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Retail Healthcare Clinics: A Measure of Quality

*Naomi Rivas Gonzalez**

I. INTRODUCTION

Healthcare is a capital intensive industry that is constantly evolving in its methods of providing care. Relative newcomers to the healthcare scene are retail clinics, which offer a new business model of urgent care.¹ Strategically located in pharmacies, discount stores, and other retail stores, retail clinics emphasize convenience to their patients.² Retail clinics operate on a walk-in basis offering patients short waiting times for treatment of minor acute conditions as well as immunizations.³ Furthermore, instead of seeing a physician, patients almost exclusively are treated by nurse practitioners and physician assistants, which greatly reduce patients' cost of service.⁴ Since their inception in 2000, the

* Juris Doctor Candidate, Loyola University Chicago School of Law, Class of 2011. Ms. Gonzalez is a staff member of *Annals of Health Law*.

¹ Ateev Mehrotra et al., *Comparing Costs and Quality of Care at Retail Clinics with that of Other Medical Settings for 3 Common Illnesses*, 151 ANNALS INTERNAL MED. 321, 321 (2009).

² *Id.*

³ *Id.*

⁴ Ateev Mehrotra et al., *Retail Clinics, Primary Care Physicians, and Emergency Departments: A Comparison of Patients' Visits*, 27 Health Aff. 1272, 1272 (2008); Mehrotra et al., *supra* note 1, at 324.

number of retail clinics in the United States has grown significantly to roughly 1000 clinics nationwide in 2009.⁵

Although the increased use of retail clinics may reduce stress on overcrowded emergency rooms, some physician groups have voiced concerns about this trend.⁶ These physician groups have expressed concern that retail clinics fall short in the quality of care they provide to patients, which may result in increased misdiagnosis, overuse of antibiotics and other medications, and a decrease in the administration of preventative care.⁷ The number of people utilizing retail clinics is rapidly growing, and currently, 15% of children and 19% of adults are likely to visit a retail clinic.⁸ Therefore, the question of whether retail clinics are able to provide high quality of care is paramount and must be answered. This article will focus on the quality of care patients receive at retail clinics, looking at several quality indicators such as frequency of misdiagnosis, patient overmedication, and preventative care. Moreover, this article will provide a brief background describing patient demographics of retail clinics, retail clinic providers, and then discuss the quality of retail clinics.

II. RETAIL CLINIC PATIENT PROFILE

Retail clinics offer care for a limited amount of acute illnesses and preventative services, and they are only able to serve patients with certain illnesses.⁹ Approximately 90% of retail clinic patients receive treatment or

⁵ Mehrotra et al., *supra* note 1; Mehrotra et al., *supra* note 4, at 1273.

⁶ Mehrotra et al., *supra* note 1, at 326; Mehrotra et al., *supra* note 4, at 1280.

⁷ Mehrotra et al., *supra* note 1, at 326; Mehrotra et al., *supra* note 4, at 1273.

⁸ Mehrotra et al., *supra* note 1; Mehrotra et al., *supra* note 4, at 1281.

⁹ Mehrotra et al., *supra* note 4.

preventative care for one of the following: “upper respiratory infections, sinusitis, bronchitis, sore throat, immunizations, inner ear infections, swimmer’s ear, conjunctivitis, urinary tract infections, and screenings or blood tests.”¹⁰

Although nurse practitioners offer services to patients over the age of eighteen months who pay either out of pocket or with insurance,¹¹ the patient mix is not uniform. Of the patients with conditions that retail clinics treat, roughly 54% to 63% of retail clinic patients are female.¹² In a study conducted by the RAND Corporation, it was determined that females accounted for 62.8% of patients in the retail clinics studied.¹³ In addition to a sex disparity, the study revealed that an age disparity also exists in retail clinic patients. Approximately 43% of retail clinic patients are between eighteen and forty-four years of age.¹⁴ The overall age demographics of patients as determined by the RAND study showed children and elderly adults utilized retail clinics at a much lower rate than adults younger than sixty-five.¹⁵ In addition, retail clinics have a relatively high amount of self-pay patients.¹⁶ Of patients visiting retail health clinics in the RAND study, 32.9% paid completely out of pocket while 67.1% had some form

¹⁰ Betty Joyce Nash, *Health Care Aisle: Retail Medicine Pushes Competition, Price Transparency*, REGION FOCUS, Summer 2009, at 20; see also RAND Health, *Health Care on Aisle 7: The Growing Phenomenon of Retail Clinics*, http://www.rand.org/pubs/research_briefs/2009/RAND_RB9491.pdf (last visited Mar. 9, 2010); Mehrotra et al., *supra* note 4, at 1276.

¹¹ Press Release, CVS Caremark, *MinuteClinic Says Rand Corporation Study in Annals of Internal Medicine Study on Quality, Affordable Care at Retail Clinics Affirms Internal Information* (Aug. 31, 2009), available at <http://investor.cvs.com/phoenix.zhtml?c=99533&p=irol-newsArticle&ID=1326056&highlight>.

¹² Mehrotra et al., *supra* note 4, at 1275-76.

¹³ *Id.* at 1277.

¹⁴ Mehrotra et al., *supra* note 4, at 1276-77; RAND Health, *supra* note 10.

¹⁵ Mehrotra et al., *supra* note 4, at 1277.

¹⁶ *Id.* at 1276.

of insurance.¹⁷ However, the study did not compare patient demographics related to the method of payment.¹⁸

III. RETAIL CLINIC HEALTHCARE PROVIDERS

Both nurse practitioners and physician assistants undergo extensive training in order to provide care at retail clinics.¹⁹ Physician assistants are highly trained and board certified.²⁰ Similarly, nurse practitioners at retail clinics are typically registered nurses possessing master's degrees.²¹ These nurses are board certified to independently diagnose and treat illnesses, prescribe medications, and administer preventative care.²² Moreover, many retail clinics impose additional requirements on their nurse practitioners. For example, MinuteClinic, which is the largest provider of retail clinics in the United States, requires its nurse practitioners to have graduate level training specializing in family healthcare.²³

Although nurse practitioners at retail clinics are trained to administer care autonomously, they receive guidance in treating illnesses.²⁴ Retail clinics follow established clinical practice guidelines and regulations.²⁵ Some retail clinics provide physician supervision for their nurse practitioners.²⁶ A significant source

¹⁷ *Id.* at 1276, 1277.

¹⁸ *Id.* at 1277.

¹⁹ Convenient Care Ass'n, Fact Sheet Convenient Care Clinic: High Quality Care, http://www.ccaclinics.org/images/stories/downloads/factsheets/cca_factsheet_quality_care.pdf (last visited Mar. 29, 2010); Sue Horrocks et al., *Systematic Review of Whether Nurse Practitioners Working in Primary Care Can Provide Equivalent Care to Doctors*, 324 BRIT. MED. J. 819, 819 (2002).

²⁰ Convenient Care Ass'n, *supra* note 19.

²¹ *Id.*

²² *Id.*; Horrocks et al., *supra* note 19.

²³ CVS Caremark, *supra* note 11.

²⁴ Convenient Care Ass'n, *supra* note 19.

²⁵ *Id.*

²⁶ *Id.*

of guidance at retail clinics comes from evidence-based protocols, which nurse practitioners use to diagnose and treat illnesses as well as provide preventative care.²⁷ Nurse practitioners at retail clinics strictly adhere to their evidence-based protocols and, in some instances, follow the protocols more than practitioners in more traditional medical centers.²⁸ For minor conditions, some retail clinics use computer kiosks to help nurse practitioners diagnose and treat patients.²⁹ Following the proper protocols creates “precision medicine” by lessening the likelihood of judgment errors by nurse practitioners.³⁰

IV. RETAIL CLINIC QUALITY

Retail clinics utilize nurse practitioners to provide high quality care. To obtain a complete representation of the quality provided at retail clinics, several factors should be examined, including: the frequency of misdiagnosis; the likelihood of over medicating patients; the frequency of preventative care administration; convenience of service; and technological sophistication.³¹

A. Frequency of Misdiagnosis

Whenever a patient seeks medical treatment, there is a possibility the patient will be misdiagnosed. However, some physician groups have voiced concerns that retail clinics have a higher amount of misdiagnosed patients than other medical settings because nurse practitioners are generally administering care

²⁷ *Id.*

²⁸ *Id.*

²⁹ Mehrotra et al., *supra* note 4, at 1280.

³⁰ Nash, *supra* note 10, at 19.

³¹ Mehrotra et al., *supra* note 1, at 325-26.

instead of physicians.³² Since nurse practitioners have less formal training than physicians, there is a belief that the level of care at retail clinics is of diminished quality.

In response to these concerns, the RAND Corporation conducted a quality study of retail clinics considering three conditions: “middle ear infections, sore throats, and urinary tract infections, which comprise [48%] of acute care visits at retail clinics.”³³ RAND investigated 2100 episodes of medical care provided to patients at retail clinics by examining the care given to a patient for three months after their original incident.³⁴ The RAND study found that patients who received initial care at retail clinics did not have a high occurrence of follow-up visits to urgent care centers or hospital emergency departments.³⁵ The lack of further treatment suggests that patients receive accurate diagnoses and effective treatment during their initial visit to retail clinics.³⁶

B. Likelihood of Over-prescribing Medication

Another area of concern for physician organizations is in patient medication prescriptions.³⁷ Retail clinics are primarily owned by pharmacies or chain stores; 73% percent are owned by CVS, Walgreens, or Target stores.³⁸ Since retail clinics are typically located in stores, they attract business for those stores because patients may choose to fill their prescriptions at the most

³² Mehrotra et al., *supra* note 4, at 1217.

³³ CVS Caremark, *supra* note 11; Mehrotra et al., *supra* note 1, at 322.

³⁴ CVS Caremark, *supra* note 11; Mehrotra et al., *supra* note 1, at 324.

³⁵ Mehrotra et al., *supra* note 1, at 326.

³⁶ *Id.*

³⁷ *Id.* at 321.

³⁸ RAND Health, *supra* note 10, at 2-3.

convenient place, the pharmacy of the store in which the clinic is located.³⁹ This tendency may create a perceived financial incentive on the part of the store owners to run a clinic and on behalf of the nurse practitioners to over-prescribe medication to give their company business.⁴⁰ That is, the company has an incentive to maintain a clinic if the clinic brings in business for the company, and if the clinic remains open then nurses continue to have work, so nurse practitioners also have an indirect financial incentive to over-prescribe medication.⁴¹

This concern is compounded by the belief that nurse practitioners are not as competent as physicians to prescribe medications. While nurse practitioners are not trained as extensively as physicians for prescribing medication, they overcome this limitation by following evidence-based protocols.⁴² For example, one study of antibiotic prescriptions for negative strep test patients found that retail clinic practitioners adhered to evidence-based protocols about twice as much as practitioners in traditional settings.⁴³ This result suggests that nurse practitioners in retail clinics effectively prescribe medication.⁴⁴ The RAND study found that for “middle ear infections, sore throats, and urinary tract infections,” practitioners at retail clinics prescribed about as much medicine for patients as

³⁹ Mehrotra et al., *supra* note 4.

⁴⁰ Mehrotra et al., *supra* note 1, at 321, 326.

⁴¹ *Id.*

⁴² RAND Health, *supra* note 10, at 3-4.

⁴³ Convenient Care Ass'n, *supra* note 19.

⁴⁴ RAND Health, *supra* note 10, at 3-4.

practitioners in physician offices, urgent care centers, and emergency room departments.⁴⁵

C. Implementation of Preventative Care

Preventative care is important for quality because, if delivered correctly, it may keep patients healthy. Although preventative care is sensible, the rates for such care in the United States remain low.⁴⁶ Comparing retail clinics to more traditional environments of care may indicate whether retail clinics deliver an appropriate amount of preventative care.⁴⁷ The rate of preventative care administered to patients in retail clinics is similar to that of physician offices.⁴⁸ However, the RAND study found that retail clinics administered preventative care more often than emergency departments.⁴⁹ This result may be largely due to the fact that retail clinics primarily provide preventative care in the form of immunizations.⁵⁰ A separate RAND study found that for patients sixty-five years and older, about 73% of retail clinic visits were for immunizations.⁵¹ In addition to immunizations, retail clinics also administered other forms of preventative care, including preventative health examinations and screenings for diabetes, hypertension, and obesity.⁵²

⁴⁵ RAND Health, *supra* note 10, at 3-4; CVS Caremark, *supra* note 11.

⁴⁶ Mehrotra et al., *supra* note 4, at 1279.

⁴⁷ Mehrotra et al., *supra* note 1.

⁴⁸ RAND Corp., Retail Medical Clinics Perform Well Relative to Other Medical Settings, <http://www.rand.org/publications/randreview/issues/winter2009/news.html#medclinics> (last visited Apr. 11, 2010).

⁴⁹ Mehrotra et al., *supra* note 1, at 326.

⁵⁰ Mehrotra et al., *supra* note 4, at 1276-77.

⁵¹ *Id.*

⁵² CVS Caremark, *supra* note 11; RAND Health, *supra* note 10, at 2; Mehrotra et al., *supra* note 1, at 326.

D. Convenience of Service and Technological Sophistication

Convenience also contributes to the quality of service patients receive at retail clinics. Having clinics located in stores allows patients convenient access to clinics.⁵³ For example, one statistic shows that 36% of people in urban areas live within a ten minute drive of a retail clinic.⁵⁴ In addition, retail clinics offer quick service by not requiring appointments and having short waiting times.⁵⁵ Wait times may vary, however, depending on day of the week and season, such as longer wait times during weekends and flu seasons.⁵⁶

Another indicator of quality is the sophistication of retail clinics technology. Retail clinics have generally implemented electronic medical records technology into their record keeping, which provides a valuable way to keep accurate records of patient care, prevents medication conflicts, and facilitates provider communication in treatment.⁵⁷ These electronic records can be printed out and given to patients or can be faxed to a patient's primary care provider at their request.⁵⁸ In addition to electronic medical records, some clinics have implemented a greater level of technology.⁵⁹ For example, MinuteClinic nurse practitioners utilize software while treating patients, which allows them to automatically generate diagnostic records, and visit invoice, prescriptions, as well

⁵³ Mehrotra et al., *supra* note 1; RAND Health, *supra* note 10, at 2.

⁵⁴ RAND Health, *supra* note 10, at 2.

⁵⁵ Mehrotra et al., *supra* note 1; Mehrotra et al., *supra* note 4.

⁵⁶ Nash, *supra* note 10, at 20.

⁵⁷ Convenient Care Association, *supra* note 9; Mehrotra et al., *supra* note 1, at 327; Nash, *supra* note 10, at 21.

⁵⁸ Convenient Care Association, *supra* note 9; Mehrotra et al., *supra* note 1, at 327.

⁵⁹ CVS Caremark, *supra* note 11.

as educational materials.⁶⁰ MinuteClinic also automatically sends patients' diagnostic records to their primary care physicians.⁶¹ Thus, the use of technology, such as electronic records, by retail clinics helps patients to keep track of their health.

For the limited amount of illnesses treatable at retail clinics, nurse practitioners are able to accurately diagnose patients and prescribe effective dosages of medication on par with the amount normally prescribed by physicians. In addition, patients enjoy preventative care at retail clinics through immunizations and various screenings. These services occur at convenient locations and are carried out with little wait time. Finally, retail clinics use electronic medical records that permit patients to keep track of their health and can even keep their primary care physicians informed. Retail clinics performed well on all the individual factors of quality, thus, patients receive a high quality of health care at retail clinics. With increasing numbers of people utilizing them, retail clinics may provide a popular alternative to emergency rooms and doctor offices for the limited services offered.

V. CONCLUSION

Retail clinics offer quality services to the community. As the RAND study found for selected illnesses, retail clinics have quality scores equal to or greater than other care settings.⁶² This finding is true even though retail clinics primarily utilize nurse practitioners instead of physicians. However, the RAND

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² Mehrotra et al., *supra* note 1, at 325-26.

study is limited in scope because it only looked at “middle ear infections, sore throats, and urinary tract infections,” so the study analyzed a little over half of ailments treated at retail clinics.⁶³ Retail clinic’s high performance in quality may not generalize fully to the conditions not examined by RAND.⁶⁴ Even so, the future of retail clinics is promising. If the growth rate continues, the number of retail clinics should increase in the future, as a part of the evolving healthcare system. Although retail clinics began as exclusively self-paid clinics, many insurance companies have begun covering treatment in retail clinics because nurse practitioners offer quality care to patients at lower rates than hospitals and doctor offices, which may sustain retail clinic growth in the future.

⁶³ *Id.* at 326.

⁶⁴ *Id.*