



The Rise of In-Store Clinics — Threat or Opportunity?

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The recent acquisition by the pharmacy chain CVS of MinuteClinic, a chain of in-store clinics founded in Minnesota, has put this model of primary care delivery back in the spotlight. Although still

not widespread, the model is increasing in prevalence (see table) and appeals to several stakeholders: payers note that primary care is less expensive when delivered at in-store clinics than when provided in a doctor's office or emergency room, patients value the convenience and low price, entrepreneurs see a profitable business model, and proponents of consumer-driven health care see services that can be paid for out of health savings accounts. Physicians, however, express concern about the quality of care and the potential impact on their businesses.

The typical in-store clinic is a kiosk — a small, thin-walled

structure located inside a store — staffed by a nurse practitioner. The clinics differ from the old “doc-in-the-box” model in that they are neither routinely staffed by a physician nor intended to provide all primary care services. Indeed, the range of services — posted as a “menu” on the company's Web site or on the kiosk — is strikingly small, including common adult vaccinations, screening tests, and treatment for simple conditions (see box).

But for these circumscribed services, the clinics provide a compelling value proposition. Care is intended to be quick, inexpensive, and convenient: visits and waiting times are short, the charge

is usually less than \$50, and extended hours are offered along with ample parking. It's not surprising, then, that patients and investors have taken notice. Although only 7% of respondents in a 2005 poll said they had ever used such a service, 41% said they would be likely to do so.² And since 2000, when the concept was developed by QuickMedx (which later became MinuteClinic), at least 10 other companies have entered the market and several hundred clinics have been opened or are being planned. The California Health-Care Foundation expects thousands to open in the near future.¹

At the heart of the appeal are well-thought-out business and operational models, both dependent on the limited services menu. Overhead is low because staffing, real estate, and financing costs are low, and some of these overhead costs are shared with the

In-Store Clinic Companies.*			
Clinic Operator and Headquarters	Locations and Expansion Plans	Affiliated Retailers	Slogan
Aurora Quick Care Milwaukee	17 Locations in Wisconsin	Aurora Pharmacy, Piggly Wiggly, Wal-Mart	No appointment. No waiting. No hassle.
Curaquick Sioux City, Iowa	11 Locations in Iowa, Nebraska, and Ohio	Hy-Vee, Pharm Discount Drug	The nurse is in.
HealthRite Atlantic City	1 Location in New Jersey	ShopRite grocery stores	Health care right when you need it!
MediMin Phoenix	3 Locations in Arizona	Bashas', Food City	Time, sensitive care.
Medpoint Express South Bend, Indiana	3 Locations in Indiana	Wal-Mart	Get well sooner.
MinuteClinic Minneapolis	156 Locations in Arizona, Connecticut, Florida, Georgia, Indiana, Kansas, Maryland, Michigan, Minnesota, Missouri, Nevada, North Carolina, New Jersey, New York, Ohio, Rhode Island, Tennessee, Texas, and Washington	CVS, Target, Supervalu's Cub Foods, Bartell Drugs, QTC	You're sick. We're quick!
QuickClinic Akron, Ohio	3 Locations in Ohio	ACME Fresh Market, Ritzman's Pharmacy	On the spot relief.
QuickHealth San Francisco	7 Locations in California and Iowa	Farmacia Remedios, Longs Drugs, Wal-Mart	We make quality medical care affordable and convenient.
RediClinic Houston	29 Locations in Arizona, Georgia, New York, Oklahoma, and Texas	HEB, Wal-Mart, Duane Reade	Get well. Stay well. . . . Fast!
SmartCare Greenwood Village, Colorado	12 Locations in Colorado, North Carolina, and South Carolina	Kerr Drug, Wal-Mart	Convenient healthcare for everyday needs.
Take Care Health Systems Conshohocken, Pennsylvania	36 Locations in Kansas, Missouri, and Oregon	Brooks-Eckerd Pharmacy, Rite Aid, Osco, Sav-On Drugs, and Walgreens	Professional care. Always there.
The Little Clinic Louisville, Kentucky	14 Locations in Florida, Indiana, and Kentucky	Kroger, Publix	Convenient neighborhood medical care.

* Information is updated from Scott.¹

store. Clinics are located in states that allow prescribing by nurse practitioners, and physician involvement is limited. In addition, their focus on out-of-pocket payment limits accounts-receivable costs. Affiliations with drugstores

benefit both partners: patients appreciate the convenience of being able to fill prescriptions on the spot, and the clinic draws customers to the store.

The operational model is equally well constructed. The origina-

tors based their design on the McDonald's hamburger chain, in which customers select items from a limited menu. The services listed are highly standardized interventions and require no physician evaluation. Diagnoses are made

A Typical Menu for Care at an In-Store Clinic.	
Conditions Treated, Tests Offered	
Allergies	Minor burns and rashes
Athlete's foot	Minor skin infections
Bladder infections	Minor sunburn
Bronchitis	Mononucleosis
Chlamydia	Nausea and vomiting
Cholesterol screening	Pinkeye and sties
Cold sores	Poison ivy
Diabetes screening	Pregnancy testing
Diarrhea	Ringworm
Ear infections	Sinus infections
Flu	Strep throat
Impetigo	Swimmer's ear
Insect bites	Swimmer's itch
Laryngitis	Wart removal
Lice	
Vaccines	
Diphtheria, tetanus, and pertussis	
Flu	
Hepatitis A	
Hepatitis B	
Measles, mumps, and rubella	
Meningitis	
Pneumonia	
Polio	
Tetanus and diphtheria	

by using a simple binary test (such as for a streptococcal throat infection) or by applying a rigid, protocol-based decision rule. In some cases, no diagnosis is required (such as for a hepatitis vaccination). In addition, the conditions treated and therapies offered require no or minimal follow-up (for instance, clinics offer diabetes screening but not treatment), and decisions can be guided by highly specified protocols. More important, the conditions can be diagnosed and treated quickly.

Some concerns have been raised, however, about quality of care. Critics worry that important, albeit rare, diagnoses and opportunities to address other concomitant health issues may easily be missed by nurse practitioners following rigid protocols. Questions have also been raised about the potential lack of continuity of care: when care is fragmented, with different clinics or clinicians pro-

viding care at different times, trends suggestive of serious underlying conditions may be missed, and if clinics have no explicit after-hours arrangements, complications arising from daytime care may go unaddressed. In addition, past experience suggests that for-profit clinics might be motivated to overservice patients.

These drawbacks have thus far remained theoretical. Clinics have worked to maintain good relationships with local primary care practitioners,³ some have software that searches for patterns of repeated presentations, and the strict reliance on evidence-based protocols should prevent overservicing. Both the American Medical Association and the American Academy of Family Physicians support the concept of pluralism in primary care services.³ Moreover, these clinics raise important issues regarding the future design of primary care delivery.

First, in-store clinics reflect a well-designed operating system in which all the elements — location, physical structure, information systems, staffing, clinical and business processes, and range of services — are aligned to meet a particular population's needs efficiently and effectively. Health care services tend to be loosely stratified, typically by patient age, by body system, or by disease. Although these variables are often rough proxies for the complexity of medical problems, complexity itself is not usually an organizational rubric. In-store clinics, by contrast, stratify the primary care market into more and less complex care and are carefully configured to serve the needs of the less sick. Focus on a small segment of the market facilitates such operating system alignment.

The effect of this specialized care delivery model on traditional primary care practices may be to remove some patients and services from the doctor's office, leaving a sicker population behind. Some practitioners will see this as "cream skimming" and a threat to their revenue, particularly if they rely on income from short appointments for simple cases to subsidize the cost of more time-consuming appointments for more complex cases. But others may see in-store clinics as a way to improve their patients' access to care, decompress their busy waiting rooms, free them up to spend more time with patients, and serve the uninsured, a group of patients whom they may wish to avoid.

Second, in-store clinics place patients in a new role, as they become responsible for sorting their medical problems according to their complexity. Because some menu items are diagnoses, there is an implicit assumption that patients can make their own clinical judgments, relying on clinics only to confirm the diagnosis and deliver the treatment. The clinics' highly engineered business and operational models are very sensitive to misclassification. Attracting patients for whom the clinic is not configured — for instance, someone with an acute, life-threatening disease — would cause a serious delay for others in the queue and weaken the customer value proposition of speed and convenience. Clinics, however, say that such occurrences are less common than one might fear; Michael Howe, the chief executive officer of MinuteClinic, notes that less than 10% of patients are turned away at his company's clinics, which have never had a



patient present with chest pain, for instance. With regard to the circumscribed set of conditions on the menu, patients have turned out to be capable diagnosticians. Moreover, some patients — and not just those in higher socioeconomic groups — seem to be happy with this role and comfortable arranging their own care.

Third, prognosticators see an impending crisis caused by the convergence of a reduced supply of physicians and nurses and an increased demand for health care as baby boomers age and develop chronic conditions.⁴ Service models such as in-store clinics may efficiently provide services to a small slice of the population, freeing up primary care practitioners and emergency rooms to deal with more complex cases, for which they are more appropriately configured. In fact, primary care practices and emergency departments could themselves use such a model, both to improve access to care and to create spare capacity. Indeed, several provider organizations have already opened their own in-store clinics, using

their powerful local brand to attract consumers.

Finally, some wonder whether this model is a “disruptive innovation” — that is, a service or technology that enters a market at the low end, initially not performing as well as higher-end incumbents, then improves until it captures the whole market.⁵ In-store clinics are certainly entering the market at the low end of medical complexity. However, they have, by design, limited ability to move “up” into coverage of more complex conditions or problems. The menu of services consistent with their operating model is short, and taking on others would undermine their operations and their customer value proposition. Consequently, it is unlikely that in their current form they will usurp the core business of primary care practitioners.

Whether or not this model becomes a permanent feature of the health care landscape, the thinking behind it — in terms of operating-system alignment, alternative approaches to stratification and capacity creation, and

the patient’s role — may well influence the design of future delivery systems. If these clinics are to complement existing services, they will have to ensure continuity of care by building effective relationships with local primary care physicians and by developing systems to track patients who have multiple appointments in order to identify patterns suggestive of underlying illnesses. However, concern about the quality of care is not a reason to reject such models out of hand. Given the stresses expected to bear upon delivery of services in the future, such models deserve consideration as one potential mechanism for managing a particular class of medical problems, serving a particular patient need, and maximizing patient benefit with limited resources.

An interview with Dr. Bohmer can be heard at www.nejm.org.

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4. Bodenheimer T. Primary care — will it survive? *N Engl J Med* 2006;355:861-4.
5. Christensen CM, Bohmer RMJ, Kenagy J. Will disruptive innovations cure health care? *Harv Bus Rev* 2000;78(5):102-12.

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CORRECTION

The Rise of In-Store Clinics — Threat or Opportunity?

The Rise of In-Store Clinics — Threat or Opportunity? . The third sentence of the seventh paragraph (page 767) should have read “Both the American Medical Association and the American Academy of Family Physicians support the concept of pluralism in primary care services,” rather than “the American Association of Family Practice.” The text has been corrected on the *Journal's* Web site at www.nejm.org.