



Objective :

- Describe and analyze the effectiveness of the PSQI curriculum within the PM&R Residency Program at the University of Kansas Medical Center during the academic years of 2017-2020.

Background:

- PSQI is an imperative aspect of healthcare and resident education.
- The ACGME Clinical Learning Environment Review National Report in 2016 found that many academic institutions were routinely failing to engage trainees in PSQI opportunities.
- ACGME mandates that QI instruction and participation be included in residency and fellowship education.
- This resource represents the first curriculum specific to PM&R residents.

Methods:

- A total of 16 PM&R residents have participated for a minimum of one or more years since curriculum inception in 2015.
- The curriculum includes nine mandatory Institute for Healthcare Improvement modules (Table 1), the university's GME core conference series, the department's patient safety conference series, a PSQI lecture series (Table 2), and annual resident-led QI projects.
- Resident PSQI knowledge was assessed before and after completion of the annual curriculum through an internally generated questionnaire with optional resident feedback.

Results:

- A significant difference was found in 9 of 12 domains during the 2017-2018 academic year, 10 of 12 domains during the 2018-2019 academic year, and 10 of 12 domains during the 2019-2020 academic year.
- Aggregating for all academic years revealed a statistically significant difference across all 12 domains (Figure 1).

Conclusion:

- In order to graduate from an ACGME-accredited residency program, residents must exhibit proficiency in PSQI.
- The continuous PSQI curriculum within the PM&R Residency Program at KUMC has proven to be effective and may serve as a model for other PM&R programs around the nation.
- Additional revisions to our curriculum and evaluation tools are needed to further improve resident knowledge acquisition, skills, and attributes as it pertains to PSQI.

Patient Safety and Quality Improvement: A Curriculum for Physical Medicine and Rehabilitation

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PM&R resident trainees must be proficient in patient safety and quality improvement (PSQI) as a core competency for graduation. The continuous PSQI curriculum at the University of Kansas Medical Center has proven to be effective in improving residents' understanding, familiarity and comfort with quality assessment and improvement.



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Tables and Figures:

Table 1: Required IHI Modules

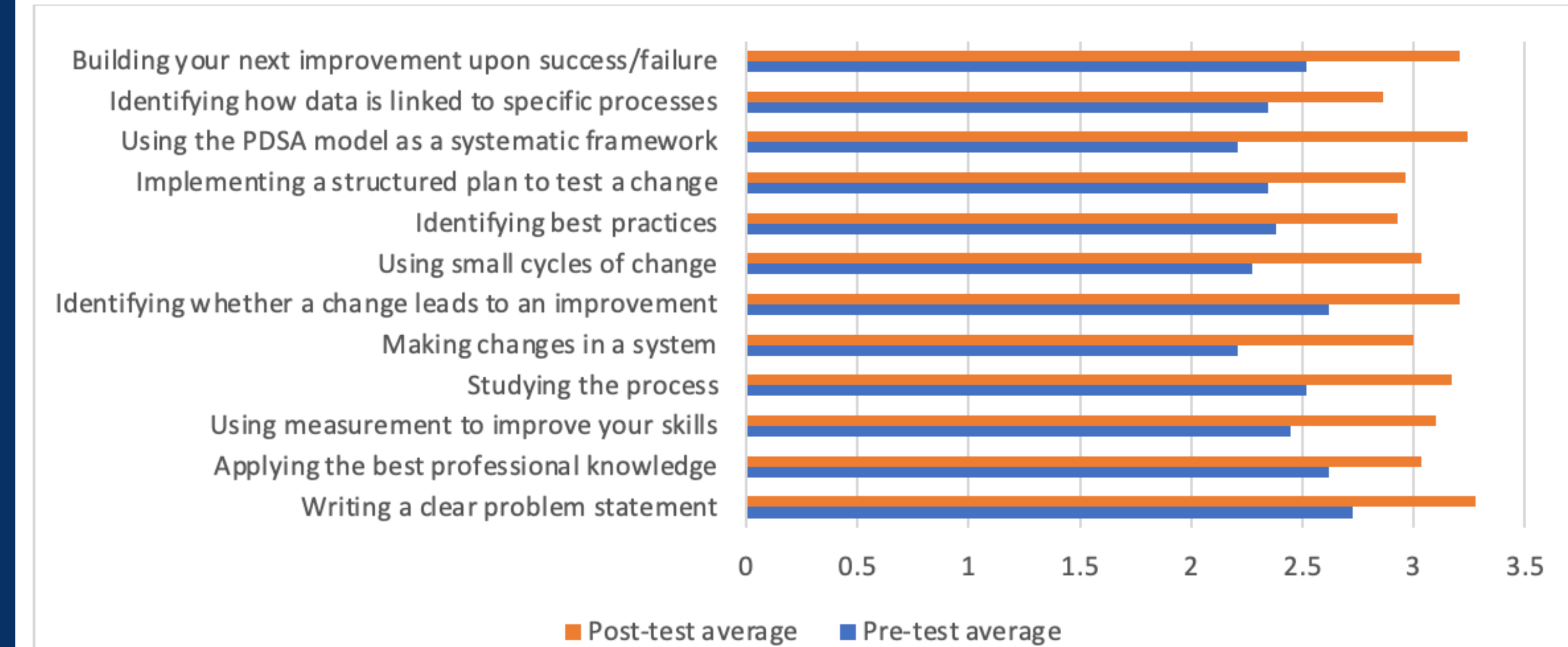
Lecture Number	Title
QI 101	Introduction to Healthcare Improvement
QI 102	How to Improve with the Model for Improvement
QI 103	Testing and Measuring Changes with PDSA Cycles
QI 104	Interpreting Data: Run Charts, Control Charts, and other Measurement Tools
QI 105	Leading Quality Improvement
PS 101	Introduction to Patient Safety
PS 102	From Error to Harm
PS 104	Teamwork and Communication in a Culture of Safety
PS 105	Responding to Adverse Events

Table 2: PSQI Lecture Series

Date	Time (minutes)	Topic	QI Worksheet (questions requiring completion prior to lecture)
First quarter	30	Introduction and Construction of a QI Project*	Questions 1-4
Second quarter	30	Intro to PDSA Cycle*	Questions 5-6
Third quarter	30	Modeling Processes*	Questions 7-8
Third quarter	60	(Mock) Root Cause Analysis	-
Fourth quarter	30	Making QI Work for You*	Question 9
Fourth quarter	30	Prepare QI Project Presentations	-

*Represents capstone quarterly lectures

Figure 1: PSQI pre-post difference aggregated for all years



References

- Accreditation Council for Graduate Medical Education. (2017) *ACGME common program requirements*.
- American Board of Medical Specialties. (2020) *Committing to physician quality improvement*.
- Weiss KB, Wagner R and Nasca TJ. (2012) "Development, Testing, and Implementation of the ACGME Clinical Learning Environment Review (CLER) Program."