** Similar to the SNF program, Cedars sends nurse practitioners to home care facilities (HCF) to improve patient care and reduce unnecessary hospital visits. The program led to an increase in patient interaction, including a pre-discharge visit to the HCF, and an additional home visit on the day of discharge, as well as a tuck-in call on Friday nights and weekend calls to ensure patients are following medical instructions and prescription routines. This program has led to a 38 percent decrease in hospital readmissions.

The challenge is that medical centers still are in a fee-for-service business paradigm while having to prepare for a future based on population health and capitated payments.

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- **Heart Failure Program.** At Cedars, an analysis of heart patients revealed that several findings predicted readmissions to the hospital within 30 days, including, but not limited to, whether a patient:

- Was able to detect worsening of symptoms.
- Had the confidence to manage one's condition.
- Suffered from generalized anxiety disorder.
- Adhered to a low-salt diet.
- Understood post-hospitalization instructions.
- Saw a physician within 10 days of discharge.

To address these areas, Cedars gave heart patients diet and nutrition counseling and medication counseling, home weight monitoring instructions, and a follow-up visit by a physician within 10 days of discharge.

Before the program was implemented, Cedars had a 24 percent one-month hospital readmission rate. Since the program's inception, those readmission rates have dropped by 15.4 percent.

- **Abdominal Pain and Addiction.** At Cedars, a population of patients was being seen in the emergency department with non-specific abdominal pain. CT scans and blood workups were ordered—typically with negative results. Nonetheless, narcotics often were administered to help these patients cope with the pain. After being released, many of them would return within weeks with the same condition. Despite continued negative test results, narcotic painkillers again would be administered.

Cedars built a multi-disciplinary team to examine past cases and study how to manage this population of patients in the future. The team, including pain and addiction specialists, began by reaching out to primary care physicians who, it turns out, also were prescribing narcotics to treat these patients. The team shared research that showed that patients become increasingly tolerant of high doses of narcotic medications. Team members cautioned physicians that they in theory, could be held legally liable for incidences such as overdoses.

The second part of the plan was to work directly with Cedars' emergency department to ensure that these patients would not receive large doses of intravenous narcotics. If patients returned within a specific time period with the same set of symptoms, they would not get an additional diagnostic workup and would not be admitted to the hospital without an additional complicating situation.

Only recently implemented, it's too early to glean specific results, but anecdotal information suggests the program has been effective in reducing hospital readmissions.

Even within a classic fee-for-service environment, there are actionable cost-saving solutions available.

AARP saw a 3:1 return on investment in its High Risk Case Management pilot program in year three.

The Consumer Approach to Improving Health Outcomes and Lowering Costs

The Medicare Supplement population in the United States includes 9.8 million people, or approximately 20 percent of all Medicare beneficiaries. This population also is highly susceptible to chronic diseases, with 25 percent of all Medicare patients reporting at least one chronic condition and many others coping with overlapping chronic conditions. Most of these consumers have extremely fragmented care, with multiple providers treating different conditions but with little to no coordination among providers. As a result, physicians frequently are treating patients without a complete picture of their care, incomplete knowledge of what medications they are on and lack of information on what other underlying conditions may exist.

To improve coordination among consumers of AARP's Medicare Supplement Plans and the doctors, caregivers and other providers, the consumer-membership organization launched a trial program called the High Risk Case Management pilot. Participants included policyholders in Cleveland, Los Angeles, New York City, central North Carolina, and Tampa with coronary artery disease, diabetes and/or congestive heart failure.

A dedicated nurse or case manager and an interdisciplinary team of social workers, behavioral health advocates and medical directors coordinate care among the patient, physicians and specialists and attempt to reduce redundant or avoidable costs. Now in its fifth year, the program provides members with:

- Home-based heart-monitoring devices so physicians and caregivers can monitor a member's health status.
- Health assessment tools to allow patients to better understand their conditions.
- Individualized care plans based on assessments.
- Depression screenings and drug compliance.
- Social services to help coordinate health assessments, meals, social activities within the community and transportation options.

The initial results have been promising. The average age range for participants in the High Risk Case Management program was 78 to 80—significantly higher than the Medicare eligibility age. Hospital readmission rates for those enrolled in the program decreased by 25 percent. Of the participants who were screened for falling, 75 percent never fell again during the two-year study period. Eighty percent of participants said the program improved their health.

AARP estimates the program saved \$8.3 million during the first two years and led to a return on investment (ROI) rate of almost 2 to 1, and in year three, the ROI increased to 3 to 1. Importantly, the financial benefits weren't accrued until after 10 months as consumers became thoroughly familiar with all aspects of the plan and its benefits.

The results suggest that even within a classic fee-for-service environment, there are actionable cost-saving solutions available. For its part, AARP is looking into scaling the program across the entirety of two states.

The Willie Sutton Law: Investment Opportunities/Diverse Partners

- Chris McFadden, Senior Advisor, Health Evolution Partners
- Ian Sacks, Managing Director, TowerBrook
- Matt Hermann, Senior Managing Director, Ascension Ventures
- Paul Kusserow, former Senior Vice President and Chief Strategy, Innovation and Corporate Development Officer, Humana
- Daniel Cain, Co-founder, Cain Brothers
- Emad Rizk, M.D., President, McKesson Health Solutions
- Nina Nashif, Founder and Chief Executive Officer, Healthbox

The disruption taking place in healthcare that is spurring new and sometimes unconventional partnerships is fundamentally being driven by an overwhelming need to cut costs and improve care. It's these same drivers that also are spurring a wave of seed-stage venture capital, private equity investments, and strategic mergers and acquisitions.

2013 was an active year. There were approximately \$13.9 billion in healthcare-related venture capital investments made during the first six months. According to research by the Mercom Capital Group, the healthcare IT sector alone reported 353 investment deals worth \$1.85 billion during the first nine months of the year. Private equity investments through the third quarter of 2013 hit just \$5 billion, but another \$119 billion was spent on mergers and acquisitions in the same time period.

New healthcare accelerators are helping early-stage start-ups enter the marketplace. The accelerator Healthbox, for example, recently raised \$10 million and is focusing on an increasingly engaged consumer as a strategic investment driver. This includes tech-enabled solutions for consumers that will avoid the long U.S. Food and Drug Administration approval process for medical devices and pharmaceutical solutions.

The sheer size of the healthcare market is attracting the interest of organizations outside the industry, including retail and consumer technology businesses. The view of many on our panel was that while there are tremendous investment opportunities, the inability to foresee what the healthcare industry will look like three to five years in the future suggests there will be as many losers in the market as winners.

2013 Healthcare Investment at a Glance

- **Venture capital:**
\$13.9 billion (Q1/Q2)
- **Healthcare IT venture capital:**
\$1.85 billion (Q1-3)
- **Private equity:**
\$5 billion (Q1-3)
- **Mergers and acquisitions:**
\$119 billion (Q1-3)

Participants and panelists highlighted several areas of strong interest and investment opportunities, including:

- **Physicians and physician groups.** Hospitals, payers and large multi-specialty groups are acquiring physicians to achieve a sustainable scale. Today, approximately 55 percent of physicians are employed by one of these groups, but that figure is expected to increase to 70 percent within three years.
- **Alternative site care.** In an effort to take costs out of the hospital environment, investors continue to identify and invest in lower cost alternatives.
- **Home care and aging in place.** This is another tool to keep chronic-disease and aging patients out of the hospital and cared for at home—or in lower cost facilities.
- **Wellness.** Investors are betting that everything from consumer-focused health games to weight-loss clinics can help drive overall costs down.
- **Data analytics.** The ability to analyze individual and population health data on a large scale could lead to enormous care efficiencies and also identify the most at-risk and costly patients for intervention.
- **Atypical care facilities.** Organizations that provide non-clinical care utilizing providers such as nurses, physician assistants and nurse practitioners are drawing the attention of investors. These can include pharmacies, consumer retail outlets and workplaces that typically don't have a strong healthcare presence.
- **Mobile health and telemedicine.** Healthcare is one of the few fields where the relationship between traditional providers and consumers has not been disintermediated by web-based technology. Many believe this disintermediation is inevitable, and it eventually could revolutionize how consumers—especially the millennial population—receive care.

While investment is essential to innovation, and to the delivery of solutions to an industry in transition, others pointed out that just the act of adopting new technologies would add costs to an overburdened system. This period of transformation in the healthcare field will require leadership that is capable of building novel partnerships, is skilled in implementing change management, and is comfortable with adopting advanced technologies and solutions that could revolutionize an industry.

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