Abstract

#8: ADDRESSING THE CLER QI FOCUS: AN EXPERIENTIAL LEARNING PROGRAM IN QI

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Background

Quality Improvement (QI), including how sponsoring institutions engage residents in the use of data to improve systems of care, foster inter-professional teamwork, and improve patient outcomes is one of the focus areas of the Clinical Learning Environment Review (CLER) program. Residency programs, with institutional collaboration, must go beyond teaching quality improvement principles to integrating trainees into hospital operational improvement work. Challenges include development of faculty and resident QI knowledge base, a need for QI mentors, a working knowledge of hospital Quality and Patient Safety priorities, development of inter-professional teams, and engagement of the residents in QI planning, execution and reassessment. A residency QI program was developed in which residents develop and lead projects in their ambulatory practices that have patient care impact, emphasize inter-professional collaborative teamwork and use formal QI methodology.

Objectives

To evaluate a residency QI program that provides residents with skills in conducting QI work through designing and participating in projects which align with hospital QI priorities.

Methods

Over a ten year period, teams of pediatric residents selected ambulatory based gaps in care, many based on hospital QI priorities, then designed and implemented QI projects using the Model for Improvement. QI projects were developed annually in the domains of prevention, screening and workflow and the team participants included providers, residents, nurses, social workers, medical assistants, registrars and supervisors, as well as hospital leadership. Surveys were utilized to assess the residents' knowledge of basic QI principles and to assess the training program's effectiveness. In addition, the 10 year program was reviewed to assess the number of projects which have been sustained and which have aligned with hospital QI priorities.

Results/Outcomes/Improvements

Residents have annually completed a range of QI tasks including defining a gap in care, developing AIM statements, flowcharts, implementing and responding to project measures, and conducting a series of PDSA cycles (minimally 4-5 per project). They were trained to consider care delivery systems, to engage team members and to obtain feedback from the relevant population. Each project was presented annually at a summative meeting which included hospital leadership and team members from the ambulatory care site. Knowledge scores increased between untrained new interns and residents with QI training (p < 0.0001), however there were no significant differences in the mean knowledge scores between PL1, PL2 and PL3 residents (p=0.41) at the end of each year. 89.7% of residents reported that their QI work helped them effectively use system resources and 94.9% reported that it helped them evaluate patient care practices. There was a significant increase in residents’ self-reported confidence in implementing future QI programs with an improvement from 85% somewhat/very prepared as PL1s to 95% as PL2s and 98.6% as PL3s (p=0.0002). Over 62% of the projects have been sustained and spread over the 10 year period, resulting in workflow changes in the ambulatory setting and supporting hospital QI priorities.

Significance/Implications/Relevance

Experiential learning with residents as active participants can be a foundation for a strong QI training program, leading to sustainable QI behaviors and sustainable improvements in ambulatory care, while supporting hospital quality and safety priorities.