

Health Care on Aisle 7

The Growing Phenomenon of Retail Clinics

Retail clinics are medical clinics located in pharmacies, grocery stores, and “big box” stores, such as Target. They offer care for simple acute conditions, such as bronchitis, and preventive care. The care is typically delivered by a nurse practitioner. Retail clinics emphasize convenience, with extended weekend and evening hours, no appointments, and short wait times. Retail clinics are becoming increasingly widespread. The first retail clinics opened in 2000, and by 2010 they numbered close to 1,200.

Retail clinics have also generated controversy. Provider groups, such as the American Medical Association, have raised concerns about quality-of-care issues, including the overprescribing of antibiotics, the lost opportunities for preventive care, and the disruption of existing patient-physician relationships. Conversely, champions of the retail clinic model have pointed to their potential benefits: Retail clinics may function as a provider for lower-income patients and those without a primary care physician and could also provide a less costly alternative for patients who otherwise would go to emergency departments (EDs).

To date, the controversy over retail clinics has occurred without much factual grounding: There has been little empirical analysis of clinic characteristics and activities. To improve understanding of these issues, RAND Health researchers conducted several studies of retail clinics. The research focused on three areas:

1. *A profile of retail clinics:* Where are retail clinics located, what services do they offer, and who owns them?
2. *Patient characteristics and service use:* Who uses retail clinics, and what services do patients obtain?
3. *Costs, quality, and preventive care delivery:* How do retail clinics compare on these dimensions with other health care settings?

Key findings:

- Most (88 percent) U.S. retail clinics are located in major metropolitan areas, and one-third of the U.S. urban population can easily access a clinic.
- Retail clinics typically serve younger adult patients who do not have a regular health care provider.
- For a selected group of conditions, retail clinics deliver lower-cost care of equivalent quality compared with other settings.
- Approximately one in five visits to a primary care physician and one in ten visits to an emergency department are for a problem that can be treated at a retail clinic.

Most Retail Clinics Operate in Large Metropolitan Areas

In two different projects, RAND researchers examined the characteristics of retail clinics. Using cross-sectional data from industry and foundation sources, the team identified 982 retail clinics operating in the United States (as of August 2008). Analysis of these clinics revealed the following:

Geographic distribution

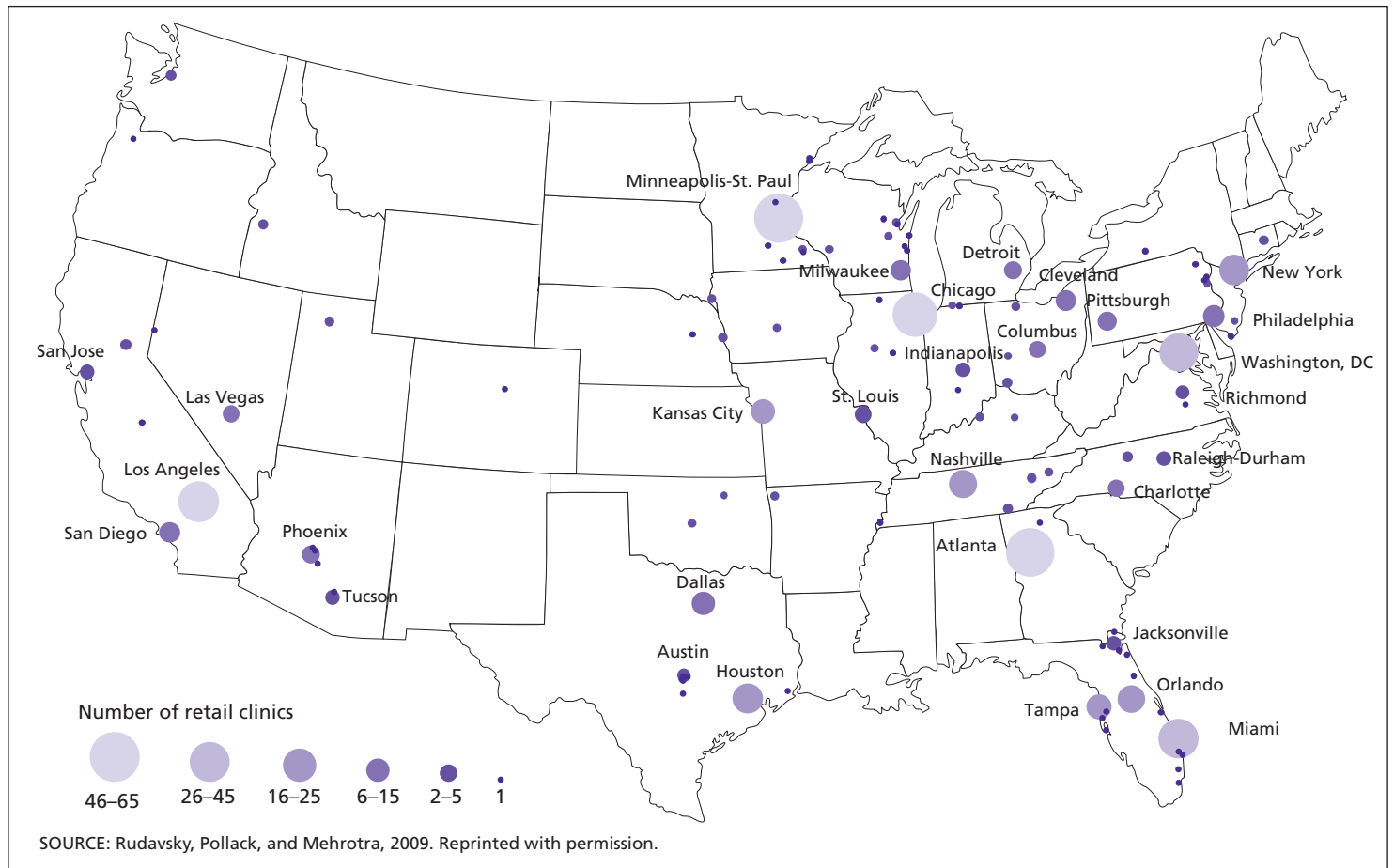
- The majority of retail clinics were located in the South (43 percent) and Midwest (31 percent). Nearly half (44 percent) of all clinics were located in five states (Florida, California, Texas, Minnesota, and Illinois; see Figure 1). An estimated 35.8 percent of the U.S. urban population lived within a 10-minute driving distance of a retail clinic.

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Figure 1
Location of Retail Clinics in the United States



- Retail clinics were more likely to be located in regions of metropolitan areas that had lower poverty rates and higher median incomes. Of 982 clinics located in 32 states, only 12.5 percent were located in medically underserved areas. For comparison, 21 percent of the U.S. population lives in a medically underserved area. Even after adjusting for the location of pharmacies and supermarket chains, clinics were less likely to be located in medically underserved neighborhoods than in other areas.

Services

- All clinics offered treatment for pharyngitis (sore throat). More than 95 percent offered treatment of skin conditions, immunizations, pregnancy testing, and lipid or diabetes screening.
- Nearly all accepted private insurance (97 percent) and Medicare fee-for-service (93 percent); 60 percent accepted some form of Medicaid.
- For an uninsured patient, the average cost for a sore throat visit was \$59.

Ownership

- Three organizations—CVS, Walgreens, and Target—operated 73 percent of the clinics. More than half of the 42 organizations that operated retail clinics were existing hospital chains or physician groups, such as the Mayo Clinic, Aurora Health Care, and Sutter, but these organizations operated only 11 percent of the clinics.

The results showed that retail clinics are widespread and easily accessible to large numbers of Americans, but the results did not support the claim that these clinics are improving access to care for underserved populations, since most of the clinics were located outside medically underserved areas.

Typical Retail Clinic Patients Are Younger Adults with No Regular Provider

Another study examined the characteristics of patients who use retail clinics and the medical services they receive. RAND researchers analyzed details of more than 1.3 mil-

lion visits to retail clinics from 2000 to 2007 and compared information from that analysis with national data on visits to primary care physician offices and EDs. According to the study's findings,

- The largest group of clinic users was young adults, age 18–44, who accounted for 43 percent of patients. Nationally, this group made up only 23 percent of patients who visit primary care physicians (see Figure 2).
- Retail clinic patients were less likely to have a personal doctor: 39 percent said that they had a primary care physician, compared with 80 percent of patients nationally who reported a usual source of care.
- Two-thirds of retail clinic visits were paid for with health insurance, compared with 90 percent of visits to primary care physicians.
- About 90 percent of visits to retail clinics were for ten simple acute conditions and preventive care: upper respiratory infections, sinusitis, bronchitis, sore throat, immunizations, inner ear infections, swimmer's ear, conjunctivitis, urinary tract infections, and screen blood tests. The same conditions accounted for 18 percent of visits to primary care physician offices and 12 percent of ED visits.

Though the research did not examine the impact of retail clinics on existing patient-physician relationships, it is notable that, in multiple studies, the majority of retail clinic patients did not have a regular provider, so there was no relationship to disrupt. The results provided some support for the view that retail clinics are attractive to patients who do

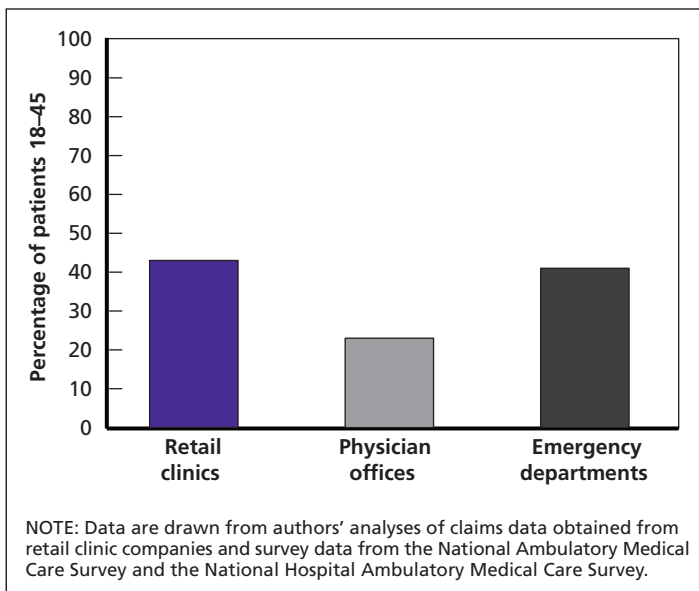
not seek care at doctors' offices. The profiles of ED and retail clinic users were similar, and thus it is possible that retail clinics could be a substitute site of care for some patients who now seek care in EDs.

Retail Clinics Offer Lower-Cost, Similar-Quality Treatment for Some Medical Conditions

Another study examined the costs and quality of care at retail clinics and compared these with costs and quality in other health care settings. Analysts used claims data from enrollees in a large Minnesota health plan who received care for one of three common conditions: otitis media (inflammation of the middle ear), pharyngitis, or urinary tract infection. Treatment was aggregated into care episodes (including initial and follow-up visits, pharmaceuticals, and ancillary tests) in which these illnesses were treated first in retail clinics, physician offices, urgent care centers, or EDs.

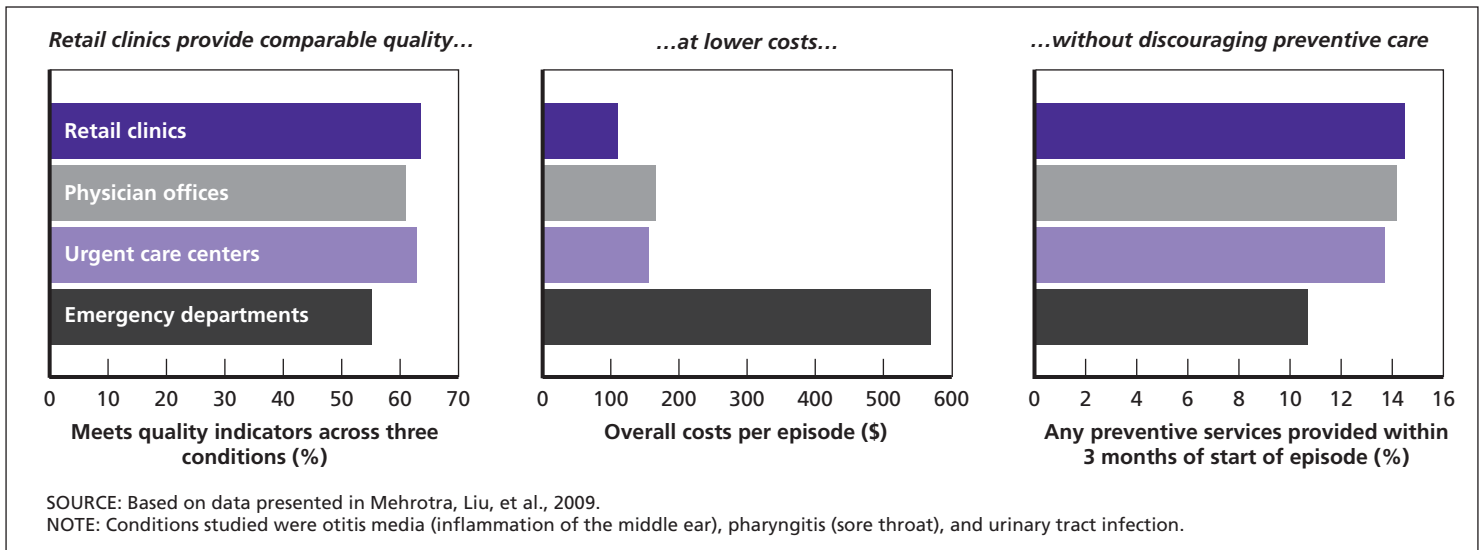
- *Costs of care.* Overall, costs of care for episodes initiated at retail clinics were substantially lower than those of matched episodes initiated at physician offices, urgent care centers, and EDs (see Figure 3). Average prescription costs were similar in retail clinics, physician offices, and urgent care centers (\$21, \$21, and \$22, respectively); ED average prescription costs were slightly higher (\$26).
- *Quality of care.* Using 12 quality-of-care measures, researchers developed quality scores for the four provider settings. The aggregated scores were similar for retail clinics, physician offices, and urgent care centers, and lower for EDs (see Figure 3). The only exception was that a smaller proportion of high-risk patients received a urine culture at retail clinics.
- *Antibiotic prescribing.* Despite concerns that retail clinics would overprescribe antibiotics, the share of patients who were prescribed antibiotics was similar for retail clinics (68 percent for otitis media and 26 percent for sore throat), physician offices (73 percent and 29 percent), urgent care centers (75 percent and 36 percent), and EDs (58 percent and 31 percent).¹
- *Preventive care.* There have been concerns that retail clinic visits represent missed opportunities for primary care doctors to identify and provide missing preventive care. Despite this concern, the proportions of patients who received preventive care within three months of their first visit did not vary significantly across the three non-ED settings (retail clinics, 14.5 percent; physician offices, 14.2 percent; urgent care centers, 13.7 percent; see Figure 3).

Figure 2
Adults Under 45 Were the Heaviest Users of Retail Clinics



¹ For the third condition studied, urinary tract infection, antibiotics were prescribed in almost all cases at each site.

Figure 3
Retail Clinics Provide Comparable Quality at Lower Costs Without Discouraging Preventive Care



The results did not support concerns that retail clinics deliver poor quality care, overprescribe antibiotics, or adversely impact preventive care. Retail clinics had similar quality of care compared with physician offices and urgent care clinics and surpassed that provided in EDs. However, the researchers caution that their findings might not generalize to care provided at all retail medical clinics. The study was conducted only in Minnesota, among insured patients, and among patients of only one retail clinic chain.

Based on this research, RAND researchers estimated the potential cost savings if retail clinics become widespread. A RAND simulation of health care cost-containment options for the state of Massachusetts estimated the effect of promoting retail clinic growth and found that savings ranged from about \$6 billion over 10 years in optimistic scenarios to zero savings under pessimistic scenarios—at most, a cost reduction of less than 1 percent of that state’s health care spending between 2010 and 2020. Extrapolating to the national stage, a similar

modeling analysis estimated savings of 0.5 percent or less for the United States over the same period.

Concluding Thoughts

These studies uncovered little evidence to bear out concerns about retail clinics. Clinics frequently serve a population that lacks access to a regular primary care provider. They treat a limited number of conditions at lower cost and equivalent quality relative to other settings. However, the research also did not support the claim by some champions of the retail clinic model that these clinics are improving access to care for the medically underserved; retail clinics are more likely to be located in relatively affluent sections of large urban areas. The analysis suggested that for one in four patients who used retail clinics, their next best alternative was an ED. In addition, while there are notable cost savings per episode from retail clinics, evidence suggests that the overall impact on spending would be modest at best. ■

This Highlight summarizes RAND Health research reported in the following publications:

Eibner C, Hussey P, Ridgely MS, and McGlynn EA, *Controlling Health Care Spending in Massachusetts: An Analysis of Options*, Santa Monica, Calif.: RAND Corporation, TR-733-COMMASS, 2009. As of May 26, 2010:

http://www.rand.org/pubs/technical_reports/TR733/

Hussey PS, Eibner C, Ridgely MS, and McGlynn EA, "Controlling U.S. Health Care Spending—Separating Promising from Unpromising Approaches," *New England Journal of Medicine*, Vol. 361, No. 2, November 2009, pp. 2109–2111.

Mehrotra A, Liu H, Adams JL, Wang MC, Lave JR, Thygeson NM, Solberg LI, and McGlynn EA, "Comparing Costs and Quality of Care at Retail Clinics with That of Other Medical Settings for 3 Common Illnesses," *Annals of Internal Medicine*, Vol. 151, No. 5, September 2009, pp. 321–328.

Mehrotra A, Wang MC, Lave JR, Adams JL, and McGlynn EA, "Retail Clinics, Primary Care Physicians, and Emergency Departments: A Comparison of Patients' Visits," *Health Affairs*, Vol. 27, No. 5, September/October 2008, pp. 1272–1282.

Pollack CE and Armstrong K, "The Geographic Accessibility of Retail Clinics for Underserved Populations," *Archives of Internal Medicine*, Vol. 169, No. 10, May 25, 2009, pp. 945–949.

Rudavsky R and Mehrotra A, "Sociodemographic Characteristics of Communities Served by Retail Clinics," *Journal of the American Board of Family Medicine*, Vol. 23, No. 1, January/February 2010, pp. 42–48.

Rudavsky R, Pollack CE, and Mehrotra A, "The Geographic Distribution, Ownership, Prices, and Scope of Practice at Retail Clinics," *Annals of Internal Medicine*, Vol. 151, No. 5, September 2009, pp. 315–320.

Wang MC, Ryan G, McGlynn EA, and Mehrotra A, "Why Do Patients Seek Care at Retail Clinics and What Alternatives Did They Consider?" *American Journal of Medical Quality*, Vol. 25, No. 2, March/April 2010, pp. 128–134.

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