SEPTEMBER 2013

Seize the ACA: The Innovator's Guide to the Affordable Care Act

by Ben Wanamaker and Devin Bean





for DISRUPTIVE INNOVATION

TABLE OF CONTENTS

Executive Summary	4
Introduction	9
Methodology	13
Individual Mandate	14
Employer Mandate	17
Accountable Care Organizations	21
Wellness Programs	23
CMS Innovation Center	25
Guaranteed Issue	27
Essential Health Benefits	29
Insurance Exchanges	31
Cost-Sharing Requirements	36
Medical Loss Ratio	38
Medicaid Expansion	40
Conclusion	43
Appendix I: Key Sections of the ACA Omitted from Our Analysis	44
Endnotes	46

Seize the ACA: The Innovator's Guide to the Affordable Care Act

by Ben Wanamaker and Devin Bean

EXECUTIVE SUMMARY

Throughout history, disruptive innovations have repeatedly, and often predictably, transformed entire industries through the introduction of affordable and accessible products and services. Personal computers, automobiles, mobile phones, airplanes, and email are disruptive innovations that have permanently changed the world around us by making previously expensive and complicated products increasingly available to larger groups of people. Today, with health care costs spiraling ever higher, the U.S. is in a health care crisis—and in dire need of disruptive innovations that could make quality care more affordable and accessible.

In 2010, the passage of the Patient Protection and Affordable Care Act (ACA) dramatically altered the U.S. health care industry. It remains one of the most controversial pieces of legislation passed in decades. In October 2013, significant provisions of the act will be implemented and the health care ecosystem will once again shift to accommodate new regulation and infrastructure.

A complicated policy with over 955 pages and countless congressional revisions, it is naïve to claim that the ACA is a wholly good or bad policy. With such complexity and nuance, sweeping statements of political or economic ideology do little to address the reality at hand. Provisions of the law are now being implemented, and it is essential that policymakers, medical practitioners, and innovators alike consider where opportunities for disruptive innovation reside. It is also essential to consider which provisions of the law might inhibit disruptive innovation and focus reform efforts on those provisions.

It is through leveraging opportunities to innovate and disrupt within the health care industry that we will move closer to the one goal almost everyone agrees upon: making health care more affordable and more accessible to all people. It is for this purpose that we have completed this study: to analyze the ACA through the lens of disruptive innovation and provide insight into the specific provisions that offer the greatest potential for positive change and disruption—as well as to identify which provisions may dis-incentivize such change and disruption. Doing so allows us to better understand and leverage new and potential opportunities that increase accessibility, decrease costs, and improve overall quality of care.

Ways in which the ACA Encourages Disruptive Innovation

Looking at the ACA through the lenses of disruptive innovation, we see several aspects of the law that open the door for disruption. These include the following items:

- Individual Mandate
- Employer Mandate
- Accountable Care Organizations (ACOs)
- Wellness Programs
- CMS Innovation Center

The Individual Mandate, which essentially requires all Americans to maintain health insurance, will bring a large population of currently uninsured individuals into the primary care system. We anticipate that this will increase demand on an already-burdened system and create space for new care delivery models that leverage less-credentialed practitioners to deliver care for more routine health concerns. Such business models are present already in retail health clinics that allow nurse practitioners to treat patients in convenient locations such as neighborhood pharmacies. This innovative approach both relieves the burden on traditional clinics and makes quality care more affordable and accessible for thousands of patients.

The Employer Mandate, which requires all employers with 50 or more full-time-equivalent employees to offer health insurance benefits, increases the financial demands on employers to provide health care coverage for their employees. As employers look to manage expanding health care costs, there will be greater demand for alternate models of health insurance. Some employers will be more proactive in providing their own health care services, looking only to insurance companies for catastrophic care coverage or no coverage at all. This could facilitate a substantial disaggregation in the insurance industry and open opportunities for new and disruptive entrants to provide health services to employers as well as for entrants in the insurance industry to provide new forms of coverage.

Accountable Care Organizations (ACOs), which are expected to proliferate under the ACA, were created with the goal of aligning the conflicting interests in the care delivery value network. By making providers responsible for the cost and quality of the care they deliver, these programs are architected to improve health care quality and financially incentivize providers and payors to

5

keep patients healthy, rather than simply treat them when they are sick. If executed successfully, such a system would yield a coherent value network that could enable disruptive business models in care delivery to flourish.

The ACA's provisions that support the development of **Wellness Programs** yield another exciting possibility for innovation. These provisions require health plans to offer wellness-focused components targeting preventive and self-directed care. Few argue against the notion that health care costs would drop substantially if we could prevent more chronic diseases and acute illnesses. To date, wellness programs have struggled to produce material cost savings, as the patients who need them most often don't utilize them until after they are ill. Innovative companies that create products and/or services that improve patient wellness by successfully addressing patients' existing "jobs-to-be-done" will be poised for explosive growth that could disrupt much of the existing system.

Another provision of the ACA creates the **CMS Innovation Center**, an organization charged with pioneering novel payment and care delivery models while operating outside the conventional infrastructure of the Centers for Medicare and Medicaid Services. One of the key tenets of the theories of disruptive innovation is that it is extraordinarily difficult for an organization to disrupt itself. Time and time again, existing business models, profit targets, and entrenched interests squash disruptive innovations because those innovations often require different models, profit margins, and priorities to succeed. The only way for organizations to disrupt themselves is to set up a separate entity, free of the demands of the existing business, to identify new markets and disruptive paths. If permitted to operate with sufficient independence, the Innovation Center could be a critical source of disruptive innovations for CMS.

Ways in which the ACA Discourages Disruptive Innovation

Just as there are some ACA provisions that create opportunity for disruptive innovation, there are also portions of the ACA that will likely inhibit disruptive innovation. While these provisions of the ACA might discourage entrepreneurs and innovators, we identify them because they are critical areas for policymakers and other stakeholders to focus their reform efforts. Provisions of the ACA that will likely inhibit disruptive innovation include the following items:

- Essential Health Benefits
- Insurance Exchanges
- Cost-Sharing
- Medical Loss Ratio
- Medicaid Expansion

The Essential Health Benefits created by the ACA limit disruptive innovation by placing requirements on the services that must be covered by any health insurance plan. This mandated level of coverage exceeds what customers need in many cases and will make it more difficult for innovators to bring truly low-end disruptive health insurance plan designs to market.

Disruptive innovation is further limited by the **Insurance Exchanges**, online marketplaces that will allow individuals and small companies to compare health insurance alternatives. Although these exchanges will improve transparency in terms of coverage options and pricing, the ACA's tight restrictions around coverage requirements essentially put a floor on the low end of coverage, thus limiting opportunities for entrants to provide different types of coverage and methods of care delivery.

The **Cost-Sharing** requirement imposed by the ACA—although created with the good intention of making quality health insurance affordable to low-income individuals and families—actually discourages disruptive innovation in ways similar to the Essential Health Benefits and Insurance Exchange provisions. By funneling low-income consumers into Silver-level plans via government subsidies, this provision will reinforce status quo plan designs and artificially constrain demand at the low end of the market (i.e., Bronze-level plans).

Enacted to prevent insurance companies from over-charging and/or not reimbursing customers for medical care, the **Medical Loss Ratio** provisions require insurers to justify rate increases and spend a minimum of 80 percent of premiums on health care. As new, disruptive entrants are likely unable to immediately replicate incumbent payors' large membership bases and economies of scale, the barriers to entry in terms of spending requirements are daunting, if not insurmountable.

Lastly, covering increasing numbers of patients at the low-end of the market through **Medicaid Expansion** limits the size of the market available to potential disruptive innovators, as millions of would-be customers will receive traditional health insurance from the government. Complex pricing mechanisms driven by CMS's pricing algorithms also constrain disruptors by limiting reimbursement options for innovative care delivery processes and products.

It is essential to note that the common thread amongst these provisions is that they will not transform health care on their own. Although some of the provisions of the ACA may open doors for disruptive innovation, the onus rests upon the health care sector—existing players and new innovators alike—to seize the disruption opportunities and create products and services that make health care more affordable and accessible. Great opportunities exist to provide care to the millions of patients now entering the primary care system. Where policymakers look to improve upon the ACA's provisions, we encourage them to focus their efforts on portions of the ACA that inhibit disruptive innovation, as such provisions will maintain higher prices and limit the accessibility of quality care within the sector.

7

Summary Table

PROGRAM	RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Individual Mandate	Encourages	Require every individual to have health insurance.	The influx of previously uninsured patients will overwhelm the current primary care system, creating the need for new disruptive care delivery models.
Employer Mandate	Encourages	Require all employers with 50 or more full-time employees to offer health insurance benefits.	Incentivizes employers to disaggregate insurance and reimbursement and manage day-to-day care. Employers can disruptively integrate around employees' health care needs.
Accountable Care Organizations	Encourages	Enable novel payment mechanisms to reduce cost and increase quality of care delivery.	Through aligning stakeholders in a coherent value network, ACOs could be disruptive. To date, the lack of transparency and process changes in routine primary care limit the cost- saving potential of the model.
Wellness Programs	Encourages	Require health plans to offer a wellness component targeting preventive care and self-directed care.	If wellness programs can address customer jobs-to- be-done, they will reduce demand on primary care practitioners and yield cost savings across the health care system.
CMS Innovation Center	Encourages	Establish an autonomous Innovation Center adjacent to CMS to pioneer novel payment and care delivery models.	The only way institutions can disrupt themselves is by setting up autonomous business units to pilot disruptions. The Innovation Center may serve this purpose for CMS.
Guaranteed Issue	Neutral 읈 (투	Require all insurers to enroll individuals with preexisting adverse health conditions.	Ensuring coverage is an important piece of health care reform but does not change the constraints of the underlying health care system. The health care value network must realign so that covered patients can receive care.
Essential Health Benefits	Discourages	Require all health care plans to provide, at a minimum, all "essential health benefits."	Stifles low-end disruption opportunities by essentially establishing a floor on the low-end of the market.
Insurance Exchanges	Discourages	Create internet-based insurance exchanges; Regulate actuarial values and other plan features.	Exchanges create standardized, transparent markets, but do so on a sustaining basis, essentially putting a floor on the low-end of competition and limiting disruption.
Cost-Sharing Require- ments	Discourages	Limit out-of-pocket payments for mid-range (Silver) plans.	Cost-Sharing requirements incentivize all consumers to purchase Silver-level plans at the cost of potentially disruptive Bronze-level new entrants, discouraging disruption.
Medical Loss Ratio	Discourages	Set minimum limits on the percentage of insurance that must be spent on health benefits vs. overhead or other costs.	Minimum MLR requirements impose a high barrier to entry for new entrants to the insurance market—stifling disruption since new entrants are generally the most successful disruptors.
Medicaid Expansion	Discourages	Expand Medicaid eligibility to all populations up to 138% of the federal poverty level.	Draws nonconsumers into the health care market, but complex pricing algorithms and reimbursement codes administered by incumbents discourage disruptive innovation.

INTRODUCTION

Disruptive innovation is a powerful concept that has been used to transform companies and industries for decades. It explains how seemingly small innovations have made previously expensive and complicated products available to mass markets—with new entrant companies and innovators toppling successful incumbent companies along the way. While some of the largest problems confronting the nation's health care industry are the affordability and accessibility of care, one can't help but ask: could disruptive innovation play a major role in transforming health care as we know it? And if so, will the upcoming changes from the Patient Protection and Affordable Care Act (ACA) enhance or impede that role?

This paper provides a discussion of many of the major provisions of the ACA. Before we delve into that discussion, however, it is important to define some key concepts with regards to the theory of disruptive innovation that are referenced in subsequent sections of the paper.

Overview of Disruptive Innovation

Disruptive innovation and its derivative references are some of the most overused and misapplied buzzwords in the business lexicon. The term "disruptive innovation" was coined by Harvard Business School professor Clayton M. Christensen to describe the process by which new entrant competitors can successfully employ disruptive technologies, steadily move upmarket, and eventually replace much larger, well-heeled competitors. ¹ There is a simple three-ingredient formula for successful disruptive innovation:

- Simplifying Technology. Every disruptive innovation requires a simplifying technology. These technologies are not necessarily simple (e.g., the Intel microprocessor was a simplifying technology that required incredibly sophisticated design and production expertise). Rather, they enable people with less money and less skill to utilize products and services that were previously reserved for people who had more money and greater skill.
- 2. **Disruptive Business Model.** Technology alone is never enough. Simplifying technologies must be nested within business models that effectively utilize and prioritize the simplifying technology. This is most easily accomplished by new entrants, as they are not locked into existing models. Industry incumbents hoping to disrupt themselves must set up an autonomous business unit, target new or different customers, or develop new or different channels. Finally, disruptive business models are always targeted at the low-end of a market (representing the least attractive, least profitable customers to incumbents) or at nonconsumers—new customers who previously did not buy products or services in a given market.

9

3. **Coherent Value Network.** For a disruptive innovation to steadily move upmarket it must be part of a value network where upstream and downstream suppliers, partners, and customers are all better off when the disruptive technology prospers than they were before. The value network determines the costs and incentives that an organization faces. In insurance companies, for example, the value network consists largely of underwriters, employers, insured populations, and health care providers. In this value network, insurance providers make money by charging more in premiums than they pay out in claims. Win-lose dynamics abound where value networks are incoherent. These dynamics usually prevent disruptive technologies and business models from growing.

Disruptive innovations make goods and services less expensive and more accessible by transforming the value network using disruptive technology. For example, the microprocessor enabled the emergence of personal computers, which were initially sold directly to consumers rather than large corporations—and thus sold and used in their own value network. As technology improved, PCs began to compete against mainframe and minicomputers, and consumers were able to purchase low-cost, high-performance devices.

Disruption in health care begins in much the same way. Simplifying technologies are introduced that allow complex, expensive procedures and treatments to be done in lower acuity settings by less credentialed (and less expensive) clinicians. These technologies are most commonly available for what we call "precision medicine" conditions, or conditions where the mechanism that causes a disease is well understood and predictably effective therapies exist to treat the disease.

Strep throat is a prime example of a precision medicine condition. The cause of strep throat is one of a number of types of streptococcal bacteria, which can easily be discerned using a simple diagnostic test. When the diagnosis is positive, predictably effective antibiotic medications can be prescribed to target the disease. In this case, the diagnostic test is the simplifying technology.

For treatment of strep throat to become affordable and accessible, the disruptive technology needs to be nested within a disruptive business model, such as a retail clinic. A strep patient can show up to a local pharmacy or big box retailer and be tested in a clinical setting by a nurse practitioner. Offering care in a more convenient location, with lower overhead costs and less expensive clinicians, allows retail clinics to offer strep diagnosis and treatment for 32 to 47 percent less than it costs in a doctor's office.²

For disruptive business models like this to move up-market and treat more complicated conditions, they need to be part of a coherent value network. This may include payors that will reimburse for retail clinic services, retail businesses that have profitable clinic services, and providers that are willing to work at such clinics.

The Innovator's Dilemma

The innovator's dilemma arises when a company has developed successful products that meet, and over time exceed, customers' basic needs. As good managers pursue ever-better margins and products with more features, incumbent players are incentivized to disregard technologies that yield products with lower margins and fewer features. As new-to-market entrants sell low-cost, "inferior" products that leverage these lesser technologies, they innovate, improve, and gradually gain market share. Having ignored these products and technologies in their most nascent forms, incumbent companies often don't feel any pain from these new entrants until the new entrants have amassed so much market share that the viability of the incumbent's business is challenged. Thus arises the dilemma where management best practices can lead to the failure of large and successful organizations that have the resources to be the most innovative.

Very few companies or governments have solved the innovator's dilemma. One example is IBM, which began as a mainframe computer manufacturer. It was able to stay on top of the industry when Digital Equipment Corporation (DEC) and others introduced the minicomputer because it spun out an autonomous business unit to develop and market minicomputers. When faced with the personal computer wave of disruption that put DEC and almost all other minicomputer manufacturers out of business, IBM again established an autonomous business unit to develop and market personal computers. In time, that small start-up unit grew to dominate much of the company's core business. Creating separate and autonomous units insulated from the core business allows new technologies and business models to emerge and grow without getting lost in the strategy, margin, and business model demands of existing business units.

Jobs-to-be-Done

Despite the best efforts of marketing experts to segment markets and predict demand based on demographic data, our height, weight, income, or age never causes us to make a purchase. What causes us to purchase a product or service is the fact that situations arise in our lives where we need to get something done. When we identify such a "job" we'll purchase or "hire" the product or service that most completely satisfies the job we need to get done.

Companies that leverage this understanding of jobs-to-be-done and bring products to market that help customers accomplish tasks they need to address can unleash explosive growth in any given industry. For example, the home furnishings market is a very mature industry with a crowded, competitive field. Yet Swedish furniture retailer IKEA continues to grow despite fierce competition and a challenging macroeconomic environment.³ It does so because it has honed in on a clear job-to-be-done for people who need to quickly furnish an apartment or home with reasonably fashionable, cheap items. Every aspect of an IKEA store is configured around this job: from the babysitting service, to the cafeteria that keeps customers energized through a marathon shopping experience, to the enormous inventory that allows customers to take home their purchases the same day.

Products and services that don't meet clearly identifiable jobs-to-be-done tend not to succeed in the marketplace. Google Health was an effort to create a personal health record that patients control. Most people thought this was a brilliant idea that would empower patients to conveniently control and access their health data. The venture failed, however. Many have speculated why it failed, but most explanations boil down to the simple fact that the vast majority of people do not identify "manage my personal health data" as a job.

In industry after industry, sustaining innovations—in the form of technological and business model improvements—have brought us better products and services than we ever imagined. It is disruptive innovations, however, that make those wonderful products and services affordable and accessible to ever-larger groups of people. In an era when health care costs are spiraling out of control, we cannot be passive about the crisis at hand. While sustaining innovations may improve health care in important ways, they do little to mitigate rising health care costs. By pursuing disruptive innovations in the health care industry innovators can help address the core issues of accesibility and affordability and make high-quality care available to all.

METHODOLOGY

Our study of the Patient Protection and Affordable Care Act (ACA) involved multiple iterations of research and analysis. We conducted a review of secondary sources about the legislation to identify the appropriate scope for our analysis. We elected to focus on sections of the ACA where there was a significant likelihood that theories of disruptive innovation would offer material insights into the impact of the legislation.

This narrowed our study to 16 major parts of the legislation, which we evaluated through the relevant lens of disruptive innovation theory. Due to length and materiality of the insights garnered from the theories of disruptive innovation, we further narrowed our scope to 11 sections of the legislation. Those parts that were excluded from final analysis are outlined in Appendix I.

There is much research that can and should be done on the ACA that was out of scope for this report. For example, this report does not include a detailed economic or clinical analysis on the likely outcomes of the legislation, nor does it contemplate the political ramifications of implementation of the law. We encourage other experts to undertake these important questions, and hope that our work may contribute to their efforts.

INDIVIDUAL MANDATE

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Encourages Disruptive Innovation	Objective: Prevent systemic costs caused by care for people without insurance; prevent insurance rate increases caused by adverse selection. Means: Require every individual to have health insurance.	 Principle: When nonconsumers enter a market, that market must realign to serve the demands of the new entrants. Conclusion: The individual mandate will change the health care industry by creating a new market segment of previously uninsured individuals. Yet further systemic changes are necessary lest we provide "coverage without care."⁴

Statutory Objective

Healthcare.gov explains the purpose of the individual mandate:

When an uninsured person requires urgent—often expensive—medical care but doesn't pay the bill, everyone else ends up paying the price in the form of higher insurance premiums. That's why the health care law requires all people who can afford it to take responsibility for their own health insurance by getting coverage or paying a penalty.⁵

The act itself further states, "In the absence of the requirement, some individuals would make an economic and financial decision to forego health insurance coverage and attempt to self-insure, which increases financial risks to households and medical providers."⁶ Requiring all people to carry insurance prevents individuals from taking advantage of the system by only signing up for insurance when they are sick.⁷

Statutory Means

This provision can be broken down into three sections: the requirement, the penalties, and the exemptions.

- The law requires that all individuals who are not exempt maintain "minimum essential coverage" for themselves and their dependents beginning in January 2014.⁸ Minimum essential coverage is defined as any exchange plan, any employer plan, Medicare, Medicaid, or other government-sponsored plan.⁹
- If an individual does not maintain minimum essential coverage for themselves and their dependents, they are required to pay a penalty in the form of a tax return deduction.¹⁰ The penalty in 2014 is 1 percent of yearly income or \$95, whichever is higher. The fee grows every year until it reaches 2.5 percent of income or \$695 in 2016. If dependents are not covered, an additional fee applies.

- An individual is exempt from these conditions if they meet any of the following criteria:^{11 12}
 - The individual is uninsured for less than three months of the year
 - The individual has very low income, making coverage unaffordable
 - The individual is not required to file a tax return because income is so low
 - The individual would qualify for Medicaid but their state has chosen to not expand it
 - The individual is a member of a federally-recognized Indian tribe
 - The individual participates in a health care sharing ministry
 - The individual is a member of a recognized religious sect with religious objections to health insurance
 - The individual is incarcerated
 - The individual is not lawfully present in the United States

Disruptive Innovation Insights

While it is tempting to claim that the individual mandate reduces the opportunity for business model innovation by eliminating nonconsumers of health insurance, this contention is incorrect first, because free emergency care is already required, and second, because exemptions and qualifying provisions still allow for innovative health care solutions. Rather than constricting innovation, the individual mandate will expose existing inadequacies in the health care system and spur disruptive change.

Hospitals *cannot* currently deny life-saving treatment to the uninsured or to those who cannot pay.¹³ As a result, America *already has* universal health insurance, in a sense—though the present system forces people to wait until they have no other recourse but to seek care in an extraordinarily expensive hospital emergency environment. Many cannot pay, and their care must be subsidized by a "hidden tax" on health insurance companies in the form of high fees for service. Thus, requiring universal coverage does not eliminate nonconsumers, but rather moves toward improving a market where nonconsumption is already highly limited.

This does not mean that disruptive entrants have no market options, however. For example, one health care provider in Alaska, the Alaska Native Tribal Health Consortium, has pioneered potentially disruptive "dental health aid therapists" who can perform routine, standardized dental procedures at much lower cost than traditional dental providers.¹⁴

Newly insured individuals ineligible for Medicaid form another important group that entrants could target. The Congressional Budget Office predicts that 7 million people will enroll in the

exchanges in 2014, and 13 million by 2015.¹⁵ Other estimates put the 2014 number even higher as states refine their projections.¹⁶ New market innovation "whitespace" still exists under the individual mandate.¹⁷

Most significantly, requiring all individuals to carry health insurance will expose gaps in health care delivery that were previously hidden by blanket care requirements and government services. Currently, few options outside of the high-cost hospitals exist for low-income individuals who need routine care. Ensuring that all have health insurance will increase demand for routine health care, putting pressure on the health care system to break out routine and high-risk care and to create new, low-cost venues for routine care delivery.¹⁸ Some potential venues, such as retail clinics, already exist. Accenture predicts that retail clinics will grow 25 to 30 percent annually over the next three years due to capacity constraints in hospital and emergency room venues.¹⁹

While health insurers are required to provide certain benefits to customers, they may offer narrow networks as long as allowed by state regulators. Thus new insurers such as Neighborhood Health in Massachusetts can focus on providing this type of targeted, provider-restricted, potentially disruptive health care coverage that focuses on filling the current gaps in care delivery at the low end of the market for low-income populations.²⁰ Retail clinics, on-site employee clinics, telemedicine, and other innovative venues are poised for explosive growth if they are coupled with disruptive business models and unencumbered by constraining scope of practice regulation.²¹

EMPLOYER MANDATE

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Encourages Disruptive Innovation	Objective: Expand access to affordable health care coverage; prevent public cost from soaring due to employers dumping employees on government- subsidized exchanges.	Principle: <i>Insurance</i> is different from <i>reimbursement.</i> Intermingling different business models results in high-burden overhead and incurs significant complexity costs.
	Means: Require all employers with 50 or more full-time-equivalent employees to provide health coverage to all employees that work more than 30 hours per week.	Conclusion: The employer mandate incentivizes employers to break apart insurance and reimbursement and to take control of day-to-day care. They can disruptively integrate around employees' health care needs.

Statutory Objective

The Employer Mandate, or "Employer Shared Responsibility" provision, in conjunction with other aspects of the law is intended to "expand access to affordable health coverage," says the Department of Labor.²² The Small Business Administration comments that the employer mandate in particular will "offset part of the cost of the Marketplace premium tax credits."²³

Statutory Means

The employer mandate expands access to health coverage by requiring all employers with 50 or more full-time-equivalent employees (30+ hours/week) to provide health insurance to their full-time employees or else pay a penalty.

The ACA imposes one of two penalties on employers that do not provide health insurance that we will term the "heavy penalty" and the "light penalty." If an employer does not provide health coverage and any employee enrolls in an exchange, the employer must pay the heavy penalty. If an employer provides coverage that is not considered "affordable" and any employee enrolls in an exchange, the employer must pay the light penalty. The funds from these penalties are earmarked to partially offset the cost of insurance exchanges.* Penalties are not tax-deductible.

• **Heavy penalty:** The employer must pay a penalty for each full-time-equivalent employee (minus 30) whether or not they enroll in the exchanges. The penalty is \$2,000. A business with 80 full-time-equivalent employees would pay \$100,000.

^{*} Insurance Exchanges are online marketplaces where low-income employees would likely purchase their insurance if not provided by their employer. See Insurance Exchange section of this paper for additional detail.

• Light penalty: The employer must pay a penalty only for full-time-equivalent employees who actually enroll in the exchanges. The penalty is \$3,000. Assuming that only six employees opt out of the employer-offered insurance and instead enroll in the exchanges, a business with 80 full-time-equivalent employees would pay \$18,000.

Disruptive Innovation Insights

Though at first glance the mandate seems to discourage innovation by requiring employers to offer expensive and complex insurance plans, the penalties and incentives in play for employers may in fact encourage disruptive innovation.

The key is the light penalty. If an employer provides "minimum essential coverage," then the business will only be fined for employees who actually enroll in an exchange.* This creates an environment where the employer is incentivized to offer a plan that is low-cost to the employer but good enough for the employees that they do not desire the more expensive and comprehensive coverage offered through the exchange. This kind of "good enough" innovation that fits, but does not overshoot, customer needs is exactly the type of innovation that can disrupt higher cost insurance and care practices.

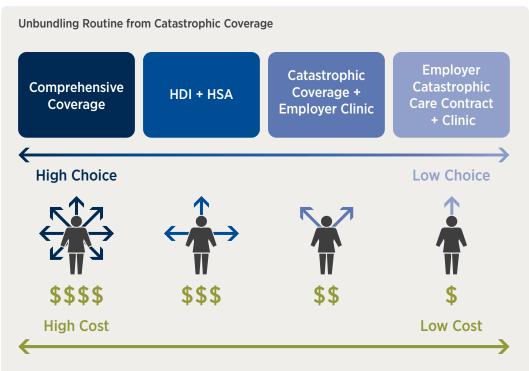
Two types of health care coverage may fit this bill. The first is high-deductible insurance (HDI) coupled with a health savings account (HSA). This type of arrangement addresses one of the fundamental problems with today's insurance companies: they conflate insurance and reimbursement models. Consider car insurance. When a person purchases insurance for his car, he pays a premium and only files a claim if an unexpected accident occurs. Insurance companies make money because they charge more in premiums than they pay in claims, and individuals are well-served because their premium payments are less than the potential harm of a serious car accident. Now imagine that car insurance companies also covered gasoline and routine maintenance costs. Premiums would skyrocket. So would overhead and paperwork: every gas station would need to be up-to-date on all insurance companies in the country, and every time a person filled up with gas he would have to submit a claim. Conflating insurance and reimbursement models leads to a complexity nightmare experienced as high cost to companies and consumers.

Yet this is exactly what most comprehensive health insurance plans do today. They cover both routine treatment as well as care for catastrophic, unexpected events. High-deductible insurance

^{*} See Internal Revenue Code § 5000(A)(f) for the legal definition of minimum essential coverage. Basically, any plan legally sold in a state or any employer self-insured plan qualifies as minimum essential coverage.

with health savings accounts fixes this problem. HDI plans allow insurance providers to focus on what they do best: insure against catastrophic health issues. HSAs put the consumer in charge of their routine health care, thus reducing both paperwork (claims and other complexities) and overconsumption of care.

The second type of plan that qualifies as "minimum essential coverage" is employer-integrated health care. Under this type of plan, the employer provides on-site clinics or similar services that cover primary care needs and then contracts directly with health care providers for catastrophic care. For example, Quad/Graphics in Milwaukee is one of America's largest printing companies. They set up their first in-house primary care clinic in 1990 and contracted directly with local hospitals and specialists for advanced care, saving thousands of dollars per employee.²⁴ They now operate QuadMed, a company that contracts with employers to provide primary care onsite. Other large employers could follow suit in order to fill the minimum essential coverage requirement.²⁵



Employers have a range of health benefits options at their disposal to make care more affordable and accessible to their employees. The choices range across a continuum of high vs. low cost and high vs. low provider choice.²⁶ Because employers have a vested interest in keeping their employees healthy, they are better situated than the government, insurance companies, or doctors to take action to maximize individual wellbeing. Employees will perceive that coverage provided by their employers through on-site clinics is often better and much more convenient than that offered through traditional insurance plans. When this happens, employer integrated care will be well on its way to disrupting traditional health insurance, thanks in part to the incentives introduced by the ACA.²⁷

ACCOUNTABLE CARE ORGANIZATIONS

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Encourages Disruptive Innovation	 Objective: Reduce health care costs and improve health care outcomes by aligning the financial incentives of providers and payors. Means: Providers assume financial responsibility for a patient population and share savings or bear penalties based on performance vs. targets set by the Centers for Medicare and Medicaid Services (CMS). 	 Principle: Aligning stakeholders in a coherent value network enables disruption to proceed unencumbered. Conclusion: ACOs could encourage disruptive business models. However, the lack of visibility to patients and lack of process changes in routine primary care limit the upside of the current model.

Statutory Objective

An Accountable Care Organization (ACO) is a network of providers (typically doctors and hospitals) that share responsibility for providing coordinated care to patients in order to limit unnecessary spending and improve quality of care.²⁸ ACOs aim to tie providers' payments from Medicare to achievement of "health care quality goals and outcomes."²⁹ As of July 2013, there were 488 accountable care organizations in the United States.³⁰

Statutory Means

ACOs are enabled by the legislation under the following conditions:³¹

- 1. Entity is willing to become accountable for the quality, cost, and overall care of at least 5,000 Medicare fee-for-service beneficiaries assigned to it for at least three years.
- 2. Entity defines processes to promote evidence-based medicine and patient engagement and report on quality and cost measures.
- 3. Entity uses an alternative payment mechanism, including bundled payment or shared savings, to encourage financial and clinical accountability.

Disruptive Innovation Insights

In any industry, health care or otherwise, three preconditions are required for disruption to take place: 1) A simplifying disruptive technology needs to be available and affordable, 2) The simplifying technology must be housed within a disruptive business model that motivates the company to prioritize the simplifying technology as a growth- and profit-maximizing initiative, and 3) The company must be part of a coherent value network, where upstream and downstream suppliers, partners, and customers all mutually benefit when the disruptive business model makes money.

ACOs represent an effort to align the previously adversarial interests within the health care delivery value network. Traditional fee-for-service reimbursement is a win-lose dynamic between providers and payors (i.e, when providers make more money, payors lose money and vice versa). Under alternative payment mechanisms authorized under the ACA, the financial interests of payors and providers are more aligned. In theory this should enable adoption of disruptive technologies and business models in provider organizations where it would previously be impossible under fee-for-service reimbursement.

The above statements are an evaluation only of the contents of the statute. In practice, ACOs have been slow to deliver the hoped-for disruptive business models and aligned value networks. The struggles to do so can be attributed to two major flaws in the execution of the ACO model:

- 1. Individual providers almost never know whether an individual patient is a member of an ACO or traditional fee-for-service reimbursement scheme.
- 2. Provider organizations rarely adjust care delivery processes for the majority of patient populations. To date, process improvements have been focused on patient populations with complex, expensive conditions.

Once the knowledge of which patients belong to an ACO scheme is transparent to providers and differentiated processes to treat ACO patients exist, we are optimistic that ACOs may fulfill their full potential. By aligning interests in a coherent value network ACOs have the potential to enable significant adoption of disruptive technologies and business models in health care delivery.

WELLNESS PROGRAMS

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Encourages Disruptive Innovation	Objective: Encourage wellness programs offered through employers and insurance plans to prevent people from getting sick and thereby reduce health care costs. Means: Provide funding for wellness programs, allow employers to incentivize participation in wellness programs, and require coverage of annual wellness visit in plan design.	 Principle: Great solutions address customers' jobs-to-be-done. Conclusion: If wellness programs can effectively address customer jobs-to-be-done, they will reduce demand on primary care practitioners, resulting in cost savings for individuals and across the health care system.

Statutory Objective

The ACA includes provisions that encourage employers and insurance plans to offer wellness programs that improve and promote health and fitness. Participation in such programs allows employers or insurance plans to offer premium discounts, cash rewards, gym memberships, and other incentives to participants. Some examples of wellness programs include plans to help you stop smoking, diabetes management programs, weight loss programs, and preventative health screenings.³²

Statutory Means

The ACA uses several mechanisms to encourage employers and insurance plans to offer wellness programs, including the following:

- Allow employers and health plans to offer insurance premium rebates of up to 30 percent (50 percent if authorized by HHS) to employees that achieve targeted heath standards.³³ This is colloquially known as the Safeway Amendment in reference to Safeway's work on reducing its health care spending.
- Require coverage of wellness programs as part of minimum essential benefits.³⁴
- Mandate state wellness demonstration projects to innovate new wellness program designs.³⁵
- Provide \$2B in federal funding in support of wellness programs.³⁶
- Provide resources to aid employers in set up of new wellness program offerings.³⁷

Disruptive Innovation Insights

Most people do not perceive a "job-to-be-done" of staying healthy until they are already sick yet most wellness programs to date have made the assumption that patients want to be proactive about staying healthy.³⁸ Since jobs-to-be-done tend to be relatively static in a person's life, creating awareness of an unsatisfied job that users do not readily identify in their lives is not a successful strategy.³⁹ Thus, most wellness programs to-date have not created significant growth, health improvements, or profitability.

If wellness programs can meaningfully address an existing job-to-be-done for their participants, they will be very successful. Examples of existing jobs-to-be-done that wellness programs may try to target include the jobs of accumulating wealth or developing meaningful friendships. If they are able to leverage a job-to-be-done that patients readily identify, we expect that wellness programs could reduce demand on primary care through reducing incidence of disease among program participants, and result in cost savings for individuals and across the health care system.⁴⁰

Thus, wellness programs hold the promise of encouraging disruption in health care delivery by helping patients take more ownership of their health and by doing so, minimize costly medical care. They will only succeed at this aim if they can identify and leverage a job-to-be-done that existing products or services do not successfully address.

CMS INNOVATION CENTER

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Encourages Disruptive Innovation	 Objective: Test innovative payment and service delivery models to reduce expenditures while preserving or enhancing care quality. Means: Create a Center for Innovation under Centers for Medicare and Medicaid Services (CMS). 	 Principle: The innovator's dilemma occurs because industry incumbents cannot disrupt themselves. Companies can address this problem by setting up wholly separate entities that are autonomous from existing business units to pursue disruptive strategies. Conclusion: By establishing an
		independent center, CMS takes a large step toward solving the innovator's dilemma.

Statutory Objective

The ACA creates a separate entity within the Centers for Medicare and Medicaid Services (CMS) for the purpose of testing 'innovative payment and service delivery models to reduce program expenditures and preserve or enhance care quality for those individuals who receive Medicare, Medicaid, or Children's Health Insurance Program (CHIP) benefits."^{41 42}

Statutory Means

The ACA amends Section 1115A of the Social Security Act in order to establish an "Innovation Center" responsible for testing "innovative payment and service delivery models." The Secretary of Health and Human Services (HHS) may expand the scope and duration of tested models, and is required to terminate or modify the model testing unless the model improves care quality without increasing costs, decreases costs, or both.

Further, in the ACA and other legislation Congress assigned the Center with specific models to test, such as comprehensive geriatric care plans, inpatient hospital rehabilitation, and various evidence-based, guideline-driven care practices.⁴³

Disruptive Innovation Insights

Health care improvement in the United States is subject to the classic innovator's dilemma: sometimes "best practices" that are essential to a company's success—such as catering to the needs of the best customers and focusing investments where profitability is most attractive—can lead to a business's downfall as newer, cheaper, and often lower quality products take over market share. The Innovation Center is a positive initial step toward resolving this dilemma within CMS.

CMS is an enormous organization that was single-handedly responsible for 36 percent (or nearly \$1 trillion) of health care spending in the United States as of 2011.⁴⁴ Like large incumbent organizations in any industry, CMS has a 'business model' that dictates the innovations it can

and cannot prioritize. The essence of the CMS business model can be boiled down to three critical components:

- 1. **The coverage approval process,** which governs what new medical technologies and procedures will be reimbursed by CMS and which ones won't,
- 2. The disease related group (DRG) coding structure that governs the prices at which CMS approved fee-for-service medical care is reimbursed, and
- 3. The need for technologies and care delivery methods to scale uniformly across the entire Medicare and Medicaid populations.

In the coverage approval process, sustaining innovations are the most likely to be prioritized because they almost always improve clinical performance. When these new innovations are coded and priced under the DRG coding structure, they almost always have higher reimbursement rates than their predecessors. While this business model is very sensible for evaluating and managing sustaining innovations, it makes it nearly impossible to bring a disruptive technology or care delivery business model to market. An entirely autonomous unit with a different business model would be required to prioritize such disruptive innovations and care delivery models at CMS.

The Health Quality Partners (HQP) CMS demonstration project, authorized under the 1997 Balanced Budget Act, provides an informative case study that illustrates the necessity of forming a separate organization. Demonstration projects are unique in that the bill authorized the Secretary of HHS to autonomously scale them up without Congressional oversight, so long as the project was increasing care quality without increasing cost. Health Quality Partners both improved care quality and reduced cost by sending a nurse on home visits to chronic care patients' homes every week. According to an independent analysis, HQP reduced hospitalizations 33 percent and cut Medicare costs 22 percent. No other program both increased quality and cut costs, and so now HQP is the only demonstration project still running.⁴⁵

Yet CMS's Medicare program has attempted to shut the project down numerous times. It has done so because it is unclear the cost savings will continue if the program is scaled to a larger population. As a large incumbent, CMS's business model will not allow it to prioritize a seemingly insignificant innovation like HQP. For Medicare, a huge program that covers millions of people, the appeal of a program that only treated a few thousand people borders on irrelevant, especially when that program utilized a model so different than Medicare's traditional fee-forservice mechanism.

Creating an Innovation Center separate from the main CMS organization is a critical first step toward enabling disruptive innovation at CMS. Already the Center is testing ideas such as bundled payment for care that would not likely be prioritized under the traditional CMS business model. The Center's success, however, will depend on its ability to function independently from entrenched incumbent health care companies and the core CMS business model.

GUARANTEED ISSUE

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Neutral	Objective: Ensure that no person can be denied health care coverage even with preexisting conditions.Means: Require all insurers to enroll individuals with preexisting adverse health conditions.	 Principle: Ensuring coverage is an important piece of health care reform, but does not change the underlying health care system. Conclusion: The health care value network must realign lest we provide "coverage without care."⁴⁶

Statutory Objective

"Being sick doesn't keep you from getting coverage," proclaims Healthcare.gov. This portion of the legislation aims to ensure that no person can be denied health care coverage, even if one has preexisting serious health conditions.

Statutory Means

Group health plans may not impose enrollment exclusions based on preexisting health conditions.⁴⁷ The Health Insurance Portability and Accountability Act of 1996 (HIPAA) created some regulations for accepting consumers with preexisting conditions. Under HIPAA, a health plan may only use an individual's previous six months history to determine preexisting condition exclusions. The exclusion period may only last for 12 months and may not include exclusions for pregnancy, genetic information, and some children from preexisting condition consideration.⁴⁸ The ACA goes further by removing all exclusions and continuous coverage requirements, provided one enrolls during yearly open enrollment periods or in conjunction with a qualifying life event.

Disruptive Innovation Insights

Guaranteed issue does not inherently foster disruptive innovation in health care because it does not lead to changes in the industry value network.

A *value network* is "the context in which a firm establishes cost structure and operating processes and works with suppliers and channel partners in order to respond profitably to the common needs of a class of customers."⁴⁹ The value network determines the costs and incentives that a firm faces. For an insurance company, the value network consists in part of underwriters, employers, insured populations, and health care providers. In this value network, insurance providers make money by charging more in premiums than they pay out in claims.

Disruptive innovations make goods and services less expensive and more accessible by transforming the value network using disruptive technology. The microprocessor enabled personal computers which were for years sold and used in their own value network. As the technology improved they began to compete against professional computers, and the value network realigned so that processor manufacturers and operating systems suppliers rather than computer assemblers captured profits while enabling consumers to purchase low-cost highperformance devices.

The ACA's guaranteed issue provision does not realign the value network. Rather, people with preexisting conditions will be part of the exact same health care ecosystem as those without preexisting conditions—same insurance companies, same reimbursement framework, same health care providers.

ESSENTIAL HEALTH BENEFITS

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Discourages Disruptive Innovation	Objective: Ensure health plans offer a comprehensive package of items and services.	Principle: Disruption generally occurs at the low-end of the market among consumers least appealing to incumbent
Ţ	Means: Require all health care plans to provide, at a minimum, all "essential health benefits."	companies. Conclusion: Requiring plans to provide benefits based on current market practices prevents disruptive innovation at the low-end.

Statutory Objective

"The Affordable Care Act ensures health plans offered in the individual and small group markets, both inside and outside of the Health Insurance Marketplace, offer a comprehensive package of items and services, known as essential health benefits."⁵⁰ This plank is meant to guarantee that insurance plans offer valuable health benefits to consumers.

Statutory Means

The ACA requires plans to provide at least the following benefits:⁵¹

- Ambulatory patient services (outpatient care without being admitted to a hospital)
- Emergency services
- Hospitalization
- Maternity and newborn care
- Mental health and substance use disorder services, including behavioral health treatment
- Prescription drugs
- Rehabilitative and habilitative services and devices
- Laboratory services
- Preventative and wellness services and chronic disease management
- Pediatric services

States set the benchmark for each category based on "midrange" employer-offered plans within their state. $^{\rm 52}$

Disruptive Innovation Insights

The ACA's "essential health benefits" requirement discourages disruptive innovation perhaps more than any other section. It mandates minimum coverage that overshoots the needs of many customers while preventing innovation that could fundamentally lower the cost of care by requiring that insurance plans mimic the legacy state insurance markets.⁵³

Essential health benefit requirements use existing health care plans as a benchmark, legally requiring that health plans and providers imitate the current offerings, effectively putting a floor in the market. This prevents the type of low-end competition needed for disruptive innovation to occur. For example, antibiotic tuberculosis treatment displaced sanatorium care in the 1940s. If the ACA and modern insurance plans had existed then, insurers would have been required to cover sanatorium care, even when antibiotics were a more effective treatment at much lower cost. Even if an individual realized that they did not need sanatorium care, they could not have purchased a less expansive plan without sanatorium coverage. Similarly, the essential health benefits provision locks customers into outdated, expensive treatment options, even when lower-cost, more convenient solutions exist.

In addition, by virtue of the benefits they cover, most care under exchange-based health plans will be funneled to traditional venues of care—the hospital and doctor's office. Regulators could encourage disruptive innovation by leaving the low end of the market open to innovation, allowing reimbursement for care delivered in lower-cost venues outside of the hospital or through new technologies like telemedicine and monitoring devices. This would allow innovators to develop novel, focused business models that could offer high quality, more affordable care to all patients. Retail clinics are one example of a focused business model. These businesses take the most routine procedures and offer them in a more convenient setting with lower overhead costs and less expensive clinicians. Enabling focused business models like retail clinics frees up the most routine diagnoses and procedures from the undue complexity and cost of the general hospital business model—and allows more specialized practitioners to treat more complicated problems.

In summary, essential health benefit requirements hinders disruptive innovation in two ways. First, essential health benefits are legally required to mimic the current market, limiting low-end disruptive innovation. Second, they require health plans to provide too much coverage, conflating insurance and reimbursement models and encouraging costly overconsumption of medical care. Thus, "essential health benefits" as laid out in the ACA hinders disruptive innovation and keeps costs of care high.

INSURANCE EXCHANGES

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Discourages Disruptive Innovation	Objective: Lower cost and increase quality of health care through competition; make insurance plans that meet minimum benefit requirements accessible to customers. Means: Create internet-based insurance exchanges; regulate actuarial values and other plan features.	 Principle: Pitting new entrants against incumbents in a sustaining battle wastes resources and does not lower prices. Disruptive innovation, created through new business models, lowers prices and increases accessibility. Conclusion: Exchanges create standardized, transparent markets, but do so on a sustaining basis, essentially putting a floor on the low-end of competition and preventing disruption.

Statutory Objective

The purpose of the ACA's insurance exchange provision is simple: to lower the cost and increase the quality of health insurance through competition and transparency while making insurance plans easily accessible to consumers. "The insurance exchange will pool buying power and give Americans new affordable choices of private insurance plans that have to compete for their business based on cost and quality," claims the Department of Health and Human Services (HHS) summary.⁵⁴ Competition is expected to increase because the plans are sold side-by-side on an online exchange. Standardized comparison mechanisms are intended to allow consumers to easily compare features and level of coverage. Internet-based exchange websites are designed to enhance accessibility.

Statutory Means

The ACA implements insurance exchanges in three parts. The first part is the exchange itself, its platform and supporting technologies. The second includes regulations about plans on the exchanges, specifications of their characteristics and values. The third component outlines provisions for exchange implementation, when the implementation will take place and who will create and maintain the exchanges.

The Exchange

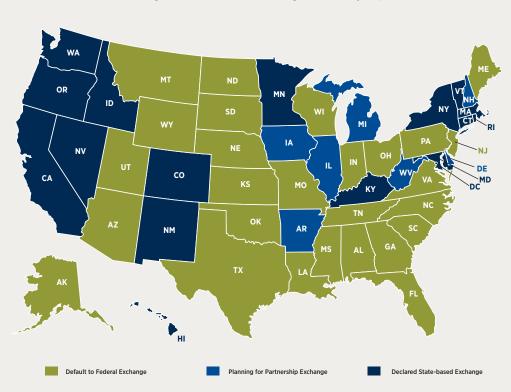
- Insurance exchanges function as an online marketplace where individuals can compare plans. It is intended to be similar to Travelocity or Expedia for airline and hotel bookings.⁵⁵
- Exchanges include resources to help users such as a subsidy calculator, a toll-free telephone hotline, and "navigator" organizations to help people use exchange resources and make decisions about health insurance.

Exchange Plan Regulations

- Exchanges include a plan ranking and comparison mechanism.
 - Exchanges categorize plans by actuarial value into Platinum, Gold, Silver, or Bronze rankings.⁵⁶
 - Exchanges delineate standard benefits, allowing for easy cross-plan and cross-category comparison.⁵⁷
- The benefits and actuarial values offered by plans are regulated by the federal government.
 - Only qualified plans may participate. A qualified plan is one that meets all ACA provisions for benefits, community rating, and population service. Companies must offer at least one plan at both Silver and Gold levels as well as charge the same price for plans sold on or off the exchange.⁵⁸
 - Bronze plans must cover at least 60 percent of the actuarial value of care, Silver plans 70 percent, Gold plans 80 percent, and Platinum plans 90 percent.⁵⁹

Implementation

- Exchanges are being made available first to individuals and small businesses in 2013; medium-sized businesses must be given access by 2015; all will have access by 2017.⁶⁰
- Exchanges may be implemented by states, the federal government, or by a state-federal partnership.⁶¹
 - For state-run exchanges, individual states control marketing, insurer participation in the exchange, exchange fees, and regulations that build on federal requirements. For example, states may implement stricter price controls or eliminate allowed variation such as premium adjustments for individuals who smoke.⁶²
 - All state exchanges must be approved by the federal government.



State Decisions For Creating Health Insurance Exchanges as of May 28, 2013

Disruptive Innovation Insights

Two general schools of thought exist about health care insurance costs. The first is that competition will drive down health care prices because it encourages efficiency and affordability over monopolistic pricing. The second is that large insurance companies retain de facto control of the marketplace and will gouge individual purchasers, and so pricing controls are required. Neither of these is true. To successfully lower prices, regulators must go beyond just encouraging competition. They must encourage a marketplace that allows for disruptive innovations that will both lower prices and prevent too-powerful incumbent advantage.

Sustaining competition, or competition within old markets to provide ever-better services to customers with ever-higher margins for businesses, tends to increase prices. New entrants compete against incumbents on their terms, and as a result they often fail after tremendous waste of resources.

Source: Data compiled through review of state legislation and other exchange documents by the Kaiser Family Foundation.

Disruptive competition, on the other hand, enables entrants to succeed in new markets. Once established, these disruptively competitive businesses have the opportunity to move up-market from their new (though small) strongholds and capture incumbents' business.

The Exchange

As discussed in the section on the individual mandate, the creation of a new market segment that needs health care could spur disruption in the insurance industry from limited-provider, low-cost plans. The exchanges will be helpful by providing aid to people in adopting health care plans, but do not themselves spur disruption in any portion of the health care industry. While an online marketplace could encourage transparency and competition and afford consumers with more open access to health insurance, of itself it is disruption-neutral.

Exchange Plan Regulations

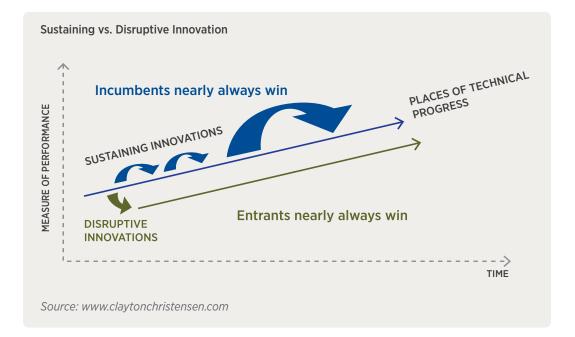
Insurance plans must offer the "essential health benefits" outlined in the law while conforming to pre-determined actuarial values before being listed on the exchanges. These regulations, though meant to protect consumers and make high-quality health care available to all, severely constrain the potential business models for insurers and by default the prices at which they can be offered.⁶³ The exchanges erect further barriers to disruptive competition by requiring that all plans offer options at the Silver and Gold levels, requiring participation at the high-end of the insurance market. High-end competition pits disruptive entrants against incumbents in battles that incumbents almost always win due to scale and resource availability.

As a result, most plans offered on the exchanges will be sustaining, not disruptive. As plans cannot dip below established actuarial values and must offer all "essential health benefits," new entrants will have little foothold to gain customers except by severely restricting provider networks. This is a feasible option: a recent study by McKinsey & Co. found that consumers would opt for smaller networks of providers in order to save money on premiums.⁶⁴ Unfortunately, these potentially disruptive low-cost, limited-network Bronze-level plans are discouraged by special subsidies that apply only to Silver-level plans.⁶⁵ Further, the availability of these types of plans on the exchanges is contingent upon state regulators permitting them in the first place.

Implementation

Rolling out exchange-based plans first to the uninsured and self-insured is a strong positive for encouraging disruptive innovation because it creates new markets that will not initially threaten incumbent insurers. The reality remains, however, that there is little space for disruptive entrants on the exchanges.⁶⁶ Further, any state-based modification to the exchange can only add to requirements imposed by the ACA and federal regulators. Thus any state-based exchange that is substantially different from the federal exchange is likely to further lock down business models.⁶⁷

In summary, though the theory of disruptive innovation says little about the implementation of a competitive exchange, it is relevant to the type of competition encouraged by regulators



and state governments. As implemented, regulations imposed on exchange participants limit low-end entrants and discourage disruptive competition. We predict, therefore, that exchange marketplaces will mimic the current market except for a limited number of Bronze-level plans. Insurance prices will likely remain static or drop minimally due to competition on the exchanges, and sustaining competition could even encourage prices to rise as companies offer more services.⁶⁸ Businesses and entrepreneurs aiming to disrupt insurance should instead focus outside of the exchanges.⁶⁹ In addition, as we suggested when discussing the employer mandate, employers are one good off-exchange candidate to disruptively lower insurance costs.

COST-SHARING REQUIREMENTS

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Discourages Disruptive Innovation	 Objective: Make quality health insurance more affordable for low-income individuals and families. Means: Limit out-of-pocket payments and require insurance companies to bear a larger portion of health care costs for low-income individuals buying Silver-level plans. 	 Principle: Disruptive innovations generally happen at the low-end of markets or among nonconsumers, and they are most often carried out by new entrant companies. Conclusion: Cost-Sharing requirements incentivize all consumers to purchase Silver-level plans to the detriment of potentially disruptive Bronze-level new entrants, discouraging disruption.

Statutory Objective

In addition to subsiding health insurance premiums, the ACA attempts to make quality health insurance more affordable for low-income populations by limiting the portion of health care costs that individuals must pay themselves.

Statutory Means

Cost-Sharing is implemented by imposing out-of-pocket maximums for individuals and by requiring health insurance companies offering insurance on the marketplace to lower the amount paid by low-income individuals purchasing Silver plans. "Out-of-pocket" costs refer to copays and deductibles, but not to premiums.

Specifically, under the ACA an individual can pay no more than \$6,350 out-of-pocket each year, and a family no more than \$12,700. All other costs must be borne by the insurance company. This requirement was originally to be enforced in 2014, but the administration delayed enforcement until 2015.⁷⁰

Individuals and families whose income is under 400 percent of the poverty line are eligible for further cost reductions.⁷¹ Insurance companies are required to reduce out-of-pocket payments on a sliding scale in order to enable lower income groups to afford health care. These reductions only apply, however, to people purchasing Silver plans.⁷²

Disruptive Innovation Insights

Cost-Sharing proponents make a strong point: for the unhealthy, low-income individual, Bronze plans are insufficient. High deductibles, big copays, and large coinsurance percentages work for people with full HSAs, but not for individuals without savings and with significant health expenses.

However, by incentivizing all low-income individuals to buy Silver plans instead of just those who need that level of coverage, Cost-Sharing requirements draw consumers away from potentially disruptive alternatives (Bronze or otherwise).

Most Silver plans offer comprehensive coverage with a broad provider network. They are required to have a 70 percent actuarial value, meaning that they pay, on average, 70 percent of health care costs for the enrolled individual. This type of coverage is good for someone who expects high health costs or who wants greater peace of mind than offered by a plan with a lower actuarial value and higher deductibles.

In contrast to Silver plans, Bronze plans require only 60 percent actuarial value and have higher deductibles and narrower provider networks. Narrow provider networks decrease individual provider choice, but allow these insurers to provide quality health care in affordable venues.

Experiences in Massachusetts illustrate this potential. When the state implemented a health care exchange, its individual mandate—in combination with Commonwealth Care subsidies that applied to all levels of insurance plans—spurred the creation of new Bronze- equivalent limited-network providers such as Neighborhood Health. Enrollment in these plans grew at faster-than-expected rates during the first two years. In 2010, a survey of these plan members reported encouraging findings. "More than four out of five Commonwealth Care members reported high levels of satisfaction with the program, including satisfaction with their choice of doctors and other health care providers, the range of services covered, the quality of care available, the application process, and the ease of enrolling in a health plan."⁷³ These plans, initially targeting the lower tiers of the insurance market, are providing satisfying services that people need at lower cost.

The solution is not to eliminate cost-sharing benefits and thus expose low-income individuals to the vicissitudes of health and market fluctuations. As a hypothetical alternative, instead of subsidizing the purchase of Silver plans, patients could use subsidies to purchase Bronze plans coupled with a government-subsidized deposit into an HSA. This would enable payors to create disruptive plan, product, and service designs, rather than just funnel people into more costly Silver plans. However, as currently constituted, the ACA's cost-sharing requirements will reinforce the incumbent reimbursement system and discourage disruptive innovation from the low end.

MEDICAL LOSS RATIO

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Discourages Disruptive Innovation	 Objective: Keep insurance costs low and hold insurance companies accountable for prices and profits. Means: Require insurance companies to justify rate increases and to spend at least 80% of premium revenues on health care or rebate the difference. 	 Principle: Disruptive innovations almost always come from new businesses rather than incumbents because incumbent companies' business models are locked around their previous successes. Conclusion: Medical loss ratio limits hinder disruptive innovation because they increase the barriers to entry for new businesses that cannot match incumbents' economies of scale.

Statutory Objective

Also known as the 80/20 rule, the administration says that this rule is meant to "hold insurance companies accountable and keep costs down."⁷⁴ Medical loss ratio (MLR) refers to the percentage of premium revenues used to pay for health expenses.

Statutory Means

The MLR rule is called the 80/20 rule because it requires that at least 80 percent of premium revenues in individual and small-group plans be used to cover medical expenses, leaving 20 percent for administration, advertising, and other overhead. Large-group markets must have an MLR of at least 85 percent.⁷⁵ If the MLR is below the requirement, then the insurer is required to reimburse a proportional amount of premium payments.

Also, the ACA requires insurance companies to justify all rate increases larger than 10 percent.

Disruptive Innovation Insight

Disruptive innovations almost always come from new market entrants, not from alreadysuccessful incumbents. This is not because incumbent companies are incapable of innovation; rather, it is because their business models have locked around their previous success. A company that has been successful by producing and selling high-margin products has little incentive to concern itself with a new entrant that sells low-margin products.⁷⁶

Disruption-friendly regulations therefore lower barriers to new entrants. MLR limits increase entrance barriers to the insurance industry, thus discouraging disruptive competition.

The profit formula of a typical insurance company consists of collecting premiums from a large, diverse group of customers and paying claims from those premiums. The difference in revenue from premiums paid and costs from claims dispersed, plan administration, and processing overhead is the company's profit. Because claims processing and other overhead is a relatively fixed cost, and because future claims costs are more predictable for large groups, insurance companies realize large economies of scale. The larger the company, the lower the overhead cost per plan member.

New entrants into the insurance market already face steep competition from incumbent businesses. Mandating MLRs makes those barriers even steeper because they require new entrants to operate at the same efficiencies as incumbents. As a report by Oliver Wyman Group notes, "MLR floors will also have a major impact on pricing: Price too high and you will both lose customers and have to rebate premiums. Price too low and you may lose your shirt."⁷⁷ This concern looms large for incumbents; it looms even larger for new entrants who are already constrained by community rating and essential health benefit requirements.

Additionally, MLR regulations constrain innovations that rely on increased insurance company overhead to reduce the cost or increase the efficacy of care. While federal regulations allow for wellness programs to count as health care expenditures, certain restrictions narrow the scope of these programs, including strict limits on accepted clinical practice, reliance on criteria issued by professional medical associations, and accounting regulations for cost-cutting activities.⁷⁸ New entrants attempting to implement disruptive technologies that fall outside the narrow scope of insurance-sponsored wellness programs are thus further hindered.

We acknowledge the need for consumer protection by preventing irresponsible profit-taking or price increases by insurance companies. As proposed, however, MLR limits increase the alreadylarge entry barrier for to new entrants in the insurance market. They prevent new entrants from succeeding in the market because they mandate a "size and scale wins" profit model.

MEDICAID EXPANSION

RATING	STATUTE SUMMARY	DISRUPTIVE INNOVATION INSIGHTS
Discourages Disruptive Innovation	 Objective: Ensure that health coverage is available to all people regardless of income level. Means: Expand Medicaid eligibility to all populations up to 138% of the federal poverty level. 	 Principle: Incumbent organizations are incentivized to resist disruptive innovation because it cuts into their core business and revenues. Conclusion: Although this provision draws nonconsumers into the market, complex pricing algorithms and reimbursement codes administered by incumbents discourage disruption.

Statutory Objective

Expansion of the Medicaid program is intended to reduce the number of uninsured Americans by providing access to affordable coverage for people that qualify based on income levels.

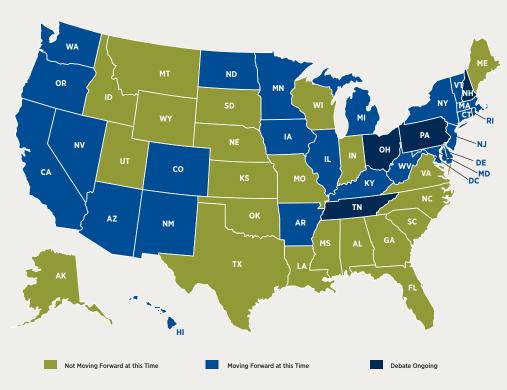
Statutory Means

Prior to the ACA, Medicaid-eligible mandatory coverage groups primarily included pregnant women and children under age six with family incomes at or below 133 percent of the federal poverty level (FPL), children under 18 with family incomes at or below 100 percent of the FPL, certain low-income parents or caretaker relatives, and low-income elderly people with disabilities.⁷⁹

The ACA expands Medicaid coverage to nearly all individuals under the age of 65 whose income falls below 138 percent of the FPL. 80

The federal government will fund 100 percent of most states' cost increases due to this program from 2014-2016, gradually decreasing to 90 percent by 2020. Under the original text of the ACA, states that did not expand coverage could lose their federal Medicaid funding. The Supreme Court in 2012 in *National Federation of Independent Businesses (NFIB) v. Sebelius* ruled this overly coercive, however, effectively making Medicaid expansion optional for states.

As of September 03, 2013, 25 states have opted to expand Medicaid, 21 have declined, and five are still considering. The expansion option has no time limit.⁸¹



Status of State Action on the Medicaid Expansion Decision as of September 3, 2013

Disruptive Innovation Insight

Medicaid expansion is one mechanism in the ACA intended to draw current nonconsumers of health insurance into the health care system. The theory of disruptive innovation suggests that new nonconsumers in the system would increase the opportunity for low-end disruption. However, since the new nonconsumers that are added to health insurance via Medicaid will be crammed directly into an incumbent model, the odds of low-end disruption from Medicaid plans is very low.

All new Medicaid participants will be enrolled in a traditional insurance plan that offers comprehensive coverage using incumbent provider networks. The patients in these plans will have limited out-of-pocket costs for their care. The health insurance plans that cover them have no incentive to invest in or try novel care delivery models or payment models since their premiums will be paid by the government. Thus, their profits are virtually guaranteed by reimbursing care using the incumbent reimbursement coding schemes.

Source: Based on KCMU analysis of recent news reports as well as executive and legislative activity in states.

These reimbursement schemes are governed by the Centers for Medicare and Medicaid Services (CMS) and the American Medical Association (AMA), who control the reimbursement code definitions. The codes issued by CMS and the AMA determine the prices at which a payor will reimburse a given procedure. This effectively fixes prices in the market. This price fixing makes it nearly impossible for a low-end entrant to offer a disruptive solution at a lower price than the incumbent, because entrants cannot set reimbursement rates.

Because the cost of getting a potentially disruptive drug, device, or procedure approved for market use and obtaining reimbursement coverage is so high, and the probability that CMS or the American Medical Association (AMA)—the organizations representing those who will be disrupted—will approve a disruptively positioned product or procedure is so low, few innovators try to obtain approval for disruptive products or services.

Some new entrants have attempted to avoid this problem by operating outside of government reimbursement frameworks. Retail clinics employing nurse practitioners, for example, have charged fixed fees to uninsured individuals for simple procedures such as strep throat diagnosis and treatment. Home dialysis treatments target high-income individuals who can foot the bill themselves when not covered by their insurance. These types of disruptive practices, however, typically encounter harsh resistance from incumbent medical organizations.⁸²

Expanding Medicaid makes the pool of newly insured but Medicaid-ineligible individuals smaller, discouraging disruption. If every state expanded Medicaid, by the end of 2015 approximately 60 percent of those newly obtaining coverage would be covered under Medicaid and force-fitted into old coding groups and reimbursement schemes.⁸³ If outreach efforts are successful, that number could be even higher.⁸⁴

This could be counter-balanced in part by the Supreme Court's 2012 ruling in *National Federation of Independent Businesses (NFIB) v. Sebelius*, which made Medicare expansion optional for states. The Congressional Budget Office estimates that due to this change six million fewer people will be eligible for Medicaid nationwide.⁸⁵ Three million of these will enroll in the exchanges, and three million more will be uninsured because their incomes are too low for exchange subsidies yet too high to qualify for Medicaid in states that opt out of expanding coverage.⁸⁶ This change gives more space for low-end disruption but leaves more people uninsured.

Expanding subsidies for Medicaid-eligible consumers to buy the plan of their choice (Bronze or Silver) would be a more disruption-friendly alternative versus broadening the scope of the existing Medicaid program.

CONCLUSION

Implementation of the ACA exposes some of the most exciting innovation opportunities in decades. But, it is only through *disruptive* innovation—simplifying technologies coupled with new business models in a coherent value network—that we can fundamentally reverse the current trajectory of health care costs in America.

In an effort to disrupt the defunct system, we recommend that innovators focus their efforts on areas where the legislation creates opportunities for disruptive innovation, specifically the Individual and Employer Mandates, ACOs, Wellness Programs, and the CMS Innovation Center. While these provisions are far from silver bullets, innovations positioned with the right business models and value networks will yield exactly what legislators were hoping to create: more affordable and accessible quality health care.

In contrast, where provisions of the ACA discourage disruptive innovation—namely, Insurance Exchanges, Essential Health Benefits, Cost-Sharing Requirements, Medical Loss Ratio, and Medicaid Expansion—we appeal to policymakers to focus their efforts on making the legislation more innovation-friendly. Quality health care will not become affordable and accessible on its own; we need to be proactive in creating room for the innovations that will transform the current state of the industry.

We are hopeful that this research will serve as a useful roadmap in navigating the opportunities and challenges embedded in the ACA and encourage innovators and policymakers alike to take action. By using the principles of disruptive innovation as its compass, the health care community will be better equipped to traverse the legislative labyrinth of the ACA, remove obtrusive political bias, and innovate toward a more affordable, accessible U.S. health care system.

APPENDIX I: KEY SECTIONS OF THE ACA OMITTED FROM OUR ANALYSIS

While we have examined many important provisions of the Affordable Care Act, we have also left many out. A paper of this length cannot possibly hope to cover every detail of a law spanning hundreds of pages, and so we have targeted the planks most relevant to disruption theory. Below are samples of provisions that we have left out, along with brief explanations of why we did so.

Cadillac Tax

The Cadillac Tax is an annual tax on health plans with premiums exceeding \$10,200 for an individual or \$27,500 for a family. The purpose of the tax is to generate revenue to help pay for the cost of the ACA and to discourage overuse of medical care. While we believe that enabling the emergence of coherent value networks would be much more effective than taxes on the current system, we believe this provision will have little effect on disruptive innovation itself.*

Community Rating

The Community Rating provision aims to spread risks and costs for health insurance more evenly across a broad group of people. It does this by prohibiting insurers from charging people more for adverse health and lifestyle choices. The ACA implements a modified community rating that allows insurers to charge individuals only up to three times more than their lowest rate based on age, only one and a half times as much if a person smokes, and allows for some minor rate adjustment based on geography. Traditional economic theory dealing with market efficiency is more relevant than disruption theory, so this provision is beyond the scope of this paper.

Medical Device Tax

The Medical Device Tax imposes a 2.3 percent tax on manufacturers and importers of certain devices. We believe that this tax discourages the development of important diagnostic and treatment technologies that could make health care more affordable. However, as with other provisions highlighted in this appendix, insights from more traditional economic theory are more directly relevant than the theory of disruptive innovation.

^{*} A value network is the context in which a firm establishes cost structure and operating processes and works with suppliers and channel partners in order to respond profitably to the common needs of a class of customers.

Primary Care Investments

The ACA created various funds for training new primary care providers, supporting community health centers, expanding the National Service Corps, and expanding the resources of primary care providers.⁸⁷ Some of these programs address an immediate need for expanded primary care capacity, but they generally do not encourage disruptive health organizations. Due to the wide variety of programs and relatively limited scope of primary care funding, we did not include these investments in our analysis.

Public Health Funding

HHS.gov states that, "The Affordable Care Act established the Prevention and Public Health Fund to provide expanded and sustained national investments in prevention and public health, to improve health outcomes, and to enhance health care quality."⁸⁸ Some of the programs supported by the fund may have disruptive potential; many do not. The disparity of programs prevents holistic analysis and thus is beyond the scope of this paper.

ENDNOTES

¹ Clayton M. Christensen and Michael E. Raynor, *The Innovators Solution* (Boston: Harvard Business School Press, 2003).

² Clayton M. Christensen, Jerome H. Grossman, and Jason Hwang, *The Innovator's Prescription* (New York: McGraw Hill, 2009), p. 119.

³ Mia Shanley, "IKEA posts record profit, gains in almost all markets," Reuters, January 20, 2012, <u>http://www.reuters.com/</u> article/2012/01/20/us-ikea-idUSTRE80J0DV20120120.

⁴ Dr. Marcia Angell, former NEJM executive editor, quoted in *The Innovator's Prescription*, pp. 378, 413-414.

⁵ "What if someone doesn't have health coverage in 2014?," Healthcare.gov, <u>https://www.healthcare.gov/what-if-someone-doesnt-have-health-coverage-in-2014/</u> (accessed August 2013).

 6 Patient Protection and Affordable Care Act (ACA), Pub. L. No. 111-148 § 1501(a)(2)(A). See § 1501(a)(2) for further rationale for the individual mandate, <u>http://housedocs.house.gov/energycommerce/ppacacon.pdf</u>

- ⁷ ACA § 1501(a)(2)(I)
- 8 ACA § 5000A(a)
- 9 ACA § 5000A(f)
- ¹⁰ ACA § 5000A(b)(2)

¹¹ ACA § 5000A(d), § 5000A(e); "What if someone doesn't have health coverage in 2014?," Healthcare.gov, <u>https://www.</u> healthcare.gov/what-if-someone-doesnt-have-health-coverage-in-2014/ (accessed August 2013).

¹² HHS Final Rule and Treasury Notices on Individual Shared Responsibility Provision Exemptions, Minimum Essential Coverage, and Related Topics," Centers for Medicare and Medicaid Services, June 26, 2013, <u>http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-Sheets/2013-Fact-Sheets-Items/2013-06-26.html?DLPage=1&DLSort=0&DLSortDir=descending%20and%20a%20guidance%20 (accessed September 2013).</u>

¹³ Emergency Medical Treatment and Active Labor Act, 1986, 42 U.S.C. § 1395dd.

¹⁴ "The Alaska Dental Therapist has increased access to preventive and restorative oral healthcare for over 35,000 citizens of Alaska's remote, rural communities," Alaska Native Tribal Health Consortium, <u>http://www.anthc.org/chs/chap/dhs/</u> (accessed August 2013).

¹⁵ "CBO's February 2013 Estimate of the Effects of the Affordable Care Act on Health Insurance Coverage," Congressional Budget Office, http://www.cbo.gov/sites/default/files/cbofiles/attachments/43900_ACAInsuranceCoverageEffects.pdf.

¹⁶ Kelly Kennedy, "States predict more insurance customers," USA Today, August 20, 2013, <u>http://www.usatoday.com/story/news/politics/2013/08/19/health-care-law-uninsured-estimates-obama/2671489/.</u>

¹⁷ The Supreme Court's decision in National Federation of Independent Businesses (NFIB) v. Sebelius, 2012, creates another group of people in states that opted to not expand Medicaid who will have incomes too low to be eligible for exchange subsidies. They represent another group in need of innovative coverage options.

¹⁸ For more information on this topic, see blog post by Ben Wanamaker and Jeff Wheeler, "What to do about the ailing hospital business model," Clayton Christensen Institute, July 18, 2013, <u>http://www.christenseninstitute.org/what-to-do-about-the-ailing-general-hospital-business-model/</u>.

¹⁹ "Retail Medical Clinics: From Foe to Friend?," Accenture, 2013, <u>http://www.accenture.com/SiteCollectionDocuments/PDF/</u> Accenture-Retail-Medical-Clinics-From-Foe-to-Friend.pdf.

²⁰ See the Cost-Sharing section of this paper for additional detail on this topic.

²¹ For more information on this topic, see blog post by Ben Wanamaker and Jeff Wheeler, "Why retail clinics are poised for explosive growth," Clayton Christensen Institute, August 1, 2013, <u>http://www.christenseninstitute.org/why-retail-clinics-are-poised-for-explosive-growth/</u>.

²² "Technical Release No. 2012-01: Frequently Asked Questions from Employers Regarding Automatic Enrollment, Employer Shared Responsibility, and Waiting Periods," United States Department of Labor, February 9, 2012, <u>http://www.dol.gov/ebsa/</u> newsroom/tr12-01.html.

²³ "Employers with 50 or more employees," U.S. Small Business Administration, <u>http://www.sba.gov/content/employers-with-50-or-more-employees</u> (accessed August 2013).

²⁴ The Innovator's Prescription, p. 209.

²⁵ Although large employers can establish their own on-site clinics or contract with companies such as QuadMed, other new, innovative businesses can help smaller employers get some of the same benefits. Sherpaa in New York aids employers in selecting insurance plans or in setting up self-insurance based on employee census data, then provides telemedicine consults to reduce

employee primary care needs. This increases the overall health profile of the employee population, thus saving on insurance costs. The telemedicine model makes workplace-based health care and consultation available to companies that are not able to provide on-site clinics.

²⁶ For more information on this topic, see blog post by Ben Wanamaker, "Untangling the bundled insurance problem," Clayton Christensen Institute, August 29, 2013, http://www.christenseninstitute.org/untangling-the-bundled-insurance-problem/.

²⁷ "Untangling the bundled insurance problem"

²⁸ Jenny Gold, "FAQ On ACOs: Accountable Care Organizations, Explained," Kaiser Health News, August 23, 2013.

²⁹ "Glossary: Accountable Care Organization," Healthcare.gov, <u>https://www.healthcare.gov/glossary/accountable-care-organization/</u> (accessed August 2013).

³⁰ Matthew Peterson et al, "Growth and Dispersion of Accountable Care Organizations: August 2013 Update," Leavitt Partners, 2013.

31 ACA § 3022

³² "Glossary: Wellness Programs," Healthcare.gov, https://www.healthcare.gov/glossary/wellness-programs/ (accessed August 2013).

33 ACA § 2705(3a)

34 ACA § 1302(Bh)

³⁵ ACA § 2717b, § 2705

³⁶ ACA § 4002(c)

³⁷ ACA § 4304(u), § 10408(a)

³⁸ People hire products and services to satisfy jobs that arise in their lives. See the introduction of this paper for more information on the jobs-to-be-done theory.

³⁹ One exception to this rule is when there is a fundamental, life-changing technology change. For example, 300 years ago, no one had the job-to-be-done of managing their chronic health condition—they just died from the disease while it was in acute stages. As medical science and technology has progressed, diseases that were once fatally acute have been transformed into chronic conditions that are now manageable over decades. This fundamental change in medical science and technology over time has introduced a new job to those chronic disease sufferers' lives. As a result, a host of new technology and products have been created to help them do their "new" job of managing their chronic condition.

⁴⁰ Soren Mattke et al, "Workplace Wellness Programs Study," RAND Corporation, 2013.

⁴¹ "About the CMS Innovation Center," Centers for Medicare and Medicaid Services, <u>http://innovation.cms.gov/About/index.</u> <u>html</u> (accessed August 2013).

42 ACA § 3021

⁴⁴ "National Health Expenditures Fact Sheet," Centers for Medicare and Medicaid Services, <u>http://www.cms.gov/</u> <u>Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.html</u> (accessed September 2013).

⁴⁵ Ezra Klein, "If this was a pill you'd do anything to get it," *The Washington Post*, April 28, 2013, <u>http://www.washingtonpost.</u> com/blogs/wonkblog/wp/2013/04/28/if-this-was-a-pill-youd-do-anything-to-get-it/.

⁴⁶ Dr. Marcia Angell, former NEJM executive editor, quoted in *The Innovator's Prescription*, pp. 378, 413-414.

⁴⁷ ACA § 1201 amending § 2702 of the Public Health Service Act

⁴⁸ "FAQs About Portability of Health Coverage and HIPAA," U.S. Department of Labor, <u>http://www.dol.gov/ebsa/faqs/faq_consumer_hipaa.html</u> (accessed August 2013).

⁴⁹ The Innovator's Solution, p. 44.

⁵⁰ "Glossary: Essential Health Benefits," Healthcare.gov, <u>https://www.healthcare.gov/glossary/essential-health-benefits/</u> (accessed August 2013).

51 ACA § 1302(b)(1)

52 ACA § 1302(b)(2)

53 ACA § 1302(b)(2)

⁵⁴ Introduction, Title I, U.S. Department of Health and Human Services, <u>http://www.hhs.gov/healthcare/rights/law/index.html</u> (accessed July 2013). See also "Creating a New Competitive Health Insurance Marketplace," Centers for Medicare and Medicaid Services, <u>http://www.cms.gov/cciio/resources/marketplace-grants/</u> (accessed July 2013).

⁴³ ACA.§ 3021

- 55 ACA § 1103(a), § 1311(c)(5)(A)
- 56 ACA § 1302(d)(1)
- 57 ACA § 1311(e)(3)
- 58 ACA § 1301
- ⁵⁹ ACA § 1302(d)(2)
- 60 ACA § 1312(f)(2)(B)(i)

⁶¹ "State Decisions For Creating Health Insurance Exchanges, as of May 28, 2013," Kaiser Family Foundation, <u>http://kff.org/</u> health-reform/state-indicator/health-insurance-exchanges/.

⁶² For state-by-state market rating reforms, see "Market Rating Reforms," Centers for Medicare and Medicaid Services, <u>http://</u>www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state-rating.html (accessed August 2013).

⁶³ The Essential Health Benefits regulations are the most constraining to potentially new insurance business models. These regulations put an effective floor on the market that constrains insurers' ability to craft new business models targeted at the low end where disruptive innovation most often occurs. See the section of this paper on essential health benefits for additional detail.

⁶⁴ See recent study by Noam Bauman, Manish Chopra, Jenny Cordina, Jennifer Meyer, and Saumya Sutaria, "Winning strategies for participating in narrow network exchange offerings," McKinsey Consumer Exchange Simulation, McKinsey & Co, May 2013. Studies by Booz & Co. and Blue Cross Blue Shield of Rhode Island have drawn similar conclusions.

⁶⁵ The Cost-Sharing requirements imposed by the ACA make it economically irrational for any low-income person not to purchase a Silver-level plan with the subsidies provided by the government. See the section of this paper on Cost-Sharing for additional detail.

⁶⁶ This is due to the fact that Essential Health Benefits limit plan design, particularly at the low end, and that Medical Loss Ratio requirements erect huge barriers to entry for new entrants in the insurance industry. See the sections of the paper on Essential Health Benefits and Medical Loss Ratio for additional detail.

⁶⁷ Some states, for example, do not allow any premium rate adjustment for tobacco users. States such as Utah that have attempted to implement exchanges significantly different than the federal version have so far not been successful and are instead falling back on the federal exchange.

⁶⁸ We see portents of this already: the consulting firm Oliver Wyman, among others, is encouraging insurers to expand their offerings beyond traditional insurance in order to maintain profits. See "'The Four Ps' for Post Reform," Oliver Wyman, <u>http://</u>www.oliverwyman.com/media/The_Four_Ps_of_Post_Reform.pdf.

⁶⁹ One example of this is the emerging direct primary care model that in many cases avoids insurance entirely.

⁷⁰ "FAQs about Affordable Care Act Implementation Part XII," U.S. Department of Labor, <u>http://www.dol.gov/ebsa/faqs/faq-aca12.html</u> (accessed August 2013).

⁷¹ ACA § 1402(c)

⁷² "Will I Qualify to Save on Out-of-Pocket Costs?," Healthcare.gov, <u>https://www.healthcare.gov/will-i-qualify-to-save-on-out-of-pocket-costs/</u> (accessed August 2013).

⁷³ Alan G. Raymond, "Massachusetts Health Reform: A Five-Year Progress Report," BlueCross BlueShield of Massachusetts, November 2011, <u>https://www.mahealthconnector.org/portal/binary/com.epicentric.contentmanagement.servlet.ContentDelivery</u> Servlet/Health%2520Care%2520Reform/Overview/BlueCrossFoundation5YearRpt.pdf.

⁷⁴ "How does the health care law protect me?," Healthcare.gov, <u>https://www.healthcare.gov/how-does-the-health-care-law-protect-me/#part=10</u> (accessed August 2013).

75 ACA § 2718

⁷⁶ The book Innovator's Solution is focused on helping incumbent companies solve this dilemma.

⁷⁷ "Four P's' for Post Reform," Oliver Wyman Group, <u>http://www.oliverwyman.com/3745.htm#.Ui54QGSq-1w</u> (accessed August 2013).

⁷⁸ "45 CFR 158.150 - Activities that improve health care quality," Cornell University Law School, <u>http://www.law.cornell.edu/</u> <u>cfr/text/45/158.150</u> (accessed August 2013).

⁷⁹ "A Guide to the Supreme Court's Decision on the ACA's Medicaid Expansion," Kaiser Family Foundation, August 2012, http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8347.pdf.

⁸⁰ Though the text of the ACA gives a 133% limit, the act also disregards 5% of total income, making the expansion substantively equal to 138% of the FPL.

⁸¹ Status of State Action on the Medicaid Expansion Decision, as of August 28, 2013," Kaiser Family Foundation, 2013.

⁸² The American Academy of Pediatrics, for example, explicitly opposes retail clinics; see "AAP Principles Concerning Retail-Based Clinics," American Academy of Pediatrics, <u>http://pediatrics.aappublications.org/content/118/6/2561.full</u> (accessed August 2013).

⁸³ Letter to the Honorable Nancy Pelosi, Congressional Budget Office, March 2010, <u>http://www.cbo.gov/sites/default/files/</u>cbofiles/ftpdocs/113xx/doc11379/amendreconprop.pdf.

⁸⁴ John Holahan and Irene Headen. "Medicaid Coverage and Spending in Health Reform: National and State-By-State Results for Adults at or Below 133% FPL," Urban Institute, 2010.

⁸⁵ Letter to the Honorable Nancy Pelosi, 2010.

⁸⁶ Updated Estimates for the Coverage Provisions of the Affordable Care Act, Congressional Budget Office, July 2012, <u>http://</u>www.cbo.gov/sites/default/files/cbofiles/attachments/43472-07-24-2012-CoverageEstimates.pdf.

⁸⁷ "Creating Jobs by Addressing Primary Care Workforce Needs," U.S. Department of Health and Human Services, <u>http://www.hhs.gov/healthcare/facts/facts/eets/2013/06/jobs06212012.html</u> (accessed August 2013).

⁸⁸ "Prevention and Public Health Fund," U.S. Department of Health and Human Services, <u>http://www.hhs.gov/open/</u>recordsandreports/prevention/ (accessed August 2013).

About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through disruptive innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach. With an initial focus on education and health care, the Christensen Institute is redefining the way policymakers, community leaders, and innovators address the problems of our day by distilling and promoting the transformational power of disruptive innovation.

Acknowledgements

Thank you to Clayton M. Christensen, Ann Christensen, Hayden Hill, Michael B. Horn, and Katherine Mackey.

About the Authors

BEN WANAMAKER is the executive director of the Health Care practice at the Clayton Christensen Institute, where he works with practitioners, entrepreneurs, and policymakers to research and promote disruptive technologies and business models in the health care community. Prior to joining the Institute, Ben managed the Innovation Council for the Medical Devices unit at Covidien and was a consultant at PricewaterhouseCoopers. Ben holds a BS in Management from Brigham Young University and an MBA from the Harvard Business School.

DEVIN BEAN is a research associate in the Health Care practice at the Clayton Christensen Institute. His research centers on applying principles of disruptive innovation to health care technology and development. Devin earned a BA in East Asian History at Harvard College.



Copyright © 2013 by Clayton Christensen Institute All rights reserved. www.christenseninstitute.org