# HEALTH CARE BUSINESS MODELS AND OPERATIONS STRATEGY: A COMPARATIVE STUDY OF CLEVELAND CLINIC AND CVS MinuteClinic

15.768: Operations Management in the Service Sector, December 2010

MIT Students

#### I. Abstract:

Innovations have emerged albeit slowly in the health care industry with a slower clockspeed owing to high risks and costs of delivering 'health', commonly considered a 'public good', and therefore subject to access and affordability concerns. These range from innovations in service delivery as in the case of Cleveland Clinic; to specializing in a particular 'kind' of service, such as in the case of Shouldice Hospital; to further disrupting the traditional model by 'retailing' simple health services, as is the case with CVS MinuteClinic. In this paper, we undertake a comparative study of the two divergent health services models of the Cleveland Clinic, a large hospital network system, and CVC MinuteClinic, a growing 'chain' of retail health services. In comparing the two cases, we first examine their business strategies and models, followed by an assessment of the two operations strategies and system designs highlighting their alignment with the companies' business strategies. We then analyze the strengths and weaknesses of the two service models focusing on the role of operations in internally and externally supporting the companies. Finally, we build on the challenges noted and present recommendations for the two companies going forward. The analyses presented in this paper, particularly, the section on strengths and weaknesses have been drawn from the two frameworks for assessing service companies – The Four Things a Service Business Must Get Right (Frei, Francis) and A Frame for Analyzing Service Operations (Bitran, Gabriel)

# II. Cleveland Clinic and CVS MinuteClinic: Background, Business Strategy, and Model

In this section, we assess the Cleveland Clinic and CVC MinuteClinic businesses by providing a brief background for the two companies and describing their business strategy and models. A

comparative summary is presented to facilitate an understanding of the differences in the business models of these two different health care delivery companies.

#### **Cleveland Clinic**

Cleveland Clinic (CC) was founded as a nonprofit, group practice in 1921, at a time when medical care took place in individual doctor's offices. Its founders served together as front-line surgeons in World War I, where they realized that working together to provide integrated, multi-specialty care to patients was effective. Clearly, the group practice model has endured and is now the predominant form of American health care delivery. CC also endured, blossoming one of the country's largest health care centers with 27 community health centers, as well as three affiliate hospitals (Exhibit 1).

#### **Business Strategy**

Service Offering: CC is known for delivering cutting edge, high-touch care. The institution's leaders designed a service offering that correctly aims to deliver experiences that customers want to have at a hospital, resulting in an attractive and competitive service offering<sup>1</sup>.

- *Products/Services:* CC offers high-quality medical care to its patients. Patients receive care within a "Patient First" context, where organizational culture and systems implore staff to exceed customer expectations and continuously improve care. The system has also been the site of major medical innovations, most notably advances in thoracic surgery, which allow the Cleveland Clinic to deliver the most advanced care in several specialties (Exhibit 2).
- *Market Segmentation:* CC serves both patients and the doctors who refer patients to CC for specialized hospital care. CC treats patients with variety of conditions, needs, education, and

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<sup>&</sup>lt;sup>1</sup> Frei, Francis. *The Four Things a Service Business Must Get Right.* P. 4.

resources and does not selectively target any specific segment. The Clinic's notoriety draws customers from across the United States and world.

Differentiation: CC differentiates itself with its multi-disciplinary, patient-centric care.
 Traditionally, health care units have rotational and linear care. Instead CC employs a teambased care structure with Care Team and Specialty Centers. Its hospitals also provide a layer of service beyond basic care because of its patient-centric culture.

*Value Proposition:* CC offers high-touch, integrated, comprehensive, and continuous care to a diverse set of patients. Moreover, their medical center's integrated community health facilities allow patients to conveniently triage their healthcare needs, often visiting the health centers for primary care and hospitals for more advanced treatment.

*Financing/Revenue Model:* This non-profit healthcare center is financed by a mix of sources including insurance, government programs, grants, philanthropy and a recently levied service fee for outpatient appointments of \$55 per visit<sup>2</sup>. In the recent past, revenues have hovered around \$4 billion and the hospital has struggled to balance its operating budget.

#### **Performance**

According to *US New and World Report* rankings, the Cleveland Clinic has performed extremely well among peer US hospitals, ranking third in the nation in 2006. Their performance can be assessed based on customer satisfaction, growth, financial stability, and service innovations.

<sup>2</sup> Elliott, Victoria Stagg. *Facility fees added to patient bills have some crying foul.* American Medical News. American Medical Association. April 10, 2009.

Customer Satisfaction: CC has consistently earned high marks for customer satisfaction, scoring it in the 80<sup>th</sup> percentile of the American Customer Satisfaction Index (ACSI)<sup>3</sup>.

*Growth:* Over its 90 year history, CC has grown from a small group practice to the second largest medical practice in the world. Its leaders are charting a future growth path overseas, currently working to open Cleveland Clinic in Abu Dhabi in 2012. Growth prospects look strong for the organization as they raise investment capital and investigate future international deals.

*Financial Stability:* While CC is looking to expand internationally with the use of philanthropic funds and wealthy investment partners, its domestic financial stability is still somewhat tenuous.

Service Innovations: At CC, service innovations are systematically pursued through a combination of research, teaching, and special programs. As a result, CC has created the highest number of patents per research dollar spent in the US, meaning this institution contributes more to the advancement of modern medicine than other top American hospitals (Exhibit 2).

#### **CVS MinuteClinic**

MinuteClinic, a subsidiary of CVS Caremark Corporation, is the largest provider of retail health clinics in the United States with a network of 563 clinics in 26 states, including 100 seasonal clinics. CVS bought MinuteClinic in 2006 and integrated the clinics in its network of pharmacies. Prior to 2002, MinuteClinic was known as QuickMedx. The first QuickMedx centers opened in Minneapolis-St. Paul area Cub Foods stores in May 2000. They focused on common medical conditions such as Strep throat, flu, pregnancy testing, etc. Patients paid cash – much less than at urgent care, emergency or other health care centers.

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<sup>&</sup>lt;sup>3</sup> Wood, Debra. Are We Slipping? Measuring and Improving Patients' Satisfaction with Hospital Care. Nursezone.com. May 27, 2010. http://www.nursezone.com/nursing-news-events/more-news/Are-We-Slipping-Measuring-and-Improving-Patients%27-Satisfaction-with-Hospital-Care\_34278.aspx

#### **Business Strategy**

Service Offering: The service offering of CVS MinuteClinic is grounded in the concept of "McDoc in the box". No appointment is necessary and the clinics are open 7 days a week and accept different payment options (insurance or out of pocket).

- Products/Services: MC is a one stop medical center- for fast, cost-effective, convenient, reliable diagnosis and treatment services for common illnesses and vaccinations. Various MinuteClinic categories of services as well as the specific services are detailed in Appendices (Exhibit 3 and 4).
- Market Segmentation: The market served by the MC is significantly younger (under 45),
  Female (known as the seeker for healthcare for themselves and their families). 40% of the patients accessing the clinics do not have PCP and greater than 80% of the total has health insurance. It also serves the employed individuals due to the service availability after work and on weekends.
- practices or hospitals. These practices tend to provide full and continuous care to the patients with complex conditions. These facilities have the diagnostic ability to either detect patterns or to perform problem solving through complex work flows and specialized clinical practitioners. In contrast, CVS MinuteClinic positioned itself as only a diagnostic and limited care medical provider accessing the niche demographics that prefers fast, affordable, convenient care. They also relied on out of pocket payment mechanism rather than traditional insurance claims based reimbursements till 2006.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> Currently 170M insured have access to MinuteClinic in US.

Value Proposition: MinuteClinic's key value proposition is to bring in a disruptive health care model that targeted low-risk patients with specific needs by offering standardized diagnostics and primary care services such as vaccinations in an affordable, convenient, and fast way. The value for the clients is substantial and real. Clinics are highly accessible, located in high traffic areas offering affordable prices. The "walk-in" service, low wait times, and ease of payment made the service convenient and fast. High quality was afforded through highly reliable standardized protocols for testing and other services. Patients were in-charge and were allowed to determine appropriateness of visit.

Financing/ Revenue Model: MinuteClinic is in-network with most major insurers, so patients are responsible for either their co-payment or the price listed on the menu. If the patients are insured they are recommended to contact their insurance company before the visit to verify coverage, including co-payments, co-insurance, or deductibles. If the patients are uninsured or prefer to pay out of pocket, MC accepts cash, checks and credit cards. Financial model for MinuteClinic has evolved over the years. Initially at MinuteClinic (QuickMedx) patients were charged \$35 per visit out of pocket. At first, MC did not accept insurance payments; however the demand for walk-in convenience led to quick growth, with several large employers asking their health plans to include MC in their networks enabling MC to accept insurance payments.

#### **Performance**

The performance of MinuteClinic can be assessed based on customer satisfaction, financial stability, service innovations and growth.

Customer Satisfaction: The customer satisfaction scores have been better across the board and improving. Internal patient impact survey results measuring consumer satisfaction with MinuteClinic indicate promising trends with overall satisfaction rating of 94% (Exhibit 5).

*Growth:* MinuteClinic over the years has increased hourly visit rates with 26% year over year growth. The total number of clinics in the network currently stands at 563 clinics in 26 states, including 100 seasonal clinics, largest for any national retail clinic network.

Financial: MinuteClinic has seen improved financials –year over year due to the growth strategy adopted. The network growth from 5 clinics in 2000 to 563 clinic in 2010 has increased top line revenue. The improved hourly visitation rate has enabled the network to achieve better per unit costs for the medical services compared with other care avenues for same medical services. A September 2009 Annals of Internal Medicine study compared costs and quality of care for three common illnesses indicate MinuteClinic prices to be the most competitive (Exhibit 6).

Service Innovation: MinuteClinic has continued to position itself at the forefront of retail health innovation through the introduction of new services over the years: Expansion into chronic care management, addition of physicals, wider range of Vaccinations and flu injections, and Biometric screening.

#### Comparative Assessment of the Business Strategies/Models

From a service offering perspective, Cleveland Clinic and MinuteClinic are significantly different: CC offers comprehensive, high-touch, continuous, and innovative care whereas CVS offers selective, low-touch, discrete, and standardized services. Additionally, CC's target market consists of customers with varied needs, conditions, and abilities whereas CVS targets consumers that have low-risk profile and belong to particular demographics.

Table 1: Comparative Value Proposition:

Attribute	CC	CVS	
Convenience	Low	High	
Price	High	Low	
Risk profile of customers	High	Low	
Service touch-points	Many	Few	
Time in care	Long-Duration	Short-duration	
Complexity	High	Low	

Within these divergent models and value propositions, both the companies differentiate based on service delivery. By focusing on integrated care offered through care teams, specialty centers, and online health services, CC offers high-quality, innovative, comprehensive care. CVS, on the other hand, differentiates itself as a disruptive service model that provides value to customers through its fast, affordable, convenient, and low-touch service to those who would have otherwise been faced with high-cost, slow, and inconvenient experience in the traditional health care delivery systems.

# III. Operations Strategy and System Design

In this section, we assess the operations strategies of the two service companies highlighting the service delivery models, systems, and processes used to support their business strategies.

#### **Cleveland Clinic**

*Operations Strategy:* CC's high-quality medical care and customer service is centered on the mantra "Patients First". Moreover, CC approaches patient care in a unique way, using Care

Teams and Specialty Centers to manage needs in a holistic, multidisciplinary way. These operational structures align with CC's business model, enabling its staff to make integrated, high-touch service a reality. Care teams are composed of different health care professionals, and led by a nurse rather than a doctor. Under this arrangement, the Care Team visits a patient more often, and a staff member with fewer patients has ownership and knowledge of specific cases. This allows the Care Team to provide a high-level of customer service. In addition, Specialty Centers are instrumental in delivering cross-sectional, comprehensive, and integrated care for specific diseases. Specialists collaborate on patient care instead of passing the patient between silos of specialties. Finally, continuity of care, patient education, and engagement are achieved through the online health care management services that are integrated with in-house care.

System Design and Processes: In order to sustain the operations strategy above, CC has established advanced information technology, employee management, and quality management systems. CC has focused on advancing its information technology in order to operate an efficient, lower cost administrative system. Through these advanced systems CC has also built tools that allow patients and referring physicians to have continuous interaction with CC staff and resources. Examples of these online add-on services are MyChart, MyMonitoring, and Dr. Connect. My Chart gives patients access to information about their medical histories.

MyMonitoring can allow a patient to monitor the functioning of their implanted devices thereby avoiding more regular trips to their physician or alerting them if emergency trips are needed.

Finally, Dr. Connect allows referring physicians to follow the care of their patients at CC so they can provide integrated continued treatment when patients return to their offices. These IT

services give customers access to information about their own health and provides efficient, continuity of care, which allows CC keep costs down while managing their customers well<sup>5</sup>.

The Cleveland Clinic's human resource system emphasizes quality over quantity while encouraging innovation. This system design enables and motivates staff to provide service delivery in line with the Clinic's business strategy, which is crucial to achieving service excellence<sup>6</sup>. Most hospital systems compensate doctors according to the number of patients they see or the number of procedures they bill to insurance companies. However, CC management decides compensation according to the quality of care provided to patients using peer reviews and patient feedback as indicators. This employee management system certainly facilitates CC's high-quality, high-touch business model.

Quality management systems have always been a priority at CC. In 1998, the Quality Institute was established to support the high-quality care and continuous improvements that keep this health care provider competitive among leading hospitals. Specifically, this body establishes benchmarks for quality care, standardizes quality measurement metrics, and shares best practices. The work of the Quality Institute translated into three main performance initiatives — clinically focused teams, World Class Service, and outcomes measurement. In order to better treat high risk, high-volume patient populations the Cleveland Clinic formed clinically focused teams of physicians to evaluate the processes these patients go through, and identify areas of improvement across the hospital system. CC launched its World Class Service initiative in 2003 in order to focus on consistently delivery excellent service across departments, and locations. Finally, CC collects outcomes measurement data from patients and publishes monthly reports

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<sup>&</sup>lt;sup>5</sup> Frei, Francis. *The Four Things a Service Business Must Get Right*. P. 6.

<sup>&</sup>lt;sup>6</sup> Frei, Francis. *The Four Things a Service Business Must Get Right*. P. 7.

that single out departments that are both underperforming and excelling. This level of transparency distinguishes CC from the rest of the medical community. These quality systems align with CC's "patient first" values and quality care model.

#### **CVS MinuteClinic**

Operations Strategy: CVS MinuteClinic refers to its service model as "McDoc in the box". This service delivery strategy is based on enabling easy and convenient access by locating the clinics at high traffic pharmacies, delivering fast and high quality care through streamlined patient diagnostics and protocol based treatment processes, cost effectiveness through trained yet lower cost workforce of Nurse Practitioners and Physician Assistants. The partnership with CVS pharmacies and continuously improving protocols are key enablers for the exponential growth of MC clinics in the past five years.

Patient access was optimized by the location of the services. The stores are located at high traffic pharmacies within CVS system with Walk-in service, 7d/week, evenings/ holidays. In 2000-2007 the clinics had 1M visits, 2007-current 6M visits, and 8M since inception. The average wait time is limited to 5-10 minutes in most cases. The transferability of services is achieved through the collocation of MCs in CVS pharmacy premises. Most of the patients can get their medication prescribed at the clinic from the pharmacy enabling higher flow of volume of transactions per walk in patient. The 5-10 mins limited service delivery duration is well suited to treat a range of different conditions while maintaining higher volumes.

Rigid triaging protocol limits the kind of patients that are treated in the clinics. The patients who are insured are expected to contact their insurance company before the visit to verify coverage, including copays, co-insurance or deductibles, hence reducing the administrative work load of

the medical staff at the clinic. The incorporation of patients in insurance verification empowers and sets the expectation of payment, hence reducing the possibility of customer dissatisfaction with paying out of pocket if they were already expecting, it also reduces the workload of medical staff who can continue to do more value added work for the patients. If the patients are uninsured or prefer to pay out of pocket, MC accepts cash, checks and credit cards to enable convenient payment mechanism.

System Design and Processes: MC systems for patients triage and standardize care consist of 'Click-and Point' diagnostics, Information system for patient record, and Pager system to manage customer wait times. Every time when a patient visits the facility the patient medical information is entered into user's electronic medical record, which is maintained by MC. The patients themselves or patient's PCP can request the information in an electronic format. This capability increases the confidence of the patients in the system as their follow-up visits are logged to ensure a better visibility for them and their PCP.

Employee management systems are designed to support the low-cost, low-risk, selective services. The service cost effectiveness is derived by their ability to treat simple illnesses by having certified Nurse Practitioner or Physician Assistant on staff rotating 3 day 12 hour shifts. Each retail clinic has 2 NPs or 1 PA per site at any given time. The medical staff is rotated at community care giving institutions to maintain their certifications and enable them to practice broad range of conditions which may not be treated at MinuteClinic. The rotation of medical staff in community settings ensures that the individual level of competency dose not suffer from the regular narrow set of patients treated at MC. Satisfied medical providers are essential to satisfied patients.

Specific processes such as care protocols and triaging were established to support the rapid, low-risk, convenient care. The medical staff follows EMR and evidence based triaging and medical treatment and diagnostics protocols. This enables the staff to take care of only those patients whom the clinic is designed to treat, reducing the medical liability issues and ensuring sustainable standards of quality and safety which are integral to consumer satisfaction and trust. This ability is vital to delivering comparable services at a much lower cost than at any other medical facility. The protocols are continuously updated to reflect best practices; the major upside of continuously improving and simple protocols is the reduced levels of errors, lower follow up visits and better patient recovery. MC is also dynamically increasing the core service offerings to ensure better and holistic patient experience.

## **Comparative Assessment of the Operations Strategies and System Designs**

Cleveland Clinic's focus on comprehensive, high-touch point, patient-focused care in comparison with CVS' focus on selective, fast, standardized care drives the companies' varied operation strategies, that is, processes and systems that support the companies' business strategies. The service delivery mechanisms and the processes for the two companies as well as the employee, IT, and supporting systems for the businesses are compared below:

	CC	CVS
Service Delivery	Care teams, Collaborative care and	Nurse Practitioners, Standardized tests,
	treatment, complex diagnoses,	Referrals onto a different system, High
	Online multi-faceted care	level of access (high traffic areas, walk-
		in service, low-wait times)
Processes	Multiple Visits by care team,	Triage, Care protocols, diagnostic

	Complex payments, Innovation	process, Simple payments
	trips, Quality data collection	
Systems	Salaried, peer reviewed,	Rotational shifts for Nurse
	employers; Paper-less, integrated	Practitioners, Internal Patient Record
	EMR; Quality Institute	System, Click-and-Point System,

## IV. Strengths and Weaknesses of the Operation Strategies and System Designs

In this section, we analyze the strengths and weaknesses of these service organizations, focusing particularly on the roles the operations and systems play in aligning the companies internally with the business strategies and positioning them externally in the competitive landscape.

#### **Cleveland Clinic**

Product Offering: CC has defined its customer service around the notion of "patient-first", which expands the 'product' it offers its customers. Beyond the 'core' product of diagnosis and treatment, CC has significantly enhanced its service product to exceed customer's expectations, in order to surpass its competitors' offerings. Its business strategy to provide high-touch, integrated care beyond the core expectations of diagnosis and treatment is supported through its operations strategy and management. Care teams and Specialty Institutes highlight CC's multi-disciplinary approach to patient's health. The medical service product that results delivers enough value to justify the additional cost and distance associated with customers seeking care at CC, allowing its hospitals to compete in the external environment. <sup>7</sup>

<sup>7</sup> Birtran, Gabriel. *A Framework for Analyzing Service Operations*. European Management Journal, Volume 11, No. 3, September 1993. P. 275

Market Segmentation: CC serves a highly heterogeneous set of customers. As such, it has designed an operations strategy that thrives on standardization of processes and systems but allows innovation, flexibility, and a holistic approach to deal with the diverse customer set. While this allows the company to align internally, it could leave the company vulnerable to competitors that offer streamlined care that is efficient and cost-effective. CC should be aware of competitive, new entrants with specialized services such as 'Shouldice' and disruptive business models such as 'CVS' that could exploit this weakness.

Differentiation: CC continues to expand its service offerings and pursues innovations and quality improvements that differentiate it from the competition. Internally, the operations strategy and systems support the company's business strategy in providing high-quality, complex, cutting edge care. Externally, operations and systems support differentiation on these aspects positioning CC strongly in the competitive environment. Moreover, its hospitals continue to contour its operations strategy and systems taking advantage of the fact that even the most mundane aspects of service can be differentiated and provide competitive advantage.

Operations Strategy, Systems, and Processes: CC has carefully designed employee management, quality management, and IT systems that support the high-quality and integrated care crucial to its business strategy. The HR system design allows doctors to be able and motivated to provide service delivery in line with the CC's business strategy, which is crucial to achieving service excellence. CC also used quality management systems aggressively to ensure their service delivery is consistent with their business strategy and creates a competitive advantage. Lastly, online systems and tools allow CC to compete with e-health care services being offered and also create an expanded offering of continuous care creating a niche of comprehensive, on-demand health care that is a significant barrier to entry. A potential weakness with such comprehensive

systems is that these systems span all aspects of the company and standardize operations, which could undermine flexibility. Modularity has its advantages such as responsiveness to new needs or competitive forces. For instance, integration of health care across online and in-house services leaves online customer segments with lower-touch care. Finally, high-cost, high-touch operations and systems while internally supportive could lead to external weaknesses such as CC's financial troubles. These concerns are consistent with Francis Frei's thesis on service offerings, which states "service excellence can be defined as what a service business chooses not to do well". 8 CC attempts to provide a complete offering of high quality services, which is difficult to do profitably.

#### **CVS MinuteClinic**

*Product Offering:* Limited set of services allow MC to streamline and deliver 'retail' health care. One concern with the service offering at MC is the challenge of keeping up with continually changing demands and expectations of customers. As the customer expectations grow, the current business and operations strategy will be stressed to balance new patient requirements with existing delivery processes.

Market Segmentation: CVS's market segmentation is a key strength that supports its business strategy. Its operations strategy allows MC to support this market segmentation by targeting customers in particular demographics who value time and money. A relative weakness in this area would be the specificity of the market that the business can target. It is unclear what other socio-economic considerations drive customer expectations and if affordability is a main factor, future growth could be sensitive to price expectations.

<sup>&</sup>lt;sup>8</sup> Frei, Francis. *The Four Things a Service Business Must Get Right.* P. 5.

Differentiation: CVS's MinuteClinic's service hinges on a disruptive business model that has enabled customers to benefit from retailing of health care services that were traditionally a domain of large medical service providers. As MC grows, the sustainability of the model hinges on its continuous defense of this position and in attracting more customers from the traditional practices. However, one of the weaknesses of the business model is that the barriers to entry from an operational perspective are not significant as discussed under alignment below.

Operations Strategy, Systems, and Processes: MC's process centric service delivery strategy is a key enabler in the exponential growth of MC clinics. Customer management through triage process and the self-payment system enables MC to serve low-risk customers in a cost-effective way. Similarly, the rotation of medical staff in community settings and addition of new services to retain NPs has a positive effect of having a satisfied work force and customers. Such partnerships with the community also positions MC well to address any emerging entrants with similar service offerings.

Another major strength of the MC model and its operations is the efficient *matching of supply with demand*. Through its screening, data-entry, standardized set of services, protocols based diagnostics, and efficient queuing processes, MC has managed to meet the demand effectively. By conjoining customer experience at a MC store with shopping or other services at CVS, MC is able to better assess the supply patterns and prepare adequately through its staffing decisions. The need for MC to drive the volumes to maximum capacity in order to break even makes the management of increased resources and ever increasing diversification of customer services a major hurdle for future growth.

Finally, the internal alignment of the operations strategy and systems with providing low-cost affordable care is a significant source of competitive advantage for MC. This enables MC to compete cost-effectively with traditional medical systems in the arena of low-risk, primary care services. The service delivery and processes can be easily replicated given a new entrant can find a partner to collocate the service with. The current standardized systems and protocols do not leave room for innovation or flexibility which could be a major weakness if competition emerges to offer nuanced diagnostics on similar set of services.

## **Comparative Assessment of Strengths and Weaknesses:**

#### S: Strengths W: Weakness

Area	CC	CVS	
Products/Services	S: "expanded" service offering	S: Standardized services to reach a	
	beyond core	niche	
	W: High-cost of comprehensive	W: Susceptible to growing	
	offering and high-touch service	customer needs and expectations	
Differentiation	S: Multi-disciplinary approach,	S: Disruptive model, 'retailing'	
	Innovation, Quality	health services	
	W: Large, slower care similar to	W: Low barriers to entry	
	traditional systems handling all		
	patient needs		
Market	S: Large target segment	S: Niche segment	
	W: Complex variations, needs,	W: Volume of customers is an	
	abilities	issue	
Internal Alignment	S: Care teams, specialty center,	S: Co-location with CVS, standard	
	multi-disciplinary teams, diagnostics, triage, protocols, or		

	innovation trips, quality institute	of-pocket payments support their	
	support high-touch, complex,	"fast and convenient" business	
	integrated business offering	model	
	- IT and online services	- Employee, IT, and customer	
	supported comprehensive,	management allows for low-cost	
	patient-first care	care	
	W: Slows down care per patient	W: OS strategy and systems may	
	undermining patient-first"; be inflexible for growing		
	online-services can disrupt of services		
	continuity of care		
External positioning	S: Innovations, Quality, and	S: Patient access, triage, protocols,	
	holistic service delivery creates	and nurse practitioner employment	
	competitive advantage	can threaten primary care services	
	W: Delays and cost of care	W: Standardization could	
	affects financial sustainability	undermine flexibility as well as	
		range of services weakening its	
		position vis-à-vis primary care and	
	online services		

# V. Going Forward: Recommendations

Building on the assessment of the strengths and weaknesses of the two health care service models, we identify key challenges and provide recommendations for future growth of the companies in an evolving competitive environment.

#### **Cleveland Clinic**

CC is operating within a tough financial environment for American health care providers with rising costs, and decreasing revenues. CC's high-touch, expertly engineered care model provides

top quality care that is both expensive and difficult to streamline. Thus far, this nonprofit has been successful in diversifying their funding streams and introducing new patient fees in order to balance its budget, however their future sustainability remains in question. As CC looks towards the future and anticipates competition from the likes of Shouldice and CVS, the following recommendations will improve their finances without compromising their service brand:

- Continue to expand internationally for cross-subsidization purposes. Growth into foreign markets makes sense for CC only if these projects are low-risk, involve partners, and show large profit margins. If that is the case, the CC's profits should be spent to subsidize care in their US operations. Otherwise, growth increases this great health care system's world reputation, but doesn't fit coherently into their overall business strategy.
- Maintain hospital care while improving efficiency in community health centers. CC should ensure that community health centers are low cost and profitable. Their profit can be used to fund higher cost hospitals in the organization. For example, some primary care doctors could be substituted with Physician Assistants and Nurse Practitioners in health centers. Moreover, they could standardize and streamline the care offered at these centers in a way similar to CVS, referring even moderately complicated cases to their hospitals. Clearly, this recommendation deviates from the organizations core values and service priorities and CC would have to analyze these tradeoffs before making such a change.
- Continue to Invest in IT. CC information technology usage has successfully lowered costs and provided continuity of care for patients. CC should continue to invest in IT in order to develop more tools like MyMonitoring, while being mindful of using IT that could decrease quality of care within their system.

#### **CVS MinuteClinic**

CVS Minute Clinic is competing in a disruptive market place. The barriers to entry are not significantly higher. Driving high volume of patients through the clinics is important for financial viability. Dependence on a narrow set of services and patient types is at the core of fast and low cost service model. Given the existing model and the changing landscape of healthcare in US CVS-MC has to deal with many opportunities and challenges.

- Developing relationships with key integrated delivery systems (IDS) in metropolitan areas that are MinuteClinic markets. It is important that CVS develop relationships with integrated delivery systems like Partner's Health, Cleveland Clinic, Allina and Catholic Health West, and St Vincent's HealthCare etc. These partnerships will provide multiple benefits for the CVS MC: (a) Increased patient flow for minor conditions hence offloading the demand for minor medical procedures; (b) Enable rotation of its staff with the IDS facilities which will ensure higher retention of medical staff, better training and improved quality of care, and reduction of costs; (c) Co-Branding can lead to main stream recognition for CVS MC and benefits for CVS pharmacy of partnership with big delivery networks; (d) Divert patients for minimal procedures to reduce load during periods of peak demand by partner hospitals.
- Develop capability to provide chronic disease management and wellness services. Given
  the Health Reform, PCP shortages and increasing number of chronically sick patients in
  USA, MinuteClinic is well positioned to enter chronic disease market. Expanding services
  for chronic disease management can have substantial long term financial benefits.

  Hypertension, Diabetes, Hyperlipidemia and Asthma can be the focus of initial push.
  MinuteClinic should also focus on wellness, health maintenance and screening services.

(Obesity, smoking cessation, mammography) These services can provide significant patient volume as most people avoid accessing hospitals for such services due to long wait times and visitation restrictions.

• Implementing IT services as part of a push to deliver virtual medical services.

Implementing Electronic Medical Records (EMR) and integrating the IT services with IDS and PCPs will enable MinuteClinic to have an intelligent monitoring of the patient outcomes and enable timely updates to care and triaging protocols. The system will enable the MinuteClinic to improve Pay for Performance and Payer HEDIS measures and capitalize on the macro push for accountable care organizations. The MinuteClinic will be better positioned to enable hospitals and IDS to manage the patients under shared risk and capitation payment methods. Finally, integrating the IT services with patients and family care givers will enable them to develop virtual medical home services and provide care for chronic disease patients at their homes and help them manage their conditions effectively.

#### VI. Conclusion

Cleveland Clinic and CVS MinuteClinic offer a contrasting case study of two health care delivery models: former charting out a differentiating business model and operations that allow it to offer high-touch, complex, integrated care within the traditional model of large health care systems and the latter creating a disruptive business model based on 'retailing' health care to targeted set of low-risk consumers. In both cases, the operations strategy including systems design and processes such as care teams, quality institute, multi-disciplinary care in Cleveland Clinic and triage processes, care protocols, standardization in CVS MinuteClinic, play an internally supportive role enabling the companies to pursue their business strategies. They also

create a competitive edge mainly through 'expanded' product offering, care and quality systems in Cleveland Clinic and targeted market, 'Mc-Doc" in a box services, standard protocols, and disruption in MinuteClinic. As they move forward, the companies do have to be cognizant of the challenges of their service approaches such as high-cost and low-speed in Cleveland Clinic and inflexibility and low-patient volume given limited set of services at MinuteClinic. The recommendations we provided offer some avenues to mitigate these risks and in particular be aware of the competitive forces shaping the industry.

# **APPENDICES**

# **Exhibit 1: Map of Cleveland Clinic Health System**

Map of Cleveland Clinic Health System removed due to copyright restrictions.

#### **Exhibit 2: Cleveland Clinics Innovations and Achievements**

1948 Dr. Irvine Page isolates the neurotransmitter serotonin, a breakthrough that is associated with the development of Prozac, among other advances. 1951 Dr. George Phalen identifies carpal tunnel syndrome, a repetitive-stress injury that affects hands and wrists. 1956 Heart surgeons Donald Effler and Laurence Groves perform the world's first successful "stopped-heart" surgery, a procedure that involves stopping the heart so that it can undergo surgical repair. The procedure uses a heart-lung machine developed by another Cleveland Clinic surgeon, Willem Kolff. 1958 Cardiologist F. Mason Sones, Jr. develops coronary angiography, which enables doctors to view the heart and its vessels through moving X-rays, paving the way for the development of bypass surgery. Researcher Helen Brown, Ph.D., plays a key role in the national study that establishes 1959 the role of dietary cholesterol in cardiovascular disease. 1967 Heart surgeon René Favaloro pioneers coronary bypass surgery, a new method for ensuring adequate blood flow to the hearts of patients with severe coronary artery disease that becomes one of the most successful means of treating coronary heart disease, saving tens of thousands of lives every year. Some 800,000 bypass procedures are performed each year, all over the world. Cardiovascular specialists William Proudfit, William Sheldon, and Floyd Loop 1972 establish a cardiovascular information registry, the world's first computerized registry of data on cardiac diagnosis and treatment. Created with the assistance of Emily Wagstaff, R.N., the registry is a powerful tool for studying heart disease. 1992 Neurosurgeon Gene H. Barnett and researcher Donald W. Kormos develop the sonic wand, an imaging technique that enables brain surgeons to pinpoint lesions with unprecedented ease and precision. 1996 Dr. Delos Cosgrove pioneers a minimally invasive method of operating on the aortic and mitral valves of the heart, reducing recovery time and the chances of infection. 1999 The world's first baby is born following a robotically assisted fallopian tube reconnection operation performed by Dr. Tommaso Falcone, M.D., head of the Reproductive Endocrinology and Infertility Section. Dr. Peter Koltai develops a new procedure for removing tonsils that involves shaving 2002 away a portion of the tonsils rather than completely cutting them out, resulting in less pain, more rapid recovery, and fewer complications. 2003 Cleveland Clinic scientists identify the first gene confirmed as a cause of coronary heart disease in humans. The gene, MEF2A, was discovered by methodically studying the genetic makeup of 21 members of an Iowa family plagued for generations by incidents of coronary artery disease and heart attack. 2005 Pediatric cardiologists at The Children's Hospital at Cleveland Clinic become the first in the United States to use a new device, the Transcatheter Patch, to close an atrial

septal defect (ASD), a hole in the wall between the heart's right and left atria.

#### **Exhibit 3: Categories of MinuteClinic Services**

#### 1 Minor illness exam

 Evaluate and diagnose the symptoms and prescribe a medical treatment plan for minor illnesses e.g. cough, itchy eyes etc.

#### 2. Minor injury exam

o Provide first aid and care for minor injuries e.g. blisters, bug bites etc.

#### 3. Skin condition exam

o Evaluate diagnose and treat minor skin conditions e.g. acne, scabies etc.

# 4. Wellness and physical exam

Perform lab tests, exams and educational support needed to stay healthy e.g.
 asthma screening, physical exams, pregnancy evaluation etc.

#### 5. Health condition monitoring

Help chronic disease patients in between visits to PCPs by performing routine tests, reviewing the results, and providing educational support for those diagnosed with diabetes, high cholesterol, high blood pressure or asthma. After each visit, a record of the patient is sent to the primary care provider to ensure continuity of care.

#### 6. Vaccinations

 Provide immunizations and a number of common vaccines quickly and conveniently. Share the visit summary with the patient's primary care provider to ensure that immunization records are all in one place.

#### Exhibit 4: MinuteClinic's services

# Treatments and Services

#### Common Illnesses

Allergies (ages 6+)
Bladder Infections
(female, ages 12–65)
Bronchitis (ages 10–65)
Ear Infections
Pink Eye and Styes
Sinus Infections (ages 5+)
Strep Throat
Swimmer's Ear

#### Skin Conditions

Athlete's Foot
Cold Sores
Deer Tick Bites (ages 12+)
Impetigo
Minor Burns
Minor Skin Infections
& Rashes
Minor Sunburn
Poison Ivy (ages 3+)
Ringworm
Shingles Treatment
Wart Removal (ages 5+)

#### Vaccines

Polio (IPV)

DTaP, Td, Tdap (Diphtheria, Tetanus, Pertussis) Flu (seasonal) Hepatitis A & B Meningitis MMR (Measles, Mumps, Rubella) Pneumonia

#### Wellness & Prevention\*

Camp Physicals
Cholesterol Screening
Health Screening Package\*\*
Diabetes Screening
Hypertension Screening
Obesity Screening
Smoking Cessation

#### Additional Services

Ear Wax Removal Flu Diagnosis (ages 10–65) Mononucleosis Pregnancy Testing

\*Select areas only.

\*\*Cholesterol, Glucose or AIc,
BMI and Blood Pressure

#### **Exhbit 5: Customer Satisfaction Ratings for CVS MiniteClinic**

Overall satisfaction rating: 94%

Likelihood to recommend: 95%

Overall practitioner rating: 95%

Felt "listened to and respected": 96%

Health "explained understandably": 96%

**Exhibit 6: Differences of Retail Health Clinics with PCPs** 

	Retail Clinic	Primary Care Office	
Scope/Quality	Limited Scope	Full Scope	
	Straight forward visits All comers		
	Algorithm based	Complex	
Complexity	Point of Care Testing	POC and send out	
	Results at visits	Follow up and tracking for tests	
Access	Walk-In	Appointment	
	Daily and evenings	Work week	
Personnel	NP Check-In	Secretarial manages Wait and Check in	
Revenue Cycle	Cash and limited Insurance	Extensive Insurance	
	\$35	Co-payment or \$125+	
Care Coordination	Resource list for referrals	Coordination of referrals	
	No follow-up	24 on call, f/u visits	
Staffing	Staff 1.5	Staff 3.5 + MD	
	Central operations	Operations localized	
Market	young, working, women	All (insured)	

Exhibit 7: Comparison of costs for common illnesses for different care avenues

	MinuteClinic	Primary Care	Urgent Care	ER
Care cost	\$110	\$166	\$156	\$570
Pharmacy cost	\$21	\$21	\$22	\$26

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15.768 Management of Services: Concepts, Design, and Delivery Fall 2010

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