Mainstreaming Risk Management Education Into New Resident and Fellow Orientation

EILEEN T. McMYLER, MS, RN, BC
 PAULA T. ROSS, MA
 KELLY A. SARAN, MS, RN
 ANABEL URTEAGA-FUENTES, BS
 SUSAN G. ANDERSON, MSN, MBA, CPHRM
 RICHARD C. BOOTHMAN, JD
 MONICA L. LYPSON, MD

Abstract

Introduction Understanding patient safety events and causative factors is an important step in reducing preventable adverse events. The University of Michigan's Graduate Medical Education (GME) Office, Department of Risk Management (DRM), and Office of Clinical Affairs (OCA) collaborated to incorporate a video workshop as a formal introduction to patient safety during orientation for new residents and fellows. This workshop reinforced the importance of effective communication and supervision in patient safety.

Methods DRM and OCA produced a video depicting an actual, unanticipated outcome that resulted from a constellation of preventable circumstances, which allows the audience to observe communication and supervision issues that lead to a patient death. The video is followed by a discussion of the patient safety issues seen, why

they occurred, and strategies for improvement. Trainee perceptions of the value of the experience were surveyed and collected using a qualitative survey.

Results Most responders found the video workshop helpful. Trainees perceived the video and facilitated discussion as an effective way to identify patient safety issues, available resources, and the culture of patient safety at the institution.

Conclusion Trainee comments supported the video workshop as an effective way to highlight the importance of communication and supervision in relation to patient safety. In the future, the DRM, OCA, and GME hope to reinforce this shared vision of patient safety through combined educational efforts.

Editor's Note: The authors will make the workshop DVD available to interested readers.

Eileen T. McMyler, MS, RN, BC, is Project Manager in the Department of Risk Management, University of Michigan Health System, Ann Arbor, Michigan; **Paula T. Ross, MA**, is a Research Area Specialist in the Department of Health Behavior and Health Education, School of Public Health, University of Michigan, Ann Arbor, Michigan; **Kelly A. Saran, MS, RN**, is a Risk Management Consultant in the Department of Risk Management, University of Michigan Health System, Ann Arbor, Michigan; **Anabel Urteaga-Fuentes, BS**, is an Administrative Assistant in the Department of Risk Management, University of Michigan Health System, Ann Arbor, Michigan; **Susan G. Anderson, MSN, MBA, CPHRM**, is Director of the Department of Risk Management, University of Michigan Health System, Ann Arbor, Michigan; **Richard C. Boothman, JD**, is Chief Risk Officer in the Office of Clinical Affairs, University of Michigan Health System, Ann Arbor, Michigan; and **Monica L. Lypson, MD**, is Associate Professor of Internal Medicine and Medical Education and Assistant Dean of Graduate Medical Education at the University of Michigan Health System, and a staff physician at the VA Ann Arbor Healthcare System, Ann Arbor, Michigan.

Funding: The authors report no external funding source.

We acknowledge the noteworthy collaborative efforts of the Graduate Medical Education Office, Department of Risk Management, and Office of Clinical Affairs in ensuring trainees receive appropriate supervision to promote patient safety.

Corresponding author: Eileen T. McMyler, 300 NIB 8A, 300 North Ingalls, Ann Arbor, MI 48130, emcmyler@umich.edu

Received: August 1, 2010; revision received: December 15, 2010; accepted: February 28, 2011.

DOI: <http://dx.doi.org/10.4300/JGME-D-10-00143.1>

Introduction

The Department of Risk Management (DRM) is an integral component of the University of Michigan Health System (UMHS) and is committed to minimizing events that can cause harm.¹ Despite advances in patient safety, medical errors like those highlighted in *To Err is Human: Building A Safer Health System*² still occur.²⁻⁶ These events require clinicians and/or DRM staff to spend hours with patients and their families to answer questions, understand the experience from their perspective, and reach consensus on a resolution and interventions to prevent future occurrences. The UMHS policy on disclosure of unanticipated outcomes requires the attending physician to facilitate the discussion and identifies techniques, strategies, and available staff resources to assist with the dialogue.⁷ Our intervention uses this policy as the starting point for teaching residents about patient safety.

The University of Michigan's Graduate Medical Education Office (GME) uses the Accreditation Council for Graduate Medical Education (ACGME) competencies for patient care, communication, systems-based practice, and professionalism as the framework for its 16 specialty programs.⁸ The Office of Clinical Affairs (OCA) and the

Michigan Quality System strongly support a systems-based approach to improving quality and safety. The DRM serves as a resource for GME administration and uses collaborative relationships and innovative strategies to educate physicians about patient safety and risk management.

In 2009, the OCA, DRM, and GME administrations developed a video workshop as a formal introduction to patient safety at UMHS during orientation for new residents and fellows. Our hypothesis was that the workshop engaged learners and helped them appreciate the impact of communication and supervision on patient safety.

Methods

The aim of the video workshop was to cultivate a culture of accountability, open communication, and disclosure to employees including trainees. The video (*Lives in Our Hands*) depicts an actual, unanticipated, and preventable outcome. It recounts the story of an adolescent who was admitted after a rollover motor vehicle accident. The patient was severely injured; however, poor communication between providers, failure to escalate patient care concerns, and inadequate supervision ultimately contributed to the patient's unanticipated death. The video tracks the course of the patient's hospital journey through the perspectives of the mother and the intern involved in the case. The video creates the opportunity for audiences to recognize and explore communication barriers and discuss strategies for improving patient safety and communication.

During orientation for new residents and fellows, 45 minutes are allocated to the video workshop, which entails introduction of the session, viewing the 21-minute video, 3 to 5 minutes for trainees to reflect on the questions before discussion, and distribution and completion of the survey. The workshop is facilitated by OCA and DRM leaders who direct trainees toward what they see happening in the video, why these events might occur, and what they see as solutions. It is helpful to have at least 2 facilitators who are familiar with the video, patient safety issues, and the institution's resources to facilitate the discussion. At the end of the workshop, trainees are asked to complete a survey (TABLE 1).

The University of Michigan Center for Research on Learning and Teaching assisted in the development of a workshop that effectively engaged the audience. As part of that design, a survey tool was developed to stimulate participant reflection and engagement in the facilitated discussion. The project received exemption status from the university's Institutional Review Board. Residents and fellows were informed that their responses would be collected as part of a research project that would identify them only by session date and level of training and that their participation was voluntary.

Intervention

Beginning in July 2009, all new residents and fellows participated in the *Lives in Our Hands* workshop during their new employee orientation. During the workshop, trainees were separated into 2 groups by level of training. The first group included interns with no prior experience as licensed physicians, and the second group included residents and fellows with prior clinical experience and those who might also have had experience with patient safety at their previous GME institutions.

Trainees viewed the video and were asked to reflect on their perceptions of key patient safety issues and what they saw as barriers to effective communication and supervision. The discussion was facilitated by DRM and OCA leaders who asked the residents what they saw in the video and why they thought the intern did not call for help. A scribe took notes during the discussion. Trainees then completed the survey. Survey questions focused on strategies to overcome barriers to effective communication and supervision identified earlier, what trainees would have done differently, and how they might implement some of the improvements brought out in the discussion.

We collected 306 surveys (TABLE 2). The authors independently grouped written responses from the 306 respondents into thematic categories and collectively reached consensus on the categories.^{9,10}

Results

During the discussion, the trainees identified the fact that the intern was trying to manage the patient's condition without actually seeing him; the intern did not call his fellow or the attending physician when the patient's condition did not improve; the nursing staff was not clear in their need for the intern to come to the patient's bedside, and they did not call the fellow or attending physician either; and the mother's concerns were not addressed. The facilitators discussed the importance of building a culture where it is safe to ask for help and both nurses and family members are seen as part of the team. Last, the facilitators identified available resources for trainees to support how the institution is building a culture of patient safety at the institution.

Trainees were asked to evaluate the overall value of the workshop. Using a 5-point Likert scale with 1 being "not at all helpful" and 5 being "very helpful," 93% (163 of 176 first-year residents (93%) and 84 of 105 second-year residents (80%) rated the workshop as either helpful or very helpful. These percentages represent the returned surveys in which this particular question was answered. Trainees were given the opportunity to provide free-text responses to the question, "What aspects of the workshop did you find most useful?/comments," and many residents responded that there was a unique value to the candid nature of the intern's testimonial and the mother's personal story. Trainees also

TABLE 1 SURVEY QUESTIONS AND DATA

Survey Questions	
1. Please list the key patient safety issues surrounding communication and supervision in this case.	
2. Based on the video, please list barriers to effective communication and supervision surrounding patient safety.	
3. Please list potential strategies that can be used to overcome these barriers.	
4. What would you do differently, in regards to staff supervision and communication, compared to how it was handled in the video?	
5. How do you think you will be able to implement what you learned from this workshop in your unit?	
6. Please rate the overall value of this workshop?	
7. What aspects of the workshop did you find most useful?	
Reflections ^a	Responses or Remarks
Personal Testimony (23 respondents [14%])	<ul style="list-style-type: none"> • “Perspective of the intern, faculty and nurses” • “Elucidated the view of the family...makes you remember how important it is to remember the family and make sure you communicate with them what is going on.” • “Mother’s perspective of the patient loss.” • “Reaffirmation that calling superiors is ok...it’s what’s in pt’s best concern.”
Video Content (81 respondents [49%])	<ul style="list-style-type: none"> • “Touching and detailed story.” • “Actual common case scenario.” • “Video was very useful to put this issue into perspective.” • “The video was effective in communicating importance of asking for help.” • “Video was great...makes me feel more comfortable to call anyone when I need to.”
Discussion (61 respondents [37%])	<ul style="list-style-type: none"> • “Input from peers at end of video.” • “Rethink common sense measure with practical example.” • “Question and answer session was very useful.” • “Post-video discussion with advice from attending.” • “Explanation of resources.”

^a Percentage of respondents who entered a free text comment in the space provided that matched this category (n = 165 trainees who entered a comment in response to the above-stated question).

TABLE 2 ACADEMIC YEAR 2009–2010 RETURNED AND COMPLETED SURVEY TOOLS

Education Level	Trainees	No. of Returned Surveys (%)	No. of Those Who Responded to the Evaluation Question (%)
PGY-1	181	181 (100)	176 (97)
PGY-2–PGY-7	163	123 (75)	105 (64)
Totals	344	304	281

Abbreviations: PGY, postgraduate year.

indicated the video was an important part of the session and an effective tool. Comments emphasized the usefulness of postvideo discussion and highlighted the value placed on a culture of patient safety (TABLE 1). Residents also stated that hearing about the resources available during difficult situations was particularly useful.

Discussion

The patient safety issues depicted in the video and identified by the trainees during the discussion align with those found in the literature, which include breakdown in communication, failure to see patients in person, and failure to escalate care.^{6,11–13} The discussion highlights a patient safety perspective brought forth by the mother and allows for dialogue concerning existing communication and supervision barriers in the delivery of safe patient care and thoughts on improvement strategies.^{14–16}

Much of medical training is focused on the acquisition of knowledge and skills; however, it is the affective domain of learning that is responsible for changing behaviors.^{17,18} The affective domain refers to attitudes, beliefs, values, feelings, and emotions. By using the technique of reflective thought, first by the mother and then the intern, the video illustrates the potential consequences of safe patient care when appropriate levels of communication and supervision are not emphasized.¹⁹ We think our approach resulted in better engagement of the residents and will allow them to recognize the impact of communication and supervision on patient safety. We believe the workshop has the potential to improve trainees' communication patterns with families and supervisors since they were able to identify specific issues and barriers seen in the video and relate them to their own educational experiences.^{18–21} The fact that trainees recognized key patient issues and articulated strategic insights and addressed them strongly suggests the importance of partnerships among residents, hospital leadership, and safety experts when developing initiatives around patient safety.^{22–26}

Our study has several limitations. First, our discussion of patient safety was based on a particular case, and the questions asked by the facilitators were directed toward issues relevant to that clinical situation. Second, the themes elicited represented residents' perceptions based on an abbreviated summary of the case. Ideally, faculty participation in the discussion might have produced a more in-depth discussion around the issue of calling the next level of supervision. Finally, we did not measure change in behavior or improvements in patient safety as a consequence of the workshop and recognize that this survey does not guarantee that residents' practices regarding communication and supervision will actually change.

Conclusions

The video and discussion used a personal story to introduce the patient safety philosophy, the OCA, and the DRM

during the University of Michigan's new resident orientation. In the future, we hope to expand the collaboration between OCA and DRM to more effectively reinforce this shared vision of patient safety throughout the institution. The video workshop is the starting point for engaging residents in strategies to overcome the barriers to effective communication and supervision identified during the facilitated discussion, and further collaboration will allow residents to gain insight into effective strategies they can use to improve patient safety.

It will be important for the OCA to recruit physician champions to engage their peers in the work of changing the culture surrounding communication and supervision, as they are key players in creating and maintaining a culture of patient safety.¹³

References

- Strong DL, Kin JM, Kratochwill EW, et al. University of Michigan: quality and safety in an academic medical center. *J Qual Patient Safety*. 2008;34(11):671–677.
- Kohn L, Corrigan J, Donaldson M, eds. *To Err Is Human: Building A Safer Health System*. 1st ed. Washington, DC: National Academy Press; 1999.
- Leape LL, Berwick DM. Five years after To Err Is Human: what have we learned? *JAMA*. 2005;293(19):2384–2390.
- Leape LL, Berwick DM, Clancy C, et al. Transforming healthcare: a safety imperative. *Qual Safety Health Care*. 2009;18:424–428.
- Leape LL. Errors in medicine. *Clin Chim Acta*. 2009;404(1):2–5.
- Behal R, Finn J. Understanding and improving inpatient mortality in academic medical centers. *Acad Med*. 2009;84(12):1657–1662.
- Boothman RC, Blackwell AC, Campbell DA Jr, Commiskey E, Anderson S. A better approach to medical malpractice claims? The University of Michigan experience. *J Health Life Sci Law*. 2009;2(2):125–159.
- Lypson ML, Frohna JG, Gruppen LD, Woolliscroft JO. Assessing residents' competencies at baseline: identifying the gaps. *Acad Med*. 2004;79(6):564–570.
- Krippendorff K. *Content Analysis: An Introduction to Its Methodology*. Thousand Oaks CA: Sage Publications; 2004.
- Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res*. 2005;15(9):1277–1288.
- Ross PT, McMyler ET, Saran KA, Urteaga-Fuentes A, Boothman RC, Lypson ML. Trainees' perceptions of patient safety practices: recounting failures of supervision. *Jt Comm J Qual Patient Saf*. 2011;37:88–95.
- Weingart SN, Pagovich O, Sands DZ, et al. What can hospitalized patients tell us about adverse events? Learning from patient-reported incidents. *J Gen Intern Med*. 2005;20(9):830–836.
- Singh H, Thomas EJ, Petersen LA, et al. Medical errors involving trainees: a study of closed malpractice claims from 5 insurers. *Arch Intern Med*. 2007;167(19):2030–2036.
- Baldwin CD, Daugherty SR, Ryan PM. How residents view their clinical supervision: a reanalysis of classic national survey data. *J Grad Med Educ*. 2010;Vol 2:37–45.
- Farnan JM, Johnson JK, Metzler DO, et al. Strategies for effective on-call supervision for internal medicine residents: the superb/safety model. *J Grad Med Educ*. 2010;2(1):46–52.
- Nembhard I, Edmondson A. Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *J Org Behav*. 2006;27:941–966.
- Neumann JA, Forsyth D. Teaching in the affective domain for institutional values. *J Contin Educ Nurs*. 2008;39(6):248–252.
- Ross JM, Stanley IM. A system of affective learning behaviours for medical education. *Fam Pract*. 1985;2(4):213–218.
- Joint Commission on the Accreditation of Healthcare Organizations. Sentinel event alert: Leadership commitment to safety. 2009. http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_43.htm. Accessed January 29, 2010.
- Institute for Health Care Improvement. The hospital at night program: reducing risks at our most vulnerable time of the day. <http://www.ihc.org/IHI/Topics/PatientSafety/SafetyGeneral/>

- ImprovementStories/HospitalatNightProgram.htm. Accessed January 28, 2010.
- 21 Institute for Health Care Improvement. What happened to Josie. <http://www.ihc.org/IHI/Programs/IHIOpenSchool/WhatHappenedtoJosieKing.htm>. Accessed January 29, 2010.
 - 22 Jasti H, Sheth H, Verrico M, et al. Assessing patient safety culture of internal medicine housestaff in an academic teaching hospital. *J Grad Med Educ*. 2009;1:1–12.
 - 23 Philibert I. Use of strategies from high-reliability organisations to the patient hand-off by resident physicians: practical implications. *Qual Saf Health Care*. 2009;18(4):261–266.
 - 24 Gunderman R, Kanter SL. Perspective: educating physicians to lead hospitals. *Acad Med*. 2009;84(10):1348–1351.
 - 25 Denham CR, Dingman J, Foley M, et al. Are you listening...are you really listening? *J Pat Safety*. 2008;4:148–161.
 - 26 Denham CR. Are you infected? *J Pat Safety*. 2009;5(3):188–196.