

MORBIDITY AND MORTALITY CONFERENCE: AN INNOVATIVE STRATEGY TO TEACH QUALITY AND SAFETY IN THE OUTPATIENT SETTING

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Category: Education

Background

Morbidity and mortality conferences are a mainstay of examining medical errors in hospitals, and recently the format has shifted to utilizing quality improvement and patient safety (QI/PS) principles and tools to identify systemic root causes of adverse events. However, this practice has not been implemented in the outpatient setting.

Objectives

We implemented a resident-led interprofessional case-based conference to train clinical and non-clinical staff in our outpatient health center in basic QI/PS principles. The aims of this intervention were to: 1) teach principles of QI/PS to all staff in our health center, 2) demonstrate how to report adverse events, and 3) develop a potential forum for addressing clinic-specific QI/PS concerns.

Methods

The hourly conference was held quarterly during staff meetings. Each conference began with a case presentation highlighting an adverse event. An interactive session followed where participants were guided through a systematic review of the case, identifying areas for change, and generating action items to prevent future events. Working in small groups, participants explored how reviewing these cases can lead to QI projects by creating an aim statement, determining measures, analyzing the process, and planning change through multiple Plan-Do-Study-Act cycles.

Results

Three conferences were held quarterly from October 2015 to May 2016. At the first two conferences, attendees completed pre- and post-surveys utilizing a five point Likert scale to assess confidence in QI/PS principles, likelihood of incident reporting, and future participation in QI projects. We found a significant increase in confidence in QI/PS principles after attendance.

At the first conference, 96% of survey respondents agreed or strongly agreed with the statement that “the information covered will be useful in my professional activities;” 98% of second conference survey respondents agreed or strongly agreed with the above statement.

To better assess knowledge in QI/PS, we utilized a 10-question multiple choice and true/false pre- and post-test at the third conference. Pre-test response rate was 85% (34/40 attendees); post-test response rate was 78% (31/40 attendees). The median score on the pre-test was 60%; the median score on the post-test was 80%. The percentage of correct answers was significantly higher on the post-test (Mann-Whitney U = 244, $p < 0.001$ two-tailed).

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Table 1. Pre- and post-attendance survey results from the first two conferences.

	First Conference n=34 of 50 attendees (68%)			Second Conference n=40 of 49 attendees (82%)		
	Pre- Conference Survey	Post- Conference Survey	<i>P</i> value	Pre- Conference Survey	Post- Conference Survey	<i>P</i> value
“Very Likely” to submit an incident report	38%	72%	0.005	46%	67%	0.069
“Very Likely” to participate in a QI project	31%	61%	0.017	42%	58%	0.174
“Very Confident” in using a systems-based approach to analyze medical errors	12%	56%	<0.001	8%	58%	<0.001
“Very Confident” in creating a process map	15%	59%	<0.001	8%	53%	<0.001
“Very Confident” in identifying contributing factors of adverse events	18%	79%	<0.001	10%	58%	<0.001
“Very Confident” in identifying error reduction strategies	15%	76%	<0.001	5%	58%	<0.001

Survey items were measured on a five point Likert scale where higher values denoted greater confidence or likelihood (1= Very Unlikely or Very Unconfident and 5 = Very Likely or Very Confident). Pre-to-post analysis for responses to individual questions was performed using the Chi-square test, comparing pre- and post- responses of “Very Likely” or “Very Confident” to all other responses.

Discussion

Implementation challenges included identifying an ideal conference time and ensuring follow-up of action items. Future plans include conducting the conferences monthly, providing continuing education credits, reassessing QI/PS knowledge of past participants, and completing QI projects based on identified action items.