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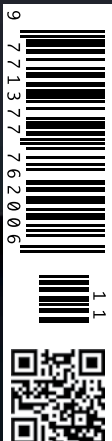
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Disruption Is Coming to Healthcare

Summary: No other industry that operates as inefficiently and ineffectively as healthcare has survived disruption in the 21st century. Why does medicine remain the exception and what forces are powerful enough to improve quality and bring costs under control?



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The United States spent an average of \$10,209 on each citizen in 2017, the last year data were made available. The second highest-spending nation was Switzerland at \$8,009 while Luxembourg came in third, spending \$6,351 per person. Of the world's 195 recognised countries, 185 of them pay less than half of what the United States spends on healthcare per individual. Perhaps this discrepancy could be justified if U.S. clinical outcomes were superior; however, the United States ranks at the bottom of the 11 most industrialised nations in nearly all measures of medical success, including *access*, *equity* and *healthcare outcomes* (Schneider et al. 2017).

Contrary to what many Americans believe, the U.S. healthcare system is overly expensive and, given the quality of the *product*, not a good deal for the money. These facts are well known to policy experts and operational leaders, but the underlying economic causes for the nation's clinical underperformance and lackluster outcomes remain poorly understood.

This article examines why the U.S. healthcare system is so expensive, the steps needed to rebalance the cost-quality ratio, and three feasible scenarios in which American healthcare could be disrupted.

The Inevitability of Disruption

There is a tried and true rule in American industry that overly expensive and underperforming businesses will be disrupted. There is only one known exception: the American healthcare industry.

Without viable competitors to contest or question standard practices, healthcare costs have continued to rise at a rate of 5% to 6% a year (PwC's Health Research Institute 2019) while the nation's ability to pay for healthcare services (as measured by the Gross Domestic Product and overall inflation) has failed to keep pace, increasing at a rate of only 2% to 3% annually (U.S. Bureau of Economic Analysis 2019). Mathematically, economically and politically, this imbalance is unsustainable. Disruption is inevitable.

If It's Broken But Profitable, Don't Fix It

In the United States, there are a handful of powerful organisations reaping the overwhelming portion of today's rewards while contributing to the system's persistent underperformance. These incumbents include U.S. hospitals, health insurers, physician specialty societies and drug makers. Given the profitability of their respective industry sectors, it's no wonder they defend the status quo and refuse to admit the system is *broken*.

Stock prices for the three-largest private insurers – United Healthcare, Cigna and Humana – have doubled over the past five years. Hospital and physician services represent half of total health spending in the United States. Meanwhile, nearly 30 drug makers took steps in 2019 to increase the prices (and profits) of more than 1,000 medications.

It's not that these players couldn't help reform healthcare. They're simply doing too well at present to change. They expect today's good fortune will remain tomorrow's reality. However, history teaches us that those who fail to innovate, or address inefficiencies, will be left behind. It is well known that Kodak could have been a global leader in filmless cameras. Likewise, Yellow Cab could have offered Uber-like technology long before Uber was founded. They had the technology, the capital and the know-how required, but each refused to embrace change until it was too late. U.S. healthcare organisations are following a similar pattern.

Compared to those in other developed nations, Americans pay nearly double for almost every part of the delivery system, including clinician salaries, a hospital day, drugs, medical technology and malpractice coverage. This is partly because the most powerful players in healthcare enjoy the freedom of near-monopolistic pricing in a growing number of markets. When hospitals consolidate, when pharmaceutical companies become sole sources for life-maintaining drugs and when physicians form single-specialty

medical groups, health insurers have no choice but to contract with them, no matter the cost. Contributing to the problem is the way private insurance masks the true costs of healthcare, blinding patients to all but one financial metric: out-of-pocket costs. Patients know what healthcare costs them, personally, but as a result of out-of-pocket maximums, it makes little difference to them whether the bill sent to their insurer totals \$20,000 or \$120,000. Americans pay the same deductible either way.

Further complicating the price problems, the United States spends disproportionately more on high-ticket items like medical specialists, diagnostic machines, surgical robots and complex interventions whereas other countries prioritise higher-value (and lower-cost) services such as primary care, preventive medicine and generic medications.

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Two Paths Towards Affordable Healthcare

The simplest and fastest solution to address the cost-quality gap would be to align U.S. prices with the rest of the world, using Europe as the standard. Under that scenario, insurance companies would pay doctors and hospitals 40% less than they do today. In response, hospitals would reduce nurse and staff salaries by an equivalent amount. Congress would allow the federal government to set drug prices at about half of the current rate and so on. Each of these changes would be bitterly opposed by medical associations, unions and powerful industry lobbyists. In the United States, the two industries that spend the most on effecting political outcomes are pharmaceuticals and insurance. Over the past 20 years, they've expended a combined \$6.64 billion on lobbying.

The other option for helping purchasers and patients spend less on healthcare: make the delivery system more efficient and productive. As difficult as that

would be, it is the easier of the two paths. But higher productivity will require major changes in the (1) reimbursement, (2) structure and (3) delivery of American healthcare.

Three Pillars of Productivity

1. Rethinking Reimbursement

The first change needed will be to shift from a fee-for-service payment system that rewards volume to a capitated one that focuses on the efficiency and effectiveness of medical care. The federal government is slowly moving in the direction of *pay for value*, and commercial insurers need to follow. In the \$3.5-trillion U.S. healthcare industry, 30 cents out of every U.S. dollar spent is wasted on unnecessary, ineffective or harmful care. Nevertheless, America's fee-for-service payment model incents doctors, hospitals and drug manufacturers to continue, uninterrupted, along their current paths. Achieving higher productivity in medicine will require the opposite. Capitation aligns incentives for doctors, hospitals and patients to maximise operational efficiency, reduce medical expenses through prevention and eliminate high-cost interventions that add no value.

2. Restructuring Hospitals

The next change required will be to consolidate and close 20% to 30% of all U.S. hospitals to achieve economies of scale, eliminate hospital-bed and medical-device redundancy and provide higher quality clinical care. This has not been the intent of industry consolidation thus far. In fact, since 1998, more than 1,400 hospitals have merged for the primary purposes of increasing clout with insurers and raising the price of hospital services.

Closures will be a tough pill to swallow in any geography. In rural areas, hospitals are major employers and a large source of community-pride. But with miniscule daily volumes (the number of patients hospitalised on any given day), these facilities rarely achieve top quality rankings from independent research organisations like Leapfrog Group. Many rural hospitals remain economically viable only because the federal government pays them higher rates, thus reducing the likelihood of closure.

A better solution in rural settings would be to shutter the inpatient areas of underperforming hospitals while maintaining 24-hour emergency services. This is not legally permissible at present. Congress could simultaneously enact laws that would funnel federal and state dollars toward the creation of an efficient rural transportation system, making it possible

for small-town patients to receive even better care at high-volume facilities after initial ER care. Further, lawmakers could incentivise the use of inexpensive video technologies, thus connecting patients in sparsely populated geographies with highly skilled specialists for consultation and treatment. Not only would these approaches increase quality outcomes by making superior expertise more readily available, they would offset the community's economic loss of local healthcare jobs through the newly created ones in the transportation and information technology sectors.

3. Rebalancing Care Delivery

The third shift is to refocus the nation's emphasis to primary care and prevention, rather than specialty care and intervention. A recent Harvard-Stanford research collaboration examined life expectancy rates in the United States from 2005 to 2015. The team found that adding 10 primary care physicians to a population of 100,000 people is associated with an average life-expectancy increase of 51.5 days but only a 19.2-day increase when adding an equal number of specialists. In other words, adding 10 primary care physicians has a 250% greater influence on life expectancy than hiring the same number of specialists. However, the research also found that the density of primary care physicians declined by 11% between 2005 and 2015, falling from 46.6 to 41.4 per 100,000 people (Basu et al. 2019).

To reverse this troublesome trend, our nation will need to alter the U.S. residency training process. At present, hospitals receive identical reimbursement (through the government-funded Medicare programme) whether they train a surgical specialist or a primary care physician. Recognising the greater value of primary care physicians, and their recent decline in numbers, the funding agency could de-incentivise the training of specialists while boosting reimbursements for primary care training programmes. An added benefit of this approach is that the decline in the number of specialists would result in higher volumes and greater expertise for each of the remaining specialists. This would, in turn, lead to fewer complications, better clinical outcomes and greater cost efficiencies.

Technological changes will be necessary to maximise the value of primary care. This begins with making every patient's medical information available to care providers at every point of contact, be it outpatient or inpatient. To accomplish that, current electronic health record (EHR) systems will need to be more user-friendly transitioned onto tablets and designed to facilitate data flow between devices. The easiest path to that end is via federal legislation, requiring all EHR vendors

to open their Application Processing Interfaces (APIs) to third-party developers. Doing so would allow for the interoperability of EHR systems and the development of time-saving apps for clinicians, analogous to what currently exists on smartphones, tablets and computers.

Three Disruptors Waiting in the Wings

Implementation of the three pillars described above will be opposed by the institutions and organisations benefiting from today's inefficiencies. That is why fundamental change is most likely to occur from outside the medical mainstream. Already, there are three disruptive entities pushing healthcare's legacy players outside of their comfort zones:

1. Haven, a medical nonprofit led by the esteemed Dr. Atul Gawande, was founded to provide superior medical care to more than one million employees of Amazon, Berkshire Hathaway and JPMorgan Chase. However, anyone who believes this organisation intends to remain an employee-only nonprofit for the long term likely thinks that Amazon still sells only books. Once these industry giants grasp the ins and outs of the U.S. healthcare system and medical care delivery, they will quickly turn their attention towards monetisation. This switch could prove as disruptive to the current providers of healthcare as Amazon proved to book stores. Haven has not yet articulated its 10-year plan, but industry experts speculate this nonprofit could someday establish a new model of care, replacing health plans with a retail business-model, replacing in-person visits with virtual care and replacing the fragmented system of care with a one-stop-shop that puts patients at the center of everything.
2. The second possible source for disruption will be large, self-funded businesses. A recent example, reported on by the New York Times (Galewitz 2019), was a company in Wisconsin that offered employees who required a total joint replacement \$5,000 to have it done in Mexico and sent a Mayo Clinic orthopaedic surgeon to do the procedure. Similarly, Walmart has chosen specific hospitals in the U.S. for its total joint procedures based on high volumes, excellent outcomes and lower prices. By working together, these purchasers have the power to shift the setting of care delivery from local communities to centres of excellence. By selecting and covering only a few high-volume centres for their employees, U.S. businesses

can drive hospital consolidation, lower prices and increase overall clinical performance. If, together, they announced that in five years' time they would only pay for their employees to receive medical care through high-quality, technologically advanced multispecialty medical groups and hospitals, the delivery system would have no choice but to comply.

3. The final possibility for disrupting the American healthcare system comes from offshore. Dr. Devi Shetty has built a hospital in the Grand Cayman Islands that does heart surgery with results that match the best in the United States at half the price. His surgeons do twice the annual volume of procedures as in the U.S., which is why they can accomplish these outstanding results. He is currently expanding the services provided in a wide-range of areas including cancer, orthopaedics and transplantation. His facility, located on this island paradise, is an hour plane ride from Miami. Today, employers and commercial insurers are reluctant to send employees outside the United States for medical care. However, as purchasers find they can't afford the rapidly rising costs of American healthcare services, they may just decide to outsource much of the work, similar to what they've done in manufacturing and telecommunications. Once Shetty's facility, and others like it, start attracting hundreds of thousands of patients, they will force the closure of inefficient U.S. hospitals and drive American providers to become more productive, if only to stay viable.

Conclusion

The opportunities to address the challenges of healthcare today aren't just theoretical. As CEO of The Permanente Medical Group, I was responsible for the

healthcare of over 5 million Kaiser Permanente members in California, Virginia, Maryland and Washington, D.C. We applied these overarching principles in the geographies we served and not only led the nation in quality (per NCQA ratings), but also reduced hospital utilisation to half the national average, became a global leader in telemedicine and lowered total medical costs by 10% to 15% compared to surrounding programmes (based on the resulting price of the healthcare premiums).

Putting the pieces together, U.S. healthcare suffers not from a lack of available solutions. What's missing is (a) the desire of current incumbents to embrace change and (b) the courage of governmental officials to enforce it. Without doubt, those doing financially well in today's inefficient healthcare system will resist change. But before they dig in their heels, they would be wise to remember those industry leaders who learned the hard way that refusing to change can be fatal. ■

KEY POINTS



- U.S. healthcare costs continue to rise faster than the nation's ability to pay. This trendline is proving to be mathematically, economically and politically unsustainable.
- History teaches that the failure to innovate and refusal to address operational inefficiencies is a deadly combination in American commerce. U.S. healthcare organisations are following a similar pattern.
- Making the healthcare delivery system more efficient and productive will require three pillars upon which all future changes will be built: (1) rethinking reimbursement, (2) restructuring hospitals, (3) rebalancing care delivery.
- Assuming these three pillars will be opposed by the institutions and organisations benefiting from today's inefficiencies, American healthcare might experience disruption from Haven, from large self-funded businesses or potentially from offshore.



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