

years of Spanish instruction). Spanish fluency is *not* a prerequisite for acceptance in our program. In fact, upon entry, 11% of entering residents scored < 10% (no Spanish), while 22% tested at or above proficiency. Significantly, 98% scored at or above proficiency prior to graduation. Average training cost is \$7,975 for a resident who enters the program with no Spanish and \$6,750 for a resident who enters with intermediate Spanish. A cost analysis on the value of the Spanish program found that if just 25% of residents' patients speak Spanish, the cost of teaching Spanish to residents is less than interpreting costs for the second and third years of residency (TABLE). Thus this "new idea" of 1-on-1 language instruction helps residents achieve fluency and save money.

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Turning Mortality Discussions Into Process Improvements

Setting and Problem

The Morbidity and Mortality (M&M) conference is a traditional forum that provides residents with an opportunity to discuss and analyze medical errors. On a national level, M&M conferences appear to be increasing focus on systems of care and plans for process improvements. Unfortunately, academic discussions and hypothetical plans that occur during the M&M conferences often are not translated into actionable improvement plans. Without designated stakeholders to serve as a driving force to connect the academic discussions to a multidisciplinary forum, mortality reviews may not lead to process improvements or change in practice. In order for M&M conferences to lead to actionable plans, Stony Brook Internal Medicine Residency Program has established a multidisciplinary forum that is specifically tasked with creating process improvement projects stemming from M&M discussions.

Intervention

In an effort to focus on systems change and process improvement, the residency program restructured the content of the M&M to emphasize principles of patient safety and system-wide improvement strategies. The chief resident presents a structured timeline of the case. The conference follows an interactive small group format in which each resident cohort group is assigned specific safety tasks. Chief residents and faculty members facilitate small group activities. The post-graduate year 1 (PGY-1) group conducts an error analysis by defining the medical error and adverse event, and determining whether the medical error caused the adverse event. The PGY-2 group is given a blank Ishikawa fishbone diagram, and residents conduct a root cause analysis with both systems and individual contributors. The PGY-3 group is expected to generate an action plan based on the case, and present a SMART (Specific, Measurable, Attainable, Relevant, Time bound) aim proposal to resident members of the Patient Safety Quality Council (PSQC). The residency program formed the PSQC in 2014 to provide a forum for discussion of patient safety issues and to promote engagement in quality

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TABLE

Process Improvements Resulting From M&M Discussions

M&M Issues Identified	Interventions
MRI near miss (MRI imaging orders on patients with metals [pacemakers])	MRI safety screening form and hard stop in the EHR
Medication error (Dextroamphetamine ordered instead of Dextromethophan)	Name alert with tall man lettering and generic names added to the EHR
Failure to enter error report	Educational intervention (workshop focused on simulation and hands-on skills) in error report entry
Lack of discharge summary from transferring facility	Transfer algorithm to include request for discharge summary prior to patient acceptance to facility
Delay in lab orders and vitals for direct admissions (direct transfer from outside hospital)	Triage power plan created to obtain triage labs and vitals upon patient arrival
Failure to escalate care	Rapid response team creation of escalation protocol for medical ICU
Communication delays between nursing and provider staff (led to unsafe discharge of a patient)	Multidisciplinary daily discharge huddle to identify next day early discharges

Abbreviations: MRI, medical resonance imaging; EHR, electronic health record; ICU, intensive care unit.

improvement initiatives centered on the clinical environment. Fifteen residents from all PGYs were peer-nominated and recruited to join the council. Council members also included a patient safety officer from the institution, a nurse, a pharmacist, informatics personnel, and various volunteer faculty members. These members are invited to the monthly M&M, and they serve as stakeholders for the generated action plans developed in the M&M conferences. PSQC members discuss the action plans generated from the M&M, and conduct PDSA (plan, do, study, act) cycles at monthly meetings; they also continue to work on pertinent issues after the meetings. At subsequent M&M conferences, the chief resident begins with a follow-up of the projects from the PSQC members.

Outcomes to Date

Our M&M conference is modeled after a system that integrates a resident-driven PSQC forum with M&M conferences. This allows for M&M discussions to develop into process improvements and effective action plans. A resident-driven multidisciplinary committee can be a valuable forum where feedback from M&M could be operationalized into action. Moving from M&M discussions to implementing action plans requires involvement of designated champions and administrative staff to help champion these efforts. The M&M and PSQC model have led to several process improvements (TABLE). Our approach shows that the M&M conference can serve as more than a forum for education. Revamping it to focus on action plans may not be sufficient to create high-value process improvements that impact delivery of patient care. We feel that a structured forum with identified stakeholders, such as a patient safety council, has great potential to turn mortality discussions into robust, actionable improvement plans.

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Cognitive Autopsy: A Transformative Group Approach to Mitigate Cognitive Bias

Setting and Problem

Diagnostic errors are estimated to occur in 10% to 15% of patient encounters. Cognitive errors contribute to over half of diagnostic errors and are associated

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