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Discussion

Presenter: Dr Kimberly Shemanski

Dr Virginia R. Litle *(Boston, Mass)*. I am excited that you are bringing a novel area of presentation to the sessions because usually it's all just a lot of clinical work. Thank you for bringing something new that will be applicable and of interest to all subspecialties.

The purpose of clinical guidelines as you know is to provide a roadmap to safety and assist clinicians in navigating a potentially tortuous or changing road. Guideline development has evolved beyond just a small panel of experts without the use of a systematic review as it was 40 years ago to use research evidence that resulted in multiple different approaches. Approximately 20 years ago, to reduce bias, came the application of the GRADE system, which is grading a recommendation, assessment, development, evaluation. The Institute of Medicine provided these criteria for trustworthy guidelines.

There are different kinds of guidelines for cardiothoracic surgeons depending on the clinical question, but with respect to the NCCN guidelines, which was your apparent focus, not all content is derived from a retrospective database. So, how can the conclusions in your study be tempered to reflect this fact?

Dr Kimberly Shemanski *(Los Angeles, Calif)*. You bring it up a couple of great points for discussion. We didn't have a lot of time to delve into the interview script here, but the interview questions specifically asked about the NCCN guidelines, which is why the hypotheses generated by this study refer to perceptions about that particular set of guidelines.

Additionally, the phrasing of the questions very pointedly differentiated between guidelines and retrospective database analyses. So the themes about one are not meant to be applicable to the other. The participants actually provided a lot more commentary on HSR than guidelines and the distribution of the themes reflects that, with themes 1 through 4 applying to HSR and theme 5 applying to guidelines.

You bring up an interesting point that not all of the content in the NCCN guidelines is from retrospective database analyses, but as we pointed out earlier, retrospective database analyses comprise a lot of surgical literature, so it's unclear how much HSR contributes to guideline formation and it appears that physicians have mixed perceptions of HSR and guidelines. So when you take those 2 things together, you start questioning how much of an impact the bulk of what we publish really has on clinical practice. I should clarify that when I said they had mixed perceptions, it was anywhere from people questioning whether the guidelines matter because it's not clear that anyone follows them, to calling them lovely and saying that they are very well thought out and they pull them up with every patient in their clinic. So I think the main point is that there's a lot of disconnect in a lot of places that just requires further evaluation.

Dr Litle. It is great that you're trying to educate the surgeons about HSR. My second question is, 6 of 27 interviewees did not attend a weekly tumor board and NCCN guidelines are typically applied in that group format discussion. How did this 22% of the sample not cause selection bias on your results?

Dr Shemanski. This is a fair question because as surgeons we're used to evaluating quantitative data, which relies pretty heavily on a statistical argument, but qualitative data are a little different in the sense that what we're really looking for is thematic saturation, which is essentially when participants' responses become redundant to the point that new participants don't introduce any additional themes. So exact numbers and percentages are a little less relevant with qualitative research; what's more important is what's being said and how that's being echoed by other participants.

Additionally, we didn't have providers specify where they were using the guidelines, whether that was tumor board or elsewhere, and some providers actually volunteered that where they use a lot of their guidelines are actually in clinic to assist with shared decision-making.

So it's difficult for us to comment on how tumor board attendance may or may not have biased perceptions of the guidelines, but the one thing that we can say from all of this is that a lot of studies have suggested that there is a relationship between guideline-concordant care and improved patient survival.

Given this study, guideline use remains pretty controversial and it's important for us to understand why providers may stray from the guidelines, and when they do, how to fix that. And most importantly, how to present new research and new information so that it's impacting clinical practice.