

Engaging Undergraduate Nursing Students In Quality Improvement By Leveraging An Existing Interprofessional Educational Clinic Model



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INTRODUCTION

- Interdisciplinary, student-led, free clinics provide affordable and accessible care, and are being used more Nationwide. For students, they provide invaluable experience in:
 - Chronic disease management and preventive care in a real-world environment.
 - Working in a busy clinic setting, using electronic health records, and working with limited resources.
- The University of Oklahoma Health Science Center operates two free clinics for uninsured patients with chronic disease:
 - Bedlam-Evening Clinic, [Bedlam-E]: episodic care
 - Bedlam-Longitudinal Clinic [Bedlam-L]: chronic, ongoing care.
- The clinics use an interprofessional approach with students (medical, nursing, physician assistant, and social work) forming two provider teams:
 - Bedlam-L by medical students (MD, N=5) or physician assistant students (PA, N=8).
 - All teams engage in quarterly retreats to address improvement initiatives using the Institute for Healthcare Improvement (IHI) Plan-Do-Study-Act (PDSA) model.
- Here, we show how the applied IHI PDSA model can provide direction on how to implement and improve colorectal cancer screening at this very busy student led clinic.



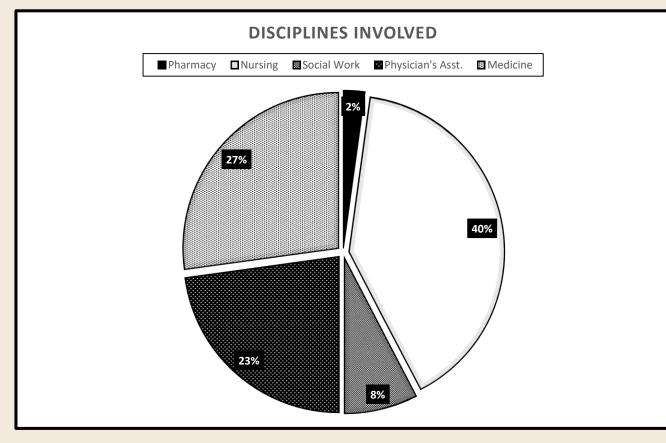
EVIDENCE BASED RATIONALE

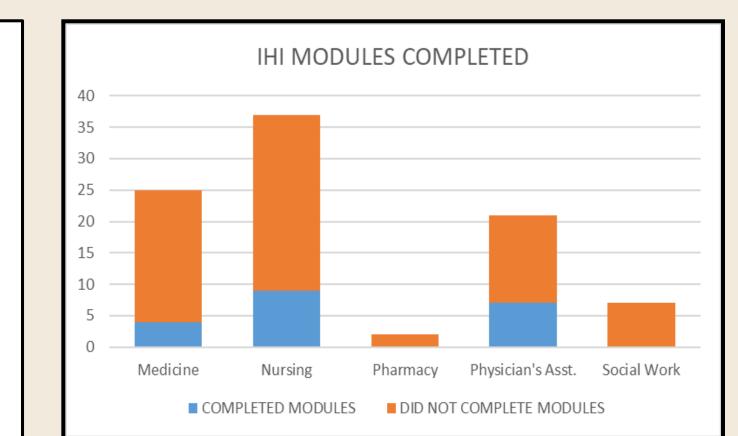
Wang & Bhakta,	Interdisciplinary collaborative care benefits those most
2013; Crandell,	vulnerable, while improving student confidence,
Wiegand & Brosky,	sensitivity to civic issues and skill competency
2013)	
Iddins et al., 2015	Attention to how specific interventions affects patient
	care outcomes is crucial, especially in free clinic
	environments where resources are further limited
Altmiller, 2018	Team engagement in quality improvement activities
	has a positive impact on student
Easter, & Tamburri,	Students are expected to graduate with understanding
2018	and skill using quality outcome data in their practices

METHODS/FINDINGS

- PLAN: Key problem across clinics was compliance with recommended Fecal Immunochemical Test (FIT)
- **DO:** Students and faculty completed IHI Open School Online Modules specific to quality improvement initiatives and use of the PDSA model. Afterwards, teams formulated action steps based on their understanding of the clinic environment. Solutions chosen were based on feasibility, ease of implementation and use of existing resources. (*Nov., 2018*).
- STUDY: Team solutions were implemented and results were reviewed at subsequent retreats (Feb., 2019).
- ACT: Subsequent follow-ups with modifications were done as needed; with transfer of action plan to next group of students. (May, 2019).

KEY FINDINGS: Within 12-months (Aug. 2018 – July. 2019), 8 of 13 teams (62%) maintained or improved screening rates.



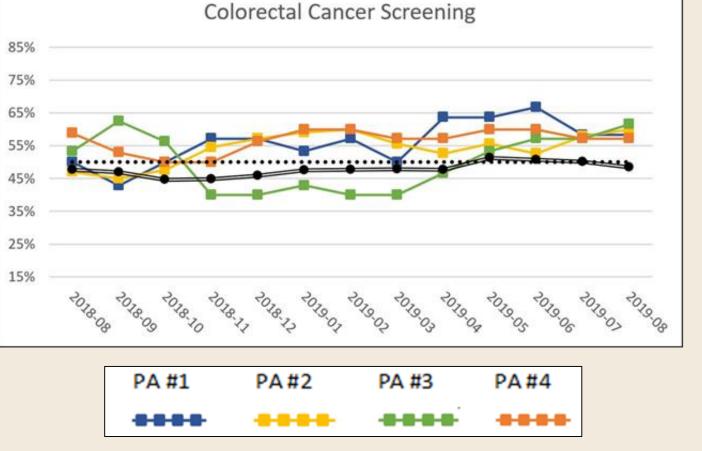


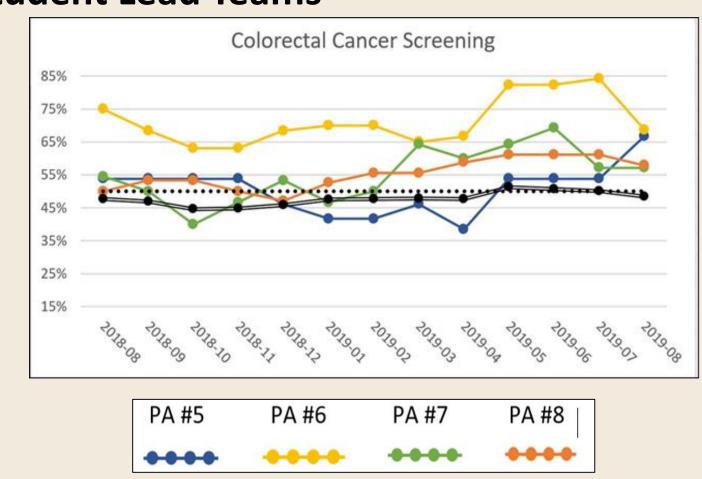
Colorectal Cancer Screening

MD #1 MD #2 MD #3 MD #4 MD #5

Medical Student Lead Teams

Physician Assistant Student Lead Teams





SUMMARY/OUTCOMES

Summary: Incorporating IHI Open School Modules into QI activities was an effective method to advance students skills in applying quality improvement strategies with real-life patients.

Examples of New Team Approaches to FIT Screening:

- The patient completes a screening questionnaire. Based on the score, the med students decided if the patient needed a FIT test, and if so, ordered one and instructed them on how to use it.
- The team chose a "driver" who also developed a patient questionnaire for those considered "eligible" for the colon cancer screening.
 - Nursing students assisted patients in filling out the questionnaire.
 - Afterwards, they either (1) provided positive reinforcement to patients who had an up-to-date FIT screen or colonoscopy, (2) gave rationale for another one to be performed, or (3) provided basic education on FIT tests, including rationale and resources.
 - Medical students reinforced the education, answering any additional questions.
 - Personal escorting to the lab was offered.
- Nursing students gave information about colorectal cancer and steps to perform the FIT test. Medical students reinforced the information and answered any additional questions.

Outcomes:

- The PDSA model promoted team strategy development by promoting collaborative care and sharing of QI responsibilities.
 - Team members took ownership of their selected interventions.
 - Selecting a "driver" kept the team on track.
- The teams improved colorectal screening rates and overall FIT compliance for this selected, high-risk clinic population.

ACKNOWLEDGEMENTS

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