



Ensuring Healthcare Improvements Stick

Six key principles aid in continuous quality improvement.

By now, most healthcare leaders understand the importance of embedding quality improvement capability in their organizations. Hospital and health system leaders have hired QI experts, engaged consultants, trained their staffs and made improvement part of their mission.

Yet, at the Institute for Healthcare Improvement, too often we have found that improvements launched by healthcare organizations fail to stick after initial enthusiasm has waned. This failure may occur because managers are not given the tools, systems and support to sustain these improvements and transition from an improvement phase of work to a phase characterized by stable, predictable operations and a new level of performance. One of the founders of improvement science, Joseph Juran, referred to this state of stable operations as “quality control.”

Researchers at IHI have been working to identify and test the “active ingredients” that make for continuous improvement and continuous quality control at the front line in healthcare. We have identified a set of management principles, leadership practices, core competencies and mental models that all play a role in generating and sustaining improvement.

Principles Driving Sustained Improvement

Our work suggests that six key principles help ensure improvements are sustained over time or, as Juran would say, ensure quality control. We gleaned these principles from leading healthcare systems, including Virginia Mason Hospital & Seattle Medical Center in Washington, Intermountain Healthcare in Utah and Denver Health in Colorado. These health systems have developed markedly similar front-line management systems to ensure quality control.

First, teams at these organizations **standardize what makes sense**.

Impactful improvement projects become part of standard work, and standard work exists for all roles with respect to high-priority areas such as safety.

Second, teams **ensure accountability** to standard work by developing systems that promote routine review of standard work at every level of the organization. Front-line managers review execution of standard work; higher-level managers observe and coach the work of front-line managers.

Third, teams introduce **visual management** practices. Visual

management refers to the use of simple visual boards or walls where key measures of patient safety and patient satisfaction can be recorded to track the status of improvement work.

Fourth, staff have fluency with **problem-solving tools** such as the Toyota Production System’s A3 method and the Associates in Process Improvement’s Model for Improvement.

Fifth, for problems that cannot be resolved at the front line, staff have clear protocols and methods for **escalating problems** to the right level of management in the right time frame.

Sixth, leading healthcare organizations realize these principles at every level. We call this principle **integration**—alignment across levels of the organizational hierarchy, and across units and departments, around the goals and operations of the management system and the content of standard work.

Realizing These Principles

As part of the Agency for Healthcare Research and Quality’s Safety Program for Ambulatory Surgery, IHI worked with a small number of ambulatory surgery centers to test these principles and introduce

aligned practices such as daily department-level huddles, visual management boards and new policies to ensure appropriate escalation of safety issues.

The sites reported that these practices were effective in improving communication, empowering team members and creating structured opportunities for problem solving. One site reported a 10 percentage point increase in its AHRQ Ambulatory Surgery Center Survey on Patient Safety Culture scores after introducing these practices along with others from the AHRQ initiative. All the sites found that performing activities differently and better than in the past helped them discover and address problems, including the need for improved communication among departments

and between sites of care (e.g., doctor's office and ambulatory surgery center) and the need for reliable and consistent patient follow-up after discharge (e.g., post-discharge call-back consistency).

Team Capability and Team Culture

Through testing, we also learned that introducing new practices is not enough to adopt the six principles. Core leaders—those responsible for managing support departments and leading front-line clinical teams—must develop a management approach that builds their team members' skills in process improvement. These core leaders also need to shape team culture to make effective front-line management systems stick.

Building team capability increases the capacity for and rate of

improvement and reinforces the expectation that improvement is everyone's job, every day, and not just a one-off project. Building team capability encompasses four activities and methods. First, core leaders need strong coaching skills. Coaching grows staff members' skills so they can perform their own work and improve the work of others. This growth, in turn, accelerates organizational improvement and the achievement of operational control.

Second, leaders must optimize the use of all staff members by creating workflows that are clear, standardized and waste free and that use all staff at their highest level of training and experience. Third, effective communication must be practiced at all levels and within teams to establish priorities, provide feedback and ensure successful coordination of care and patient handoffs. And fourth, building team capability depends on leaders promoting respect and accountability.

If leaders give their staff time, tools, coaching and other support, including respect, they can expect staff to be accountable for performance. Without this support, assigning accountability to them becomes unreasonable.

For example, to build team capability, one ambulatory surgery site asked clinical staff to complete training in improvement methods through an affiliated health system. The site's leader noted that the daily huddle itself is an important instrument in building team capability because it offers an opportunity for

Shaping Team Culture: Core Leadership Behaviors

Key Leadership Behaviors	Description	Example
Vision and Will	Link organizational strategy directly to daily work, and build will through encouraging both the mind and the heart.	Reinforce organizational strategy through regular front-line rounding and interaction with point-of-care clinical staff, removing barriers and facilitating real-time problem solving. Align unit improvement priorities with overall organizational aims.
Modeling	Model the leadership and team behaviors you desire.	Routinely communicate that engaging patients in their care is important, and demonstrate this concept by routinely visiting patients, surfacing patient satisfaction or communication issues in real time and swiftly acting to resolve patient-related problems.
Mindfulness	Demonstrate an awareness of what is important and what might fail in daily actions and conversations.	Be an unrelenting advocate for patient safety, encouraging the use of checklists, critical thinking, daily huddles and situational awareness while keeping patients' desires at the center of the discussion.
Transparency	Promote transparency to build trust and accountability.	Use visual measurement, be open in communications about challenges and failures, use routine huddles and share why actions are taken, and celebrate successes.

coaching, gives all staff a role in identifying problems and solutions, encourages effective communication, and promotes respect and accountability among all staff by offering them a venue in which to raise their concerns and reflect on their daily work.

Shaping team culture often seems nebulous, but it need not be. On the basis of our experience during testing and our many years of working with healthcare systems, we have identified four leadership behaviors that shape team culture: vision and will, modeling, mindfulness, and transparency. For a summary of these elements, see the chart on page 68.

A Recipe for Sustained Improvement

In the short term, we have found that introducing an effective system to sustain improvement requires a focus on the six key principles, realized by implementation of practices such as daily communication huddles, visual management boards and clear protocols for escalating issues that arise at the front lines of care.

In the longer term, sustaining this management system requires engaging leadership at all levels—with attention to building core leader competency and a trusting, healthy, respectful culture where problem solving can occur openly and honestly. ▲



Mate



Rakover



Munch



Pugh

Kedar Mate, MD, is chief innovation and education officer, Institute for Healthcare Improvement (kmate@ihi.org). Jeff Rakover is a research associate at the

Institute for Healthcare Improvement (jrakover@ihi.org). Dave Munch, MD, is chief clinical officer for Healthcare Performance Partners (dmunch@hpp.bz). Michael Pugh, MD, is president of MdP Associates (michael@mdpassociates.com).