

## **45th Biennial Convention (16-20 November 2019)**

### **Engaging Undergraduate Nursing Students in Quality Improvement by Leveraging an Existing Interprofessional Educational Clinic Model**

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Interdisciplinary, student led free clinics are increasing in prevalence as an important strategy to providing affordable and accessible care. This model of care delivery has the dual benefit of providing collaborative care to those who are most vulnerable and educating students (Wang & Bhakta, 2013). Faculty at a south-central state university developed multiple student led free clinics in response to a rise in unemployment and uninsured individuals following the Sept. 11<sup>th</sup>, 2001 attacks. The Bedlam-Evening Clinic, referred to as “Bedlam-E” focuses on episodic care whereas the Bedlam-Longitudinal Clinic, known as “Bedlam-L”, emphasizes care for uninsured patients with chronic disease. There is a great amount of diversity in clinic models, which disciplines and community partners involved in this approach to care. Academic programs for physical therapy and nursing students are increasingly using these models after success seen in physician, physician assistant, and social work programs. Both of the Bedlam clinics use an interprofessional approach with medical, nursing, physician assistant, and social work students forming provider teams to provide care. A rotation of interprofessional students in various levels of their programs staff the clinics guided by consistent faculty and staff who are passionate about student engagement in community medicine. Research shows that students report improved confidence, and sensitivity to civic issues in addition to specific care skills like screening, education and health coaching after participation (Crandell, Wiegand & Brosky, 2013; & Poore, Milgrom & Edgington, 2017). The structure of the clinic environment facilitates faculty and student sharing of their unique disciplinary knowledge to the service of adults with chronic illnesses (Parse, 2015). Students gain experience applying their academic learning about community medicine to a real-world environment. They gain invaluable experience working in a busy clinic setting, using an electronic health record and making the most of limited resources. There is a deficit in published resources on how to implement this model or how to cultivate specific learning opportunities. Attention to how specific interventions affects patient care outcomes is crucial, especially in the free clinic environment where resources are further limited (Iddins et al., 2015). Unique to the Bedlam clinic model, the supervising faculty of the Bedlam clinics hold a retreat for all participating students and faculty three times a year. The retreats are an opportunity gather all students, and faculty providers to focus on quality improvement activities for their specific provider panel level. Consistent with the student led model, students are shown data reflecting their specific patient population and asked to review and highlight areas of improvement. Potential target initiatives included documentation of patient counseling to consider tobacco cessation, mammography, completion of fecal occult blood testing for colon cancer screening, and cervical cancer screening referral. While there is an expectation for all areas to be addressed in quality improvement efforts, students were asked to choose one area to address as a Bedlam clinic wide team. Rates of completed fecal

immunochemical test, often referred to as “FIT” tests to detect blood in stool were lower than the benchmark set for the clinic and the national level. Students selected to focus increasing the completion of these tests across both Bedlam clinic settings. For this quality improvement initiative, students and faculty apply the evidence based learning strategies of the Institute for Healthcare Improvement (IHI) training and the use of a Plan-Do-Study-Act (PDSA) model. The IHI Open School is an on-line learning community and offers support to teams to provide the best possible care (IHI, 2018). The PDSA model is a way to assess change during implementation and make adjustments during the process for greater impact (AHRQ, 2015). Individual student groups in the two different clinics worked on completing the IHI Open School Online Modules specific to quality improvement initiatives and use of the PDSA model. As students worked through the IHI modules that incorporated the PDSA cycle, they formulated their own action steps based on their understanding of the clinic environment. Each team then shared their action steps with the entire group. The next retreat will decide which team’s PDSA interpretation will be implemented in the clinic. Deliberate involvement of the students in quality improvement is consistent with evidence that evaluation of interventions and their impact on outcomes in an interprofessional student led clinic is an opportunity to educate students on principles of quality improvement (Atmiller, 2018). The pressure to provide efficient, high quality care in today’s healthcare environment means that students graduating from healthcare disciplines are expected to not only understand, but actively use quality outcome data in their practice (Easter, & Tamburri, 2018). Working through the IHI modules and development of a PDSA cycle on a specific topic provides an opportunity for increased knowledge on quality improvement in healthcare using real-life examples from their own practice teams. The opportunity to learn and apply QI skills while a student has the potential to accelerate their skill in using these principles in practice. Enhanced team communication, camaraderie, and achievement of IHI Module Certificates were also positive student outcomes. With subsequent retreats, greater student competency with QI is expected. While the literature is limited regarding improvement in student QI competency over the course of a healthcare program, research focusing on student QI competency within the Bedlam model is a next step.

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**Title:**

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**References:**

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### **Abstract Summary:**

A quality improvement activity by medical, nursing, and social work faculty and students providing care in a student-led interprofessional indigent care clinic is highlighted. Using the Plan-Do-Study-Act (PDSA) model and incorporating Institute for Healthcare Improvement (IHI) modules, interprofessional teams collectively review patient panels focusing on actions to improve patient outcomes.

### **Content Outline:**

1. Introduction: Role of Student Experiences in a Free Clinic to Learn Competencies in Quality Improvement (QI)
  - a. The role of free clinics in academic settings is a way to fill a gap in healthcare and support students in their experiences caring for real patients.
  - b. The Bedlam Clinics is one example of an interprofessional educational initiative incorporating a free indigent care clinic with medical, nursing, physician's assistant, and social work professions.

- c. QI competencies can be applied to a free clinic setting to improve patient outcomes.
- 2. Activities to Understand Quality Improvement
  - a. Scheduled retreats are unique to the Bedlam Clinics where participating faculty and students from the various professions gather to review their respective patient panels to highlight areas needing improvement.
  - b. The Institute for Healthcare Improvement (IHI) Modules and the Plan-Do-Study-Act (PDSA) cycles are incorporated to foster greater understanding of quality improvement using real patient data.
- 3. Application of QI to Free Clinic Experience
  - a. Student teams review the data collectively to identify one area of greatest need from other potential targeted initiatives.
  - b. The student teams incorporate PDSA cycles to develop action steps on the targeted area with a plan for follow-up.
- 4. Conclusion
  - a. Students have a greater awareness and knowledge of QI competencies,
  - c. Future research on the change in QI competencies of a student throughout their healthcare program is warranted.

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