

Running Head: The Era of Culture in Quality Improvement

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Abstract

Quality Improvement Organization (QIOs) are changing the emphasis in their interventions from information sharing to culture. This emphasis is based on the evidence that culture is a mediator of organizational change. The shift to culture is a shift to facilitating organizational dynamics. Though promising, it is more complex than an activity-based program and requires different methods for success. There are constraints to impacting culture, but strategies that can work within those limitations. A dynamic approach is proposed based on complexity in changing organizational culture and the constraints to culture change. Implications are described, followed by strategies for influencing organizational dynamics.

Introduction

In their role as the CMS agents for improving healthcare services to Medicare beneficiaries, Quality Improvement Organizations (QIOs) have progressed through several approaches. The initial approach to improvement began when the Health Care Quality Improvement Program (HCQIP) made the fundamental shift from quality assurance to quality improvement. The QIO role in improvement emphasized measurement and data sharing as a prompt for provider improvement (Jencks, 1995). Three years later the QIO role in quality improvement expanded as part of a search for activities that would facilitate or accelerate healthcare improvement. This second generation effort, which encompassed rather than replacing measurement, moved the QIO role to a more active partner in improvement. As QIOs and CMS begin to plan for another contract cycle there is a further expansion of the QIO role that involves another distinct approach added to the prior two. This new emphasis is a focus on organizational dynamics in the form of organizational culture. This attention to organizational culture comes from the general growth in interest in organizational culture and the desire by the quality improvement community to accelerate the pace of improvement.

While healthcare quality is improving, even if the connection to the QI program is unclear, there is concern that the rate of improvement needs to accelerate (Jencks, et al 2002) and that organizational culture may be the key to that acceleration. Some authors believe that the reason quality improvement has had modest success is the failure to address organizational culture (Chenoweth & Kilstoff, 2002; Weick & Sutcliffe, 2001). In the healthcare environment, organizational culture has been associated with elements of organizational performance that impact quality, such as nursing care, job satisfaction, and patient safety. Glisson & Hemmelgarn (1998) showed that improving the work climate significantly improved the quality of services in

a children's healthcare organization. In addition, numerous studies relate nursing care to organizational culture and quality. For instance, hospitals known to be "good places to work" have a lower Medicare mortality rate (Aiken, Smith, & Lake, 1994). Organizational support for staff is known to affect job satisfaction and burnout, which impact quality of care (Aiken, Clarke, & Sloane, 2002; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). This has led to a call for a better understanding of the organizational context and its relationship to quality (Aiken, Sochalski, & Lake, 1997). Organizational culture has also been linked to safety, and the creation of a safety culture is seen as a key part of improving patient and staff safety (Clark, 2002; Clarke, Sloane, & Aiken, 2002; Firth-Cozens, 2001; Gillies, Shortell, Casalino, Robinson, & Rundall, 2003; Mawji et al., 2002).

While many studies associate organizational culture with quality, this is different than saying that it is possible to direct organizational culture change in a way that will lead to predictable improvement. In fact, the early enthusiasm for organizational culture has been more muted in recent years as recognition has grown that actually changing culture is a significant challenge. As we will describe, the HCQIP program appears to be preparing to face these challenges.

As the QIO program prepares for the next statement of work (SOW) contract cycle, it is preparing to attempt to leverage organizational culture for improvement. At a recent QIO conference Koren, et al (2004) reported on the development of a nursing home culture assessment tool to guide quality improvement interventions, and a related set of recommendations for organizational culture interventions. Huff (2004) reported on a preliminary finding of a relationship between QIO culture and hospital improvement. Planning documents and discussions for the Eighth SOW seek accelerated change and calls for the promotion of the

use of organizational culture. In a review of the literature on QIOs, quality improvement and culture, this author called for attention to team culture as a unit of performance that holds promise for QIOs working with providers (Delmarva Foundation, 2003). Clearly, this is the start of a new focus for QIOs, though whether it is the key to the accelerated change in improvement that CMS seeks remains to be seen. Nonetheless, given the momentum building for this new phase in quality improvement it is timely for us to ask what are the implications of this shift in focus to organizational culture and how exactly would QIOs act upon the mandate to promote changes in an organizations culture?

Culture and Complexity

There is an emerging application of complexity theory to organizational dynamics that offers some insights to methods of intervention. Features of complexity theory such as the unpredictability of outcomes, non-linearity and emergence of novel behavior are characteristic of our increasingly complex healthcare system (Plsek & Greenhalgh, 2001; Plsek & Wilson, 2001; Sweeney, 2002). The complexity of healthcare improvement in general and organizational change in particular make application of the insights of complexity theory particularly relevant. The behavior of individuals in organizations is shaped by the collective norms, systems, models, values, and leaders in the organization. We refer to this complex collection of factors with the anthropological metaphor of organizational culture. While this metaphor helps to communicate the concept, it can understate the intricacies involved in determining what people do and the quality with which they do it. Complexity theory addresses this complexity through emphasis on methods that are most relevant to such indeterminate systems. Development of multiple approaches, flexibility in planning and implementation, and recognition of the value of rapid

testing and modification are just a few of the implications of complexity theory relevant to cultural change. In particular, complexity theory emphasizes that systems are dynamic, meaning that they are constantly changing in ways that are not necessarily observable or predictable. This emphasis on dynamics is particularly relevant to organizational culture and the search for methods to direct changes in culture, a search that is essentially about factors that control behavior in organizations. The key issue for quality improvement is how to best manage these dynamics, indeed if they can be managed at all.

There is currently little consensus to guide QIOs in developing approaches related to culture. Preparations for the 8th SOW reference addressing organizational culture, but do not define what that is or describe how it may be directed in ways that improve healthcare quality. This is consistent with the literature on organizational theory in which there is a growing consensus that culture is an important factor in and mediator of quality improvement, but no consensus on what exactly can be done to leverage the power of culture for quality improvement. For example, it is generally accepted that culture is related to financial success (Barney, 1986; Christensen, 1999), but there are no controlled studies showing that a set of interventions into culture will achieve financial improvement. The challenges of impacting organizational culture to improve performance are considerable, especially in contrast to the focus on measurement or activities. As Ogbonna & Harris (2002) note, the question of “whether organizational culture can be managed or not is one of the most hotly debated issues in organizational theory” (p.676). They note that the positions range from those that are overly optimistic about the ease of change to those that are overly pessimistic and say it is impossible to direct change. Most theorists appear to be favoring a middle view, that cultures can and do change, but that this is not necessarily subject to management direction. Missing in this debate is the question of what we

mean by managing culture (p.677). This is the question we seek to clarify for the benefit of quality improvement organizations, along with some concepts for development of strategies.

An Approach to Impacting Culture

Changing organizational activities does not necessarily change culture, nor do activities require a change in culture in order to occur. That is part of the reason that quality programs like TQM have had limited cultural impact (Shortell, et al, 1995), and why authors increasingly caution against the search for a quick cultural fix (Tobias, 2004). Selected activities can change without a related change in organizational values or structures. In contrast to activities, culture change by definition means a change in the dynamics of the organization, including at a basic level the values held by the members of the organization. Organizational dynamics and values can and do change, but their role is, in part, to provide stability and identity to an organization, which means that culture will also tend to modify or resist change.

Based on complexity theory and the literature on developing effective teams, and our experience in developing methods to improve QIO team performance, we propose a set of five dynamic factors that we believe are components of organizational culture and represent a basis for developing interventions. The selection of these components is based on several factors. First, values operate at several levels, thus the five components address different levels of corporate behavior, from a basic model of performance to interpersonal behavior. Second, the strength of organizational culture is associated with alignment across units and people. Reflecting this view, some intervention models do not seek to promote a distinct culture but rather seek too align people and systems within the existing culture. The use of multiple levels of organizational behavior is designed to promote this alignment. Third, teams are often

described in the literature as an effective unit for organizational intervention (Whitehead, 2001). For example, QIOs and providers are familiar with the work of Crew Resource Management, which began by training effective teams in aircraft and then successfully extended their team training to hospital units. In the rest of this paper we describe these five dimensions and propose examples of methods that can be used to impact these dimensions in the service of healthcare improvement.

Five Dimensions for Team Culture

Shared Mental Model: The first of our five dimensions involves the overall organizing concept for the team or organization. (Herein we will refer to the team, but this applies equally to any organizational unit or the entire organization) A shared mental model is a vision or representation of the team that is shared by the members of a team and helps people to set goals to advance the team. It is essential for team motivation and empowerment. Without a shared understanding of the team purpose, its actions are confined to management by objectives, that is, by the goals that have been set by the higher management level or, in the case of large institutions, by outsiders. Consequently, members of a team without vision are not able to really take part in improving their own professional future—and improving the future of their working environment. For example, Urban et al (1995) describe how teams that have a shared mental model are able to adapt to unpredictable circumstances and operate more effectively in novel environments as compared to more structured or rules based teams.

Perception: Perception refers to the way that team culture shapes what people pay attention to, literally what they are willing to see. This dimension draws upon Weick's work on Mindfulness (Weick & Sutcliffe, 2001). Mindfulness is fundamentally about perception and

addresses how the team's experience over time creates standards and expectations regarding challenging assumptions and biased interpretations, the rigor with which we look at our performance, and the way success causes us to make assumptions that in a complex environment are unlikely to hold up over time. Weick's concept of mindfulness, like Reason's concept of cognizance (Reason, 1997), has multiple dimensions that are based on the corporate sense of "how we do business here". The basic concept is the ability to maintain vigilance for of poor quality performance versus the need for the security created by the sense that the team knows what to do from past success. More effective teams learn to counter this bias and monitor team behavior for evidence of risks for failure.

Communication: Effective teams are characterized by both basic actions as well as more complex communication behaviors. Basic behaviors are those that are characteristic of running good meetings, such as respect for one another, not interrupting, etc. In addition, teams that are effective in complex environments engage in some specific complex behaviors related to understanding complex information. These include considering multiple perspectives and developing a plan that integrates perspectives. Teams that have the ability to consider multiple perspectives, integrate information, and maintain an openness to alternate viewpoints are known to be more innovative and creative (Cohen & Bailey, 1997).

Hierarchy: Teams that are organized in a way that distributes responsibility and decision-making are non-hierarchical. If the team structure is truly flat, authority is based on expertise, not organizational role; members are evaluated on their contributions to the team, not independent of it; information flows across the team; and the team shares control of and accountability for the outcomes. For example, Urban (1995) hypothesizes that non-hierarchical

teams communicate differently, engaging more in information sharing rather than checking or permission seeking. This improves information flow and contributes to team effectiveness.

Leadership: Leadership for quality refers to the extent to which the leadership communicates clearly that quality, and all the related expectations for behavior supporting quality, are ultimate values for the organization. The need for leadership support and participation for quality improvement is well known and understood. Most QIOs consider leader support the essential first step in quality improvement. Denison (1990) puts this into an organizational culture context by describing leaders as the “culture makers” (p194), a role that is more effective for change when culture development is seen as an explicit and focused activity rather than a by-product of management. To achieve breakthrough results, one must look to motivating leadership to enhance fundamental units of culture such as mission and involvement (Fisher & Alford, 2000). The key to this approach is that leaders are not asked to generally exhort people to quality, nor are they enticed to attempt to control the quality of staff work. Instead, leadership is asked to do what leadership does best — define the core values and mission of the company so that staff can see that quality and related actions are a fundamental component of the company, i.e., inherent in its culture. The literature suggests that this is a requirement for success but not the full scope of the task.

Focus on Micro-Systems

While these dimensions can be applied at any level, our preferred focus has been in teams. Teams represent an effective and accessible unit for quality improvement and for generating change in organizations (Whitehead, 2001). Creation of quality-oriented teams or micro-systems is associated with healthcare quality (Institute of Medicine, 2001), and more

effective teams are associated with higher quality care (Aiken, Sochalski, & Lake, 1997). Cohen and Bailey (1997) note that team behavior and structure are associated with quality of work, but also state that teams operate in a larger social context and their performance at one level does not mean they are effective at all levels. Firth-Cozens (2001) asserts that improvements in patient safety come largely from team and organizational learning and describes teams and team leaders as an effective unit of intervention for driving improvement. Similar to Cohen & Bailey (1997), Fontaine, Vinceneux, Traversat, & Catala (1997) describe improvement through work with teams that had limited impact on the rest of the organization because of the need to affect other levels of the organization. Sexton, Thomas, & Helmreich (2000) applied aviation industry work on teams and safety to medical teams in surgical and intensive care units and found many cultural similarities. Team training similar to that developed for the airline industry was proposed as a means for improvement. We also emphasize teams because the general approach to quality improvement by QIOs is typically team based. As we will see next in the discussion of strategies, this team emphasis creates opportunities for impacting culture in several ways, making teams a useful and effective unit of focus for healthcare quality improvement.

Strategies for Leveraging Organizational Culture for Quality Improvement

The application of the five dynamics described above to quality improvement is based on three assumptions. These assumptions are stated because they are still subject to further research and while we believe they are correct, they are not fully accepted in the literature. First, organizational change involves learning that can be managed and focused for improved capacity and performance (Denison, 1990). This is particularly salient given the exploratory nature of QIO efforts to impact culture. The strategies described here emphasize a shared learning

approach to changing culture rather than an authoritative relationship. This must be balanced by emphasizing that we are not saying that conducting a training program will automatically change culture in a pre-determined way. We are saying that certain conditions must exist for effective teamwork, and the most effective teams have these conditions developed to the point where they are perceived as cultural. Creating the conditions for effective team performance is a useful starting point for cultural change.

Second, these strategies are based on the assumption that coalitions with partners who support innovation and change efforts helps to sustain these efforts in an otherwise resistant environment. For example, Soh & Roberts (2003) report that innovators in an organizational setting are more likely to persist in their change efforts over time when supported by alliances. This is a basic assumption of the QIO program which emphasizes a relationship between QIOs and providers as a necessary element for effective improvement interventions.

Third, as an agent of change, the QIO must represent the values and actions that it espouses. There is developing evidence for QIO culture as a factor in execution of quality improvement efforts (Huff, 2004), though the nature of this relationship is far from clear. Programs are currently underway to explore and clarify this relationship.

These three assumptions are represented in four QIO strategies for improving culture that follow. These strategies are: Recruiting leadership for cultural improvement; Improvement in the team-based performance of QIOs; Development of cross-organizational teams; Creation of learning networks to promote cultural change.

Recruiting Leadership for Cultural Improvement

Organizational leaders are the makers of organizational culture (Denison, 1990). When this role is recognized, and the methods by which leaders demonstrate and communicate cultural values are leveraged for quality, then the leaders become powerful forces for cultural improvement. Leveraging this power for improvement requires explicit culture development activities rather than assuming that culture is a by-product of doing business (Denison, 1990). This can include addressing the artifacts of organizational culture, explicitly communicating the organizational vision and promoting alignment between each team's vision and the larger organizational vision. It can also mean examining organizational systems and processes for alignment with organizational values. Do employee assessment and reward systems promote the desired behaviors, does the hierarchy promote information sharing and inclusion, etc. Extending the leader's valuing of certain cultural values into explicit activities is essential in order for the values to take on meaning and have impact.

Consistent with the complex nature of this field, there are authors who question this assumption of leadership involvement. Schien (1992) suggests that this is not always the case, and in fact leadership involvement can work against change as well as support, depending on the nature of the leadership. This view points up the necessity of not making any unexamined assumptions about conditions or elements of change.

Improve QIO Team Culture

Improving the performance of teams within the QIO is important for several reasons. Teams are viewed as the most effective performance unit when addressing complex

environments, such as quality improvement. Further, when forming cross-organizational teams the participants negotiate not only goals, but methods and performance expectations. Individuals experienced with high performance teams will bring these expectations and experiences with them as they form new teams and influence the performance of those teams. In fact, we hypothesize that this may be one of the mechanisms through which high performing QIO teams influence the performance of providers. There is some evidence for this in the extensive study of cross-organizational teams and performance by Tieglund & Wasko (2003). They found that work across organizational boundaries increases worker performance compared to work performed only with co-located workers. In fact, they go on to recommend that knowledge organizations would be well served to seek ways to help workers to cross organizational boundaries. Finally, just as healthcare is complex, healthcare quality improvement is likewise a complex undertaking. QIO teams that operate according to the five dimensions described above are believed to be more effective in promoting change. This hypothesis is currently being tested in pilot studies with QIOs.

Develop Cross-Organizational Teams

Creation of cross-organizational teams means the incorporation or alignment of the provider team into a larger QIO team that is focused on improvement. This goes beyond the consulting relationship in which an external team provides technical support and other assistance. A cross-organizational team has many of the attributes of a within organization team, though with less intensity. Starting with the obvious, a cross-organizational team will define membership as including staff from two or more organizations. These members will then establish a set of shared values and goals and agree upon methods for accomplishing these goals.

Members all have responsibilities are accountable to the group for the execution of those responsibilities. These shared values, shared goals, and shared accountability create a team culture that can facilitate the improvement of care while also acting as a model within the larger organizational culture. This also illustrates the importance of the QIO team culture. In order for the QIO members of the cross-organizational team to effectively promote effective forms of team culture the members themselves must be enculturated in these organizational forms.

Zuckerman & Higgins (2002) recommend the development of cross-organizational as a way to overcome the limitations of organizational culture on cross-organizational work. They recommend applying generally accepted team methods to the cross-organizational team so that the consulting organization will be treated as a team member rather than an outsider.

Create Learning Networks

A learning network is related to a collaborative, but does not have a defined set of practices or expert consensus that can be applied to the subject. The learning network focuses on sharing of participants efforts, with a focus on taking the general knowledge of organizational culture and collaboratively translating this into local requirements and characteristics. This approach is consistent with the state of the art of organizational culture.

The key difference between a cross-organizational team and learning network is in the objectives. A cross-organizational team is focused on achieving specific improvement in care practices through team based performance improvement. A learning network is focused on increasing local knowledge through the spread of knowledge gained for organizational culture initiatives. It is possible to illustrate the relationship between the various team forms as three nested groups, as shown below:

Implications for Quality Improvement Organizations

The organizational culture strategies we propose have several implications for quality improvement organizations. First, attention to culture requires different skill sets than traditionally associated with healthcare quality improvement. As illustrated in the five dimensions of team culture described in this article, assisting a team in developing a mental model, increasing communication skills, or developing skills associated with monitoring bias, etc, require different types of intervention skills than those associated with data sharing or promoting the use of tools. The dimensions are based on the social science literature, and further development of these and related dimensions will require expertise in this literature and the related fields. Professionals in behaviorism, organizational psychology, social learning, communication and related fields can provide expertise in these areas that would help QIOs craft effective interventions. Further, application of interventions may also require additional skills, such as team facilitation, coaching, behavior management, or training.

Though the concept of organizational culture goes back to the 1970's, the consensus on what it is and how it can be changed is still unfolding. This would call for a learning approach and care to not get beyond what is known in research. The enthusiasm for organizational culture goes back to the 1970's, and some of the anticipated results have not unfolded as expected. As is often the case with a new field, the initial enthusiasm gives way to a more considered assessment that looks closely at the conditions under which something will have an effect or with who is it most likely to be effective. This characterizes the current state of study on organizational culture, and suggests caution against expectations that do not take into account mediating effects.

Finally, focusing on culture change is a long-term proposition. Rather than a project focus or contract focus, the effective QIO may need to build a long-term cooperative relationship with a provider. Such a long-term partnership would have numerous benefits for working on quality improvement in general, but also allows attention to developing effective cultural attributes over time.

Conclusion

QIOs and CMS are moving toward using organizational culture as a means to accelerate quality improvement. While the early literature was full of such hopefulness, as is often the case in new fields, the more recent work can be characterized as more cautious. Nonetheless, there are opportunities for QIOs that may best be developed if approached in a thoughtful, informed manner. We provide a model for understanding the dynamics of organizational culture based on five dimensions: Shared mental model, perception, hierarchy, leadership, and interpersonal communication. We then propose four strategies developed from these dynamics that can be used by QIOs in quality improvement work: Develop specific qualities of leadership, develop effective QIO teams, form cross-organizational teams, and develop learning networks. These strategies have implications for QIOs staffing and skill sets. Though much more evidence is needed before prescribing definitive interventions to direct cultural change, we believe that the proposed strategies are within the scope of the current research knowledge base and the capabilities of QIOs.

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