In hospitals, a tradeoff between better clinical quality and a good patient experience

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Hospitals that adopt strategies to reduce errors and meet government requirements face an initial tradeoff between improved clinical quality and a decline in the quality of individual patients' experiences, according to new research.

Quality process management, a practice associated with the private sector, is becoming more common in hospitals as they set up operating systems in response to federal and state mandates to reduce medical errors and improve patient safety, the researchers say.

The Ohio State University researchers weren't surprised to find that the implementation of these techniques led to improved clinical outcomes. But finding that these improvements sometimes came at the expense of the quality of the patient experience was unexpected. Also referred to as experiential quality, the quality of the patient experience is gauged by how patients perceive their personal interactions with health-care providers.

"Clinical quality is about doing things correctly – strict guidelines, standardization and checklists, for example – so when you consider experiential quality is about customizing health-care delivery to an individual patient's needs, there is a tension there," said Aravind Chandrasekaran, assistant professor of management sciences at Ohio State and lead author of the study.

How might this tension play out? The authors describe a case in which

clinical quality guidelines recommend a beta blocker prescription for patients who have had a heart attack, but offer no suggestions for how to effectively relay that information to a patient. So the hospital gets a good mark for prescribing the drug, but a patient may not understand the instructions and possibly won't even fill the prescription.

Chandrasekaran and colleagues assert that setting up standardized quality management systems is the most effective way for hospitals to meet state and federal mandates geared toward patient safety. Quality process management entails a systematic approach to map, improve and adhere to given sets of guidelines with a goal to minimize an organization's variation in its processes.

"Hospitals need a structured approach to doing things correctly and they need to collect data to measure their progress. Unless they are doing that, they're not going to learn anything," Chandrasekaran said. "But we don't want to lose sight of the patients, who are often treated as commodities these days. We feel it would be helpful for government officials to introduce legislation that has a dual emphasis on patient safety and patient-centered health care to reduce the chances for this tradeoff in the first place."

He conducted the research with co-authors Kenneth Boyer, professor of operations management, and Claire Senot, a management sciences graduate student, both at Ohio State. The research appears online and is scheduled for future print publication in the journal *Manufacturing & Service Operations Management.*

Federal and state regulations in health care have become more stringent since 1999, when the Institute of Medicine released a milestone report stating that almost 100,000 people died every year as a result of preventable medical errors in U.S. hospitals.

In a move toward standardization, the U.S. Centers for Medicare and Medicaid Services (CMS) in 2003 issued hospital care guidelines related to four health conditions: heart attack, heart failure, pneumonia and surgical care. CMS requires hospitals to report their care practices with these types of cases, and has provided financial incentives to hospitals that are best at adhering to the standards of care outlined in these guidelines.

In addition, many states have passed patient-safety legislation calling for reductions in hospital-acquired infections, also beginning in 2003. In the study, the researchers used this legislation as an example of state leadership focused on improving clinical quality.

These regulations have led many hospitals to adopt quality process management practices to improve their clinical outcomes as quickly as possible. The current study supported previous findings by Boyer that showed that a legislative mandate's reinforcement of federal guidelines can accelerate hospitals' progress toward improved clinical quality.

"What gets watched gets better," Boyer said. "There is no doubt that passing these laws raised clinical quality levels in hospitals."

But the researchers also wanted to examine what happened to the patient experience as hospitals focused on new techniques to improve their clinical quality. To determine these relationships, they analyzed four sources of data: a survey of 284 acute care hospitals in 44 states; CMS clinical quality scores publicly reported between April 2009 and March 2010; state legislative mandates for reduced hospital-acquired infections passed between 2003 and 2008 in a portion of those 44 surveyed states; and April 2009-March 2010 reports from the Hospital Consumer Assessment of Healthcare Providers and Systems survey as a measure of patient experience quality.

Directors of quality or chief nursing officers at 284 hospitals in 44 states were surveyed to determine how extensively respondents were using a data-driven, quality management system to design operations and train staff with the goal of adhering to CMS guidelines. Additional questions examined the leadership style and culture of each hospital.

The analysis showed that a focus on quality process management was simultaneously associated with an increase in clinical quality as reported by hospitals and a decrease in the quality of the patient experience as reported by patients. State legislative mandates to improve patient safety initially reinforced this tradeoff. However, the earlier these laws were passed, the sooner hospital environments adjusted to operational changes so they could improve the patient experience as well.

"Legislation encourages hospitals to improve clinical quality, which in the short run can lead to taking one step backward on patient experience quality," Chandrasekaran said. "In the long run, getting better at clinical quality – doing the right thing – frees up resources and leads to two steps forward on the patient experience as well."

When the researchers dug deeper into the survey data about hospital leaders' traits, they found that patient-focused leadership could soften the negative association between quality process management and experiential quality, allowing hospitals to excel in both areas.

"When leaders were more patient-centric, our analysis showed that they were able to overcome that tension between clinical quality and the quality of the patient experience," Chandrasekaran said. "Leaders have to be thinking about patients when they design their operations. That way they can cater many of their design principles to individual patients."

Hospitals also commonly survey patients after their stays to gauge their satisfaction with their care. These surveys collect information about

patients' overall impression of their care and whether they would return to the hospital or recommend its services to friends and family.

The researchers found that while there is no direct correlation between clinical quality and patient satisfaction, the analysis did suggest that in hospitals with high levels of experiential quality, there was also a positive relationship between clinical quality and patient satisfaction.

"This suggests that patients are able to understand and appreciate the standardization in hospitals if they experience better levels of communication during their care. In other words, treating patients well enables them to better perceive when they are getting the 'correct' clinical care," Chandrasekaran said.

This research group is continuing its studies of the benefits of patient-centered care. Chandrasekaran noted that CMS is scheduled to begin offering financial incentives to hospitals that score well on patients' experiential quality scores in October.

"We think that is good, because having a one-two punch of financial incentives for clinical as well as patient-centered care from a governing body is going to encourage hospitals to perform well on both of those dimensions," he said.

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