Slouching Towards Disruptive Innovation

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Clay Christensen, perhaps the most influential business school professor of our era, passed from the world earlier this year. He left us with his fundamental insight into why large and successful businesses often fail, despite what would appear to be insuperable advantages of scale, scope, and experience, to be replaced by unknown upstarts. Kodak, Sears, US Steel, General Motors, DEC, Xerox, and many others that once dominated the Fortune 100 are gone or have been reduced to a shadow of their former selves.

Christensen articulated the concept of ‘disruptive innovation,’ in which outsiders with low-performance but low-price products compete for consumers poorly served or not served at all by industry insiders, and then gradually improve performance while retaining lower prices and thereby seize the heights as well as the depths of their markets. He applied this core insight across the full range of industries in a small library of remarkable books, including one focused on health care.

In the Innovator’s Prescription, co-authored with Jerome Grossman and Jason Hwang, Christensen predicted and advocated the disruption of physician practices, hospitals, insurers, pharmaceutical firms, and the rest of health care. Through no fault of his, the industry has proven stubbornly resistant, preferring to remain high-priced, inconvenient, and inaccessible. Glimmers of hope are to be seen, however, and no doubt eventually this bastion of inefficiency will be replaced by something more consumer-friendly and affordable.
But meanwhile, this is a moment to reread The Innovator’s Prescription and ponder why health care delivery remains dominated by the same hospital-centered conglomerates, insurance by the same commercial carriers, and the pharmaceutical sector by the same global corporations whose names were familiar to our parents and grandparents.

### Disruptive Innovation Is For Others

Before Clay Christensen, scholars’ dominant model of innovation stemmed from Joseph Schumpeter, for whom the economy was swept by gales of creative destruction, driven by large, diversified firms with monopoly power and profits. This model seemed to fit well the world’s major economies through the first and second industrial revolutions, as chronicled comprehensively by Alfred Chandler.

Then in the 1970s the world seemed to turn upside down. Bottom-feeding Japanese motorcycle and radio firms came to dominate the auto and consumer electronics sectors; poorly capitalized mini-mills displaced the integrated steel companies; home-garage laptop makers swept away the computer giants; and pundits began to talk of the diseconomies rather than the economies of scale and scope.

Into this business and intellectual ferment Clay Christensen introduced the distinction between sustaining innovation, which builds on and improves existing technologies, and disruptive innovation, which side-steps and undermines them. Sustaining innovations, which may be incremental or radical, are carried by and strengthen the incumbent firms in each industry. They improve product performance and satisfy the demands of the most sophisticated and least price-conscious consumers. In contrast, disruptive innovators offer products with lower quality but attract consumers who did not value the performance and could not afford the prices of the status quo. Outsiders get a toe hold at the bottom of the market and then gradually improve product performance in the dimensions appreciated by their customers, especially simplicity, convenience, and affordability. Step by step they push the incumbents out of remaining market segments until they are the new incumbents, eventually at risk themselves for disruption.

Industry disruption requires outsiders with new technologies and business models that assail the industry incumbents. Health care has had its full share. The delivery sector has spawned multispecialty group practices, physician practice management (PPM) firms, and pharmacy-based retail clinics, among innumerable others. The health care financing sector has seen waves of staff model HMOs, ‘consumer-driven health plans’ (CDHP), and e-insurance firms. The pharmaceutical industry has been threatened by thousands of biotechnology startups incorporating the most fundamental discoveries from the life sciences.

But where now are all those wannabe disrupters? Most of the ambulatory alternatives to traditional hospital-centered care now are owned by hospital-centered organizations, albeit relabeled as ‘health systems.’ The HMO, CDHP, and e-insurance plans have been absorbed by CIGNA, United, and the Blues. A few biotech firms have been able to grow into fully integrated pharmaceutical companies (FIPCO), but most have been purchased by, or are waiting to be purchased by, the same set of Swiss, German, and US corporations that emerged in the pre-war and post-war period.

### When Do We Get Our Disruptive Innovation?

The health care sector is an ideal candidate for disruptive innovation, according to Christensen’s model. It is over-priced, inconvenient, complex, inaccessible, and detested by all. In the recent Gallup poll of Americans’ views of the 25 largest industries, health care services rank as the 23rd most positively viewed industry, and the pharmaceutical industry ranks dead last at number 25.
Christensen is not alone in pointing out the many culprits for health care inefficiency and stasis; we have all bemoaned these before. Insurance undermines consumer willingness to accept lower performance for lower price, depriving upstarts of the revenue needed to improve their performance over time. Regulation impedes market entry by startups whose products do not match that of the incumbents along the dimensions valued by the most wealthy and discerning customers. Professional licensing blocks the ability of nurses, dental hygienists, and other caregivers to expand their scope of practice, move across state lines, and relieve labor force shortages. Tax policy gives larger subsidies to inefficient insurance designs and over-priced providers than to value-based designs and value-priced providers. Philanthropists, including billionaire disrupters from other sectors, support sustaining innovations that further entrench the incumbent organizations, products, and processes.

Christensen predicted and promoted the standard set of health care solutions that have been predicted and promoted by his Harvard Business School colleagues. Pharmacy-based retail clinics should disrupt the acute care activities of primary care; disease management networks should do the same for chronic care; single specialty hospitals should displace comprehensive community facilities; ambulatory surgery centers should drain hospital outpatient departments; high-deductible designs should replace first-dollar insurance. Most importantly, the organizational structure of health care should move away from multi-specialty breadth to single-specialty depth, with care coordination ensured through next-generation electronic medical records. Good luck with all that.

Of course, many of these ideas are good, and if we are still waiting for them to disrupt health care, well, it’s hardly the fault of the professor. One ambiguity in Christensen’s opus does allow, however, for ambiguity in what is perhaps the central question facing the health care delivery system. Where are the efficient boundaries of organizations?

We stipulate that ambulatory surgery centers, single-specialty hospitals, diagnostic solution-shops, and their like offer efficiency even if they sacrifice coordination. But what if these focused units come to be owned by large, multi-product and multi-service conglomerates, namely by hospital-centered health systems? Are they still the solution or now part of the problem?

Hospitals seem to be the near-term winners in the fight to dominate health care markets, buying ambulatory clinics and physician practices to extend their reach across the continuum of care. They aspire to coordinate that continuum, though they did not rank as value networks in Christensen’s work. But they also merge to present a united front against insurers seeking price moderation. There is remarkably little discussion in the Innovator’s Prescription or Christensen’s other books of monopoly pricing power as a consequence of, and sustaining element in, market consolidation. Christensen’s core insight is that large firms become ossified, unresponsive, over-priced candidates for disruption and hence that worries over monopoly power often are overblown. But in health care, where regulatory barriers to entry are formidable, conglomerate hypertrophy is flourishing.

Maybe Next Year

We do see some disruptive tendencies in health care. Some manufacturers of generic drugs are moving upstream to produce biosimilars and aspire to launch new molecular entities. Walmart’s store clinics are moving from tests and treatments that a nurse can perform to full-service primary care centers with preventive care, radiology, behavioral health, groceries, and beauty products. Amazon has purchased startups across the pharmacy delivery spectrum and hopefully will disrupt the chain pharmacy and PBM oligopolies. Google Health has bought most of the startups worth buying in the health monitoring, health data aggregation, and health care artificial intelligence sectors, and presumably will be rolling out a comprehensive solution to which resistance will be futile.
Yes, disruptive innovation will come to health care. The system is too expensive, too complex, and too much disliked to persist forever; somehow, someday, its time will come. But it is hard to believe that 10 years from now we won't still be hearing about United Health Group, Pfizer, CVS Health, HCA, and Blue Cross Blue Shield. And today’s short list for health sector disruptors, including Walmart, Amazon, and Google, are hardly the streamlined outsiders evoked in the Innovators Prescription. If their services and products appear cheap, it’s because customers are paying with their data as well as with their dollars, data that the disrupters are monetizing to create the most powerful and profitable business organizations the world has ever seen.

Disruptive innovation in health care? Maybe next year.

Photo by Susan Young