Avoiding Culture Shock: Using Behavior Change Theory to Implement Quality Improvement Programs

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Understanding how people react to change can help ease staff into quality improvement programs.

Change initiatives, such as quality improvement programs, are major undertakings. Depending on their scope, they can affect an organization's culture-the collective attitudes, experiences, and values that influence how decisions get made and work gets done. In those cases, success is usually greatest in organizations with a willingness to learn and adapt new practices.

Unfortunately, many institutions do not have the luxury of a culture that is ready-made to accept and extol the virtues of the oft-used phrase "transformational change." Can performance improvement programs succeed if an organization lacks a culture receptive to change?

Attempting to directly change an organization's culture can be tough, and it may breed animosity and dissent. It is easier to first change the environment (e.g., implement a component of an EHR system or introduce the use of evidence-based order sets) and provide useful skills and tools (e.g., use of tablet PCs at the bedside). Changing the environment often evokes changes in thinking and practice as new behaviors are adopted and old behaviors are left behind. Over time, the entire culture of an organization can change as initially intended, but gradually and without sudden disruption.

Understanding the underlying rationale and process whereby a person modifies his or her thinking and practice can help project leaders gain better insight into why people behave the way they do. This can help identify motivators for helping them adopt and maintain desired behaviors. It can also help direct project resources to areas where they are likely to have the greatest impact.

One promising approach is behavior change theory. Project teams can use well-documented behavioral change models like Stages of Change and the Theory of Planned Behavior to implement successful and sustainable quality initiatives.

Five Stages of Behavior Change

Stages of Change theory holds that individuals attempting to change a behavior progress through five phases. Assessing each stakeholder's stage helps identify motivators that can encourage their progression. An example of computerized physician order entry (CPOE) illustrates below.

Stage of Behavior Change	Representative Statements Made by Individuals	Needs Assessment, Opportunity for Motivators
Precontemplation Unaware of the behavior or has no intention of taking action in the next six months	"We don't need computerized physician order entry; our current system is just fine."	May need more education, peer pressure, increased incentives, and more engagement to consider adopting the behavior
Contemplation Intends to change behavior in the next six months, but barriers to taking action may still exist	"I think computerized physician order entry may be a good thing for us in the next six months, but it seems too expensive and difficult to implement."	May need additional information, tools, and other resources to help adopt the new behavior

	"We have started to look at the different CPOE systems that are available in the market, and we plan to implement in the next couple of months."	
Preparation Has started to make changes and plans to adopt the behavior in the immediate future	"Our CPOE system is going live at the end of the month." "I went to CPOE training last week and plan to start using it soon."	May need additional information, tools, and other resources to help adopt the new behavior
Action Has adopted the behavior	"We have started using CPOE in our office."	May be well suited to communicate best practices and serve as models for others
Maintenance Has adopted the behavior for at least six months	"We have been using CPOE for the last year and have 100 percent adoption by the physicians in our department."	May be well suited to communicate best practices and serve as models for others

Stages of Change Theory

Stages of Change theory is based on the idea that individuals, when attempting to change a behavior, progress along a continuum comprised of five phases: precontemplation, contemplation, preparation, action, and maintenance. By gauging where stakeholders are located along this continuum, project leaders are better able to identify the motivators that encourage behavior change (see the table "Five Stages of Behavior Change," above).

Take the example of an organization planning to introduce standardized order sets. Through surveys, interviews, and in-person discussions, the project team learns that the cardiologists at the facility haven't thought about standardizing their order sets. Each cardiologist uses his or her own set and is content. These physicians are in the precontemplation stage. They don't see a need for change.

The transition from precontemplation to contemplation is a difficult one. People who do not recognize a need to change are less likely to be willing to change behavior than people who are already considering it. In this situation, the project team would have more success implementing standardized order sets with a group of physicians who already recognize the benefits. These physicians would be in the contemplation stage, and when provided with the necessary information, resources (e.g., template order sets, best practices, the latest evidence and quality measures), and tools (e.g., content and process management systems), they will likely be ready and willing to adopt the new behavior.

Additionally, early adopters are often great project champions. They help convince others, through example and peer pressure, to adopt the desired behaviors. Identifying the groups most likely to spearhead change initiatives can help project leaders leverage the greatest amount of success for the least amount of effort.

Theory of Planned Behavior

Understanding a person's or a group's perceptions of and intention to change helps identify motivators and target strategies.

Perceived behavioral control: Belief concerning how easy or difficult performing the behavior will be
Behavioral outcome: What happens if the individual adopts this behavior?
Self-efficacy: The individual's perception that he or she will be able to perform a certain behavior successfully

Behavioral intention:

- Attitude and Beliefs: The degree to which the person has a favorable or unfavorable evaluation of the behavior
- Subjective norm: The perceived social pressure to perform the behavior
- Motivation to comply: Could include pay-for-performance and other incentives, including those which are nonmonetary

Theory of Planned Behavior

Theory of Planned Behavior (TPB) seeks to identify how and where to target strategies for changing behavior. It also can predict motivational influences on behavior. According to this theory, the most important determinant of a person's behavior is behavioral intention: a combination of his or her attitude or beliefs, perceived social pressure, and motivation or incentive. In addition, TPB seeks to understand how an individual perceives the difficulty of the change, its benefits, and his or her potential for success (see the table above).

TPB assumes that individuals are rational and make systematic use of the information available to them. It also posits that people consider the implications of their actions before they decide whether to engage in a given behavior. These assumptions do not always hold true within healthcare organizations; split-second, direct patient-care decisions are often made without the benefit of all available information, for example.

Therefore, applying TPB to change behavior within healthcare environments can be challenging, but when used in conjunction with the right tools, it can be rewarding. Information technology is one tool that can facilitate the use of the Theory of Planned Behavior by enabling the immediate, accurate flow of information to relevant parties (e.g., implementation of EHR components).

Strength of support for adoption of a particular behavior can be gauged by surveying stakeholders, as illustrated in the example "Testing Perceptions to Help Plan Change," [below]. The information obtained serves as a baseline, helping identify areas needing focus.

Findings may demonstrate a need for education about why a behavior is important. Or results may show there is a need to change the incentives used to increase motivation. Perhaps there is a need to address the barriers that are making adoption of this behavior difficult. Using TPB can provide a snapshot of an organization's culture and allow project leaders to home in on areas requiring refinement or improvement.

Testing Perceptions to Help Plan Change

In this example, a survey based on the Theory of Planned Behavior (TPB) gauges support for adopting a new initiative-standardized evidence-based order sets for admission of patients diagnosed with community acquired pneumonia (CAP). For each question, respondents would be asked to indicate their level of agreement from "strongly agree" to "strongly disagree."

TPB Element	Survey Statement
Attitude or beliefs	Using evidence-based order sets for CAP will improve the quality of care that I provide.
Subjective norm	My colleagues feel that using evidence-based order sets for CAP improves quality of care. I value and trust the opinion of these colleagues.
Motivation to comply	The pay-for-performance reimbursement and other incentives I receive from following the guidelines in the CAP order set are significant enough for me to participate.

Perceived behavioral control	I have the tools and skills that I need to start using the CAP order sets.
Behavioral outcome	If I use these standard order sets, CAP patients will have better health outcomes.
Self-efficacy	If I use these standard order sets, my job will be easier and more predictable.

Eight Steps to Organizational Behavior Change

An individual's or a group's intent and attitude toward change will govern the rate and overall acceptance of new quality initiatives. Success requires preparation. The following actions can be taken to create a clinical environment that is more receptive to quality improvement initiatives.

To be effective, these recommendations do not have to be applied facility-wide, initially. They can be focused on a single department, division, group, or groups who deal with a specific condition, such as pediatric asthma or coronary artery disease.

1. Know your place in the quality landscape.

Periodically reviewing your publicly reported data with organizations such as the Centers for Medicare and Medicaid Services and the Joint Commission can help document baseline measures and set quality targets and milestones. You can also take a look at local, regional, and national competitors to see how your scores stack up.

2. Understand your organization's culture and true motivators.

By conducting interviews and surveys, you can determine the resources and tools needed to improve care delivery and staff morale, decide which incentives may be most relevant for different providers and departments, and determine whether providers and other staff are receptive to change and in what areas. To better identify cultural characteristics for successful behavior change, focus on efforts in which staff:

- • Have made a commitment and acquired the skills necessary to perform the behavior
- • Believe that the advantages outweigh the disadvantages
- • Recognize that there is more social pressure to perform the behavior than to not perform it
- • Predict that they would be able to perform the behavior under adverse, distracting circumstances

3. Position quality as an institutional core value and an executive priority.

Public reporting and transparency of performance are increasingly important to hospital executives and boards. Behavior change that focuses on addressing these basic needs can help support the idea that quality is the core value of the institution and an executive priority. For example, boards and executives may elect to have their salaries or bonuses based upon the success of specific quality initiatives at their organizations (and make this known publicly). Or they may take a more active role in quality improvement and be directly involved in using newly implemented systems and processes (e.g., using new content and process management software to facilitate committee meetings, thereby streamlining processes and increasing efficiency).

4. Make a business case for quality initiatives.

Realize that sometimes, especially where quality improvement and the integration of information technology are concerned, additional startup costs and growing pains are necessary to move toward long-term savings. Expectations of cost savings need to be realistic and, in some cases, cost and benefit may need to be expressed in something other than the bottom line. Set up a program that supports the exchange of ideas and promotes the willingness to share best practices and learn from other top

achievers in the healthcare industry. A hospital may look to quality improvement organizations, regional health improvement organizations, and local competitors for ideas on how to make quality improvement successful and sustainable.

5. Dedicate specific resources to quality improvement.

An investment in quality improvement and information technology shows employees that the institution has made these goals a priority (e.g., appropriate funds to set up rapid response teams, participation in the IHI 5 million lives saved campaign, etc.). This type of environmental change can have a strong impact on behavioral intention and the self-efficacy to perform that behavior. If healthcare providers see that the institution and the board are allocating money, personnel, and resources toward quality improvement, they can deduce that the program is here to stay and may be more motivated to make changes.

6. Employ improvement and prioritization methodologies.

Technology tools can help prioritize and establish activity deadlines, determine measures and targets, and facilitate collaboration among stakeholders. Models like Six Sigma, Lean, and the Baldrige Assessment may help kick-start initiatives in these areas. To encourage adoption, organizations can make this easy and part of the day-to-day workflow. Understanding the organizational culture and barriers to change will help determine where opportunities for early and easy successes may exist within the organization, so staff can see early results from the effort.

7. Engage physicians and other care team members.

IT tools such as CPOE and content or process management software can be designed to help engage physicians and other care team members in the quality improvement process. The healthcare team should be part of the needs assessment and decision-making processes for these technologies so they will be familiar with the environment, systems, tools, and skills to perform the target behaviors. Project teams should make good use of super users-individuals who have adopted new technologies and tools early and have become experts in their use. These individuals can help persuade others to adopt and continue use of these resources.

8. Finally, use knowledge transfer and effective communication to promote learning and adoption of best practices.

Effective, consistent, and truthful communication is one of the most important ways to promote best practices and knowledge transfer. IT can make communication easier and help facilitate collaboration and widespread adoption of best practices. Examples include easy access to computers, wireless technologies, and e-mail. Beyond the basics, IT implementation can include access to and use of content and process management systems, CPOE, and electronic health records.

Understanding how staff feel about change, communicating with and engaging them according to their stage, and providing them with the tools and incentives they need helps create change initiatives that succeed.

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