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## Innovations in Family Medicine Education\_

## Joshua Freeman, MD, Feature Editor Alison Dobbie, MD, Associate Editor

Editor's Note: Send submissions to jfreeman@kumc.edu. Articles should be between 500–1,000 words and clearly and concisely present the goal of the program, the design of the intervention and evaluation plan, the description of the program as implemented, results of evaluation, and conclusion. Each submission should be accompanied by a 100-word abstract. Please limit tables or figures to one each. You can also contact me at Department of Family Medicine, KUMC, Mail Code 4010, 3901 Rainbow Boulevard, Kansas City, KS 66160. 913-588-1944. Fax: 913-588-2496.

# Patient Satisfaction in a Student-run Free Medical Clinic

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Background and Objectives: There are currently more than 100 student-run medical clinics in the United States, operated in conjunction with various allopathic medical schools. However, there have been no reports regarding patient satisfaction with these free clinic services. Methods: Fifty-two of 60 patients seen at the C.A.R.E.S. clinic over a 4-week period in the winter of 2007 completed a questionnaire. Results: Patients were highly satisfied with laboratory services, staff friendliness, amount of time spent being interviewed, and the depth of the explanations. They were less satisfied with the hours of operation and wait time. Conclusions: Patients seen at a student-run clinic are very satisfied with the services they received.

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Simpson et al recently conducted a Web-based survey of US medical schools and identified approximately 111 student-run clinics at 49 schools in 25 states.¹ Prior studies have reported the growth of student-run free clinics and stressed their importance to the community and medical education.²,³ Other studies have reported patients' opinions regarding student participation in clinic visits.⁴-6 However, a recent MEDLINE search revealed a lack of articles reporting patient satisfaction with student-run clinics. In

the present study, we report patient satisfaction with the Community Aid, Relief, Education, and Support (C.A.R.E.S.) clinic, a student-run clinic operated by students at the Medical University of South Carolina (MUSC).

MUSC is a 4-year state medical school with approximately 150 medical students per year. In August 2005, students from MUSC opened the C.A.R.E.S. clinic, a student-run free clinic that offers medical care exclusively to the uninsured, while exposing health professional students to the rewards and challenges of caring for this population. C.A.R.E.S has served more than 2,000 patients and is led

by student officers under the supervision of a faculty advisor. It is staffed by inter-professional volunteers, including Master's of Health Administration, medical, physical therapy, pharmacy, and physician assistant students and psychiatry residents. Two physicians supervise students during clinic hours (6:30 pm to 9 pm Monday, Tuesday, and Thursday nights). Pairs of students in their preclinical and clinical years of training interview and examine the patients and then present the case to a supervising physician, followed by discussion of treatment plans and an examination by the supervising physician. The clinic provides patients with basic

medical care including prescription medications, laboratory testing, certain imaging studies, physical therapy, wellness education, and mental health services. The clinic operates after hours within a faculty practice, University Family Medicine at East Cooper Community Outreach (ECCO) Center in Mount Pleasant, SC.

#### Methods

Students administered the patient satisfaction survey during January-February 2007 at the completion of each patient visit. Patients filled out the survey anonymously in the exam room. The surveys were collected immediately after completion. The questionnaire used simple language and brief questions that were adapted from surveys used in the literature<sup>6</sup> and student suggestions. The survey consisted of 11 items, including yes/ no questions whose answers were totaled and reported as a percent of the total number of surveys, and seven 5-point Likert scale items ranking level of satisfaction of particular clinic services, ranging from "poor" to "excellent." Additionally,

free-form spaces were included for comments. The responses were totaled for each question and then averaged for a mean score. Non-responses were not included in the average scores. Results were compiled, analyzed, and presented to C.A.R.E.S. clinic student officers and faculty advisor. This research has been reviewed and approved as exempt by the MUSC Institutional Review Board.

### Results

A total of 52 of 60 (87%) patient satisfaction surveys were completed. At C.A.R.E.S., there is a 62%:37% male:female ratio, and the patients are 56% Caucasian, 28% African American, and 11% Hispanic. Twenty-two percent of our patients are between the ages of 19–28, 17% between 29–38, 22% between 39-48, and 21% between 49-58. Patients included in this study generally adhered to this demographic. Overall satisfaction with the clinic was reported in 98% of patients surveyed. Table 1 presents the Likert scale results. Wait time and hours of operation were given the lowest rating (mean

rating of 2.96±1.21 and 3.02±1.29, respectively). Friendliness of staff (4.33±0.95) and time spent with the students (4.31±0.95) and physicians (4.29±0.94) was rated highly. Patients were satisfied with medications supplied, whether as prescriptions, samples, or patient assistance, as well as laboratory services (mean rating of 4.12±1.14 and 4.41±1.00, respectively).

Services that patients felt were needed included additional or daytime hours, an ultrasound, prenatal care, and a Spanish translator. There were requests for specialty services such as cardiology (three), gastroenterology (three), women's care (five), ophthalmology (four), dermatology (eight), psychiatry (three), orthopedics (two), nutrition, pediatrics, and pulmonology. It is important to note here that most of the patients did not see the need for many more services than are currently being offered. Additionally, 88% of patients reported being aware that this clinic was student run and that students would be involved in their care.

Among the comments received were: "C.A.R.E.S. provided more

Table 1
Patient Ratings of C.A.R.E.S. Clinic Services\*

C.A.R.E.S. Clinic Service	Poor (1 point)	Fair (2 points)	Good (3 points)	Very Good (4 points)	Excellent (5 points)	No Response	Mean Rating
Hours/days of operation	6 (12%)	15 (29%)	12 (23%)	10 (19%)	9 (17%)	0	3.02 ±1.29
Wait time	6 (12%)	12 (24%)	17 (34%)	8 (16%)	7 (14%)	2	2.96 ±1.21
Friendliness of staff	1 (2%)	1 (2%)	7 (15%)	11 (23%)	28 (58%)	4	4.33 ±0.95
Amount of time with student doctor	0 (0%)	3 (6%)	7 (15%)	10 (21%)	28 (58%)	4	4.31 ±0.95
Amount of time with supervising doctor	0 (0%)	2 (5%)	8 (19%)	8 (19%)	24 (57%)	10	4.29 ±0.94
Lab services	0 (0%)	2 (12%)	0 (0%)	3 (24%)	11 (64%)	35	4.41 ±1.00
Medications provided (prescriptions or samples)	1 (3%)	2 (6%)	7 (21%)	5 (15%)	18 (55%)	19	4.12 1.14

<sup>\*</sup> Presented are the number of responses, percent of total responses (n=52), number of nonresponses, and mean ratings of services based on 5-point scale.

18 January 2010 Family Medicine

than I expected," "This has been a great service, and I greatly appreciate it," and "I felt much more attention and interest was given regarding my concerns than at any doctor visit I have ever had."

#### Discussion

Overall, patients rate their experience at a student-run free medical clinic as very positive. Patients would change little about their experience other than improved wait times and more convenient hours of operation. Based on survey results, student officers have begun working intimately with the faculty advisor and other attending physicians to initiate changes to address quality improvement issues.

Since the survey was implemented, limited gynecological services have become available. Radiological services have been offered at reduced costs through MUSC. A pamphlet that describes the services at C.A.R.E.S. has been developed. Patients have been made aware that psychiatry residents are available two nights per month and that physical therapy is available

once per week. Student leaders addressed the issue of long wait times by adding the floor manager role to monitor patient-student-physician encounter times. To address the issue of hours of operation, the clinic opened an additional night each week. Both students and faculty are anxiously anticipating a future survey to assess the impact of these changes.

With continued use of the survey, patient satisfaction can be further evaluated to ensure patients' concerns are addressed. This survey will allow us to continue to improve our clinic to support the mission of providing health care to uninsured patients.

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