The Disruption Distraction
by Jeff Goldsmith

Clayton Christiansen's 1997 classic *Innovators Dilemma* explored how established businesses are blindsided by lower cost competitors that undermine their core products, and eventually destroy their businesses. Classic examples of disruption are the displacement of film-based cameras by digital cameras and, now, cell phones, the destruction of retail shopping by Amazon and of video rental outlets by streaming video services.

Because of the anxiety it generated, Christiansen's disruption thesis has dominated corporate strategy ever since. However, I believe this notion of "disruptive innovation, twenty years on, has reached its "sell-by" date, at least in healthcare, and is now doing more harm than good.

The healthcare version of the disruption thesis was found in Christiansen's "*Innovator's Prescription*", written with health industry maverick Dr. Jerome Grossman, in 2009. Christiansen and Grossman forecast that innovations such as point-of-care testing, retail clinics and special purpose surgical hospitals threatened to take down healthcare incumbents-physicians and hospitals.

This book gave rise to a swarm of breathless healthcare disruption forecasts. Eric Topol predicted that the cell phone and a swarm of diagnostic apps would shortly replace the physician as the patient's principal source of diagnostic wisdom https://www.wsj.com/articles/the-future-of-medicine-is-in-your-smartphone-1420828632. Vinod Khosla said that 80% of physicians would be replaced by AI https://www.wired.co.uk/article/doctors-replaced-with-machines.

In 2018, Amazon's mooted entry into healthcare, and mega-mergers between health insurers and pharmaceutical benefits management firms, unleashed yet another wave of breathless disruption forecasts by industry analysts. The investment community has clamored after these forecasts like a herd of well-dressed cattle. Unless a start-up company threatens in its prospectus to "disrupt" the health system, it had a limited chance to get funded.

Healthcare is certainly not immune to disruption. Mainstream hospital-centric care delivery was massively disrupted thirty-plus years ago by ambulatory surgery, non-invasive imaging and home care. And today, as a result, almost half of all hospital revenues are not inpatient, and large chunks of complex medicine is delivered off the hospital campus. That disruption continues today, at a slightly less feverish pace, in joint replacement surgery.

But in the decade since the *Innovator's Prescription* appeared, and easily a decade before that, the main feature of health care provision has been an eerie, rock-steady stability, this despite tens of billions invested in "disrupting" the hospital. Examine the portfolio of technologies that power the hospital in 2019 and what strikes you is that it is virtually identical to that of twenty years ago,

Last Major New Imaging Platform: PET (1993)
The Last "Got-to-Have It" Imaging Tool: 64-slice CT (1998)
Last Major Radiation Therapy Innovation- Intensity Modulated Radiation Therapy (1998)
Last Major New Surgical Technology – daVinci Robot (2000)
Last Major New Surgical Product Line – Bariatrics (late 1990's)
Last Major Innovations in Cardiology- Stents and Coils (late 1990's)
Last Major Logistical Breakthrough- Pyxis Unit Dose System (1995)
Last Big Clinical Productivity Breakthrough- the eICU (2000)
Dominant IT Platforms: EpiCare (1998), Cerner Millennium (1996)

A similar argument might be made about the physician's business. We have seen waves of innovative attempts to "disrupt" the 1950's-esque physician office. This began with the so-called concierge practice (MDVIP, which Proctor and Gamble acquired in 2007 and sold to Summit Partners in 2014), and rolled on with telehealth and subscription-based practices (TeleDoc, American Well, Iora Health, One Medical, Sherpaa, etc.), multi-specialty clinics (HealthCare Partners, now Optum Health) and store-based retail clinics like Minute Clinic (now CVS). Hospitals appear mired in their second attempt at consolidation of the physician practice sector in two decades, with reported losses of near $200 thousand per physician, offset by increased (and expensive) hospital use. https://hbr.org/2018/05/do-most-hospitals-benefit-from-directly-employing-physicians.

Since so many of the physician sector start-up firms are privately held, it is impossible to know for certain how well they are doing. Optum Health appears to be generating a gusher of cashflow. But close observers of the rest of this physician sector activity detect a shortage of reportable black ink and a continuous process of rolling up, in search of those elusive "economies of scale" and the ultimate "exit opportunity" for original investors. Early promising entries like Las Vegas' Turntable Health https://zdoggmd.com/turntablehealth/ and Seattle's Qliance both closed in 2017.

After more than a decade of hype and billions in investment, retail clinic volume appears to have crested 30 million visits nationally, compared to around 145 million hospital emergency room visits and at least a billion physician office visits. And point-of-care testing had its mega faux-disruptor, Theranos, explode in a mess of lawsuits and fraud indictments, dissolving in 2018.

In a 2006 *Harvard Business Review* article https://hbr.org/2006/05/why-innovation-in-health-care-is-so-hard# on why innovation in healthcare is so hard, Regina Herzlinger pointed to a complex regulatory environment, particularly the hurdles to obtaining FDA approval and insurance coverage, the power of healthcare incumbents to influence the regulatory and political process, industry fragmentation and the pivotal role of physicians in technology adoption as barriers to innovation. To this list, I would add: the technical complexity of the healthcare "product set", the sheer scale of the industry, the increasing conservatism of the large corporations that control healthcare R+D and the variability and uncertainty around the clinical care process.

The disruption meme may be the hidden culprit behind the slowing pace of start-up companies in healthcare or in the economy as a whole. The larger and more complex the industry, the hard it is to disrupt. Disrupting a trillion-dollar hospital or health insurance industry is simply too heavy a lift for a single firm or technology. The Internet-related disruptions such as those instigated by Amazon, Apple and Craigslist were 1 in ten thousand events, the equivalent of a ballplayer hitting a blindfolded 500-foot home run. Ballplayers who swing for the fences, as opposed to looking for the strategic single or double, strike out with discouraging frequency. Investor insistence that new companies should disrupt trillion dollar incumbents has led to continuing disappointment and poor returns on the part of venture and private equity investors.

Though Christiansen belittled incremental product or service improvements as defensive "sustaining" innovations by incumbents, the sustainers have had an impressive record in healthcare. Consider the stunning progress in joint replacement. When I first witnessed this procedure in the late 1970's, it was massively invasive, required a three-week hospital stay, and a six-month long recovery/rehabilitation. Hip replacement is now, unbelievably, an ambulatory procedure, as are shoulders and knees. Some forms of heart valve replacement, interventional care for strokes, and nerve ablation procedures for arrhythmia are very short stay inpatient procedures and may be ambulatory in the near future.

All these are clearly "sustaining", not disruptive, innovations. They unfolded over decades, as clinicians and their partners in industry refined or reinvented mature technologies, markedly reducing over time both cost and damage to patients. This collaboration is unglamorous "pick and shovel" work. It has gone out of fashion in an investment climate geared to unrealistic expectations of explosive growth. Yet providers who work with the patient support of health systems and suppliers can markedly lower the risk and cost of formerly complex procedures, and improve their profitability along the way.

In his enduring 1985 classic, *Innovation and Entrepreneurship*, Peter Drucker argued for a more multi-faceted model of innovation, basically one which pivots around removing friction or barriers between a customer and a satisfaction of their needs, but also exploiting asymmetries and discontinuities in industry structure or demography. Industries preoccupied with outsized returns often do not listen acutely enough to customers as much as to the siren song of growth.

To me, the most objectionable aspect of the obsession with disruption is not that it set the bar too high for most innovations to meet, or diminished the importance of improving existing products or services to make them less costly or more efficient. It is that the imperative to disrupt focused management and investor attention on the incumbent competitor, and how to dismantle their franchise, rather than tuning in to customer wants and desires and how to meet them.

As Drucker says, "an entrepreneurial strategy has more chance of success the more it starts out with the users- their utilities, their values, their realities . . . the test of innovation is always

what it does for the user." Drucker's advice is an important antidote to the disruption distraction, and the key to better returns for investors and society from healthcare innovation.