Healthcare for the Homeless: Development and Implementation of a Medical Education Elective

Pratik Vadlamudi, Alyssa Warburton-Silva, Mary Margaret Fessler, Anita Vasudevan, Gavisha Waidyaratne, Rebekah Sugarman, Russell Pajewski, Brent Williams

Background

- Medical students across the US have participated in street medicine extracurricular activities to provide healthcare for homeless people (HCH), but few formal curricula exist.
- Street medicine extracurricular activities are common in medical schools.
- Some formal curricula at other medical schools to provide healthcare for homeless (HCH).
- These curricula are standalone electives or a part of family medicine clerkship.
- Wolverine Street Medicine (founded 2017) at the University of Michigan Medical School offered in 2021 a medical student-initiated curriculum.
- Near-peer model of learning and mentorship
- Validated tools exist to determine practitioners’ perceptions of homeless individuals, such as Health Professionals’ Attitudes Toward the Homeless Inventory (HPATHI) (supplementary material).

Methods

Needs Assessment
- 118 graduating medical students surveyed in needs assessment.
- Majority of students ill-equipped to provide HCH outside of traditional settings.
- Prompted development of elective due to protected time, didactic components, and codified institutional support.

Elective Development
- “Street run”: trip made by WSM members and HCH students and faculty to homeless shelters to provide care.
- “Street run” is the foundation of the elective. Commonly asked questions in street runs were identified.
- Web-based series of didactics created based on these questions to provide foundation (supplementary material).
- Independent elements, with real-time opportunities to apply knowledge, and journal club at end of elective.
- Also, elective students tasked with preparation of four “car-talks”: teaching pearls to share with everyone on street runs.
- Adjunctive clinical experiences offered to elective student: care delivery at homeless shelter, post-hospitalization recuperative care program, observation experiences with a supportive housing agency, and additional seasonal opportunities such as health fairs.
- Target audience of elective was upper-level medical students post-clerkships (M3 and M4).
- Multiple opportunities to reflect and debrief throughout course: students encouraged to engage other learners for debrief.
- Policy module in course demonstrated how to advocate for policy changes in government.
- Met core competencies of UMMS and followed specified learning objectives (Table 1).

Data Analysis
- HPATHI administered pre- and post-elective: personal advocacy + social advocacy + cynicism (cynicism was reverse-coded) (Figure 1).
- Single-factor ANOVA on HPATHI results.

Table 1. HCH Elective Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Description</th>
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<tr>
<td>1. Identify the role of social determinants of health in the presentation of</td>
<td>medical needs specific to underserved populations and apply this knowledge</td>
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<tr>
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<td>to the provision of healthcare to homeless persons</td>
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<td>2. Develop greater empathy in patient interactions and practice the delivery</td>
<td>of care in home and community settings that meet the patients where they are</td>
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<td>3. Design a project with the goal of making a long-term and sustainable</td>
<td>contribution to the Wolverine Street Medicine student organization and their</td>
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<td>efforts in addressing health disparities induced by homelessness</td>
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<td>4. Recognize the interdependence between clinical and non-clinical care</td>
<td>providers in addressing health care for homeless persons</td>
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<td>providers in addressing health care for homeless persons</td>
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<td>5. Independently assess patients about whom case workers place medically-related</td>
<td>care in addressing health care for homeless persons</td>
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<td>care in addressing health care for homeless persons</td>
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<td>6. Prepare and lead a scholarly discussion on a topic related to healthcare</td>
<td>for homeless persons for an audience of interested clinical and pre-clinical</td>
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<td>for homeless persons for an audience of interested clinical and pre-clinical</td>
<td>medical students</td>
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Results

Figure 1. Pre- and Post- Elective HPATHI Average Scores

Discussion

- Successfully developed and implemented this Healthcare for Homeless (HCH) elective at UMMS.
- Small but significant improvements in attitudes toward homeless people and HCH work.
- Protected time to do service-learning.

Limitations

- Limitation of 1 student per month with our partnerships, thus small sample size.
- Few HCH electives at peer institutions making validation with other institutions’ programs difficult.
- Sample selection as those interested in course may be those more prone to changing opinions about HCH.

Next Steps

- Continued administration of HCH elective at UMMS.
- Continued collection of surveys for students taking elective.
- Refining and expanding curriculum to cover more elements of HCH.
- Broadening of course to include more students.
- Administration of HCH elective at other medical schools with associated pre- and post-surveys.
- Continued HCH work broadly to improve attitudes toward HCH.

pratkv@med.umich.edu