



# Patient Expectations and Satisfaction When Using a Student-Run Health Clinic

Stephanie Mischell<sup>1</sup>; Nikhil Yegya-Raman<sup>1</sup>; Kiersten Frenchu<sup>1</sup>; Karen Lin, MD, MS<sup>2</sup>

<sup>1</sup>Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey, USA

<sup>2</sup>Department of Family Medicine and Community Health, Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey, USA

**Corresponding Author:** Stephanie Mischell; email: [mischesg@rwjms.rutgers.edu](mailto:mischesg@rwjms.rutgers.edu)

**Published:** May 3, 2017

## Abstract

**Background:** Promise Clinic, a student-run continuity-based free health clinic affiliated with Rutgers Robert Wood Johnson Medical School, serves the uninsured and low-income population in New Brunswick, New Jersey. Though it has been operating for over ten years, Promise Clinic does not yet have a formalized system for evaluating quality of care from a patient's perspective. The purpose of this study was to investigate patient satisfaction and expectations at Promise Clinic.

**Methods:** Over a two-month span, we interviewed 21 patients at Promise Clinic. The interview addressed a variety of factors, including patient satisfaction with student doctors, health education and awareness, and understanding of and access to community health options. Furthermore, we elicited open-ended feedback from patients, allowing them to express opinions regarding their healthcare and reasons for attending Promise Clinic over other low-income healthcare providers.

**Results:** We found that while patients were highly satisfied with their overall experience and student doctor teams, there were some concerns about wait times, the timing of clinic, and student doctor preparedness. Patient health education was strong in many, but not all, areas. Of eligible patients, 40.0% reported receiving regular cancer screenings and 33.3% were unaware of other healthcare options.

**Conclusions:** Overall, this study provides a patient-centered assessment of the clinic. Insight obtained has helped medical students and faculty administrators at Promise Clinic address chief patient concerns and improve upon the patient experience. We hope that patient interviews will continue to be a part of quality improvement processes at Promise Clinic and other similar clinics.

## Introduction

Presently there are over 100 student-run free health clinics operating in the United States, which provide valuable healthcare benefits to uninsured and low-income populations.<sup>1</sup> Student-run free clinics often provide healthcare to people who otherwise would not seek medical care for financial reasons.<sup>2</sup> One such student-run free clinic is Promise Clinic, located in New Brunswick, New Jersey and affiliated with the Homeless & Indigent Population Health Outreach Project (HIPHOP) at Rutgers Robert Wood Johnson Medical School (RWJMS).

At Promise Clinic, medical students and volunteer physicians provide primary care services to eligible clients of Elijah's Promise Soup Kitchen. Operations take place once per week out of Eric B. Chandler Health Center, a federally qualified health center in New Brunswick. Using a continuity-based model, patients are seen by the same team of medical students at each visit. The team is comprised of four students with various levels of medical training. A typical visit consists of obtaining a patient's vitals and laboratory tests, performing an interview and physical exam, and presenting the case to the attending physician, who oversees patient management. With over 300 patient visits per year and 43 active patients, Promise Clinic's services are in demand.

The patient population that Promise Clinic serves is varied and underprivileged. According to the 2014 United States census data, roughly 50% of the New Brunswick population is Hispanic or Latino and 16% is black or African American.<sup>3</sup> In 57% of households in New Brunswick, a language other than English is spoken. This population has a great need for free clinics in that 35% live under the federal poverty line and 31% of people under the age of 65 lack health insurance.<sup>3</sup>

Though it has been operating for over ten years, Promise Clinic does not yet have a formalized system for evaluating the quality of care from a patient's perspective. This patient population has a unique set of demands and obstacles to healthcare that need to be evaluated and addressed. Previous studies measuring patient satisfaction at other student-run free health clinics in the United States have demonstrated the benefits to both patients and clinics from conducting this type of study.<sup>1</sup> Through survey analysis, unforeseen needs, as well as strengths and weaknesses of a clinic, can be identified. It also forces medical providers to focus on quality improvement as a central goal of the practice, which can create "better care for happier patients."<sup>4</sup> The purpose of this study is to investigate patient satisfaction and expectations at Promise Clinic through a confidential voluntary survey.

## Methods

Surveys were administered orally in April and May of 2015 at Promise Clinic. Every patient who visited the clinic during this time period and met inclusion criteria was asked to participate. To be eligible, participants must have been registered patients in the clinic and have had at least two prior appointments. Each patient was allowed to interview only once.

Patients were interviewed in the exam rooms while waiting for their student doctors during their visits. The study was conducted by co-investigators of Promise Clinic's Quality Improvement Committee, who are not student doctors, to maintain confidentiality of responses. Informed consent was obtained from each patient. Interviews were conducted in English and Spanish. No patient names or secure health information were recorded, and patients were not given any type of compensation for their time. This study was approved by the Rutgers Behavioral Health Sciences Institutional Review Board.

Interviews were conducted using a preformed questionnaire (Appendix 1) evaluating patient experiences and satisfaction. This questionnaire was based on concerns previously raised by the Quality Improvement Committee and other Promise Clinic committees. Understanding of the New Brunswick area healthcare options and receipt of services provided by Promise Clinic was assessed. Patients were asked why they were selecting Promise Clinic over other local low-income health centers in the area in order to assess patient expectations from the clinic. A mixed methods research design was utilized, whereby data collected included both numerical responses as well as free-form quotations from the interview process. Trained interviewers selected multiple-choice responses and offered prompts to elaborate on questions; all patient quotes were handwritten by interviewers. Data was summarized and analyzed with a focus on identifying opportunities for improvement. Descriptive statistics were generated on scaled responses and open-ended responses were mined for themes mentioned by more than one patient. Results and recommendations were shared with Promise Clinic administrators, the steering committee, and student doctors.

## Results

In April and May of 2015, 25 patients attended Promise Clinic, of whom 21 met inclusion criteria. All 21 agreed to participate in this study. Of the 21 patients, 61.9% were male and 47.6% reported Spanish as their primary language. The results are separated into three categories: satisfaction (Table 1), education/awareness (Table 2), and open-ended feedback (Table 3).

First, we examined patient satisfaction, which is broken down into general satisfaction, satisfaction with student doctor teams, and satisfaction with wait times (Table 1). Patients rated their overall experience with Promise Clinic very highly (mean 4.7 out of 5). All patients felt they have been treated with respect by everyone at Promise Clinic, and 94.7% of patients reported an easy time contacting clinic and trusted that Promise Clinic could get them their medications quickly and inexpensively. Satisfaction with student doctor teams was extremely high as well: all patients believed their teams are good fits for them, and 95.2% were familiar with, trust, and feel comfortable with their team members. However, 33.3% of patients believed their time is wasted at some point during a

visit and 9.5% reported that the wait has interfered with other plans.

Next, we looked at patient health education/awareness (Table 2), which in part reflects whether Promise Clinic is empowering patients to make informed health decisions. All patients reported that they understand everything their student doctors are doing and why, and 75% said they can name all of their medications and what they do. The vast majority (>85%) of patients have been educated by their student doctor team on their own medical condition(s), nutrition, diabetes, hypertension, and weight loss. However, patient education in several categories was lacking, including transportation options (43.8%), language services (62.5%), community resources (70%), and drugs/alcohol/sexually transmitted diseases (70%). Additionally, only 40% of age-eligible patients reported receiving regular Pap smears and mammograms or prostate exams, and only 61.9% were aware of Promise Clinic's urgent care services. Perhaps most concerning was that only 33.3% were aware of options for their healthcare apart from

Promise Clinic and Eric B. Chandler Health Center, despite the presence of several other low-income healthcare providers accessible to New Brunswick residents.

Lastly, patients were given the opportunity to provide open-ended feedback about their expectations from as well as their experiences at Promise Clinic. Responses were categorized based on common themes and only sentiments expressed by two or more patients are shown in Table 3. When asked to name the primary reason(s) they attend Promise Clinic, 47.6% prefer it for financial reasons and/or because they are uninsured, and 38% come because they find "other value" in clinic. In particular, patients stated that Promise Clinic "cares more and asks more questions about the patient," "has the best interest at heart," and "is a great learning experience for medical students." Patients were allowed to provide more than one primary reason, and one respondent reported both financial and "other value" as primary reasons. When asked for recommendations to improve clinic, most feedback involved increasing

**Table 1.** Patient Satisfaction

Satisfaction Category	Question/Statement	% Affirmative (unless otherwise specified; n = 21)
General	On a scale of 1 (poor) to 5 (excellent), what has been your overall experience with Promise Clinic?	Mean rating: 4.7
	I am treated with respect by everyone at Promise Clinic.	100.0
	The staff at the front desk are friendly and informative.	100.0
	I have an easy time contacting Promise Clinic.	94.7
	Promise Clinic does a good job reminding me when I have a visit.	95.2
	If I need a medication I trust that Promise Clinic will get it quickly and inexpensively.	94.7
Student doctor teams	My team is a good fit for me.	100.0
	How many people should be on a team?	Mean number of people: 4.3
	I am familiar with and trust each member of my team.	95.2
	My team makes me comfortable.	95.2
Wait times	I wait for an appropriate time at each visit.	90.5
	Do you feel your time is being wasted at any point during the visit?	33.3
	Have you ever missed a ride because of the wait?	5.0
	Has the wait ever interfered with other plans?	9.5
	Reading pamphlets while I wait would make my experience better.	71.4

**Table 2.** Patient Health Education and Awareness

Question/Statement	% Affirmative (n = 21)
I understand each thing my student doctors are doing and why.	100.0
Do you understand what each of your medications are and what they do?	
Yes, all of them.	75.0
Yes, some of them.	20.0
None of them.	5.0
Do you get a regular Pap smear/mammogram or prostate exam?	40.0
My team has made an effort to educate me on...	
nutrition.	85.7
diabetes, hypertension, and my medical condition.	95.0
weight loss and, if applicable, made a plan.	85.7
community resources available to me.	70.0
transportation.	43.8
accessing services in my first language (if not English).	62.5
drugs, alcohol and sexually transmitted diseases.	70.0
Would you be interested in a half hour program at some point in the evening on topics such as nutrition, exercise, social service, transportation help or immigration services?	47.6
Are you aware of other options for your healthcare apart from Promise Clinic and the Eric B. Chandler Health Center?	33.3
Are you aware of Promise Clinic's urgent care services?	61.9
If so, have you ever used them?	33.3

**Table 3.** Open-Ended Patient Feedback

Question & Common Responses	% (n = 21)
Why do you go to Promise Clinic over the Eric B. Chandler Health Center?	
Financial reasons/lack of insurance	47.6
Find other value in clinic	38.0
What would make your experience better?	
More opportunities to meet with student doctor team	9.5
Decrease wait times	9.5
Expand clinic hours	9.5
What is your biggest concern about Promise Clinic?	
Clinic funding	9.5
Student doctor preparedness	9.5

opportunities to meet with student doctor teams (9.5%), cutting down on wait times (9.5%), and expanding clinic hours (9.5%). Concerns about clinic included clinic funding/maintenance (9.5%) and student doctor behavior/preparedness (9.5%). No patient offered more than one recommendation or concern. The majority of patients chose not to voice recommendations or concerns, either because they did not have any or did not wish to.

## Discussion

The purpose of this study was to examine patient satisfaction and expectations at Promise Clinic through a confidential voluntary survey. Results revealed that although patients are very satisfied with their overall experience and student doctor teams, there are some gaps in care regarding patient education and public health screenings, and concerns about wait times, student doctor preparedness, and the timing of clinic. These

findings have helped to guide and align current and future clinic improvement projects, ensuring Promise Clinic continually improves upon the patient experience. In particular, we are collaborating with Master of Social Work (MSW) students, decreasing patient wait times, increasing patient awareness of other healthcare options and public health screenings, and more clearly delineating expectations of student doctors.

Our study revealed that student doctors are doing an excellent job educating their patients in many, but not all areas. Deficits include transportation options, language services, and community resources. Recently, we began collaborating with the Rutgers University School of Social Work, whereby MSW students are conducting patient needs assessments and increasing Promise Clinic patients' connections with the community. This should provide greater access to community resources for health screening and other items necessary for long-lasting health.

Many patients (33.3%) felt that their time is wasted at some point during a clinic visit. Typically, after seeing their patient, a student doctor team must wait in line to present to the attending physician; meanwhile, patients are left waiting alone for about 20 minutes. Since the end of the study in May, several projects have been implemented to address this issue. Use of the "Waitlist Me" smartphone application has greatly cut down on wait time: as soon as an attending is available, the appropriate student doctor team is notified, eliminating the need to stand in line. Additionally, during the patient down-time, MSW and other medical students engage the patients and address gaps in their care. For example, patients are being informed about Medicaid and screened for potential Medicaid eligibility. According to our study, only 33.3% of patients were aware of healthcare options beyond Promise Clinic and the Eric B. Chandler Health Center. The ongoing initiative is showing early successes, as several patients have been enrolled in Medicaid. In the future, patients can also be screened for the New Jersey Cancer Education and Early Detection Program. Only 40% of age-eligible patients regularly receive cancer screenings such as Pap smears/mammograms or prostate exams. Although we did not assess the medical indication for screenings, given the population of 18- to 64-year-olds, this disparity in access is so severe that it merits concern and further specific evaluation.

The study also highlighted the main reasons why patients attend Promise Clinic in the first

place. As expected, 47.6% come because of financial reasons or lack of insurance. Interestingly, 38% come primarily because of the level of dedication of Promise Clinic's students/faculty and personal connection forged with their student doctor team. Nevertheless, a few patients expressed concerns about student doctor preparedness. To standardize student doctor knowledge and experiences, and to better meet patient expectations of student doctors, we have introduced a student doctor handbook. This handbook, to be carried by all student doctors during a clinic visit, outlines expectations, procedures, and reminders for a successful patient encounter. By enriching student doctor knowledge and awareness, we hope to improve upon the patient experience.

Furthermore, we received several concerns regarding the hours of clinic operation, a problem many student-run clinics face.<sup>1</sup> Currently, Promise Clinic only operates once a week, on Thursday evenings. Consequently, patients must fast the entire day before getting certain laboratory tests done, such as serum lipid profiles. Expansion of clinic hours represents a long-term goal that primarily depends on available resources, but can greatly increase patient health and well-being.

These recent initiatives represent a starting point for improving patient satisfaction and well-being at Promise Clinic. We plan to conduct similar surveys in a few years, to evaluate the efficacy of our current initiatives and help guide future projects.

This study is the first systematic attempt to include patient voices into the Quality Improvement process at Promise Clinic. It assessed both quantitative receipt of services and satisfaction with clinic services, as well as patient comprehension of the role of clinic and their healthcare needs. Using students who are not student doctors allowed for confidentiality and safety in freely answering questions, as demonstrated by the constructive criticism and direct feedback received during the study. By conducting interviews orally and in two languages, we were able to include every established patient visiting clinic during the study time. Moreover, using a mixed methods approach allowed for both statistical evaluation as well as incorporation of patient ideas and experiences into recommendations.

This study is not without limitations. The researchers involved are not active student doctors, but are active in the operations of Promise Clinic as members of the Quality Improvement Commit-

tee. Even though they are not involved in a patient's direct care and the survey was confidential, patients may be reluctant to fully disclose their true feelings about the care they receive. There is also the potential for response bias in this study. Previous research has demonstrated response bias in patient satisfaction surveys, concluding that it can cause an overestimation of the level of satisfaction in the patient population and that the estimation is most inflated by the least satisfied patients.<sup>5</sup> This may be more significant because the survey was orally administered. Another significant weakness lies in the small sample size of the study, limiting its external validity. A total of 21 patients out of 43 active patients (49%), were surveyed. Therefore, this study serves better as a pilot program and initial evaluation than a final conclusion about patient satisfaction. Furthermore, this study was not outcome based, but instead relied on patient perspectives and opinions on whether they had received certain services, such as health education. Despite the survey being voluntary, no patients opted not to participate, eliminating sample bias and self-selection. Thus, with roughly half of Promise Clinic patients being surveyed, this study has high internal validity.

Realizing the value of empowering patients in healthcare settings, we would recommend that student-run free clinics employ their own patient interviews as a means to evaluate clinic services and assess need for improvement. This model was successful in our clinic because of the wait times in patient flow that allowed for patient interviews during clinic visits, costing patients no additional time. The availability of student researchers who are not student doctors and who spoke the same languages as the patient population allowed us to conduct confidential interviews. We would encourage other student-run free clinics to take steps to ensure impartiality of investigators and keep in mind the presence of response bias, as well as to recognize the time demands on low-income populations when designing interview studies. This study is an introduction to establishing relationships between patients and Quality Improvement initiatives that we hope will continue for years to come.

#### Acknowledgements

Thanks to Dr. Karen Lin, Dr. Eric Jahn, Susan Giordano, Carly Borinsky, Gloria Gerber, Promise Clinic Operations Committee and Promise Clinic Student Doctors.

#### Disclosures

The authors have no conflicts of interest to disclose.

#### References

1. Ellett JD, Campbell JA, Gonsalves WC. Patient satisfaction in a student-run free medical clinic. *Fam Med*. 2010 Jan;42(1):16-8. [LINK](#)
2. Gertz AM, Frank S, Blixen CE. A survey of patients and providers at free clinics across the United States. *J Community Health*. 2011 Feb;36(1):83-93. [LINK](#)
3. Quick Facts: Population Estimates, July 1, 2014 [Internet]. U.S. Census Bureau; 2014 Jul 1 [cited 12 Dec 2015]. Available from: <https://www.census.gov/quickfacts/table/PST045216/3451210,00>. [LINK](#)
4. White B. Measuring patient satisfaction: how to do it and why to bother. *Fam Pract Manag*. 1999 Jan;6(1):40-4. [LINK](#)
5. Mazor KM, Clauser BE, Field T, Yood RA, Gurwitz JH. A demonstration of the impact of response bias on the results of patient satisfaction surveys. *Health Serv Res*. 2002 Oct;37(5):1403-17. [LINK](#)

**Appendix 1.** Survey Questions

What has been your overall experience with promise clinic?	1	2	3	4	5						
I wait for an appropriate time at each visit.	Agree			Disagree							
Have you ever missed a ride because of the wait?											
Has the wait ever interfered with other plans?											
During what part of the visit do you feel your time is being wasted?											
Would you be interested in a half hour program at some point in the evening on topics such as nutrition, or exercise or social service or transportation help or immigration services?											
Reading pamphlets while I wait would make my experience better.	Agree			Disagree							
I am treated with respect by everyone at promise clinic.	Agree			Disagree							
My team is a good fit for me.	Agree			Disagree							
How many people should be on a team?	1	2	3	4	5	6	7	8	9	10	
I am familiar with and trust each member of my team.	Agree			Disagree							
My team makes me comfortable.	Agree			Disagree							
I understand each thing my student doctors are doing and why.	Agree			Disagree							
Do you understand what each of your medications are and what they do?	Not at all			Some of them					All of them		
The staff at the front desk are friendly and informative.	Agree			Disagree							
I have an easy time contacting promise clinic.	Agree			Disagree							
Promise Clinic does a good job reminding me when I have a visit.	Agree			Disagree							
If I need a medication I trust that PC will get it quickly and inexpensively.	Agree			Disagree							
Do you get a regular Pap smear/mammogram or prostate exam?											
My team has made an effort to educate me on nutrition.	Agree			Disagree							
My team has made an effort to educate me on diabetes, hypertension, my condition.	Agree			Disagree							
My team has made an effort to educate me on weight loss and made a plan.	Agree			Disagree							
My team has made an effort to educate me on community resources available to me.	Agree			Disagree							
My team has made an effort to educate me on transportation.	Agree			Disagree							
My team has made an effort to educate me on accessing services in my first language.	Agree			Disagree							
My team has made an effort to educate me on drugs alcohol and sexually transmitted diseases.	Agree			Disagree							
Why do you go to PC over Chandler?											
Are you aware of other options?											
What would make your experience better?											
What is your biggest concern about Promise Clinic?											
Are you aware with urgent care you can walk in without an appointment any Thursday?											
If you are aware have you ever use them?											