

An Interprofessional Patient Safety Fellowship Improves Systems Thinking and Quality Improvement Knowledge among Health Professionals: Building Local Capacity for Patient Safety

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Presentation Objectives

- Describe the role and importance of interprofessional training and experiential learning in building capacity for leadership in patient safety and quality.
- Describe the beneficial outcomes of interprofessional training in patient safety and quality improvement through a 6-month program.

Background

- Health professionals require skills for safe, high quality, and patient-centered care. However, incorporation of this training has been limited.¹
- Little has been done to incorporate this training for practicing health professionals and limited evaluation of existing programs have been reported.

¹ The Institute of Medicine. (2003). Health Professionals Education: A Bridge to Quality. National Academy Press.

Background

- Health professionals identified that they are eager to contribute to patient safety work and had key insights regarding strategies for improvement but often lack the knowledge, skills, and experience in patient safety and QI methodologies.
- Patient safety leadership roles have been introduced on many patient care units and unit-leaders and staff voiced a need to build capacity for those moving into these positions.

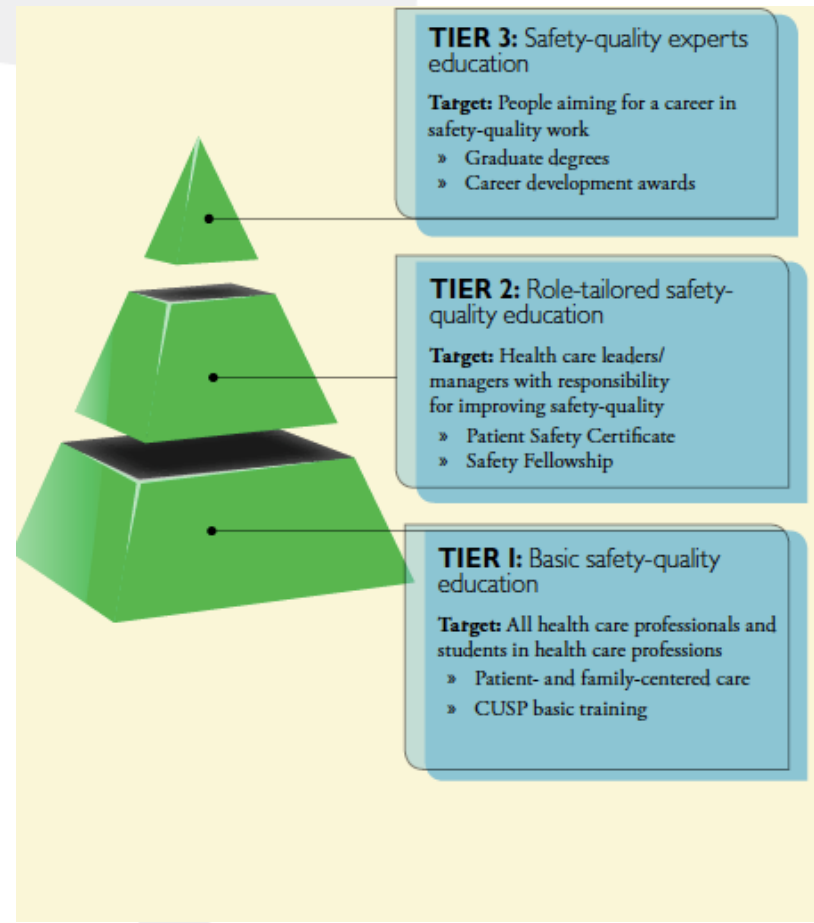
Armstrong Institute (AI) Patient Safety Fellowship

- The 6-month program was developed and implemented at Johns Hopkins Medicine
- The program was intended to build knowledge and skills in patient safety and QI leadership and systems thinking among participating staff.
- The curriculum was developed by AI experts in curriculum development, patient safety and QI methodology, implementation science, and program evaluation.

AI Patient Safety Fellowship: 3P's Curriculum Components

3 P's (Each cohort is 6 months)

- A mentored **P**roject in quality or patient safety
- A **P**racticum experience with JHM quality and safety committees and groups
- **P**articipation in didactic educational lectures and experiences
 - Weekly 3-hour lectures with Q/PS experts, 40-hr patient safety certificate training, Lean Sigma training



AI Patient Safety Fellowship: Fellow Selection

- Health professionals, interested in enhancing patient safety and QI leadership skills, throughout the institution were eligible to participate (Supervisor approval was required).
- Departmental emails were sent to unit leaders and staff to solicit applications.
- Selection was based on prior QI experience, interest in pursuing a quality and patient safety career, and selection committee consensus.

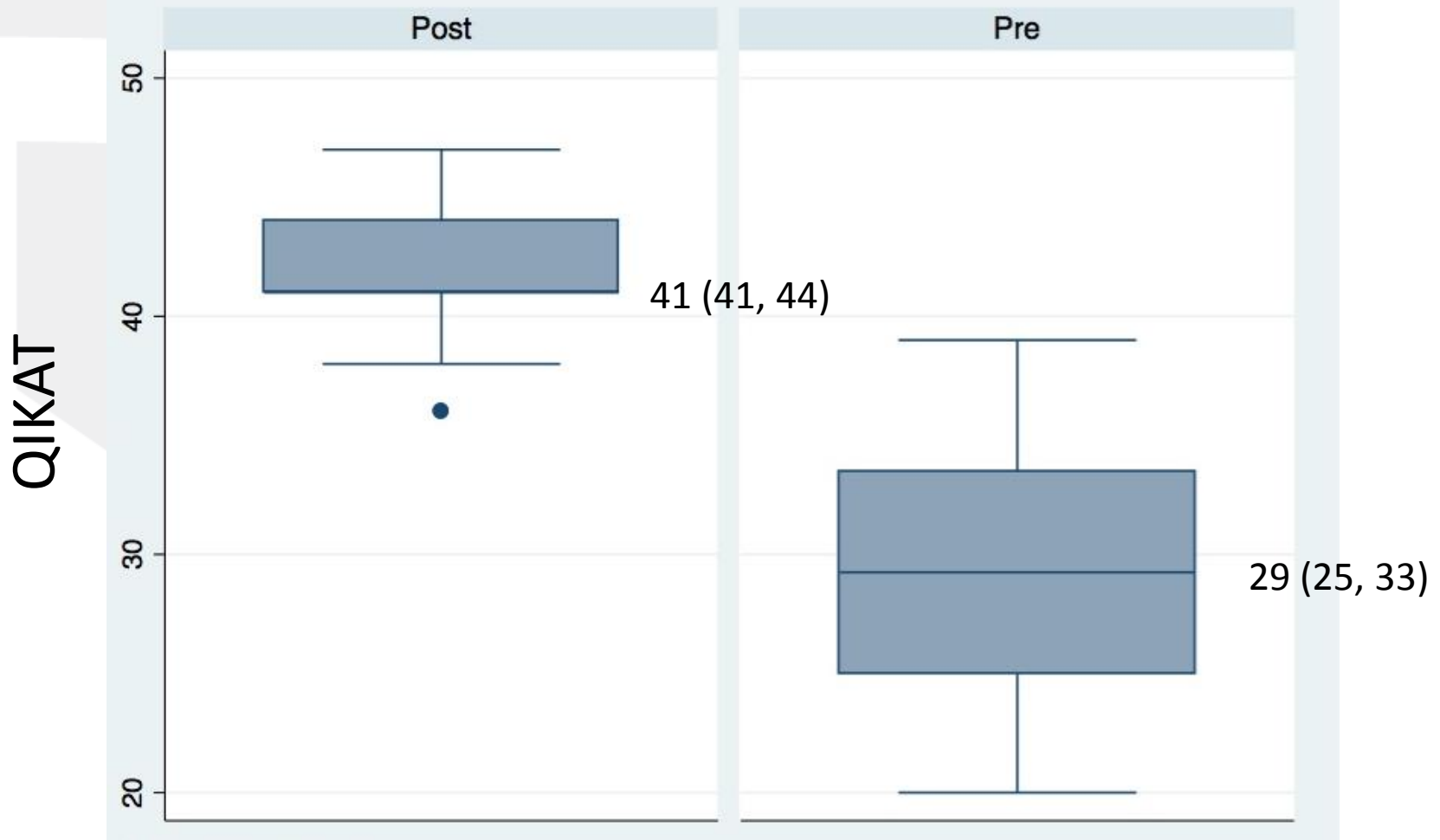
AI Patient Safety Fellowship: Program Implementation

- Cohort 1 (n=6): January - June 2013
- Cohort 2 (n=14): January - June 2014
- Met as a cohort weekly for 6 months and received salary support of 8-12 hours per week to “back-fill” their clinical obligations.
- Participants were health professionals, including nurses, physicians, and administrators, interested in leading patient safety initiatives at our institution.

AI Patient Safety Fellowship: Program Evaluation

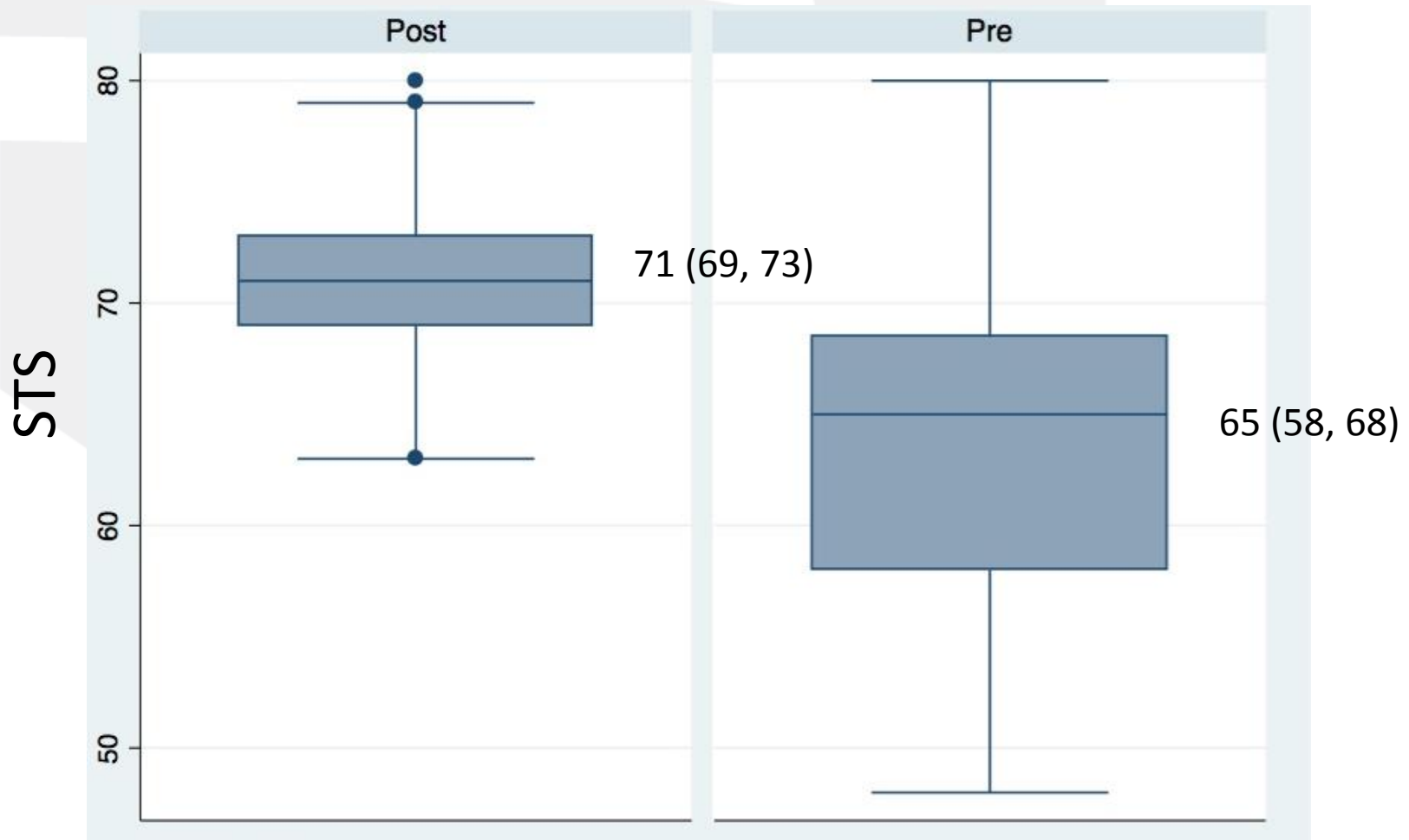
- Pre-Post quasi-experimental design
- Quality Improvement Knowledge Assessment Tool (QIKAT)
 - 12 questions, 1-4 Likert scale, 48 total points
- Systems Thinking Scale (STS)
 - 20 questions, 0-4 Likert scale, 80 total points
- Qualitative feedback from participants

Quality Improvement Knowledge Assessment Test



Wilcoxon Rank Sum Test
 $p=0.0002$

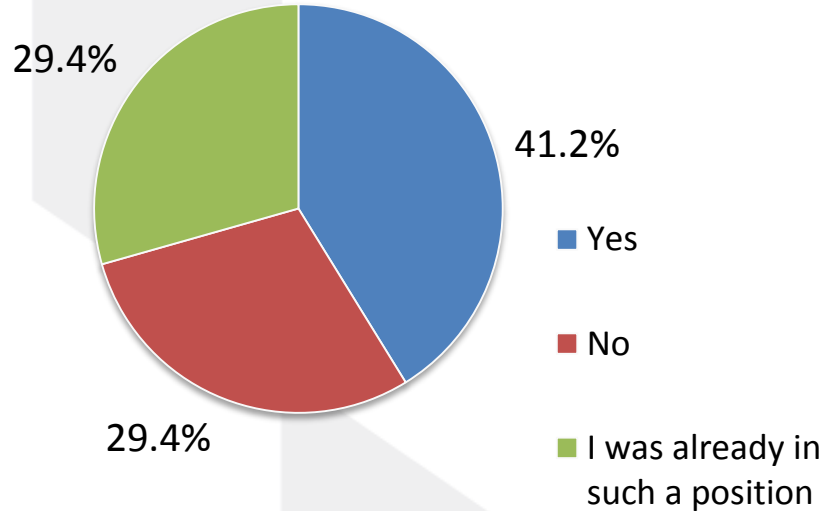
Systems Thinking Scale



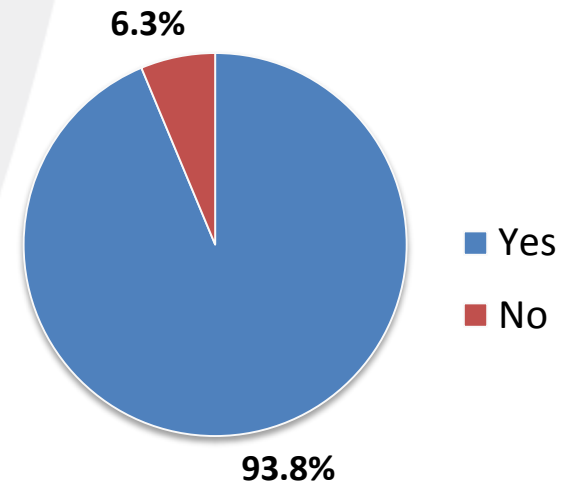
Wilcoxon Rank Sum Test
 $p=0.0018$


Long Term Results

Have you moved into a position or taken on formal responsibilities in patient safety and/or quality improvement since participating in the Patient Safety Fellowship?




Have you led, participated in, sustained, or modified patient safety and/or quality improvement projects since completing the Fellowship?






Participant Feedback




“The opportunity for mentorship and education from AI safety and quality experts has been invaluable to my career ... developing "lenses" to identify defects ... learning a structured framework to tackle these defects and navigate within a project ... is a skill set I will continue to utilize moving forward ... into my day to day practice.”

2013 Fellow - MD



“Words can’t adequately describe how much this Fellowship has re-shaped my focus in the care we provide and the way I practice medicine. It was simply excellent!”

2014 Fellow - PA



“Participating in the PSF re-launched my career. I have returned to school to obtain a MSN in Health Care Quality and taken on a full time role in QI. I use what I learned in the PSF everyday! And I would do it again if I ever had the opportunity.”

2013 Fellow - RN

Program Learning

- Lengthened to 9 months
- Fellows required additional support in development of project metrics and analysis plans -- the curriculum was modified accordingly for cohort 2.
- We have developed a Patient Safety Certificate Course, which is now a program requirement.
- The majority of program participants have continued their involvement in patient safety and quality improvement initiatives at our institution.
- Feedback from participants and unit leaders supported continuation of the program.

Conclusion

- This structured patient safety fellowship program is an effective strategy for improving quality improvement knowledge and systems thinking building capacity for patient safety and QI improvement among health professionals.
- With a high level of institutional support, we have expanded the program to include 33 participating health professionals in our current cohort.
- We are collaborating with institutional leaders to ensure the sustainability of this program.