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Organizing for Quality

Inside the “Black Box” of Health Care Improvement in Europe and the United States

Looking is not seeing. Listening is not hearing. It is possible to miss so much that is right in front of us if we lack the categories and skills to notice. The greatest of these skills is, perhaps, to put aside our expectations, and to stay open to the actual.

—Donald M. Berwick, from the Foreword of the book *Organizing for Quality: The Improvement Journeys of Leading Hospitals in Europe and the United States*

Ever since the landmark reports by the Institute of Medicine (Kohn, Corrigan, and Donaldson, 1999; Committee on Quality of Health Care in America and Institute of Medicine, 2001), the “quality chasm” in health care delivery has become ever more evident and difficult to ignore in both the United States and Europe. During this time, health services research has grown increasingly adept at documenting serious deficiencies in the quality of care, including the following findings: (1) patients typically receive only half of recommended care; (2) high levels of underuse, overuse, and misuse of medical treatments; (3) clinically unnecessary variations and disparities in care and in health outcomes; and (4) extensive inefficiency and waste. The continuing accumulation of evidence has led to an emerging consensus in health research, policy, and practice that our health care systems, in their current state of organization, are plagued by dysfunction and are incapable of providing the quality of care that the citizens of most developed countries expect (and pay for).

Despite the increased ability to measure the quality chasm, little is known about the organizational causes at the root of these deficiencies, and even less about how to change and improve health care organizations. Studies have tended to generate lists of factors associated with successful implementation of quality improvement (QI), such as leadership, information technology, and incentives; however, they have offered less insight

Key findings:

- Previous studies of health care quality improvement (QI) have listed factors associated with change but neglected how these factors interact and the contexts in which they occur.
- There are many different paths to sustained improvement, but successful efforts share two features: an ability to address multiple challenges simultaneously and skill in adapting solutions to the organization’s specific context.
- QI efforts should pay attention to the organizational and human dimensions of change and the processes by which these dimensions are set in motion and unfold over time.

into how these “key success factors” relate to each other as change unfolds or how organizations set them in motion. As a result, the process of implementing, managing, and sustaining QI—that is, of *organizing* for quality in health care—has remained a “black box,” impenetrable to the outside observer.

An international study conducted jointly by researchers from the RAND Corporation and University College London (UCL) directly addresses this critical gap in understanding. In their book, *Organizing for Quality: The Improvement Journeys*

of *Leading Hospitals in Europe and the United States*, authors Paul Bate, Peter Mendel, and Glenn Robert examine hospitals and medical centers that have earned reputations for sustained achievement in QI and performance. The aim of this research was to understand the *process* of improving quality, both in the complex ways that different organizational and human factors influence each other and in how the different levels of an organization can make this process effective.

The results of the study include the following:

- **In-depth case descriptions** of *how* a set of leading health care organizations have been able to achieve and sustain high levels of performance and quality. These case studies combine rich descriptions in the case participants' own words with application of current streams of organizational theory relatively untapped by conventional research on health care quality.
- **A model of six core challenges** in organizing for quality, derived from the experiences of the organizations studied.
- **A codebook for QI** in health care that catalogues the diverse processes and strategies utilized by the case organizations in addressing the six core challenges. The codebook includes a glossary illustrated by examples from the case studies, in addition to a diagnostic checklist tool for health care and improvement practitioners.
- **A novel method for mapping QI processes** that graphically reveals the complexity of change and improvement processes related to the six core challenges, the relative emphasis attached to each, and the interrelationships among them within health care organizations.

The authors conclude that there are many different paths to successful, sustained QI; however, the unifying features across all of them are an ability to address multiple challenges simultaneously and to adapt solutions and strategies to the organization's own context. The findings emphasize the need for all those concerned with promoting and implementing change within health care organizations to attend to the organizational and human dimensions of implementing change, and to look particularly at how these dimensions interact over time to sustain improvement.

A New Approach to Studying Health Care Improvement

This study is one of the first to apply contemporary organizational theory to detailed accounts of QI experiences across a variety of health care organizations. The RAND-UCL team selected for study nine hospitals and medical centers in the United States and Europe that are renowned for high performance and excellence in implementing and sustaining QI. Utilizing staff interviews and narrative accounts, orga-

nizational documents, and direct observation of everyday organizational life, the research team conducted in-depth case studies to retrace each organization's "quality journey" at the level of the senior team (macro-system) and at the level of a selected high-performing, frontline clinical unit (micro-system). The team was thus able to incorporate two critical perspectives on this journey that are rarely analyzed together. In each case, it was possible to identify a key organizational concept that gave each institution's approach to QI its distinctiveness, and to which other factors seemed integrally connected. (See Table 1.)

Core Challenges to Organizing for Quality

Though each quality journey was unique, it also became clear that each institution was attending to a set of common issues and challenges. By systematically identifying and classifying specific improvement activities and strategies across the sites, the research team distinguished six core challenges that all of the case study institutions faced in organizing themselves for QI:

- **structural**—organizing, planning, and coordinating quality efforts
- **political**—addressing and dealing with the politics of change surrounding any QI effort
- **cultural**—giving *quality* a shared, collective meaning, value, and significance within the organization
- **educational**—creating a learning process that supports improvement
- **emotional**—engaging and motivating people by linking QI efforts to inner sentiments and deeper commitments and beliefs
- **physical and technological**—designing physical infrastructure and technological systems that support and sustain quality efforts.

For ease of use as a diagnostic tool and aid to thinking, each of the core challenges was assigned a color evocative of the underlying organizational processes associated with it (i.e., a visual metaphor of sorts). The common challenges were then combined with key dimensions of the organizational (inner) and wider environmental (outer) context, also identified through the case analyses, to form a color-coded framework for organizing for quality (see Figure 1).

As noted, one of the main concluding hypotheses of the study is that the organizations that were examined have been able to achieve and sustain high levels of care because they have recognized and been extremely successful in addressing each of the core challenges.

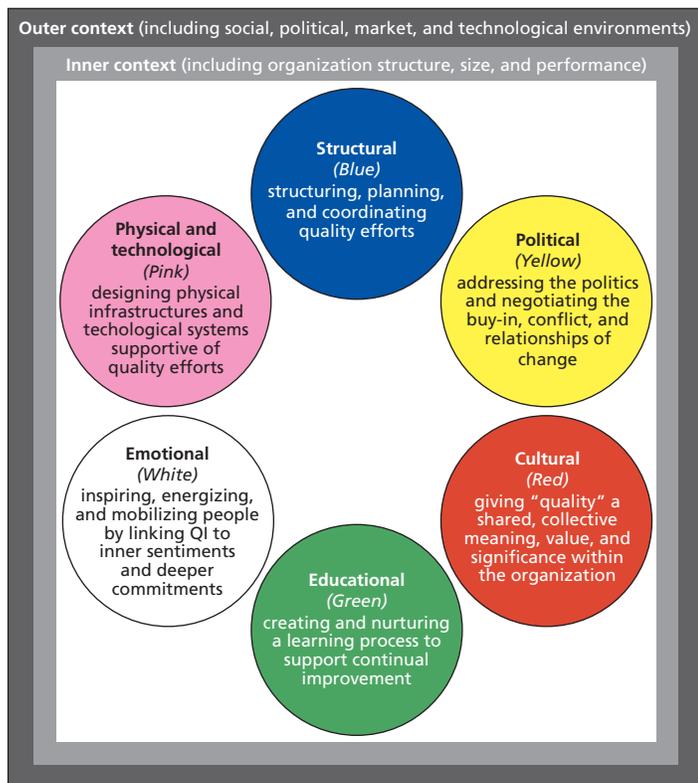
Their experiences also indicate the likely implications of responding inadequately to these challenges. Thus, different kinds of failure are associated with each of the six challenges.

Table 1
Case Sites and Key Concepts

Organization (Macro-System)	Department (Micro-System)	Key Concepts
United Kingdom		
Royal Devon and Exeter National Health Service (NHS) Trust ^a	Orthopedics center	<i>Organizational identity</i> : the distinctive character of an organization and the groups within it
Peterborough and Stamford Hospitals NHS Trust ^a	Radiology department	<i>Empowerment</i> : granting power for decisions and cultivating the self-efficacy to exercise decisionmaking authority at lower levels of an organization
King's College Hospital NHS Trust	Breast cancer clinic	<i>Organizational citizenship</i> : dedication to the common good reflected in such behaviors at work as altruism, courtesy, and conscientiousness
United States		
Children's Hospital of San Diego, California ^a	Allergy and immunology clinic	<i>Mindfulness</i> : a heightened state of involvement and wakefulness characteristic among members of high-reliability organizations
Cedars-Sinai Medical Center, California ^a	Emergency department	<i>Organizational learning</i> : the ability of an organization as a whole to search for, retain, and act on new knowledge
Luther Midelfort Mayo Health System, Wisconsin ^a	Critical care unit	<i>Sociotechnical design</i> : joint optimization of the social and technical systems within an organization
Albany Medical Center, New York ^a	AIDS treatment center	<i>Mobilization</i> : marshalling and organizing various resources for change, including the energy, talent, and commitment of people
SSM Health Care, St. Joseph's Hospital, Missouri	Intensive care unit	<i>Spiritual capital</i> : the moral fortitude within an organization to serve a greater meaning, purpose, and set of fundamental human values
Netherlands		
Reinier de Graff Groep, Delft ^a	Varicose surgery	<i>Multilevel leadership</i> : the capacity for improvement that strategically distributes leadership across different individuals, units, and levels within an organization

^aCase studies for these sites are included as separate chapters in the book *Organizing for Quality*.

Figure 1
Organizing for Quality in Health Care:
The Six Universal Challenges



Improvement efforts can fail or underachieve in different ways (see Table 2).

Many Paths up the Mountain

The specific improvement activities initially identified represent the variety of approaches and solutions applied by participants in the case studies at various points on their quality journeys. These activities helped to meet the six core challenges—or to avoid the pitfalls described in Table 2. In essence, each organization found its own path up the mountain, tailored to its own context and circumstances, with no one best way to reaching the goal of sustained improvement.

To illustrate the range of the responses made by the high-performing organizations in the study, the research team catalogued these process solutions—56 in all, spread across the six challenges—into a *codebook for change*. This codebook includes a glossary or *quality thesaurus* defined with multiple quotations from study participants, along with a diagnostic checklist tool for health care and improvement practitioners.

The color-coded framework and codebook of specific organizational processes are intended to help practitioners and researchers by

Table 2
Different Ways in Which QI Efforts Can Fail

Lack of . . .	Can lead to . . .
Structural process (planning and coordination)	<i>Fragmentation</i> and a general lack of synergy between the different parts of the organization doing QI
Political process (negotiating change and managing conflict)	<i>Disillusionment and inertia</i> because QI is not happening on the ground and certain groups or individuals are blocking and resisting change
Cultural process (giving <i>quality</i> a shared meaning and value)	<i>Evaporation</i> because the change has not properly “anchored” or become rooted in everyday thinking and behavioral routines
Educational process (learning and accumulating knowledge)	<i>Amnesia and frustration</i> as lessons and knowledge are forgotten or fail to accumulate, and improvement capabilities and skills fail to keep abreast of growing aspirations
Emotional process (energizing and mobilizing)	<i>Loss of interest and fade-out</i> as change efforts run out of momentum and fail to engage passion and commitment on a wide and deep scale
Physical and technological process (designing technical and other infrastructure)	<i>Exhaustion</i> as people try to implement changes by hand or by word of mouth, without a system or standardized procedures to take on the weight of routine activities

Putting together all the links for a case produced a network map showing the patterns of interactions among the specific organizational processes. Aggregating up to the level of the six general domains of the framework produced maps illustrating the degree of emphasis on each of the challenges, as well as the strength and direction of influence between them within a particular case.

For example, the high-level process map for Cedars-Sinai (Figure 2) indicates a relatively strong emphasis on structural (blue) and cultural (red) aspects, followed by learning (green) and then political (yellow). Emotional (white) and physical and technological (pink) processes appear less central to the Cedars-Sinai story. Contextual factors (both inner and outer) similarly do not seem to have played a central role, at least in sustaining (as opposed to stimulating) the institution’s quality journey. Notice too the “iron triangle” of strong relationships (denoted by the thick arrows) connecting the structural (blue), cultural (red), and learning (green) circles.

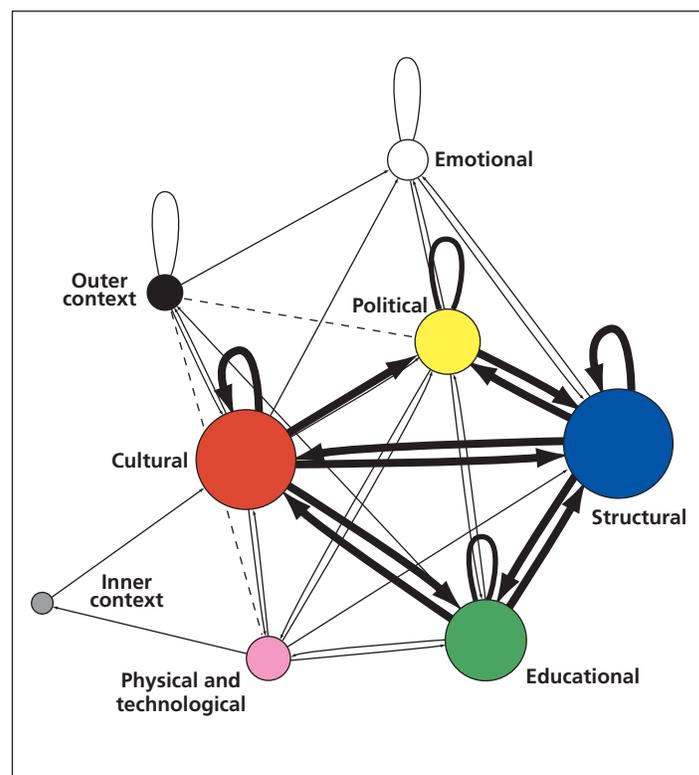
The network analytic techniques also allow drilling down to identify the most central specific solutions or strategies within each of the core areas. For Cedars-Sinai, these included developing collegial “communities-of-practice,” quality governance systems, and distributed leadership roles in the blue (structural) area; a sense of group culture and

- identifying the range of challenges any QI effort will face
- giving QI participants a method for identifying gaps in their own activities that will need to be addressed
- allowing implicit assumptions about the theory and practice of QI to surface and be exposed to conscious thought and challenge, perhaps for the first time
- providing people with a common framework and language to use for thinking and talking about the issues and challenges associated with organizing for quality.

Mapping Processes of Change

In order to move beyond the lists of key success factors typically generated by health care research, the study sought to understand the *processes* of organizing for quality by examining the ways in which the various quality challenges and solutions were related to each other within each organization’s quality journey. Using network analysis, the research team mapped the connections among the specific process solutions described in each case narrative. For instance, the decision by Cedars-Sinai Medical Center to hire a quality director with both a medical and administrative background for the purpose of lending credibility to the institution’s quality effort was recorded as a link from “boundary-spanning roles” (structural) to “politically credible leadership” (political).

Figure 2
Cedars-Sinai High-Level Process Map



culture of learning in the red (cultural) area; and QI training and “knowledge harvesting” from outside the institution in the green (learning) area. Reviewing maps from across the cases revealed a similar prominence of cultural and structural processes with strong, mutually reinforcing connections between them, but a wide variety of emphasis on other processes and specific strategies.

Implications for Policy, Practice, and Further Research

Taken together, the case studies underscore that QI processes are interconnected and symbiotic. Organizational processes can form cycles or closed loops, which can be virtuous (upward improvement) or vicious (downward degrading) spirals; both of these can be present in an organization at the same time. For health care leaders, policymakers, and other QI activists, this suggests that health care organizations should not neglect human and organizational processes at the expense of clinical and technical ones.

Understanding how these organizational processes interrelate has important implications for QI efforts:

- The **structural** (planning and coordination) and cultural (framing and valuing) processes proved to be the most central dimensions of organizing for quality and go hand in hand, in contrast to conventional quality approaches that emphasize one or the other.
- The **political** challenge of QI within health care organizations, such as engaging clinicians in the quality agenda, also tends to be prominent but can be successfully addressed by various strategies related to other areas.
- **Educational** and learning processes, including learning from one’s own mistakes, are critical to supporting continuous improvement and typically require integration across a variety of other processes to be effective.
- Health care organizations, including many of those in this study, are still searching for the keys to addressing the **emotional** processes of mobilizing, inspiring, and building momentum around QI.
- The **physical** and **technological** aspects of quality need to be placed in perspective. Even the best technology will not add much to service and QI performance if no one knows how to use it (learning), it is not perceived as

important or useful (cultural), does not fit into existing work routines (structural), or rubs against vested interests and fear of change (political and emotional).

- The **contexts** of health care organizations are important sources of influence and innovations, but whether a trajectory of improvement is sustained depends on how health care organizations respond to and utilize these stimuli and resources in their wider environments.

For researchers, the results imply the need for new directions in studying QI. Analysis of QI has tended to focus on isolating the factors associated with change rather than understanding how these interact and the organizational contexts in which they occur. Greater focus on organizational processes and their interactions would bring better understanding of the sometimes “punishing contextual terrain” that has to be crossed to bring about those improvements that are best suited to the circumstances of a particular organization. Additional longitudinal case studies and methods for examining the pace and sequencing of QI processes over time would further advance this understanding. ■

This Highlight summarizes RAND Health research reported in the following publication:

Bate P, Mendel P, Robert G, *Organizing for Quality: The Improvement Journeys of Leading Hospitals in Europe and the United States*, Oxford, U.K.: Radcliffe Publishing, 2008, 270 pp., ISBN: 9781846191510. To order copies of the book, visit Radcliffe Publishing online: <http://www.radcliffe-oxford.com/books/bookdetail.aspx?ISBN=1846191513>

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- Committee on Quality of Health Care in America and Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C.: National Academy Press, 2001.



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