LISTS THAT WORK

The Healthcare Leader's Role in Implementation

By Susan Birk

"Knowledge has both saved us and burdened us," Atul Gawande, MD, professor of surgery at Harvard Medical School, writes in his best-seller *The Checklist Manifesto: How to Get Things Right*. The proliferation of scientific advances that has led to thousands of new procedures and medications has saved lives and improved health, but has also created a staggering complexity in healthcare that challenges even the most highly trained clinician. As Gawande says, "Getting the steps right is proving brutally hard, even if you know them." Even in comparatively simple procedures, basic steps can be forgotten.

People make mistakes, and in healthcare, mistakes can cause harm and death. Preventable medical errors lead to an estimated 98,000 deaths yearly according to the Institute of Medicine's landmark 1999 report *To Err is Human: Building a Safer Health System.* It's a reality providers grapple with daily.

Increasingly, they're tackling the problem with checklists: distillations of processes into straightforward reminders of critical steps and safeguards that are quickly becoming a patient safety stalwart.

Employed for decades in aviation, skyscraper construction and other high-reliability industries to ensure unfaltering adherence to proven safety protocols and prevent catastrophes, checklists have finally begun transforming healthcare as well. Though still challenged by some, their value in reducing medical errors is becoming hard to deny, says Harvey V. Fineberg, MD, PhD, president of the Institute of Medicine, Washington, D.C.

"There have been some egregious errors in medicine, and these simple checklists can help eliminate those errors," Fineberg says. "The high-reliability approach is producing some important, concrete gains." The trial of a protocol for the

insertion of central venous catheters, for example, has yielded a 40 percent reduction in central line-associated bloodstream infections, he noted. "Used properly, the checklist improves performance at the time the line is inserted, reducing the frequency of infections," he says. The surgery safety checklist developed by Gawande and his colleagues for the World Health Organization's Safe Surgery Saves Lives program has shown similar value.

Other checklists are helping hospitals reduce errors and improve safety. The Joint Commission requires the checklist-based Universal Protocol for Preventing Wrong Site, Wrong Procedure and Wrong Person Surgery by providers seeking accreditation. Checklists are helping caregivers decrease the incidence of ventilator-associated pneumonia, pressure ulcers and other preventable complications. The American Board of Internal Medicine Foundation has launched a list-based initiative called Choosing Wisely to enhance safety and reduce costs by promoting the more judicious use of certain procedures.

Don Goldmann, MD, senior vice president of the Institute for Healthcare Improvement, Cambridge, Mass., believes checklists, bundles and standing order sets are the three most useful approaches to improving evidence-based practice at the point of care. "These work most efficiently when they are incorporated into care pathways so that they can be acted upon at the point in time when they are needed," he says.

He points to checklists as a significant component of an emerging quality improvement landscape that uses multiple levers to align practice more closely with evidence. "Central catheter infections are declining dramatically," he says. "Why is that? We have good evidence from healthcare epidemiology research about what works to reduce risk. We've put that evidence into checklists and bundles that are relatively easy to use and understand. We're emphasizing the importance of inter-professional teams and peer norms. And we have important regional and national implementation programs [such as Agency for Healthcare Research and Quality-sponsored initiatives and the Centers for Medicare and Medicaid Services Partnership for Patients]; clear, practical guidelines from professional societies and the Centers for Disease Control and Prevention; public reporting in many states; and pay for performance requirements from CMS and other payors [albeit research on payment incentives hasn't yet detected any impact]. When all of these efforts line up, it's easier and quicker to make change."

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Still, change can be a challenge, even when checklists are involved, Goldmann says. For example, the Choosing Wisely lists are helpful, but they are only a starting point.

"Almost anybody who's trying to improve care pathways is concerned about these issues," he says. "But a lot of physicians have a pattern of behavior and work in a system that doesn't necessarily support doing the most cost-effective thing."

For these decision aids to drive adoption of best practices, "physicians must have the skills and willingness to have discussions with patients, because a patient may not think it's a good guideline or that it meets his or

her own needs and desires," he says. "There are all kinds of values, preferences and lifestyle issues over and above the guidelines."

However, Goldmann believes healthcare executives should be acutely aware of what is on the Choosing Wisely lists, work with their clinical leaders to be sure the medical staff are aware of them and monitor to see how often physicians are prescribing the tests. "We want to learn, not just blindly apply these guidelines," he stresses. "And executives can create a culture in which looking at variation in practice among physicians and respecting evidence is rewarded and celebrated."

Health reform may spur greater acceptance and application of checklists by hospitals and health systems, notes Fineberg. "As we move increasingly to payment models that do not reward extra services, readmissions or errors, and that do reward for doing the right thing the first time, every time, healthcare providers may have additional incentives to apply this approach even beyond the obvious benefits to patients," he says.

And as CEOs and senior executives become increasingly immersed in safety issues and in building a culture of safety in their organizations, they will inevitably learn to champion the use of checklists as well.

University of Washington Medical Center, Seattle

It's safe to say that the University of Washington Medical Center, Seattle, has embraced the checklist. The 450-bed medical center helped pilot the surgery safety checklist developed by Gawande, and with the leadership of E. Patchen Dellinger, MD, led the development of the Surgical Checklist that is the cornerstone of the Surgical Care and Outcomes Assessment Program, a statewide initiative spearheaded by the Foundation for Health Care Quality, Seattle.

UWMC also participates in the AHRQ-funded Surgical Unit Safety Program, which uses checklists to improve surgical outcomes; employs the ProvenCare checklist-based protocol developed by Geisinger Health System for patients with operable lung cancer; and is commencing Choosing Wisely.

"As leaders, it is our responsibility to set the tone for all staff that safety and quality are central to everything we do for our patients and their families, and safety checklists are powerful tools that standardize processes facilitating quality patient care," says Stephen P. Zieniewicz, FACHE, executive director at UWMC.

Zieniewicz believes healthcare leaders are responsible for fostering the culture of safety that makes safety improvements possible, including the adoption of checklists. To build that culture at UWMC, he employs a strategy that blends high personal visibility around safety, active participation in safety initiatives, efforts to "socialize" safety at every level of the organization and intentional focus on specific problems.

"The CEO has to demonstrate that he or she is dissatisfied with the status quo," Zieniewicz says. "It's a matter of talking about it, looking at best practices and challenging our teams to be the best." For Zieniewicz, that means participating in quality and safety meetings at UWMC, the UW Medicine Health System and at the Washington State Hospital

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Association; taking board members on patient safety rounds; appearing in the medical center's "gel in, gel out" hand washing campaign posters and videos; producing video leadership messages recognizing safety and checklist successes on his intranet page; and spending one day each year shadowing a new resident to deepen his understanding of safety issues by seeing patient care through a doctor's eyes.

It also means taking the lead in translating safety statistics and abstractions into human terms. "As a leader, one of my roles in the success of the implementation of a list is to continually bring the team's focus back to the fact that the safety numbers represent a patient's life," he says. Toward that end, he begins each meeting with a safety-related patient story, and a weekly "harm report" is distributed to keep staff focused on the fact that their jobs are about the integrity of human life. Zieniewicz encourages patient and family advisors to be active participants on quality and safety initiatives and asks that their personal stories guide the work of the team.

Zieniewicz also participates in implementation, which is why, for example, he carries and shows the credit card-sized copy of the medical center's new five-step sepsis stabilization protocol when appropriate and displays the SCOAP Surgical Checklist and the Central Venous Catheter Safety Checklist in his office.

Temple University Health System

The introduction of a new checklist holds more sway for staff when the "selling" of the safety measure comes from the CEO, says Sherry Mazer, FACHE, corporate regulatory officer at Temple University Health System, Philadelphia. "CEOs are the ultimate champions, so they have to be out there letting the organization know that the checklist is important to them. That has to be their mantra because everything they ask their teams to do is about improving quality and safety and reducing errors," she says.

Checklists also are more likely to win buy in from stakeholders and become automatic and integral components of workflow patterns if they have a clinical champion who may be an unofficial leader with standing and influence among his or her peers, says Mazer, who is a board member of the National Association for Healthcare Quality. These individuals often have more of the credibility needed to change attitudes and practices and bring a checklist to fruition than those with official titles because they are respected as true believers in the cause.

"You need thought leaders who are passionate about the subject matter at hand," Mazer says.

A checklist also needs a strong facilitator who can lead the team in developing and implementing the protocol, Mazer adds. "But don't reinvent the wheel. Most of the information on specific checklists is already out there. Contact your professional organizations and colleagues in other institutions. Do the Internet searches. Take what another organization has done and customize it. But if you do borrow something, make sure you understand each of the items on the checklist. You need to be able to

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define each step and how it relates to your organization," she says.

As a leader whose responsibilities include overseeing teams involved in checklist development and implementation, Mazer takes ownership of the initiative with the CEO or another senior leader, sets budgets and timelines, and then packages it so the leader can present it to the champion and team. "A personal invitation directly from the CEO carries a lot of weight," Mazer says.

Mazer employs tracer methodology to assess a unit's documentation of checklist implementation and monitors readiness for an accreditation survey. This work has shown her that "one of the most important things to remember about a checklist is that it's not just a matter of putting the checkmark in the box; it's a matter of understanding what that checkmark means from a quality and safety perspective. As an example, the staff needs to know that it's not only about having an informed consent on the chart, but it's also about having an informed consent that's completed correctly."

One of the biggest challenges with checklist implementation is motivating staff to change their behaviors over the long haul. "You've got to keep homing in, reinforcing the message, and clarifying with case studies and simulations to make sure you have inter-rater reliability. When a checklist says to elevate the head of the bed to 90 degrees, you need to make sure that everyone knows what 90 degrees means and that you've observed everyone doing it," she says.

A frequently-overlooked component of checklist rollouts is the celebration, adds Mazer. "Once the checklist is in place and it's been working for a couple of months, you need to recognize the team's efforts and throw a spotlight on the gains they've achieved. You may not be able to see measurable results right away, but there is always something to celebrate. Applaud those wins no matter how little they are."

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Cleveland Clinic

As clinicians and caregivers rely increasingly on technology and automation, basic but essential steps can be taken for granted, notes Anthony Warmuth, FACHE, CPHQ, administrative director of quality and patient safety at Cleveland Clinic. Complacency is a recipe for errors that the medical center and its community hospitals combat in large part with the use of evidence-based checklists.

"In many cases, checklists are about getting back to those basics that everyone agrees on and making sure we have them hardwired into our processes so they're not forgotten. It's about making the right thing to do the simple thing to do," he says. "We're always looking for new ways to incorporate that checklist approach into our processes."

That penchant led Cleveland Clinic to become an early adopter of the WHO surgery safety checklist. It also has led to the implementation of numerous checklists at the bedside, including the protocol for reducing central line-associated bloodstream infections and an expanded version of The Joint Commission's Universal Protocol. "We wanted to take things beyond the regulatory requirements and leverage them in an optimal way," Warmuth says.

Components of the expanded protocol include checklist-based sign-in and sign-out processes involving the entire care team. These extra measures ensure, among other things, that the right materials and equipment are on hand before the procedure begins and that everyone agrees, before they leave the room when the procedure is over, on the postoperative management issues that need to be addressed.

As a healthcare leader charged with winning support for checklist implementations, Warmuth has found that engaging clinicians early and researching the literature to show the opportunities an initiative will afford to advance the science on a process go a long way to bringing clinicians on board.

"Though all of these measures have a huge impact on our bottom line, it's not just about saving the resources that go into managing these complications; it's about the patient's life," he says. "Framing it that way resonates much more with our providers than the associated dollars. It comes down to aligning the initiative with what motivates them, and what motivates them is great patient care."

According to Warmuth, one of the most important things healthcare leaders can do to ensure a successful checklist rollout is to eliminate barriers by providing a safe place to implement new practices. "How do we show that we support them as they take time out of their productive hours? It's a matter of communicating that this is a priority for us and that we're here to partner with you and give you the flexibility and the tools you need," he says.

"It's easy to make a checklist and say you need to start using this on Monday," Warmuth adds. "What it's really about is giving people a chance to practice it and get good at it. Because in order to be effective that checklist has to become second nature. How do we execute it, educate the right people and put the necessary supports in place so it can be sustained?"

It's also a matter of understanding and helping to mitigate the impact of workflow changes, he says. For example, Warmuth and his staff have provided scripting to help caregivers respond to patients' questions, e.g., "Why are you writing on my knee?" and developed alternatives, such as an orange wrist band, to determine laterality for patients who don't want a body part marked.

Almost all checklists are pilot tested in a single unit to identify and address barriers before they're rolled out institutionwide. "But you don't want a pilot project to go on indefinitely because you lose momentum or forget what is at the core of the implementation," he says. "You need to evaluate and make changes early. If it's working, it's in patients' best interest to spread those changes as soon as possible."

Cleveland Clinic also makes frequent use of simulations to work out any kinks in advance and actively solicits patient involvement and feedback. "The message isn't that we've had errors with these types of events, it's that we want to make sure we're doing everything we can to make this safe," Warmuth says. "In a lot of ways this makes patients more confident, not less."

Susan Birk is a freelance writer based in Wheaton, Ill.

Editor's note: A November/December 2012 *Healthcare Executive* article titled "The Ethics of Avoiding Nonbeneficial Healthcare" by William A. Nelson, PhD, contains additional information about the Choosing Wisely campaign.

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