Morbidity and Mortality Conferences: Change You Can Believe In?

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In this issue of the *Journal of Graduate Medical Education*, Gonzalo and colleagues compare the content of their institution's Department of Medicine morbidity and mortality conferences (MMCs) in 1999–2000 with MMCs in 2010–2011.¹ Use of audio recordings from the conferences made it possible to make direct comparisons of the content and style of conferences. The researchers sought to determine whether systems-based practice (SBP) content and presentation of adverse events and errors occurred to a greater degree in 2010–2011 MMCs compared with conferences held in 1999–2000. The authors concluded that over the past decade, MMCs in their setting had transformed to include more extensive discussion of SBP-related content and adverse events. Why is this an important question?

The importance of systems errors is a central message of the 1999 Institute of Medicine's *To Err is Human: Building a Safer Health System*.² In addition, SBP has been a core competency requirement of the Accreditation Council for Graduate Medical Education (ACGME) since 1999. The ACGME expects residents to participate in identifying system errors and implementing potential systems solutions.³ Although the ACGME does not specify how to accomplish this aim, a number of studies^{4–7} have offered that the MMC is a natural forum to teach residents this important competency. Thus, it is important that this conference be studied to assess whether it is meeting a regulatory mandate to teach SBP. However, having an MMC is not an ACGME requirement for internal medicine (IM) residency programs, and not all IM residency programs use this forum to discuss quality and safety problems in patient care.⁸

Perhaps more importantly, the presentation and discussion of adverse events and errors are critical for emerging physicians, since they will witness and commit many errors during their professional careers. How well these errors are managed by the professional group and on a personal level can determine whether a resident or practicing physician adopts constructive or defensive responses.⁹ When evaluated, MMCs have varied greatly in

the presentation and discussion of adverse events and errors. For example, in a 2000–2001 study¹⁰ of 2 academic institutions, an IM resident could expect to hear, on average, 21 discussions of an error during his or her residency (13 of which occurred on IM service), whereas a surgery resident could expect to hear 132 such discussions during the same time period (117 of which actually occurred on the surgery service). These variations raised the question of whether some residents are not learning important skills for managing errors and whether the culture of IM still “seems to have no place for its errors.”¹¹

So, has anything changed in IM MMCs in the decade since the ACGME identified the importance of SBP and the Institute of Medicine highlighted the importance of medical errors and the need for increased reporting and systematic improvement? The findings of Gonzalo and colleagues merit cautious optimism that things may be moving in the right direction.

There are reasons to be cautious about the authors' conclusion. The first has to do with bias. The 2 raters who analyzed the recordings for 30 MMCs in each time period for the presence of SBP content and whether adverse events and errors were presented were not blinded to the study hypothesis or the years evaluated, potentially introducing significant bias in the study results. A study design with reviewers blinded to the research question and the time periods studied would increase our confidence in the validity of the results.

The second concern has to do with the significance of the SBP comments that the authors identified. The authors categorized the spoken language of the MMCs according to whether it was scripted language (usually limited to case presentation information) or nonscripted language. All nonscripted language was further characterized as questions or comments that were SBP related or not. The source of the questions or comments was also noted.

The main results are that the fraction of all nonscripted language that was recorded as systems related was higher in 2010–2011 than in 1999–2000. For example, the fraction of faculty questions and comments that was systems-related increased from 1% and 4%, to 19% and 44%, respectively. What's missing is a measure of the significance of these comments. It would be useful to know the number of utterances that form the denominator of these measures. For faculty, 44% of comments in 2010–2011 were systems related. If the total number of faculty comments averaged

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DOI: <http://dx.doi.org/10.4300/JGME-D-12-00252.1>

10 per MMC, 4.4 were systems related. This is certainly an improvement over the 0.4 comments that were systems related in 1999–2000 (assuming the same average number of faculty comments), but is it a noticeable signal amid the other comments and questions and scripted language that are uttered in an MMC? In addition, we have no sense of whether these comments are then used to teach learners how to identify, prioritize, and address systems failures or left to wither without further discussion. A measure of the time spent discussing systems-related issues may give a better sense of whether systems-related issues are raised as an integral aspect of the MMC or to superficially meet an ACGME competency.

Third, although the presentation and explicit discussion of adverse events and errors increased over the decade, we still cannot conclude that learners are exposed to successful strategies to personally manage adverse events and errors. For example, after making an error, residents who discuss the error with colleagues are more likely to adopt constructive practice changes.⁹ Also, disclosing one's own experience of errors can reduce a colleague's sense of isolation after he or she has made an error.¹² However, when examined a decade ago, faculty acknowledged having made an error during a discussion of a case with an error only 6% of the time in IM MMCs and 25% of the time in surgery MMCs.¹⁰ Whether faculty are currently serving as useful role models in this regard is an open question that should be considered in future research.

Optimism springs from the finding that Departments of Medicine may have found a place for the discussion of errors in MMCs. Whether or not presenting 26 adverse event and 13 medical error discussions a year is adequate, it is an improvement on previous estimates of the frequency of these discussions in IM MMCs. Creating a safe setting to do so is a necessary first step and may increase error reporting. Our aim should be to move from individual

blame to seeing errors as signals of an imperfect system that requires improvement. The steps involved in creating this improvement should be made transparent to learners at all levels to promote SBP learning. Thus, incorporating residents into their hospital's quality improvement apparatus as Gonzalo and colleagues describe is an important advance that will further promote resident exposure to SBP and how to create system change. Finally, the authors' attention to MMC's potential for playing a leading role in both SBP education and how to personally manage adverse events and errors highlights a positive opportunity for American graduate medical education.

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