

A Roadmap to Clinic Expansion: Meeting the Needs of an Underserved Community

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Abstract

In today's medical education, student-run clinics play an integral role in helping to prepare students at all levels in their medical training. The Morehouse School of Medicine Health Equity for All Lives (MSM-HEAL) student-run clinic was established in 2011 as a place dedicated to meeting the needs of Atlanta's underserved population. Today, the MSM-HEAL Clinic has grown in three areas: clinical sites, interdisciplinary leadership and volunteer teams, and community outreach initiatives. The purpose of this descriptive report is to demonstrate the roadmap to a clinic expansion to meet the needs of a community and how the MSM-HEAL Clinic grew in one year, marshaling financial and community resources and establishing a community outreach initiative. The MSM-HEAL Clinic has served over 1,400 individuals as of December 2017. With the expansion came the demand for funding clinic operations and patient care. A grant proposal was submitted to a community nonprofit organization. In one year, over \$20,000 was raised to support MSM-HEAL. These funds made healthcare access possible by providing transportation to patients for their appointments, medication assistance, supplies for medical screenings, and seasonal community vaccination initiatives. During this one-year period the MSM-HEAL Clinic provided services to an increased number of patients and greater education for the interdisciplinary student volunteers, creating a shared benefit. The free clinic will continue to benefit the community by providing no-cost services for uninsured and underinsured patients and improve professional student clinical education while upholding the core values of family medicine.

Introduction

Student-run free clinics (SRFCs) exist throughout the United States; some are associated with schools while others are freestanding. There are 96 clinics across the nation registered with the Society of Student-Run Free Clinics (SSRFC).¹ Students from a variety of healthcare programs (nursing, physical therapy, chiropractic, dentistry, veterinary, medical, and more) usually operate these clinics in areas with large populations with low socioeconomic conditions. The services are provided free of charge to uninsured and low-income persons to help create access to healthcare.² SRFCs exist not only for the benefit of the patients they serve but also to enhance the education of the next generation of physicians and healthcare workers.

The MSM-HEAL Student-Run Free Clinic

The Morehouse School of Medicine (MSM) student-run clinic at Good Samaritan Health Center (GSC) was established in 2011 by three members of the MSM class of 2014, aligned with the school's mission of serving people of color and the underserved urban populations in metro-Atlanta and Georgia. The clinic offered primary care services to patients one evening a week. In 2015, prior to expanding to the second clinical site, the name was changed to Morehouse School of Medicine Health Equity for All Lives (MSM-HEAL) Clinic. In 2017, the leadership structure was remodeled to match the growing services and needs of the clinic in community outreach, marketing, and research. The new leadership model increased sustainability efforts through incorporation of students from all educational programs to provide diverse perspectives and improve patient care from all aspects (Figure 1).

The mission statement of the MSM-HEAL Clinic is: "We exist to contribute to health equity of the underserved and uninsured populations in Georgia. We strive to provide concise patient education to promote disease prevention. We intend to increase the diversity of healthcare through clinical experience and dynamic medical training."

Clinic Operations

The current clinic sessions are held at three different sites and average 8 to 10 patients per clinic session. The clinic workload is shared among interdisciplinary students from each year of the medical (MD), pharmacy, public health (MPH), masters-level pre-medical, and non-medical doctorate (PhD) programs. The role of the MD students evolves across all four years of medical school (Figure 2). Once patients are financially screened, their clinical visit encompasses patient education, disease management, and pharmacist consultation (Figure 3). Laboratory studies are drawn on site by student volunteers. Imaging services or surgical procedures may be referred to our affiliate hospital or healthcare facility. The HEAL Clinic is staffed by licensed physicians who supervise the students and finalize the clinical assessment and plan, as well as review laboratory test results and plan of action. An updated resource guide is used to track local pharmacy prices for medications at free or reduced prices. In addition, pharmacy students assist patients in completing applications for Patient Assistant Programs offered by major pharmaceutical companies. The clinic uses Epic as its electronic medical record (EMR). All HEAL patients are scheduled within the EMR, and all documentation for the encounter is done in Epic. There is a nocharge code used for the HEAL clinic patients in the system.

Rationale for Expansion

With Georgia's decision not to expand Medicaid, publicly funded hospitals (e.g. Grady Hospital) had a drastic increase in emergency room visits with disease processes that could have been prevented with regular primary care visits.³ In Fulton County, 17% of persons under the age of 65 are without health insurance, and include mostly African Americans, Asians and Hispanics that are in poverty, unemployed or working minimum wage jobs.^{4,5} These individuals often have no access to health insurance through employers, do not meet the criteria for Medicare or Medicaid, and cannot afford to purchase insurance through the Affordable Care Act marketplace. There was a significant need for more delivery of clinical services to underserved populations in metro-Atlanta.

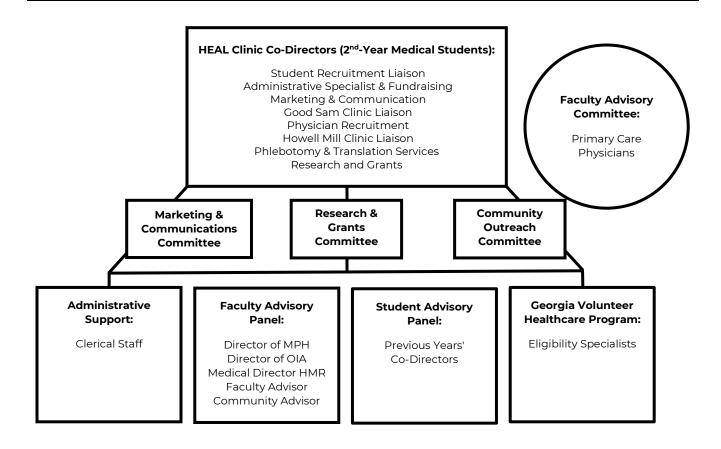
The MSM-HEAL Clinic is in a unique position to serve members of the Georgia community that have fallen through the cracks of society's healthcare safety net. The HEAL Clinic creates access to healthcare by providing services free of charge to all uninsured persons in the metro-Atlanta area. Although Atlanta is a large metropolitan city with many healthcare providers, there is still a large deficit of physicians, with a 950:1 patients-to-physician ratio.⁴

Planning HEAL Clinic's Expansion

A Second Assessment

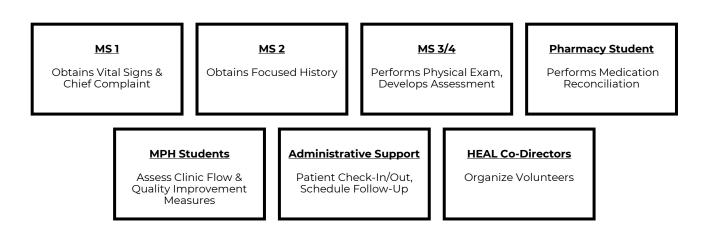
Upon the decision to expand to a second clinical site, several socioeconomic factors were considered. The first task was to assess the need of services in the MSM-HEAL Clinic patient population and surrounding communities. The GSC was in neighborhood planning unit (NPU) K (Figure 4) and the patient population at this site is primarily Hispanic and African American individuals aged 20-64.⁵⁻⁷ The second MSM-HEAL clinic site selected is in NPU D.

The criteria for MSM-HEAL Clinic's second location was proximity to the medical school, population characteristics (low income and uninsured), ease of access for patients, cost of clinic space, speed of opening clinic for operation, and availability to have more clinic sessions. A search for a second site began with locating facilities available within a 10-mile radius of the proposed population and accessibility to public transportation. Based on the NPUs with a large proportion of low Figure 1. Structure of MSM-HEAL leadership team



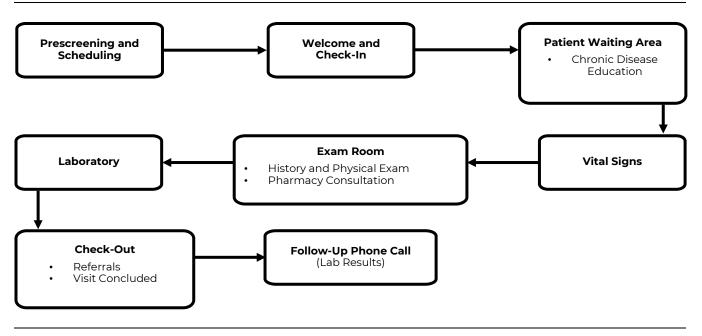
MPH: Master of Public Health; OIA: Office of Institutional Advancement; HMR: Howell Mill Road Clinic

Figure 2. Roles of clinic volunteers during each clinic session



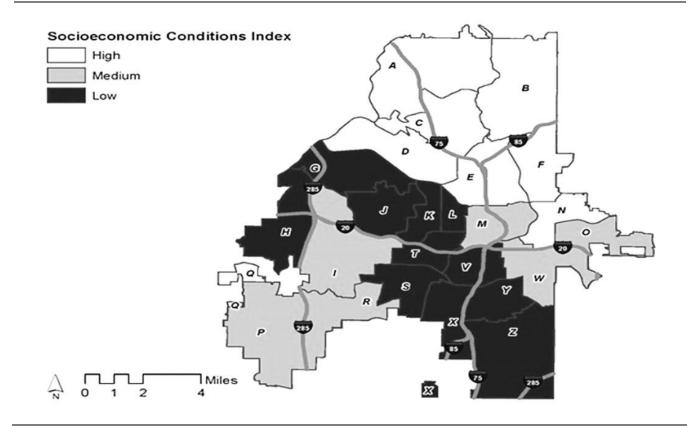
MS: medical student (MS 1: 1st-year medical student, MS 2: 2nd-year medical student, etc.); MPH: Master of Public Health

Figure 3. Patient flow through MSM-HEAL Clinic



Medical students escort patients to each location

Figure 4. Neighborhood Planning Unit (NPU) map of Atlanta coded by socioeconomic conditions^{6,7}



socioeconomic conditions, there was a large need for healthcare for persons in NPU K and L. However, there were limited facilities that were available for use based on facility cost and/or being up to building code. The Morehouse Healthcare Howell Mill Road (HMR) Clinic was selected based on availability to have more clinic sessions to serve patients, ability to use the facility at no charge, and quick turnaround for opening the facility to HEAL patients. After assessing the facility capabilities, the team determined the amount of staffing needed to run the clinic as well as the anticipated clinic flow. Per clinic session, about nine medical students, two pharmacy students, one/two physicians, one pharmacist, and one nurse were needed. The Clinic Co-Directors (Figure 1) visited faculty, departmental, and institutional board meetings with sign-up sheets to solicit the help of clinical faculty physicians. Medical student volunteers were recruited by the Student Recruitment Liaison (Figure 1) using email sign-up. Clinic nursing support and pharmacy students were recruited by the HMR medical director and clinical pharmacist, respectively. All student and other healthcare volunteers were required to complete Health Insurance Portability and Accountability Act (HIPAA) training, tracked by MSM to ensure safety of patient information. Morehouse School of Medicine provides malpractice coverage for all enrolled students; supervising physicians were covered by sovereign immunity with the Georgia department of public health.

Financial Resource Acquisition

Fundraising for MSM-HEAL Clinic began at our annual institutional fundraising event. The student directors were also able to network with the stakeholders and community leaders about other funding opportunities. MSM-HEAL Clinic received various donations from faculty and alumni after sharing the story of HEAL Clinic and the work being done. MSM-HEAL Clinic received its first grant from the Fulton-DeKalb Hospital Authority for \$20,000 to aid in funding clinical operations and reducing the burden placed on Atlanta's Grady Memorial Hospital. However, the fundraising did not stop there; the MSM-HEAL Clinic website was set-up to accept donations, which is ongoing and account for 5% of total clinic funding. Most financial support for MSM-HEAL Clinic is from grant support and the remaining from MSM.

Funds raised for MSM-HEAL Clinic have made healthcare access possible for 937 individuals in the metro-Atlanta area. A portion of the funds is used to provide bus passes to patients to have transportation to their appointments. An additional portion of the clinic funds goes into disease prevention which is done through health fair screenings, patient educational materials, and seasonal community vaccination initiatives. Clinic funding is managed by the administrative assistant who maintains a monthly budget, coordinates ordering supplies, track donations, and reports outcomes to grant organizations.

Community Engagement

The last task prior to opening the clinic for service was engaging the community and creating awareness of the services available. A community liaison was appointed to learn about community health fairs and make connections with community leaders.

Community outreach and engagement are gateways to providing patients with screening services and referral for follow-up-the start to comprehensive patient care. There has been greater connection with the local community; we have been able to connect patients to local resources, distribute informational pamphlets, and provide preventive health services. Since the inception of the community engagement initiative, MSM-HEAL has participated in six health fairs and community events (Table 1) in the metro Atlanta area within a 15-mile radius of HMR Clinic. Student volunteers performed blood pressure and blood glucose screenings and educated patients about diabetes, hypertension, and hyperlipidemia. Over a one-year period, MSM-HEAL Clinic has screened over 500 people during health fairs and community events (Table 1).

The marketing department of MSM works with clinic leaders to develop flyers, posters, and a website for advertising. Flyers are distributed at community centers, churches, local shelters, and supermarkets. Additionally, ads ran in local newspapers and segments were recorded and aired on a local news station.

Outcomes

The second MSM-HEAL Clinic site was opened in February 2016. MSM-HEAL was permitted to use some existing equipment at Morehouse Healthcare, while medical supplies and other equipment was purchased using MSM-HEAL Clinic funding which came from grants and inkind donations. At the initial clinic, 10 patients were scheduled, and six individuals successfully served. The additional space has allowed MSM-HEAL to see an average of five additional patients per clinic session. The HMR Clinic is easily accessible to patients residing in the surrounding NPUs via public transportation. Since the inaugural clinic session, there has been tremendous growth. During the HMR site's first year open, 59 patients were served, which increased to 138 during the second year. This increase is probably due to increased availability of appointments to serve patients and marketing efforts in the community and health fairs, although no direct data was collected. Furthermore, 26 physicians were recruited by connecting with MSM's family medicine department, institutional alumni, and community providers. There have been more than 130 student volunteers at the MSM-HEAL Clinic.

Discussion

Since its creation in 2011, the MSM-HEAL Clinic has been constantly evolving. Through community engagement, MSM-HEAL has obtained a better understanding of the social determinants that affect our patient population and has applied this to our patient care approach. We have established partnerships with local community organizations to create direct access for persons within local homeless shelters, transitional housing, and church groups. Additionally, MSM-HEAL Clinic works to improve interdisciplinary student education by preparing pre-clinical students for their clinical rotations. Medical students enhance their clinical education through real-life application of skills learned in the classroom which are used to assist patients of the clinic.

Table 1. Health fairs and community events attended by HEAL Clinic leaders

Health Fair/Community Event	NPU	Patients Screened
Ben Carson Academy	K	153
AKA & Beulah Baptist Church	L	47
MSM Community Engagement Day	T/V/M	60
FDHA Health Summit	М	23
MA Jones Elementary Community Day	К	18
Ryan Cameron Foundation	0	237

NPU: neighborhood planning unit location; AKA: Alpha Kappa Alpha Sorority; MSM: Morehouse School of Medicine; FDHA: Fulton-DeKalb Hospital Authority; MA: Mamie Agnes

The goal of the MSM-HEAL Clinic has been to improve the overall health outcomes of the underserved communities of Metro-Atlanta by creating health equity. We have worked towards this by increasing the frequency of services provided. Instead of having 1-2 clinic sessions per month, MSM-HEAL has been able to expand the population we serve with a second location which allows our team to conduct 4-5 clinic sessions per month. The HMR location has also offered more exam room space, which has contributed to an increased number of patients seen per clinic session. The bigger waiting rooms at HMR also allow MPH student volunteers to conduct chronic disease education sessions for patients. By bringing these healthcare services to Fulton and surrounding counties, the burden on the state and local healthcare systems like Grady Memorial Hospital will be partially alleviated. Currently, there is only anecdotal evidence from patients who have indicated that without MSM-HEAL, they would have visited an emergency room for medical care. However, the leadership team plans to quantify these outcomes in the future.

Considerations and Lessons Learned

Although we have increased the access to primary care services for our patient population, we still struggle to meet our patients' specialty care needs. We have not been successful yet in incorporating specialty care into the MSM-HEAL Clinic. Secondly, at the start of this expansion plan, the leadership team consisted of only four secondyear medical students. The leadership team required expansion for sustainability of the clinic and expanded to seven student leaders in 2017, and currently we have 14 student leaders from varying degree programs. Expanding and diversifying the leadership team has helped to ease the burden of the workload. This also allows students in the second year of the MD program to focus on their academic success and stimulates varied perspectives in approaching patient care. Additionally, we faced barriers with patient transportation to appointments, which resulted in frequent no-shows. To combat the transportation barrier, we partnered with a state-wide organization, Rides to Wellness program. Lastly, we learned the importance of using data collection to assess the impact of our efforts on the health outcomes of our patients. While we have worked to advertise and perform community screening, we have not been able to successfully gauge the impact this has made. We hope that our MPH students will serve more active roles in assisting in this area.

Future Directions

The MSM-HEAL Clinic plans to expand services to aid rural populations in Georgia by starting up a monthly rural pop-up clinic and partner with a local homeless shelter for on-site medical services. The MSM-HEAL leadership team will engage in scholarly activities and quality improvement projects to evaluate and refine the clinic's impact. We know there is a long way to go to ensure health equity for all lives, and we continue to seek grant support from other partners.

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The authors have no conflicts of interest to disclose.

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