NEW IDEAS

Early Engagement of Residents Into the Root Cause Analysis Process

Setting and Problem

In July 2012, the University of Nevada School of Medicine (the sponsoring institution) and its primary teaching hospital, the University Medical Center of Southern Nevada, participated as an alpha test site for the Clinical Learning Environment Review (CLER). As evidenced in the CLER report, the residents and

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fellows were unaware of medical error and adverse event reporting (only 2 reports were generated by residents and fellows during the 2011–2012 academic year), and residents were not knowledgeable about the investigative process of sentinel events. Few residents and fellows participated on the hospital's Quality and Patient Safety (QPS) Committee.

Intervention

To address the issues identified in the CLER report, a 3-part approach was undertaken by the designated institutional official with support from the graduate medical education committee. The first part, deemed to be a critical component of the institutional response plan, commenced during intern orientation with an introduction of the root cause analysis (RCA) process. The physician co-chair of the hospital's QPS Committee developed an interactive didactic session to familiarize residents with the principles of RCA.

To engage the audience in the application of their new knowledge, the co-chair facilitated a large group performance of an RCA on the sinking of the Titanic—a historical event of which most people have a general familiarity with, as well as opinions. After observing and participating in the Titanic RCA, interns were divided into small groups and provided a sentinel event case from the hospital files. Each group received 1 of several cases that had been selected due to system failures, communication breakdowns, electronic health record issues, and problems with transitions of care.

Discussion in each small group was facilitated by training program leaders who guided the interns through a systems-based analysis of their case and the performance of a RCA. Hospital quality improvement staff circulated throughout the room to provide additional expertise and assistance, and each group concluded its RCA with the development of an Ishikawa fishbone diagram. Resident spokespersons from each group reported their case analysis to the audience, followed by a general discussion moderated by the facilitator, with continued emphasis on a culture of safety. During this activity, residents also were educated about the use of the hospital's online event reporting instrument, "Safety Intelligence," via a brief PowerPoint presentation that included screenshots of the software to facilitate real world application.

The second part of the intervention featured patient safety topics during the institution's monthly interdisciplinary grand rounds, as well as a review of the event reporting process. The third part of the process focused on enhancing resident and fellow participa-

tion on the hospital's QPS Committee by encouraging program-wide representation.

Outcomes to Date

Since the implementation of this activity during intern orientation, there has been a demonstrated increase (900%) in resident and fellow event reporting, with 18 reports generated over the 2014–2015 academic year. In addition, active resident participation in institutional RCA investigations was found to have significantly increased from its previous negligible level to 64% of cases in which a resident was involved. Finally, informal evaluation has elicited a positive response to the session, and residents may be more comfortable in participating in a RCA as a result of their attendance during orientation.

Introduction of residents and fellows to the investigative process of sentinel events, accompanied by enhanced integration into the patient safety reporting system, has significant potential to benefit both present-day and future patient care as trainees transition to independent practice.

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