The Student Navigator Project (SNaP): novel value-added roles for preclinical medical students in an academic general internal medicine clinic

Reem Hasan MD PhD¹ and Meredith Niess MD MPH²,³

¹Oregon Health and Science University, Portland, Oregon
²Fair Haven Community Health Care, New Haven, Connecticut
³Yale School of Medicine, New Haven, Connecticut

Background and Aims
Preclinical (1st/2nd year) medical students need clinically-based curricula on systems-based practice and practice-based learning.

Aims: Pre-clinical medical students will:
1. Integrate into clinic-based interdisciplinary teams, developing skills and confidence to participate in daily clinical care, and participate in clinical quality improvement practices.
2. Partner with medically complex patients navigating their healthcare and establish longitudinal relationships with patients, directly experiencing the complexities of the medical system from the patient perspective, including barriers and facilitators to successful patient system navigation.

Curricular Conceptual Framework: Health Systems Science

Setting and Participants
- Academic General Internal Medicine (GIM) clinic – Patient Centered Medical Home
- Longitudinal “pre-clinical” experience – 18 months
- Replaced the traditional (largely shadowing) precepting experience
- 4 hours weekly
- First year medical students
- 6 students program’s pilot year (2016-2017), 7 students (2017-2018)

Curriculum Design

Student Roles:
- Clinical
  - Vitals, injections, EKG, POC testing, irrigation, falls risk assessment
  - Scribing, medication reconciliation
- Population Health
  - Health maintenance outreach
  - Hospital follow up
- Navigation
  - Outreach calls, home/inpatient visits, resource list development
  - Care management integration: SW, PharmD, RN – care plan development, communication with PCP
- Quality
  - EBM presentations / PICO question generation and presentations
  - QI project

Curriculum design providing progressive independence and complexity of student responsibility in the interdisciplinary clinic team, with didactic training followed by guided practice in each area.

Evaluation
Student Assessments:
- OHSU Preceptorship competency based evaluation of Systems-Based Practice, Practice-Based Learning and Improvement, Professionalism, and Interpersonal and Communication Skills
- 360 evaluation by non-MD clinical team (MA, PC, SW, pharmacist)
- Scheduled formative feedback with faculty mentor
Curricular Evaluation: In Progress
- 100% of the inaugural cohort completed the program
- Outcomes (SNaP students vs 2 control groups):
  - Patient-centeredness and self-efficacy – survey and qualitative research
  - Intended and final specialty choice
  - Clinical rotation grades

Reflection
1. Preclinical medical students can add value to complex patient care. We hope to study patient experience in the future, and that this translates to improved patient-centeredness.
2. Student satisfaction increases with direct patient experience and having skills to contribute to the team. We hope to see this translate to other outcomes in our ongoing research.
3. Early direct (beyond classroom) experience in systems-based practice and interdisciplinary teams is possible and likely beneficial to student learning. We hope this translates to improved confidence and performance in clinical rotations.

Impact
By simultaneously teaching students practical clinic skills and teaching them the tools to complete an improvement project, the clinical enterprise can also benefit from student presence and learning.

While the full impact of this program has yet to be seen, we believe it has the potential to better prepare students for active participation in their clinical training years by meeting curricular competencies in systems-based practice, practice-based learning, and communication/teamwork skills.

Acknowledgements
This work was supported in part by the OHSU SOM Dean’s Office Educational Innovation Mini-Grant program. We acknowledge the efforts and advice of Sharen Azar, Katie Benschung, Judy Bowen, Chris Terndrup, Rebekah Weil, Britney Zachary and clinical staff in GIM who supported this program and contributed to the student learning environment.