

Patient Safety Tip of the Week

June 28, 2016

Culture of Safety and Catheter-Associated Infections

A study recently published garnered lots of national headlines implying that we don't need to change our culture to improve outcomes. While we can't speak for the authors of that study, we don't think the headlines generated were what they intended.

University of Michigan researchers ([Meddings 2016](#)) looked at responses on the Hospital Survey on Patient Safety Culture (HSOPS) survey at hospitals participating in two prospective cohort studies from acute-care intensive care units (ICUs) and non-ICUs participating in the AHRQ CLABSI and CAUTI collaboratives, including one ([Saint 2016](#)) we've highlighted in our July 2016 What's New in the Patient Safety World column "[Holy Moly, My Patient has a Foley!](#)". Among responding units, infection rates declined over the project periods, by 47% for CLABSI and 23% for CAUTI. But Meddings and colleagues found no correlation between the CLABSI and CAUTI rates at these units and the HSOPS measures either at baseline or at one year. Those results were contrary to the authors' hypothesis that the improvements seen would correlate with scores indicating a culture of safety as measured by HSOPS.

Meddings et al. conclude their results show one of two possible things:

1. The reduction in infection rates seen was due primarily to such components as standardization of techniques and procedures, independent of changes in culture or
2. Changes in culture that were pertinent to improvement in infection rates did occur but were not adequately accounted for by the HSOPS tool

The implications are significant. If the former is true, many projects could be streamlined by eliminating many of the time and other resources put into developing a culture of safety. If the latter is true, time could also be saved by eliminating a measure that is also time-consuming and adds little value.

Yes, you can use constraints or forcing functions to promote use of standardized techniques and procedures (for example, requiring completion of a checklist before a central venous catheter kit can be opened). But if you don't get buy-in from most physician and nursing staff that the standardized techniques and procedures are the right thing to do to improve patient safety, your likelihood of success will be diminished.

Note that we have stressed over and over that, in our opinion, the primary reason we've failed to significantly improve patient safety has been our inability to develop a culture of safety in our organizations. You've heard us use the phrase "culture trumps _____" (fill in the blank with words like policy, procedure, strategy, tactics, vision, etc). In fact, "**Culture trumps...Everything!**". When we do root cause analyses (RCA's) on cases with adverse outcomes we very often find that the culture of the unit tolerated workarounds or shortcuts or was such that it discouraged healthcare workers from speaking up when they knew something was wrong. We have wholeheartedly agreed with John Nance's view that the reason healthcare has not achieved the results that the aviation industry has attained in safety is that healthcare has failed to change our culture (see our June 2, 2009 Patient Safety Tip of the Week "[Why Hospitals Should Fly...John Nance Nails It!](#)" and our January 2011 What's New in the Patient Safety World column "[No Improvement in Patient Safety: Why Not?](#)").

And "failure to embrace a culture of safety" made the most recent ECRI Institute's Top Ten Patient Safety Concerns for 2016 (see our May 2016 What's New in the Patient Safety World column "[ECRI Institute's Top Ten Patient Safety Concerns for 2016](#)").

And all the good work done at Johns Hopkins and the Michigan Keystone Collaborative utilizing CUSP's (Comprehensive Unit-based Safety Programs) has emphasized the importance of culture at the unit level (see our March 2011 What's New in the Patient Safety World column "[Michigan ICU Collaborative Wins Big](#)"). In fact, CUSP principles were a key component of the two national collaboratives in the current Meddings study.

So does the recent Michigan study really mean you don't have to change organizational culture to effect improvement and you should abandon your efforts to develop a culture of safety? Or does it just mean that the tools used to "measure" culture are not very useful. We'll opt for the latter explanation. We've never been fans of the variety of "culture" surveys that are widely used. When applied to assess the "culture" of an organization as a whole they can be terribly misleading. Culture at the unit level is much more important. All the surveys out there tend to show the same thing: physicians and administrators all have a more positive view of the "organizational culture" than do nurses and other frontline personnel. And the culture often varies dramatically from unit to unit. And people often respond to such surveys with the answers they think you want to hear rather than what they actually think, even when the surveys are "anonymous".

We've always found that you get a much better feel for the "culture" of a unit on your **Patient Safety Walk Rounds** than you get from any formal survey. When you have direct interaction with frontline staff in an informal and non-punitive fashion, they are more likely to be forthcoming and point out potential vulnerabilities that they might not when responding to a formal survey or questionnaire. Our October 7, 2014 Patient Safety Tip of the Week "[Our Take on Patient Safety Walk Rounds](#)" discusses in detail how you can make such rounds valuable and help improve your culture of safety (and also warns how you can misuse such rounds to be detrimental in promoting a culture of safety!).

Where we do concur with Meddings et al. is that using HSOPS responses in large quality improvement collaboratives is time-consuming and may add little value. It should be noted that in the Meddings study HSOPS response rates were low overall, 24% for the CLABSI collaborative and 43% for the CAUTI collaborative. Those low rates of response may well reflect that participants found HSOPS to be time-consuming and they gave little importance to its inclusion in the projects. We really doubt that the authors would recommend eliminating use of the CUSP principles from such projects. Rather, we concur with the second theory espoused by Meddings et al. that HSOPS was not designed to provide a valid measure of safety culture impacting care at the bedside. Meddings et al. also point out that safety culture can be very difficult to measure over time, particularly since changes in staffing and resources and competing priorities commonly occur during the timeframes of such measurement. If you are going to eliminate anything from such quality improvement projects, take out the culture surveys.

So beware of media headlines that seem to imply that safety culture may not be so important.

Some of our prior columns related to the “culture of safety”:

April 2009	“New Patient Safety Culture Assessments”
June 2, 2009	“Why Hospitals Should Fly...John Nance Nails It!”
January 2011	“No Improvement in Patient Safety: Why Not?”
March 2011	“Michigan ICU Collaborative Wins Big”).
March 29, 2011	“The Silent Treatment: A Dose of Reality”
May 24, 2011	“Hand Hygiene Resources”
March 2012	“Human Factors and Operating Room Safety”
July 2012	“A Culture of Disrespect”
July 2013	““Bad Apples” Back In?”
July 22, 2014	“More on Operating Room Briefings and Debriefings”
October 7, 2014	“Our Take on Patient Safety Walk Rounds”
July 7, 2015	“Medical Staff Risk Issues”
September 22, 2015	“The Cost of Being Rude”
May 2016	“ECRI Institute’s Top Ten Patient Safety Concerns for 2016”

References:

Meddings J, Reichert H, Greene MT, et al. Evaluation of the association between Hospital Survey on Patient Safety Culture (HSOPS) measures and catheter-associated infections: results of two national collaboratives. *BMJ Qual Saf* 2016; Published Online First 24 May 2016
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