FCRC | Reflection

The Value of Medical Students in Free Clinics: Why Medical Students are Uniquely Positioned to Understand, Empower, and Serve

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Medical students: we're eager but anxious, we want to help but we don't always know how, we study hard but we're often unsure of the answers. We mean well, but because we are still learning, we often straddle a thin line between giving and taking from our experiences. We are told we are important members of a patient's care team, but we question ourselves constantly. These issues are particularly salient when we apply them to our work in free clinics.

This past year, I was one of sixteen medical students from Loyola University Chicago Stritch School of Medicine that organized and staffed a weekly primary care clinic at CommunityHealth Clinic (CHC), the nation's largest volunteer-run free clinic. As we presented an informational session in preparation for a transition to the new student board, someone raised their hand and asked, "So are we, as students, actually helpful and needed or would we just be using this as a chance to gain clinical experience?" It was a question that my fellow board members and I had asked ourselves repeatedly throughout the year.

It's no secret that medical students are less efficient in finishing patient encounters, aren't as far along in their diagnostic and clinical skills, and live in the competitive world of medicine where their CVs will one day be compared as they vie for coveted residency spots. It's also true that there are well-intended criticisms of medical student-run free clinics, including questions around whether these clinics reinforce stereotypes that it is acceptable for low-income patients to receive lower-quality health care from those with less training.[1] With these criticisms in mind, the essence of the question from our informational session remains: What value, if any, do medical students add to a free clinic? Is there a benefit and utility to involving medical students in free clinic care or would these operations run more smoothly without students?

Through published literature and personal experience at CHC, I have found that medical students add value with their language and cultural competency skills, their dedication to uniquely improving the care of patients, and their role in keeping the ecosystem of safety net care alive and well.

Helping Patients Feel Understood: Multilingual & Cultural Competency

Based on a survey of all allopathic medical schools regarding their associated free clinics, the demographics of student-run free clinics nationwide are as follows: 31% Hispanic; 31% Black/African American; 25% White; 11% Asian; and 3% Native American or other.[2] However, the physician workforce does not show similar diversity, with physician provider demographics currently standing at around 56% White, 17% Asian, 6% Hispanic and 5% Black/African American (and 13% unknown).[3]

Studies show that patients with physicians of the same race/ethnic group report greater satisfaction, are less likely to postpone or delay seeking care, and report better patient-provider communication.[4,5] Further research reports patients may perceive translation of medical complaints, diagnoses, and instructions through interpreters to be inadequate and that interpreter errors have significant clinical consequences.[6,7] In other words, there are issues surrounding

representation, racial and ethnic patient-provider concordance, and language needs that face minority patients, which make up the majority of student-run free clinic patient populations.

Student surveys have shown that self-identified non-white students report free clinics as important factors in their choice to both apply to and attend medical schools, highlighting free clinics as a potential tool for recruitment of diverse medical classes.[1,8] Additionally, this highlights minority medical students' interest and likely eventual participation in student-run free clinics. Participation by minority students and students who reflect the race, ethnicity, or language ability of the clinic's patient population fills key gaps left by lack of diversity among the nation's current physician workforce.

Minority student participation also has the potential to improve patient satisfaction, among other aforementioned benefits of patient-provider concordance. Among Loyola's medical student volunteers at CHC, several students spoke either Spanish or Polish, often natively, to meet the cultural and linguistic needs of the largely Latino and Polish population served by the clinic. Anecdotally, students who were able to communicate with patients without interpretation services felt patients were able to spend more time telling their history and were able to tell it in a more uninterrupted fashion. Additionally, familiarity with cultural customs was helpful in health goal-setting and motivational interviewing.

Student-run free clinics are key actors for increasing access to medical services, reporting more than 36,000 annual patient-physician visits in addition to more non-visit encounters.[2] As we wait for the physician workforce to diversify in language capabilities, race, ethnicity, and culture, medical students at free clinics can act as multilingual providers, medically-knowledgeable interpreters, and faces of reassurance for minority patients who understandably have historic distrust of medical systems. While medical students may not be able to independently handle the complexities of a patient's medical care, we can certainly help make a patient feel welcome, heard, and assured that their concerns were properly communicated and culturally contextualized.

Empowering Patients to Be Their Healthiest Selves: Personalizing High-Quality Care

One of the principal precepts of bioethics instilled in all medical students and providers is that of non-maleficence or to "first, do no harm." Of course, this should apply to the free clinic role. Is it possible that medical students cause harm by providing lesser quality care to patients served at free clinics? Several studies have compared student-run free clinics to comparable clinics or national measures and found no difference, whether in quality of diabetes care, mental health care, preventive care, ability of infrastructure to address chronic and acute complaints, or in high levels of patient satisfaction with care teams.[2,9-13] Some of these studies even reported quality ratings, such as metrics on preventative services like smoking cessation counseling or treatment services like physician contacts after a diagnosis of depression, that were higher at student-run free clinics than at comparable clinics.[10,12]

CHC similarly held its student-run clinics accountable to providing high-quality care. To understand student roles in personalizing high-quality care for our patients, it is important to first understand our clinic flow. The Loyola primary care clinic visits began by having a medical student perform patient intake, as well as a thorough history and physical. Then the medical student would step out and wait for one of the physician volunteers to become available in order to present and then step back into the patient's room as a team for follow-up questions and to ascertain the assessment and plan. Additionally, while the patient waited for the medical student to return with the physician, the student assigned as Floor Manager for that week would step into the room to provide information on that month's health education topic.

As CHC holds several different primary care and specialty clinics throughout the week, quality metrics are closely tracked and reported for each

student-run clinic that participates. Our pre-clinic huddles and health education topic materials also emphasized strategies for improvement in providing quality care.

In other words, though we were medical students and not full-fledged providers, the expectation for providing high-quality service remained.

In fact, as the students had more time than physicians to spend with patients, we were able to dedicate time specifically for meeting important quality measures like universal PHQ2 screenings for depression or pre-encounter chart review for recommended health screenings. Importantly, our extended time also allowed for meaningful conversations about preventive health care and personalized goals on topics like nutrition or exercise, including the use of motivational interviewing techniques.

Beyond conversation, we were able to use time to collect and distribute resources for helping our patients meet their goals through financially and culturally appropriate methods. For example, medical students were able to help write "prescriptions" for gym memberships at a local gym that partnered with CHC or to print healthy recipes using traditional ingredients from a patient's preferred cuisine. In clinic settings like these, where many patients are counseled on diabetes and hypertension control, a thorough understanding of motivations, barriers, and actionable plans are key for enabling patients to take control of their health outside of the clinic.

Lastly, greater allotted time for patient interviews by medical students allows for a deeper dive into social histories that may be affecting a patient's health. Use of the biopsychosocial model of illness in primary care both allows the care team to understand processes leading into a patient's health problems and empowers patients in actively participating in management of their illness.[14] In the past year, our medical student team collected countless examples of psychosocial histories obtained due to the trust that grew out of extended encounter times allowed to students. More than once, patients were vulnerable and emotional in encounters with medical students only to downplay or not at all mention life stressors during a physician's portion of the encounter. Perhaps this is because we have more time to ask and listen or perhaps it is because we are perceived as being less intimidating providers, but regardless of the reason, our medical student team often served as a valuable listening ear regarding life stressors that impacted a patient's ability to manage their health. This information also allowed medical students to make referrals to social work, mental health resources, and to better understand what programming could be essential to a free clinic's operations.

Serving Patients Now and Later: Investment in Current & Future Safety Nets

Some argue that perhaps the best reason to continue to keep student-run free clinics in service is because there would simply be no other alternative for many of these patients.[1] The U.S. Health Resources & Service Administration (HRSA) identifies and reports areas that meet criteria for being underserved by assigning them a Medically Underserved Area (MUA) designation. At the time of writing, HRSA lists 3,438 MUA designations with a total population of 14 million persons.[15] While student-run free clinics are extremely far from being able to meet this need by themselves, these statistics underlie the importance of having student-run free clinics as players in the health care safety net to provide options for patients who are unable to otherwise access care.

Research on a student-run free clinic in Tennessee found that 76.2% of new patients at the clinic did not have a regular physician prior to enrolling and that 98.2% of returning patients felt that the clinic provided them easier access to a physician.[16] Student-run clinics have also been shown to significantly decrease per-patient and average ED utilization.[17] These numbers demonstrate both the need for accessible primary care in areas served by student-run clinics and

the fact that these clinics can successfully meet these needs.

Medical student participation in free clinics is also an investment in the future of the safety net. A meta-analysis of specialty selection literature determined that most students enter medical school with an interest in primary care, but that interest decreases as students are exposed mainly to specialist faculty during their medical education.[18] Medical students who volunteer at free clinics have the opportunity to meet and be mentored by physicians who are primary care providers, have similar passions, and who have spent their careers working on improving community health. Cultivating interest in working in underserved areas and ultimately completing residencies in primary care could potentially decrease the provider shortage and the number of medically underserved areas.

Moreover, conversations with physician mentors, coupled with our own experiences at the free clinic, allows students to familiarize themselves with challenges faced by medical professionals in securing high-quality care for all. For example, every medical student on our Loyola primary care clinic team was able to incorporate research projects or administrative work into their roles to begin to understand the intricacies of functioning healthcare systems. In a system where administrators and physicians are often left frustrated by each other, medical students can work to temporarily step into the shoes of administrators to cultivate future cooperation in safety net health care systems. The sooner medical students are able to understand these systems, the sooner they can begin to work on realistic models for positive change and social justice through policy and programming.

Conclusion

All things considered, when the attendee at the informational session for our student-run free clinic asked about the utility of medical students in these settings, our board was able to confidently explain that though this model may not be perfect, it is valuable. Medical students, too, are valuable contributors; we contribute to multilingual and culturally competent care, are able to provide high-quality and highly customized care, and we are invested in the current and future service of medically underserved areas. Of course, there continue to be many potential areas of improvement for student-run clinics, including taking care to improve patient-perceived levels of privacy of protected health information or satisfaction with waiting times.[13] Perhaps there is not yet a way to measure the exact value of medical students in free clinics, but volunteering at our student-run free clinic has also allowed us to more deeply understand and participate in the communities local to our medical school, build meaningful relationships and mentorships, and to stay connected to our purpose in becoming physicians and empowering patients; in many ways, these aspects are also invaluable.

References

1. Xu, J. “Letting Medical Students Run The Clinic.” *The Atlantic*. 2013.
2. Simpson SA, Long JA. “Medical student-run health clinics: important contributors to patient care and medical education.” *J Gen Intern Med*. 2007;22(3):352-356.
3. “Diversity in Medicine: Facts and Figures 2019.” *Association of American Medical Colleges.* 2019.
4. Laveist TA, Nuru-Jeter A. “Is doctor-patient race concordance associated with greater satisfaction with care?” *J Health Soc Behav*. 2002;43(3):296-306.
5. Traylor AH, Schmittdiel JA, Uratsu CS, Mangione CM, Subramanian U. “The predictors of patient-physician race and ethnic concordance: a medical facility fixed-effects approach.” *Health Serv Res*. 2010;45(3):792-805.
6. Brooks TR. “Pitfalls in communication with Hispanic and African-American patients: do translators help or harm?” *J Natl Med Assoc*. 1992;84(11):941-947.
7. Flores G, Abreu M, Barone CP, Bachur R, Lin H. “Errors of medical interpretation and their potential clinical consequences: a comparison of professional versus ad hoc versus no interpreters.” *Ann Emerg Med*. 2012;60(5):545-553.
8. Gu CN, McElroy JA, Corcoran BC. “Potential advantage of student-run clinics for diversifying a

medical school class." *J Educ Eval Health Prof*. 2012;9:8.

9. Ryskina KL, Meah YS, Thomas DC. "Quality of diabetes care at a student-run free clinic." *J Health Care Poor Underserved*. 2009;20(4):969-981.

10. Liberman KM, Meah YS, Chow A, Tornheim J, Rolon O, Thomas DC. "Quality of mental health care at a student-run clinic: care for the uninsured exceeds that of publicly and privately insured populations." *J Community Health*. 2011;36(5):733-740.

11. Butala NM, Murk W, Horwitz LI, Graber LK, Bridger L, Ellis P. "What is the quality of preventive care provided in a student-run free clinic?" *J Health Care Poor Underserved*. 2012;23(1):414-424.

12. Zucker J, Lee J, Khokhar M, Schroeder R, Keller S. "Measuring and assessing preventive medicine services in a student-run free clinic." *J Health Care Poor Underserved*. 2013 Feb;24(1):344-58.

13. Lawrence D, Bryant TK, Nobel TB, Dolansky MA, Singh MK. "A comparative evaluation of patient satisfaction outcomes in an interprofessional student-run free clinic." *J Interprof Care.* 2015;29(5):445-450.

14. Kusnanto H, Agustian D, Hilmanto D. "Biopsychosocial model of illnesses in primary care: A hermeneutic literature review." *J Family Med Prim Care*. 2018;7(3):497-500.

15. "Shortage Areas." *Health Resources & Services Administration.* 2020.

16. Kramer N, Harris J, Zoorob R. "The Impact of a Student-Run Free Clinic on Reducing Excess Emergency Department Visits." *Journal of Student-Run Clinics*. 2015; 1(1):1-5.

17. Thakkar AB, Chandrashekar P, Wang W, Blanchfield BB. "Impact of a Student-Run Clinic on Emergency Department Utilization." *Fam Med*. 2019;51(5):420-423.

18. Bland CJ, Meurer LN, Maldonado G. "Determinants of primary care specialty choice: a non-statistical meta-analysis of the literature." *Acad Med*. 1995;70(7):620-641.