# Applying New Disruptive Power to an Old Problem: How Innovative Entrepreneurialism is Helping to Fix Health Care

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## Summary

Disruptive innovation helps social innovators and entrepreneurs to breathe new life into old ideas. Proven business models, products and services draw value from being reliable, established and consistent. But our needs as consumers and priorities as individuals evolve over time, typically triggering a market response. In some cases, however, a more substantial push is needed to create meaningful change in an industry. Health care is an industry that has, for many Americans, ceased to be practically useful, because of issues related to cost and access. On the other hand, it is a service that we all need; even pediatricians' children get ear infections on a weekend and would, prior to the advent of retail-based health care, typically wind up in the emergency room.

The retail-based convenient care clinic industry meets consumers' demands because it offers low out-of-pocket

cost and high clinical quality relative to its counterparts and because the practitioners work where people shop — a retail clinic can be found within a ten-minute drive of one-third of the U.S. population. Retail care is a disruptive innovation because it successfully reconceptualizes the elements of a well-established system that were failing to meet the needs and expectations of a subset of users. The retail-based clinic movement has taken hold, drawing substantial consumer support and growing quickly. Resolution of our ongoing health care crisis will require similar entrepreneurial creativity and vigor with respect to many other aspects of the system.

## What Is Disruptive Innovation and How Does It Work?

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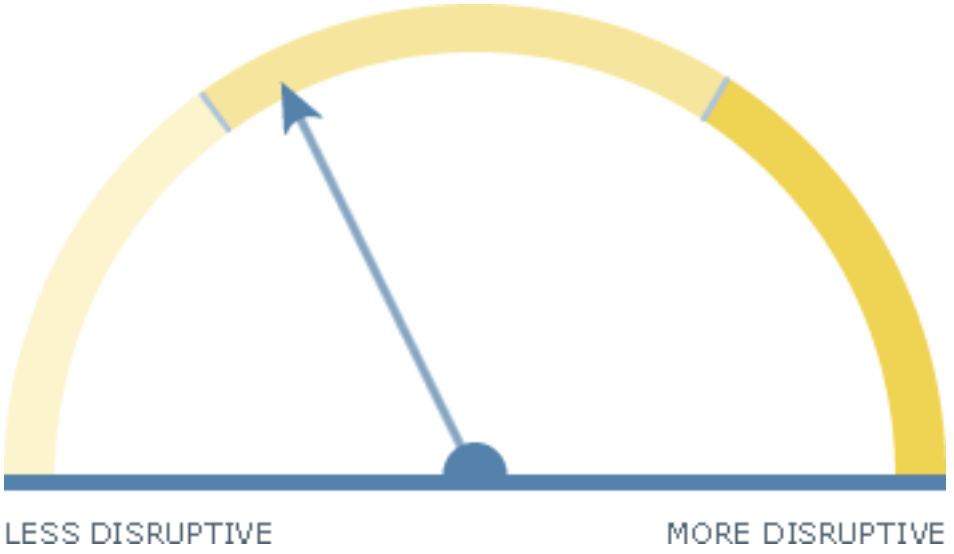
Innosight, a consulting firm co-founded by Clayton Christensen, who originated the term “disruptive innovation,” offers at its website the Disrupt-O-Meter™, which evaluates and provides a schema to enhance the potential positive disruptive force of an idea. Fledgling innovators are asked to identify their target, what “the consumer thinks about the problem you are helping them solve,” what “the consumer will think the offering is” and what “the competitor will think,” as well as projected business model, product price, marketing channel and

first-year revenue. Based on those inputs, the Disrupt-O-Meter rates the initial disruptive potential of a business model.

## Disrupt-O-Meter: Phase 1

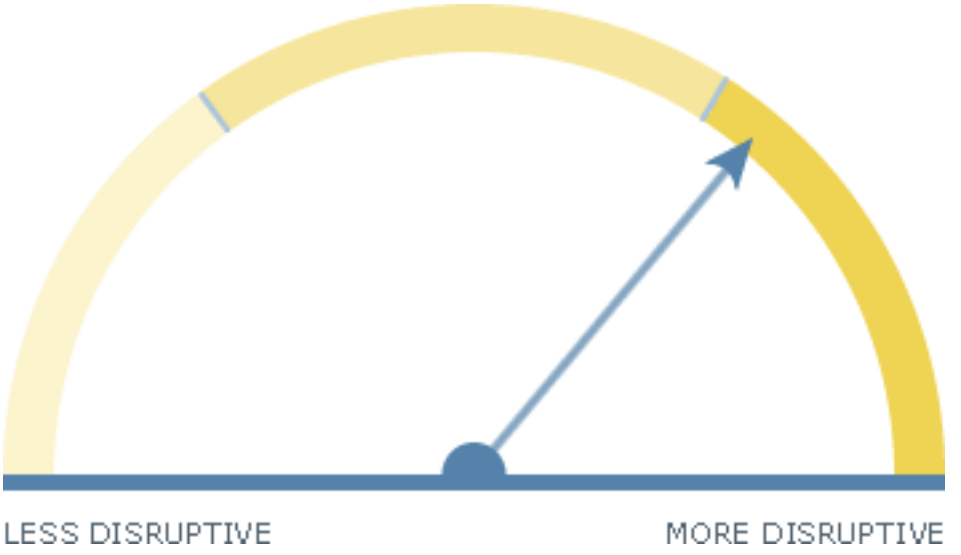



Adapted from [http://www.innosight.com/documents/Disrupt-o-Meter%20demo%20v3.xls](http://www.innosight.com/documents/Disrupt-o-Meter%20demo%20v3.xls)

Next, the exercise pushes aspiring entrepreneurs to ask themselves "What would happen if...?" For example, what would happen if the target consumer group were smaller, or in a different geographic setting? Or what if the price of the product were cut in half, or if the main competitor were brought on as a partner? What would be the impact of any of those changes on the required up-front investment, or marketing strategy, or expected revenue? Factoring in these changes triggers an algorithmic calculation by the Disrupt-O-Meter, which results in the appearance of a second line, indicating the extent to which altering the vision might drastically change the

expected disruption.

## Disrupt-O-Meter: Phase 2

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With that information at hand, the concept can be strategically revised to better reflect projected market perceptions and reactions, financial realities, product design, marketing tactics and partnership opportunities, ultimately maximizing the direct impact to the target. Innosight is in the business of helping its client entrepreneurs work through this process, but the theory behind the Disrupt-O-Meter, and its basic rubric, apply across the board, in any sector and at any stage in the process of designing and executing a business concept. Innosight's disruptive value, if you will, is in having adopted a business model designed to foster further disruption.

This article will help would-be innovators understand some of the key principles underlying disruptive innovation as a unique school of thought, with the goal of enabling readers to generate workable strategies for achieving social change. The article will focus in particular on a current example of disruptive innovation: the retail-based health clinic. The health care industry status quo has long been in need of some disruption, but has been nearly impenetrable to outside interference. With so much attention turned towards Washington and the ongoing debate about health care reform, it is worth taking a closer look at the principle of disruptive innovation, and how it might help shape the future of our health care system.

Innosight's *Disruptive Innovation Primer* states, "Disruptive innovations either create new markets or reshape existing markets by delivering relatively simple, convenient, low-cost innovations to a set of customers who are ignored by industry leaders" (Innosight LLC). In *The Innovator's Prescription*, Christensen's 2009 book about how disruptive innovation factors into health care, we learn that "the theory explains the process by which complicated, expensive products and services are transformed into simple, affordable ones" (Christensen, Grossman, and Hwang 2009, 3). Christensen offers three essential elements of disruptive innovation: (1) sophisticated, simplified and routinized technology to minimize the burden of system problems; (2) a business model that offers a non-complex solution in a low-cost,

convenient fashion; and (3) a supportive commercial milieu. In addition, functional coalescence of these three components is reliant upon a sufficiently flexible regulatory scheme that will not impede new, innovative businesses.

Fundamentally, this all makes sense: In order to upend established industry, you need a good idea that takes less time than the standard operating procedure, costs less money, with a properly enabling commercial and economic backdrop, and that doesn't run afoul of existing regulations and industry standards. But there is a less intuitive side to Christensen's theory, which is that the product or service introduced by the disruptive innovation "is actually *not as good* as those that the leading companies have been selling in their market" (Christensen et al. 2009, 5, emphasis in original). Because the new offering is perceived by consumers to be somehow less valuable or worthwhile or effective than what they have grown to expect, it will not have occurred to market leaders to pursue it, or the idea will have been considered but dismissed based on a cost-benefit analysis demonstrating that immediate profit is unlikely whereas initial investment is high. However, because the new product is either less complicated or less expensive than its competitors, the innovator's target population — those who are dissatisfied with existing options or don't use them — will seek it out. Eventually, as more people transition from the old to the new, the old may become

obsolete, at which point the disruptive innovation may become the new standard, and the cycle can begin anew.

Christensen cites personal computers as an example of disruptive innovation. In their earliest form, computers were anything but “personal,” taking up entire rooms, and were accessible and workable to only an elite few. The first home computers could run only simple gaming and word processing programs, and therefore lacked broad commercial appeal. However, as personal computers got better at doing more, public interest grew, and the companies that built their business around this innovative technology ultimately, with minimal exceptions, supplanted competitors who stayed with the old mainframe models. Though Christensen and his co-authors do not extend their analysis, it could be argued that today’s BlackBerries and iPhones are steadily diminishing the ongoing relevance of the personal computer. Particularly in the context of doing business, a computer still makes more sense than a smartphone; but they are certainly becoming more equal rivals.

## Innovating Health Care: The Final Frontier

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Commercial and technological innovation has touched nearly every aspect of our lives. Beyond computers and phones, disruptive innovation has enabled the emergence

of hybrid cars, online shopping, ATMs, and countless other features of our everyday routines. Yet one industry that inevitably applies to everyone remains unevolved since its modern inception. Health care as we know it today — beholden to an office-based primary care physician, focused on treating the sick and inextricably tied to third-party reimbursement — is a relatively recent historical construct, but one that very quickly established itself as above reproach. The organized medical community has long scorned adopting business strategies to enhance the practice of medicine, and has been highly resistant to any attempts to alter that worldview. Christensen quotes economist Henry Aaron: "At the end of the day, the only reasonable conclusion is that we waste a huge amount of money on the most nuttily cumbersome administrative system in the world" (Christensen et al. 2009, 183).

Owing to its exalted position in society and strong protection from its governing bodies, modern medicine has had little motivation to change. The typical practice maintains so-called banker's hours (which, with the advent of online banking and the fluidity of global markets, should be recast as "doctor's hours"). Patients, with insurance and with appointments, arrive at the office fifteen minutes prior to the appointment time, as directed by the receptionist, and expecting to wait at least that long, if not substantially longer, before being brought back to the exam room by a nurse. Time with the physician

varies depending on the severity of the ailment and the practice specialty, but is commonly only a few minutes. The patient's insurance company will be billed, so that the patient's interaction with the financial end of the visit is limited to the cost of the co-pay. The patient may or may not be written a prescription but, in any event, will be asked if he or she has any questions, in a manner that perhaps suggests there should not be any, and advised of when to return. The follow-up administrative burden on the physician is, admittedly, quite onerous in many cases; the back-office portion of the practice of medicine is increasingly driving primary care practitioners into specialty practices where reimbursement rates are higher and practical headaches tend to be fewer. But, despite growing challenges internally, health care has remained insulated from many of the pressures facing other industries. The transaction between the patient and physician is fairly standardized, and the practice of primary care medicine is still lucrative relative to most occupations. At the end of the visit, the patient is optimistic that he or she will feel better, the doctor is paid and the world keeps on turning.

It has, however, become strikingly obvious that this scenario does not work all that well. Insurance premiums are too high, but reimbursements are too low. Services are overutilized, yet people still get sick and we sometimes can't explain why or make it better. Cost-shifting burdens the insured, which has the consequence of increasing the

number of uninsured. The end result is total unsustainability, complete insolvency, and something approaching chaos politically. In short, the atmospheric conditions are perfect for meaningful disruption.

One innovation that Christensen highlights in *The Innovator's Prescription* is the retail clinic movement. These small health care clinics, also called in-store clinics, convenient care clinics, mini-clinics, etc., are located inside retail stores, most often drugstores or supermarkets, and are typically staffed by nurse practitioners, though some also use physician assistants. Retail clinics offer a limited scope of services, such as treatments for routine, episodic illnesses, preventive care including a range of vaccinations and screenings, and, in some locations, targeted patient counseling for smoking cessation or nutrition and weight loss. This concept of care has its roots in the nurse-managed health center model, which, as discussed at greater length by Bailey and colleagues in this issue of the *PSIJ*, relies on nurse practitioners to provide cost-effective, high-quality, comprehensive primary care in novel settings, and which has been responsible for breaking down some of the earlier barriers to nurse practitioner–directed care. Today, more than 1200 convenient care clinics see patients in 32 states, a remarkable growth rate considering that the first retail clinic opened only in 2000 and that the industry did not really take hold until late 2006, when there were about 150 clinics in operation.

The retail clinic movement's substantial market penetration in such a short time — around 500% growth in the number of clinics from 2006 to 2008, compared to about a 16% growth rate in retail services in a similar time span, and 22% in business services (FRANdata 2009) — is due, in large part, to consumer demand. Indeed, the industry's founder is himself a father who was pushed to action by one particularly inconvenient visit to a local urgent care center in his community. With its prototypical user a harried working parent who has an immediate need that our current system of health care delivery is simply not built to handle, the convenient care industry was launched to bring affordable, accessible and high clinical quality health care to the American public. Today, more than 90 percent of retail clinic users report high satisfaction (Harris Interactive 2008) with their experiences, and there have been zero medical malpractice claims.

In many respects, retail-based convenient care captures the essence of a disruptive innovation, and is actually doubly disruptive to the extent that it is carving out a specific market niche and relying wholly on so-called "non-traditional" clinicians such as nurse practitioners and physician assistants. Christensen characterizes the retail clinic industry as illustrative of a "value-adding process business" (Christensen et al. 2009, 22), which he defines as any business model demonstrating the capacity to restructure common processes in a manner

that maximizes efficiency with intrinsic quality and lower cost. Because convenient care clinics provide a standardized set of services, they are able to generate high internal consistency, such that convenience and efficiency can be achieved without compromising measures of performance and reliability that consumers of health care services, rightly, expect. By enhancing efficiency while preserving reliability, the convenient care industry has devised a model that trumps our society's presumption that high cost is correlated with high quality and that low cost must connote inferior service.

Not only have retail clinic operators successfully convinced a growing portion of the population that convenience and expediency of service need not be mutually exclusive with high quality or benefit, they have done so while simultaneously shifting the paradigm of primary care from physician-directed to something properly and effectively managed by nurse practitioners and physician assistants. Nurse practitioners, the most numerous retail clinic provider type, are able to diagnose, treat and prescribe in every state in the country, employ a holistic, patient-focused approach to health care, and achieve clinical results that are comparable to those of their physician counterparts, all while recording lower costs for the system. A combination of factors has contributed to minimal public awareness of nurse practitioners' capacity to serve as primary care providers, but current circumstances, including the visibility of the

retail-based clinics, are reversing that trend. Consequently, an important by-product of this impact of the industry is some mitigation of the ongoing primary care provider shortage across the United States. In Philadelphia, where the clinics are a fairly new addition to the health care marketplace, they are already having an impact by, for instance, providing seasonal flu shots earlier, more cheaply and much more conveniently than most doctors' offices.

In keeping with a previously mentioned central component of Christensen's theory of disruptive innovation, retail-based care has been perceived, in particular by the established medical community, to be inferior in quality. As might be expected in response to a disruptive innovation's growing assumption of market share, this supposition drove most of the early backlash to the convenient care movement. Formal legislative and regulatory challenges arose in response to allegations, primarily made by physician groups, that the clinics were endangering patients by providing health care in a novel setting and often without immediate physician oversight. Detractors claimed that retail-based care was unregulated and rife with conflict of interest; the concern was raised that the clinics, being for-profit ventures, would overprescribe and over-diagnose to drive sales within the clinic's retail host.

Achievement of true disruption of the status quo has come with the realization, by the public as well as a

growing faction of the health care powers-that-be, that retail-based convenient care is not, in fact, lower in quality. Rather, it has been demonstrated to be comparable to or even better than existing delivery models on measures such as adherence to evidence-based diagnostic guidelines and protocols for proper antibiotic prescribing (Woodburn, Smith, and Nelson 2007; Mehrotra et al., 2009). And, though the earliest players in the game were small, independent, privately funded companies, today the industry counts among its members a number of Fortune and Global 500 corporations, as well as a subset of leading health systems. Primary care physicians, adopting the proverbial if-you-can't-beat-them-join-them attitude, are opening their own clinic locations or incorporating elements of the business model, such as extended hours, into their current practices. All together, convenient care clinics have seen several million individual patients since the first clinic opened in 2000, and are, according to new research from RAND Health (Rudavsky, Pollack, and Mehrotra 2009), within a ten-minute drive of roughly one third of the U.S. population, amply demonstrating Christensen's conclusion that, once an innovation takes hold, "the spelling of the word 'quality' changes to c-o-n-v-e-n-i-e-n-c-e" (Christensen et al. 2009, 117).

## Where Will Disruption in Health Care Lead Next?

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Our country is experiencing unprecedented momentum to overhaul the way the business of health care is run. The current state of things, in fact, can partially be attributed to the mainstream medical establishment's refusal to treat health care as a business until now. Third-party payers, pharmaceutical companies, medical supply vendors and others have all capitalized on the commercial aspects of health care, leaving the health care providers — and the patients — somewhat adrift, understanding that things have gotten out of hand but unsure how to fix them. This uncertainty presents tremendous opportunity for those who are willing to wade through the morass of presumptions, fears and prejudices.

To advance the cause of health care, we need to take it back to its basic, core functions. Complex technologies and cutting-edge medication therapies have redefined how we think about many illnesses. But basic wellness care and an appreciation for the patient *qua* whole person have been lost in the process. Part of why consumers are so enamored of retail-based care is because they are able to show up unannounced and still be guaranteed a dedicated 15- to 20-minute window of time with a person whose only task, during those minutes, is to care about them and their well-being.

This is where Christensen's thematic focus on the "job the

consumer wants done" becomes crucially relevant. The consumer — in this context, the patient — wants to get, or stay, healthy. He probably doesn't have particular ideas about how that should happen, other than to point to information he read online, or to recall what a relative or friend had done under similar circumstances. We need to get to a place in how we think about the delivery of health care where the provider is empowered to do just enough to either achieve or maintain that patient's healthy state. This is why integrated care networks such as Kaiser and Geisinger are attracting increased attention, because they deploy a variety of services to meet a variety of needs, and perform each service well enough to the point that they can minimize the impact of system costs.

This, in short, is where the power of disruption should be focused next. To be effective, reform efforts would be best served by entirely deconstructing our health care infrastructure and rebuilding it again. All the necessary pieces are there already, but in such a jumble as to be practically unworkable. With a better focus on wellness and preventive care, adequate support for the providers of that care, both financially and educationally, and proper compartmentalization of the system, health care can be cured of what ails it, especially with a hefty dose of innovation from our country's most forward-thinking and courageous social entrepreneurs.

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