Setting the Stage for the ACO Strategy

We may have problems in our healthcare system, but we do have the best healthcare system in the world by far.

-Representative John Boehner (R-OH)

The Longest Day Ever

At 11:05 a.m., the emergency department (ED) at a Massachusetts hospital is starting to heat up. Only 13 of the department's 23 beds are occupied, but many of the patients are especially demanding.

"It's a very, very busy day," says the chief of emergency medicine (CEM). "We have many high-acuity psychiatric patients. The number of actual patients is quite deceptive." Since 7 a.m., the CEM has been the only physician in the unit. He is joined by two physician's assistants (PAs) and six nurses. Another physician won't arrive until after noon.

The ED feels cramped. The ceilings are low. The beds are arranged along two walls, and there isn't a good flow to the department. The CEM

and his PAs are stuck in a small alcove that is barely 10 feet across. A sign on the wall says "The Batcave." Even with 10 empty beds, the ED feels crowded, in part because each of the psychiatric patients is overseen by a hospital public safety officer in a blue uniform.

Fifteen minutes later, shouts break out. A man brought in that morning for psychiatric evaluation decides he's ready to go. In his hospital gown, he dashes out of his exam room, grabs a handful of medication off a nearby cart, and sprints for one of the exits. Safety officers give chase. Making a turn for the exit, the patient grabs a wheelchair and flings it to the nearest officer. The chair smashes the officer's left hand, but she tackles the patient and sits on top of him until other officers arrive.

An hour later, she reflects on the experience: "I've been bit, kicked, punched, spit on, and scratched—and that's on a good day. But I've never had a wheelchair thrown at me before."

The incident gives the CEM a new patient to care for. He x-rays the officer's left hand and scans the images.

"I don't want to miss any work," the officer tells him. "I like my job."

But the CEM spots a tight break in the proximal phalanx of her pinky. "It's fractured," he says.

"Oh, no." The officer is upset, knowing that this injury will mean mandatory time off, even if she's only wearing a finger splint.

From the standpoint of the hospital and its parent system, the real drama is taking place down the hall in exam room 18. There, a 29-year-old Brazilian immigrant is in the middle of his second visit to the ED in four days.

The previous Friday, the man came in with an eye infection. It turned out to be mild conjunctivitis, a common childhood affliction. He was sent home with a topical antibiotic. But over the weekend, he was cleaning the eye directly with his bare fingers, inadvertently making the irritation worse. So he's wearing wraparound shades in the exam room because he is embarrassed about how his left eye looks.

This morning, the man, who works for a company that delivers home appliances, woke up with abdominal pain. He endures palpations and throat swabs as the CEM tries to determine if he has a strep infection or appendicitis.

The problem isn't the man's symptoms, which are less complex than many they see. It's that he's going to the ED for episodes that should be treated in a primary care physician's (PCP's) office. The patient says he has a PCP, but he's forgotten her name. "I don't like doctors," he says. He says he doesn't have health insurance, but that's not really the case: His chart says he's covered by the Massachusetts Health Safety Net, a mechanism put into place by the state's landmark healthcare reform law of 2006. This law has extended coverage to about 97 percent of the state's residents.

Patients who show up in the ED when they don't belong there cost the hospital money. Had the man gone to a PCP or one of the hospital's numerous clinics, his conjunctivitis could have been treated at minimal cost. The Health Safety Net reimburses the same as MassHealth, the state Medicaid program. That means the hospital is getting about 70 cents on the dollar for treating this patient.

As it turns out, the patient did the right thing this morning. A computed tomography (CT) scan shows acute appendicitis, and he is admitted for emergency surgery. But still, the hospital suffers financially: For this entire \$4,700 episode, the hospital will be reimbursed only about \$3,300. Other reimbursement rules also hurt the hospital.

"From the moment the patient comes into the ED to the moment he is discharged from the inpatient hospital, that is considered a single episode," explains the hospital's chief financial officer. "Whatever care he gets in the ED doesn't generate any incremental revenues for the hospital. It gets bundled into one inpatient episode of care." The hospital's parent system lost nearly \$12 million in fiscal 2009 because of underpayment, as compared to costs, by the state's Health Safety Fund.

Another hour goes by in the ED. A 37-year-old man who works at the nearby college comes in with severe abdominal pain. The pain is so intense that he retches into a plastic container as he is wheeled into an examination room. A kidney stone is initially suspected. On the bed, he curls into a fetal position, writhing in pain. A CT scan shows an obstruction of the small bowel. The man is admitted for surgery.

In an adjacent bed, a 49-year-old man is waiting to be seen. He awoke the previous night with shortness of breath and pain radiating down his left arm. Because of his history of heart disease, he thinks he might be suffering another heart attack. His medical background is extraordinarily complex: cardiac disease, bouts of non-Hodgkin's lymphoma, and he is missing all his teeth due to complications from cancer treatments. The man, who previously worked at a dry cleaning shop, now lives on disability payments and was recently kicked out of his apartment.

Still, his mood is upbeat. "I have perfect blood pressure," he says. "The rest of me is falling apart, but my blood pressure is perfect." He came to the ED, which is close to his temporary home, because his primary care physician left Massachusetts two years ago, and he hasn't been able to get a new one. He's on a waiting list. "I came here because it's so close by," he says.

At 2 p.m., the CEM's physician's assistant, who has worked in the hospital ED for six years, announces to no one in particular: "This is the longest day ever. We got in here a long, long time ago."

Healthcare in America Is Not a System-It's an Ecosystem

In 2009, the battle over healthcare reform generated a seemingly endless debate on the US healthcare system. But does such a *system* even exist?

Consider, for example, a major city's municipal water system. On the supply side, the system typically consists of the following:

- a reservoir:
- a treatment plant to ensure that the supply is clean, free of contaminants, and treated with fluoride and other chemicals; and
- a network of mains, pipes, and pump stations to deliver the water under pressure into every house, business, and facility within the city.

On the waste side, there is a network of pipes and sewers to carry waste water away from millions of users; a treatment plant to eliminate or mitigate harmful and noxious elements of human waste; and a dispersal system to return treated water to the environment.

Every element in the water system is planned by the government, designed by engineers, and built to exacting standards. The average house has hundreds of connections between pipe sections that carry water under pressure. How often does one of them fail? Rarely, although the emergency call to the plumber always seems to happen frequently. Older houses often have original brass plumbing that is more than 100 years old but is still functioning.

No such system exists in US healthcare. If anything, our healthcare resembles an *ecosystem*—a defined community of living and nonliving things that work together to sustain themselves. Most natural ecosystems contain entities that play unique roles: producers, or plants, create energy from sunlight. Consumers, most of them animals, make use of that energy. And decomposers break down dead plants and animals into materials that can be reused.

Each player in the ecosystem is only concerned about its own survival. It responds to environmental changes to gain advantage for itself. In the Darwinian world of the ecosystem, each player competes with the others, seeking to expand its niche.

The US healthcare system is just such an ecosystem. Individual providers and payers all operate independently, looking out for their own success. The environment is crowded: There are many players trying to survive, and new ones constantly enter. It is also marked by scarcity: There aren't enough dollars for each player to thrive.

Consumers are another class of player in the healthcare ecosystem. For them, survival means obtaining adequate, high-quality healthcare services at a reasonable cost. They are faced with multiple, confusing choices. And the environment is also marked by scarcity: The demand for healthcare services almost always exceeds supply.

Finally, there is the government, which can effect sweeping changes in the overall environment and upset the balance between the many players.

In this ecosystem, the constant struggle for dominance and survival often perverts the real purpose for which healthcare exists. Incentives get twisted, and unintended consequences abound.

Atul Gawande (2009), a surgeon at Boston's Brigham and Women's Hospital and a staff writer for *The New Yorker*, illustrated the unintended consequences of the healthcare ecosystem in a widely discussed article published in June 2009. He looked at McAllen, Texas, a low-income community that has among the highest healthcare costs in the country. In McAllen, Medicare spending in 2006 was around \$15,000 per enrollee, or around twice the national average.

After speaking with doctors, hospital executives, local businessmen, and academics, Gawande arrived at a shockingly simple conclusion: Too many doctors in McAllen had become entrepreneurs with financial stakes in how they practiced medicine. These doctors purchased diagnostic equipment so that they could profit from high reimbursements, or they became partners in forprofit institutions. Some doctors outright asked for kickbacks in exchange for referrals. As a result, patients in McAllen were getting too much medicine—too many tests, too many operations, too many days in the hospital—that showed little or no beneficial impact on health outcomes.

In one of the article's devastating quotes, a surgeon told Gawande: "There is overutilization here, pure and simple. [In the past 15 years] the way to practice medicine has changed completely. Before it was about how to do a good job. Now it is about 'How much will you benefit?""

Is this bad behavior? Not for an ecosystem; each player in the ecosystem looks to exploit opportunities to grow and thrive at the expense of the others. But it's definitely bad medicine.

Gawande concludes, "The lesson of the high-quality, low-cost communities is that someone has to be accountable for the totality of care. Otherwise, you get a system that has no brakes. You get McAllen."

Birth of the US Healthcare System

Schoolboys were once taught that baseball, the national pastime, was invented by Abner Doubleday in 1839 in Cooperstown, New York. That tale has since been dismissed as myth; Doubleday may never have set foot in Cooperstown. The actual origins of the game are

much more complex and less romantic. One unattractive fact is that baseball probably descended from popular British folk games such as stool ball, cricket, and rounders.

The origins of the US healthcare system are similarly shrouded in myth, with the actual truth being a little less appealing. On its website, Blue Cross Blue Shield of Massachusetts (2010) says it was originally created in 1937 "by a group of community-minded business leaders" to "spread the cost of hospital treatment among a large group of employed persons." The actual origins of group health insurance in the United States are a little less quaint.

In the nineteenth century, many hospitals were essentially shelters where the sick or dying poor were cared for; these shelters were often supported by churches or other religious organizations. In the early twentieth century, medical science advanced, and hospital care became more expensive. In what has become a common refrain 100 years later, hospital administrators searched for ways to pay for the resource-intensive innovations that were revolutionizing care.

Baylor University Hospital in Dallas, Texas, was one of those institutions struggling to pay for care. A university official—Justin Ford Kimball—devised a scheme in which a group could make affordable monthly payments (50 cents to start with) in exchange for 21 days of free care at the hospital. The plan was marketed to teachers, and they signed up in droves.

The American Hospital Association (AHA) popularized the idea in other parts of the country. By 1935, there were 15 similar hospital insurance plans. The AHA created the Hospital Service Association, which became a trade group for the nascent health insurance industry, codifying rules, setting standards, and lobbying state and federal regulators.

But where did the Blue Cross come from? An official at an early insurance plan in St. Paul, Minnesota, put a blue cross on his stationery and later used it on a poster. The symbol was powerful, and the name caught on. In 1939, the Hospital Service Association officially adopted the Blue Cross name for its plans.

However, the most important events that shaped the development of the United States's unique system of employer-based healthcare were the result of a series of historical accidents, rather than any government or industry plan.

In the middle of World War II, much of the US labor force had joined the military. That left private companies scrambling for fewer job applicants. Left unchecked, supply and demand would ensure that salaries rose, as those companies competed for scarce labor. Rather than risk unchecked inflation, the Roosevelt administration put national wage controls in place.

But there was a loophole. Fringe benefits, such as healthcare coverage, were exempt from the wage controls. So companies began offering health plans as a way of enticing workers. In 1943, the Internal Revenue Service ruled that healthcare benefits should be exempt from income taxes. A later ruling strengthened the tax advantages. Ever since, the US healthcare system has tied healthcare coverage for those of working age to one's job. South Africa was one of the few other countries that adopted a similar system. Among industrialized nations, the United States became an outlier in this regard.

The history of the US healthcare system was a source of significant irony in the national debate on healthcare reform in 2009 and 2010. Opponents of reform frequently declared that the United States has the best healthcare system in the world, and any effort to change it would be tantamount to socializing medicine and would lead to a government takeover. Those positions ignored the fact that it was a socially minded president—Franklin D. Roosevelt—and a series of socially focused rulings during World War II that created the current system that is deemed to be "the best." Few politicians who espoused the superiority of the US system would support the wage controls that led to that system.

The Long, Slow Rise and Rapid Decline of Managed Care Plans

Blue Cross plans became a sort of gold standard for healthcare coverage. As traditional insurance indemnity plans, they paid for everything; there were few exclusions. If you had Blue Cross or another managed care plan, your healthcare costs were fixed. You just had to pay the premiums or premium contributions that were not covered by your employer.

Little surprise, then, that healthcare turned out to be expensive. A major response to the rising costs in the 1980s and 1990s was the growth of managed care plans. Payers found that shortening hospital stays, moving patients from hospitals to ambulatory settings, and limiting access to specialists saved money.

Employers, eager to control rising health insurance expenses for workers, embraced the new approach. Between 1984 and 1993, the percentage of employees in large firms enrolled in managed care plans increased from 5 percent to 50 percent (Lagoe, Aspling, and Westert 2005). State and local governments also jumped on the bandwagon.

The intention of managed care plans was to control costs by managing utilization, the mix of services provided, and unit reimbursement. In retrospect, it more-or-less worked, at least for a time. The annual increase in per capita healthcare spending in the United States fell to about 2 percent from 1994 to 1996, which was less than the rate of inflation. Growth in healthcare premiums also slowed, but at the cost of increasing tension, divisiveness, and dispirit among providers at every level of healthcare delivery.

But managed care plans were perhaps too successful for their own good. It turns out that healthcare consumers didn't like being told where they could and could not go and what procedures would and would not be covered. Horror stories arose of patients dying because specialized care was denied by pencil-pushing insurers. There were also tales of insurance companies using red tape and delay tactics to avoid paying patient claims. Lawsuits proliferated, many of which attained class-action status that represented thousands of plaintiffs. "Managed care" became a dirty word among consumers. Doctors also rebelled, angered because they believed accountants and actuaries were telling them how to practice medicine. In fact, there would have been a great deal that each party could have learned from the other if the system had been managed differently. But, unfortunately, there was no system to manage.

The inevitable backlash came in the late 1990s. Health plans loosened their grip on utilization, and patients used more healthcare services. In an ironic throwback to the 1940s, companies offered richer

benefit plans to attract employees. The economy was in the midst of the longest post-war expansion ever, and firms could afford to spend more on healthcare. Consumers also enjoyed a period of prosperity, with a steady increase in income for middle-class families. They could handle premiums that began to rise more each year.

By the early 2000s, medical inflation had rebounded, and the media reported each year on double-digit premium increases for consumers. Soon, politicians and policymakers started calling the annual increases "unsustainable." (The claim was somewhat weakened by the fact that the same script replayed each summer, as health plans set their premiums for upcoming open-enrollment periods.)

There were renewed efforts to control costs. "Consumer-driven healthcare" was an Orwellian euphemism for shifting costs to patients through increased out-of-pocket costs such as co-pays and deductibles. The basic thought behind the movement was that patients consumed too much healthcare because insurance shielded them from the true costs of their healthcare purchases. With more "skin in the game," the thinking went, patients would make more careful decisions. In essence, they would begin to behave more like shoppers in a clothing store, buying lots of high-value items and carefully evaluating special or designer purchases.

The Bush administration promoted the consumer-driven approach with proposals for health savings accounts and other mechanisms for patients to accumulate money to pay for out-of-pocket healthcare expenses. They never really caught on. In retrospect, it seems unreasonable to assume that Americans, who have nearly the lowest savings rate among citizens of industrialized nations, would suddenly start putting money away for unexpected medical expenses. Moreover, the Bush economic recovery wasn't long or sustained, and the income gap between the upper class and the middle and lower classes expanded to record levels. Middle-class families never achieved a feeling of prosperity that might have promoted greater savings. Many people binged on credit and depended on the real-estate bubble to support spending beyond their means.

The lack of a unified approach, let alone a successful technique for controlling healthcare costs in the first decade of the 2000s, set the

stage for a new idea that might achieve the seemingly contradictory goals of controlling costs while improving patient outcomes.

That idea seems to be accountable care organizations. This idea is discussed fully in the chapters that follow.

Inconvenient Truths

All hospitals are unique. Each provides a different mix of clinical care, teaching, and research. Each has a different relationship with doctors and other caregivers. Cambridge Health Alliance (CHA) is unique among hospital systems in Massachusetts. It is nominally an instrument of the Cambridge Public Health Commission, making it the only public acute care health system in the state. At the same time, CHA's hospitals are a few of a handful of true "safety net" hospitals in the state. Safety net hospitals serve concentrations of urban poor who have nowhere else to go for care. These patient populations lead to poor payer mixes, with a predominance of Medicare, Medicaid, and state-subsidized care; relatively few of these patients have private insurance. Thirty percent of the people in CHA's primary service areas have incomes of less than 200 percent of the federal poverty level (about \$20,000 a year) and are not native English speakers. The system spends \$6 million a year just on interpreters, with Portuguese, Spanish, and Haitian Creole being the predominant foreign languages.

Several circumstances make CHA's difficult mission tougher than that of other safety net providers in Massachusetts. After being formed in 1996, CHA was asked by the state to take over two troubled safety net hospitals. The system took over Somerville Hospital, located in a densely populated, relatively poor city that neighbors Cambridge, in 1996 and took over Whidden Memorial Hospital in blue-collar Everett in 2001. The takeovers saved the two institutions from being closed. CHA also acquired numerous neighborhood health clinics and school-based health centers as well as four facilities with a significant number of psychiatric beds.

But now the system contains three safety net hospitals, each an underperformer in terms of reimbursement. The uninsured made up 23 percent of the system's patients in 2006, prior to the state's health

reform law. Medicaid accounted for another 25 percent. Both percentages were the highest among the state's community hospitals.

In addition, CHA contains the state's top two acute care providers of psychiatric care, which devote nearly 200 beds to behavioral health. Psychiatric care is among the worst paying specialties in the United States. So CHA is saddled with additional revenue shortfalls, even as it is tasked with providing almost the entire psychiatric safety net for metropolitan Boston. Before the Massachusetts healthcare reform, CHA provided one-third of the mental health inpatient care for the uninsured in the state.

The Perfect Storm

All that was before the financial storm hit. When Dennis Keefe, the chief executive officer of CHA, looks back over the past three years, his naturally serious demeanor softens somewhat and a look of resignation comes over his face.

"It was the perfect storm," he says of the forces that converged and pushed his hospital system from a nearly \$14 million surplus in fiscal 2006 to a \$25 million loss in fiscal 2009. "The perfect storm" is an overused expression, but it isn't mere hyperbole in this case. A set of unexpected forces came together in a way that no one could have foreseen, creating a fiscal maelstrom that came close to capsizing CHA.

In 2006, it looked as if CHA was about to turn the corner financially and enter an unusually prosperous period. In April of that year, then-Governor Mitt Romney signed the Massachusetts healthcare reform bill into law. Despite his efforts later as a presidential candidate to distance himself from the law, Romney played a lead role in crafting what was a progressive and ultimately successful effort to extend health coverage to nearly all Massachusetts residents.

"We actually felt we had things under control and headed in the right direction," recalls Keefe. "We were optimistic that the new administration of Governor Deval Patrick was coming in."

Before the reform effort, hospitals treated patients who walked in their doors regardless of whether they had insurance. Hospitals that incurred unpaid medical debt were reimbursed from the Uncompensated Care Pool, essentially a fund created by the state in 1985 to ensure that all residents received care regardless of their ability to pay. It is funded by insurers, who contribute to the pool each year. (And how did the insurers meet this obligation? Essentially by raising rates on those who purchased insurance, creating another cross-subsidization within the ecosystem.)

Under the health reform law, previously uninsured Massachusetts residents were expected to buy low-cost commercial insurance or subsidized government-insurance plans. Hospitals and health systems, like CHA, would no longer be burdened by a huge number of uninsured patients. Moreover, as residents became covered, they might move to other caregivers, secure in the knowledge that they would be treated. Fewer patients would show up in the emergency department seeking routine treatment. That could ultimately give CHA, which relied on government payment for 73 percent of its revenues, a better payer mix.

It didn't work out that way. The world credit markets froze in the fall of 2007. Some of Wall Street's largest financial institutions failed. The stock market plunged, and home prices began their inevitable fall back to Earth. The Massachusetts economy was in crisis. A year later, with tax revenues falling and deficits looming, Governor Deval Patrick did the only thing he could: He imposed Draconian cuts.

Under state rules, the governor is allowed to make discretionary cuts in the state budget that has already been implemented. CHA was allotted \$94 million for fiscal year 2008, which began on July 1. But in October of that year, under Governor Patrick's prerogative to impose the so-called 9C cuts, he cut \$40 million of the allotment. CHA struggled to cope with the loss of nearly 10 percent of its annual operating budget of \$450 million.

Keefe recalls that the bad news was delivered in a phone call from Dr. Judy Ann Bigby, the secretary of Massachusetts Executive Office of Health and Human Services. Forty million of the more than \$90 million promised by the state, she told Keefe, "would not be forthcoming." Keefe recalls, "I told everyone at the time, 'We're four months into our fiscal year. There's no way we can deal with this!"

It got worse. Under the new Health Safety Net payment system, Medicare outpatient rates for the system dropped precipitously, from \$376.73 per visit in fiscal year 2008 to \$311.31 per visit in fiscal 2010. CHA, with 300 beds, has about 17,000 annual discharges. But between its ambulatory care, primary care, and neighborhood health clinics, CHA sees about 660,000 ambulatory visits a year. So the Medicare cuts were especially hurtful to the system.

"A significant portion of the free care we give is through our neighborhood clinics," says Gordon Boudrow, CHA's chief financial officer. "Medicare pays poorly, and 70 percent of our uncompensated care is through the ambulatory setting. It reduces our aggregate rate." The total hit was about \$12 million a year in unreimbursed costs because of the rate cuts. It didn't stop there. Medicaid inpatient reimbursement per case also dropped dramatically, from \$5,541.53 in fiscal 2008 to \$4,726.92 in fiscal 2010, which are lower than the rates from 10 years earlier, in fiscal 1998, before any adjustment for inflation.

Finally, none of the anticipated benefits from Massachusetts's healthcare reform materialized. Even when they had insurance and the ability to choose any provider, CHA patients proved remarkably loyal to the system. Between the implementation of the healthcare reform law in 2006 and June 2009, the proportion of the system's low-income patients and government-paid payer mix actually increased, which was the opposite of what was expected.

Allison Bayer, the system's chief operating officer, sums up what happened this way: "Under health reform, the state made a commitment to improve access and cover as many people as possible. Dollars that used to be allocated to the Uncompensated Care Pool (now known as the Health Safety Net Trust Fund) were redistributed; many of those dollars now go towards premium payments to enable more residents to have coverage. The underlying assumption around healthcare reform was that if you provide access and coverage for many more people, then there's no more need for safety net institutions like ours."

As for the newly insured patients who could now go anywhere they wanted? "In the past, they didn't have much choice," says Bayer. "Now, they could go anywhere. But that didn't happen. People stayed with us.

It's great for continuity of care. But those patients didn't disappear, so we continue to have a large proportion of care that reimburses below cost." The loyalty of patients was a great endorsement of the quality of care CHA delivered. But it also devastated the system's bottom line.

The final part of the financial storm was the recession itself. Like many hospital systems, CHA saw a drop in volume. Was it because of the patients who had lost jobs and could no longer afford co-pays and deductibles? Or was it because of the patients who were afraid of losing their jobs so they put off elective procedures in order to not lose time from work? For whatever reason, Cambridge Health Alliance hospitals had more empty beds. The choices were grim.

The Healthcare Ecosystem Weakens

Despite double-digit premium increases, millions of uninsured, and endless complaints from businesses that couldn't compete globally because of high healthcare costs, the healthcare ecosystem managed to muddle through. But there were increasing warning signs that the healthcare system was changing for the worse. Some called the situation a death spiral.

Decrease in Employer-Based Insurance Coverage

The most notable sign was the breakdown of the employer-based system. Companies increasingly found ways to avoid the costs of providing healthcare for their employees. Some shifted costs to employees, who had to pick up ever larger portions of premiums. Others found ways to categorize more workers as independent contractors, who weren't entitled to health coverage and other benefits. Finally, an increasing number just got out of the healthcare-providing business altogether, leaving employees to find coverage elsewhere.

The percentage of workers under age 65 (when citizens become eligible for Medicare coverage) has declined steadily for years. Among younger workers, the percentage has dropped even more quickly: In 2000, 67.7 percent of nonelderly Americans had employment-based health insurance. By 2009, the percentage had dropped to 55.8 percent, according to the US Census Bureau (2010).

This decline has been exacerbated by the process of adverse selection. All things being equal, older or sicker workers are more likely to purchase health insurance because they know they need it. Younger or healthier workers, on the other hand, are more likely to put off the expense because they think they don't need it. So insurance companies typically get a self-selecting group of ratepayers who are sicker than the overall population. That means healthcare costs cannot be spread across a healthier group, and premiums must rise to provide the extra care for the sicker population, which in turn drives more healthy people away.

Paul Krugman and Robin Wells (2006) reported that a form of adverse selection was under way in the workplace. Workers with health problems specifically sought jobs that provided generous health benefits. In the process, they made it more expensive for those firms to continue to provide health coverage.

The Medicare Part D Doughnut Hole

At the same time, the federal government passed the Medicare Prescription Drug Improvement and Modernization Act of 2003 (called Medicare Part D). This act highlighted the growing disarray within the ecosystem. Most everyone agreed that providing coverage for drugs for seniors was a huge step forward and would prevent the tragic situations where the poor elderly had to choose between buying food and buying medication. But as designed, Medicare Part D turned into a wasteful, complex mess.

The actual drug coverage was provided by insurance companies and not by the government, which added to administrative costs. The act specifically prohibited the government from negotiating drug prices with the pharmaceutical companies. So the potential savings of buying in bulk for millions was eliminated. And seniors were faced with literally dozens of plans to compare, an onerous task even for younger, computer-savvy caregivers. The federal government touted this plethora of choices as a benefit. But as economists have noted, consumers faced with too many choices often find themselves unable to make a decision.

Meantime, the benefit itself was flawed because of the infamous "doughnut hole." After paying a \$310 deductible, seniors were given 75 percent coverage of all their prescription drug costs until they had reached \$2,830 in costs. Then, after the \$2,830 limit, they had to pay all costs out of their own pocket until costs reached \$6,440. At that point, "catastrophic coverage" from the government kicked in, paying 95 percent of drug costs.

The system was and still is confusing, and it has angered many seniors who rightly thought that "prescription drug coverage" meant prescription drug coverage, yet found themselves paying full cost for their drugs when they fell into the payment gap.

It became harder and harder for the government, insurance company executives, or providers to pretend that the ecosystem was providing healthcare efficiently or yielding optimal medical outcomes. The destructive forces within the ecosystem were becoming clear to everyone.

The Long and Winding Road to Healthcare Reform

The fight for universal coverage and healthcare market reform didn't begin in 1994, when Bill and Hillary Clinton launched an effort to pass the Health Security Act. The plan ultimately failed because of its own shortcomings and political miscalculations on the part of the White House. The drama of that vicious battle weakened the Clinton administration for years.

Today's health reform is largely a case of déjà vu all over again, so to speak.

An early effort in the 1920s failed. In 1945, shortly after Harry Truman became president, he sought to pass a universal health plan "to assure the right to adequate medical care and protection from the economic fears of sickness" (Harry S. Truman Presidential Library n.d.). It was opposed by the American Medical Association and the drug industry. Inevitably, it was labeled "socialistic." Truman tried again after his reelection in 1948 but was again blocked by Congress.

In 1965, Lyndon Johnson passed Medicare and Medicaid as part of his Great Society program. But medical coverage for the elderly and indigent still left millions of Americans without insurance.

The next attempt was an effort of two Republican presidents: Richard Nixon and Gerald Ford. Nixon announced a plan for universal coverage in his 1974 State of the Union address. It was quickly forgotten when the Watergate scandal enveloped the administration. Gerald Ford, upon succeeding Nixon, championed national health insurance. It was blocked by insurance lobbyists and by labor leaders. (The unions were miffed by Senator Ted Kennedy [D-MA] because Kennedy introduced his own universal coverage plan in 1974 but didn't consult with organized labor.)

President Obama's Attempts at Reform

The debate over comprehensive healthcare reform in the United States gave politicians and pundits of all stripes an opportunity to promote all sorts of half-truths and mischaracterizations about American healthcare and the government's efforts. Perhaps the most ludicrous example of how this dialogue was hijacked was the pernicious misrepresentation that President Obama's healthcare plan would create "death panels" who would meet and vote on whom should be given or denied care. This story was started by Obama's opponents and repeated endlessly by the right-wing media establishment, giving it the semblance of reality. The mainstream media perpetuated this misrepresentation by including references in their reports about these alleged death panels, sowing fear among the public that healthcare reform would reduce access to care.

The incident illustrates the difficulty of having an informed discussion about such a fraught policy area. It completely eliminated the possibility of a meaningful discussion about current, let alone future, healthcare rationing in America. Members of both political parties were unwilling to talk about the reality of rationing out of fear that doing so might be misconstrued as support for rationing. But any physician or hospital official could easily describe how healthcare is already rationed because it is unattainable for many without government-sponsored or employer-based insurance.

From June 2009 through March 2010, as the White House and then the Democrats lost control of the healthcare debates, reform

opponents clung to perhaps the most insidious falsehood about the US healthcare system: that it is the best in the world.

The Quality of US Healthcare

By any rational measure, US healthcare isn't the best in the world. It often ranks as the worst system of any major industrial nation. The Commonwealth Fund, the New York–based nonpartisan foundation that promotes better healthcare in the United States, issues an annual survey that compares the US healthcare system with those of other developed nations. The results are predictably miserable.

In its latest report, The Commonwealth Fund (2010a) states that despite spending the most per capita on healthcare—\$7,290 in 2007, or 16 percent of the country's gross domestic product—the nation lagged behind Germany, Canada, the Netherlands, New Zealand, Australia, and the United Kingdom in almost all measures of medical outcome: "The US is last on dimensions of access, patient safety, coordination, efficiency and equity." It is apparent that the United States is slow in adopting national policies that promote primary care, quality improvement, and information technology.

These results, which show up in a slew of studies, should be familiar to all healthcare executives. Among 30 countries that belong to the Organisation for Economic Co-operation and Development (OECD) (2010), the United States was second worst in premature female mortality (with Hungary being first) and was fourth worst in measures of premature male mortality. Life expectancy rates were lower in the United States than in most industrialized nations, and the country also lags in measures of infant mortality (Commonwealth Fund 2010b).

Moreover, US patients experienced more safety problems than patients in other OECD countries. The United States came in last in a study of chronically or intensively ill patients in eight countries, with more than one in three American patients reporting errors in drug choice or dosage, medical errors, or delays in getting abnormal test results (OECD 2010).

Finally, 46 million American residents, or 16 percent of the population, are uninsured, making the United States one of only three

OECD countries (along with Mexico and Turkey) that have a large proportion of their population with no medical coverage. That will change under the Patient Protection and Affordable Care Act of 2010 (PPACA), but it will take years to reach its target. Even after full implementation of the PPACA in 2019, an estimated 23 million US residents will still lack healthcare coverage.

"The measures of US health, including life expectancy, infant mortality, and deaths preventable by medical care, remain mediocre compared to other rich nations," note Jonathan Oberlander and Theodore Marmor (2010) in the *New York Review of Books*. "At the same time, American medical care is notoriously the most expensive in the world. Premiums for family coverage under employer-sponsored insurance now average over \$13,000 a year. Expenditures on health care in the United States amount to more than \$2.5 trillion, or about 17 percent of national income, while Western European democracies average about 10 percent."

Despite these glaring deficiencies, reform opponents stuck to their script. "We may have problems in our healthcare system, but we do have the best healthcare system in the world by far," said Senator John Boehner, the Ohio Republican and Senate minority leader. "Having a government takeover of healthcare is a dangerous experiment that I don't think we should do with the best healthcare system in the world."

Emerging from the Jaws of Defeat

President Obama accomplished through a parliamentary maneuver what former presidents had tried to do for 60 years. The House adopted a version of the Senate bill, and then both chambers passed a reconciliation act that provides the final passage. (This only required 51 votes in the Senate, denying the chance for a filibuster.)

An immediate attack on the PPACA's constitutionality was launched, and vows to repeal the bill were made. But by mid-summer, the repeal effort had lost steam. Many think the theory that the federal government had somehow infringed states' rights in the PPACA was flawed to begin with. As the dust settled, many began to look again at

what the health reform law actually contained. And what it contained didn't seem worth all the fuss.

The PPACA is moderate, is limited in scope, and builds substantially on the existing US healthcare system. The ecosystem isn't in immediate danger, although some changes in the environment will certainly, over time, favor some species and provide challenges for others.

More than anything, the PPACA looks a lot like Massachusetts's 2006 healthcare reform bill. The PPACA extends coverage to about 30 million people. It does not threaten private insurance companies with a government-sponsored health plan—the so-called "public option" that Democrats deemed unwinnable. And it contains a lot of small but significant measures that help the average American consumer obtain and pay for health coverage.

Exhibit 1.1 shows some of the details of the PPACA, several of which have already been enacted in late September 2010.

From Financial Catastrophe to Market Leader: CHA Looks to the Accountable Care Organization

When the shock from the Massachusetts governor's 9C cuts faded in late 2008, CHA tried to find a way forward after 22 percent of its future operating revenues had been swept away. The system hired an outside consultant to perform a sweeping assessment and to recommend cost-cutting measures that wouldn't endanger its long-term survival.

The cuts went deep, and they included the following:

- Shutting all inpatient services at the Somerville Hospital campus, one of the system's three main facilities
- Reducing headcount by 447 FTEs (full-time equivalents) out of 3,200
- Shedding 35 adult mental health beds and 26 addictions beds
- Reducing outpatient mental health services by 20 percent
- Consolidating six primary care sites, four specialty clinics, and a dental clinic with other facilities

Exhibit 1.1 Summary of the Provisions of the Patient Protection and Affordable Care Act

Expanded Coverage and Better Access to Care

The PPACA

- Makes Americans and legal residents who earn up to 133 percent of the federal poverty level eligible for Medicaid, regardless of family circumstances
- Fills the "doughnut hole" in Medicare Part D (over time)
- Gives doctors who treat Medicare and Medicaid patients a bonus
- Enables children under age 26 to stay on their parents' insurance policies
- Requires large employers to offer coverage to workers or to pay a modest fine per employee
- Requires Americans and legal residents to purchase health coverage or to pay a modest penalty on their federal tax returns
- Sets up state insurance exchanges so that Americans and legal residents without employer-sponsored insurance will be able to purchase coverage, with subsidies for those who earn up to four times the federal poverty level

Insurance Industry Reforms

- Prevents insurance companies from denying coverage or charging higher premiums for those with preexisting conditions
- Prohibits insurers from retroactively canceling coverage for sick policyholders

Individual and Employer Mandates

- Individuals must purchase healthcare insurance or face a modest fine on their annual federal tax returns
- Employers must offer healthcare insurance or face a modest fine

Employees who remained also took a hit. Executives and physician leaders gave back 9 percent in compensation, and all managers reduced annual time off by five days, saving \$1 million annually.

Employees' share of health insurance premiums also increased, and salaries were frozen for fiscal 2010.

But the more CEO Keefe and his team worked at keeping the system afloat, the more obvious the shortcomings of the existing business model became. Cost cutting, consolidation, or revenue cycle improvement did not change the fundamental problem that faced CHA: Reimbursements didn't cover costs for most services, and there were no high-profit service lines that could cross-subsidize the system's money-losing operations. All the usual steps to enhance revenues made Keefe feel more and more like a hamster running on a spinning wheel, working hard but not getting anywhere. His doctors felt the same way.

"When you talk to physicians about this, you find out they are so tired of the current treadmill of increasing productivity, making their targeted numbers of office visits, and generating income," says Keefe. "They've completely lost the whole context of why they're in medicine in the first place."

Another state effort moved CHA in another direction, however. A commission established by Therese Murray, president of the State Senate, undertook a study of healthcare payments in Massachusetts. In early 2010, the commission recommended a course of action that was as bold as Governor Romney's healthcare reform had been four years earlier. The commission said the state should move from a fee-for-service payment scheme to one of global payments. Capitation was coming back. Keefe participated in focus groups for the payment reform commission. He told people he was ready for change.

"Right now," Keefe says, "we're at the bottom of the food chain. We're severely handicapped by fee-for-service. Global payments? Bring it on. If you greatly benefit from the current system, you don't want it to change. The gap between the haves and the have-nots has become greater. The whole payment system needs to be fixed."

The solution, Keefe concludes, was not just to change the medical payments but also to move his entire healthcare system to an accountable care organization (ACO) built around a medical home model.

CHA, he says, has most of the pieces to become a functioning ACO, including the following:

- Two secondary care hospitals
- A salaried physician organization
- Neighborhood clinics that function as feeders to the hospitals
- A relatively advanced electronic medical record system that is fully implemented for ambulatory care
- An in-house health insurer—Network Health—that already serves as a capitated payer for a significant portion of CHA's patients

"We're rethinking what a hospital really is," says Keefe. "We want to become a virtual high-performing ACO and then adopt more of an ACO structure."

Despite having so many pieces of the puzzle, COO Bayer says turning CHA into a real ACO won't be easy: "Physicians and other care providers don't have historical experience working as a care team to focus on managing the patient. In the current fee-for-service system, it's all about making the appointment, getting the patient in, getting the charge out, and getting the money back. We, as a system, are still paid per click. That hasn't changed yet. But we're trying to restructure the system before the payment system changes. We're moving forward.

"We've got smart, talented, creative people who work here, but they're limited by the transactional environment that exists in health-care," Bayer adds. "They're stifled and trapped in the current system. They know how to design care that works, but the system doesn't allow it. They're demoralized. They're laboring under perverse incentives that deny needed care and encourage care that isn't needed. The ACO is our opportunity to deliver a rational system of healthcare."