Institute *for* Healthcare Improvement

High-Impact Leadership:

Improve Care, Improve the Health of Populations, and Reduce Costs

How to Cite This Paper: Swensen S, Pugh M, McMullan C, Kabcenell A. *High-Impact Leadership: Improve Care, Improve the Health of Populations, and Reduce Costs*. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2013. (Available at ihi.org)

AUTHORS:

Stephen Swensen, MD, MMM: *Senior Fellow, IHI; Professor, Mayo Clinic College of Medicine; Medical Director, Leadership and Organization Development, Mayo Clinic*

Michael Pugh, MPH: *Senior Faculty, IHI; Adjunct Professor, CU Denver School of Business, Health Administration; President, MdP Associates*

Christine McMullan, MPA, CPHQ: *Vice President of Loss Prevention and Patient Safety, MCIC, Inc.*

Andrea Kabcenell, RN, MPH: *Vice President, IHI*

The Institute for Healthcare Improvement (IHI) is a leading innovator in health and health care improvement worldwide. For more than 25 years, we have partnered with a growing community of visionaries, leaders, and front-line practitioners around the globe to spark bold, inventive ways to improve the health of individuals and populations. Together, we build the will for change, seek out innovative models of care, and spread proven best practices. To advance our mission, IHI is dedicated to optimizing health care delivery systems, driving the Triple Aim for populations, realizing person- and family-centered care, and building improvement capability. We have developed IHI's white papers as one means for advancing our mission. The ideas and findings in these white papers represent innovative work by IHI and organizations with whom we collaborate. Our white papers are designed to share the problems IHI is working to address, the ideas we are developing and testing to help organizations make breakthrough improvements, and early results where they exist.

Contents

Executive Summary

There is solid evidence that leadership engagement and focus drives improvements in health care quality and reduces patient harm.[1-10] Leaders at all levels in care delivery organizations are struggling with how to focus their leadership efforts and achieve Triple Aim results for the populations they serve. Triple Aim results represent the shift from volume to value, which demands that health care leadership at every level of care delivery organizations focus on improving the experience and outcomes of care provided and reducing the cost of care for the populations they serve.

High-impact leadership is required to achieve Triple Aim results. To that end, this white paper presents three interdependent dimensions of leadership: new mental models, High-Impact Leadership Behaviors, and the IHI High-Impact Leadership Framework.

New Mental Models for Health Care Leadership

Mental models — how leaders think and view the world — are critically important because how leaders think and what they believe shapes their leadership behaviors and provides direction to focus their leadership efforts in transforming from volume-based to value-based care delivery systems. High-impact leadership requires leaders to adopt four new mental models: 1) individuals and families are partners in their care; 2) compete on value, with continuous reduction in operating cost; 3) reorganize services to align with new payment systems; and 4) everyone is an improver.

With these new mental models providing context, leaders shift the way they define success, considering new approaches and mobilizing their staff to adapt to the continually changing business environment. New mental models promote innovation.

High-Impact Leadership Behaviors

Our premise is that certain High-Impact Leadership Behaviors and practices are tightly aligned with the mental models and the leadership framework. Our list of five critical behaviors is intended to be open-ended — the starting point for health care leaders to thoughtfully examine their own leadership practices, and how they might align those behaviors with their leadership efforts and strategies to produce Triple Aim results.

1. Person-centeredness: Be consistently person-centered in word and deed

2. Front Line Engagement: Be a regular, authentic presence at the front line and a visible champion of improvement

3. Relentless Focus: Remain focused on the vision and strategy

4. Transparency: Require transparency about results, progress, aims, and defects

5. Boundarilessness: Encourage and practice systems thinking and collaboration across boundaries

Each of these five behaviors accomplishes several leadership aims at once. For example, a leader who demonstrates person-centeredness by engaging patients and community members in key planning or improvement meetings, or by starting each meeting with a patient story,

will reinforce a vision and build will, shape the culture, and foster a person- and community-centered organization.

The IHI High-Impact Leadership Framework

Leaders at all levels of care delivery organizations must organize and focus their leadership efforts in order to achieve Triple Aim results for the populations they serve. The actions and initiatives pursued within each domain of the framework are shaped by the new mental models and supported by the practice of the High-Impact Leadership Behaviors. The IHI High-Impact Leadership Framework presented in this white paper is a distillation of broad leadership experience, practices, theories, and approaches that represents the natural evolution of four major IHI works: *Leadership Guide to Patient Safety*, *Seven Leadership Leverage Points for Organization-Level Improvement in Health Care*, *Execution of Strategic Improvement Initiatives to Produce System-Level Results*, and *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*.[11-14] The framework builds on the leadership thinking and work of Tom Nolan, Don Berwick, Maureen Bisognano, James Reinertsen, and many others at IHI who have, over the years, helped motivated health care leaders drive improvement and address system-wide change.

The IHI High-Impact Leadership Framework explicitly addresses three new areas of required leadership efforts and actions: *driven by persons and community*; *shape desired organizational culture*; and *engage across traditional boundaries of health care systems*.

The framework is a practical method of focusing and organizing leadership efforts for leading improvement and innovation. It is built on excellent social science leadership research and the collective learning of IHI and others over the past decades.[1,15,16] The six domains of the updated IHI High-Impact Leadership Framework collectively represent the critical areas in which leaders at all levels of health care delivery systems must focus efforts to drive improvement and innovation and achieve Triple Aim results:

- Driven by Persons and Community

- Create Vision and Build Will

- Develop Capability

- Deliver Results

- Shape Culture

- Engage Across Boundaries

Conclusion

High-impact leadership is not just for senior leaders, but is required at every level of leadership in care delivery organizations in order to deliver Triple Aim results. Value-driven, high-reliability health care sustained by improvement and innovation requires leaders at all levels to think with *new mental models* about the challenges and their role, practice cross-cutting *High-Impact Leadership Behaviors*, and focus their leadership actions through the lens of the *IHI High-Impact Leadership Framework* to achieve Triple Aim results for the populations they serve.

Introduction

Skilled leaders are essential for success, and there is solid evidence that leadership engagement and focus drive improvements in health care quality, reduce patient harm, and save money.[1-10] Previous IHI white papers posited that organizational improvement requires *Will*, *Ideas*, and *Execution*, and that effective leadership is based on the *Seven Leadership Leverage Points*.[12,13] As health care delivery systems shift from volume-based to value-based economic reward systems, leaders face new and different challenges that require new ideas, behaviors, and actions.

As part of the effort to update its leadership framework and thinking, IHI led a 90-Day Innovation Project on leadership (see Appendix A), conducted five expert interviews, and convened an expert leaders meeting of 12 recognized organizational leaders. The purpose of the Innovation Project was to develop a deeper understanding of how to successfully bridge the gap between "the care we have and the care we need." This white paper is based on the findings from this project. Examples shared in the paper derive from the Innovation Project research and interviews, and from personal communications and interviews conducted by the authors.

Leaders at all levels in care delivery organizations, not just senior executives, are struggling with how to focus their leadership efforts and achieve Triple Aim results — better health, better care, at lower cost — for the populations they serve. High-impact leadership is required. To that end, this white paper presents three interdependent dimensions of leadership that together define high-impact leadership in health care (Figure 1).

Figure 1. Three Interdependent Dimensions of High-Impact Leadership in Health Care

New Mental Models

How leaders think about challenges and solutions

High-Impact Leadership Behaviors

What leaders do to make a difference

IHI High-Impact Leadership Framework

Where leaders need to focus efforts

First, we propose a set of ideas that constitute new mental models for leaders as they redesign care delivery systems to compete on value, rather than on volume, and deliver Triple Aim results for the populations they serve. Second, aligned with the mental models, we recommend five High-Impact Leadership Behaviors to accelerate cultural change and support efforts to achieve Triple Aim results. These leadership behaviors, when practiced systematically, are cross-cutting, supporting many key leadership efforts and initiatives at once. Third, building on IHI's legacy leadership models and

thinking, the IHI High-Impact Leadership Framework presents an updated, simpler leadership framework that serves as a guide for where leaders need to focus efforts and resources in order to drive improvement and innovation. This updated framework adds three essential areas of leadership efforts: *driven by persons and community*; *shape desired organizational culture*; and *engage across traditional boundaries of health care systems*. This white paper also includes examples from a variety of health care leaders, to help illustrate High-Impact Leadership Behaviors in real-world practice.

New Mental Models for Health Care Leadership: *How Leaders Think*

Leadership is the cornerstone of delivering results in health care for both persons and populations. The IHI Triple Aim represents a fundamental shift in defining success for health care delivery organizations — that is, the best interests of the patient and community are served by simultaneously optimizing three high-level aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care.[17]

Transitioning from Volume to Value

Success for care delivery organizations in the US has traditionally been defined by increasing use of both ambulatory and acute health care services, with economic rewards for increased volume and intensity. But the US health care system is shifting toward payment and financing systems that reward reduced utilization of acute care services, improved quality, and lower total expenditures. This transition from volume to value requires a substantial shift in leadership thinking, behaviors, and actions at all levels of care delivery organizations. The shift also demands that health care leaders at every level focus on improving the experience and outcomes of care provided and reducing the cost of care for the populations they serve. Triple Aim results in this new value-based system require leadership at all levels of care delivery organizations, whether a Federally Qualified Health Center (FQHC) community clinic system like CommUnityCare in Austin, Texas, caring for special needs populations like the homeless; an academic medical center like The Mayo Clinic in Rochester, Minnesota, treating populations of patients with the same complex disease; or a national integrated delivery system like Kaiser Permanente, providing both health plans and care delivery for employee populations.

The Importance of How Leaders Think

Mental models — how health care leaders think and view the world — are critically important because they provide the context and direction for leadership behaviors and efforts and promote innovation. The IHI Triple Aim is an example of a new way to think about health care organizational purpose and the required results.
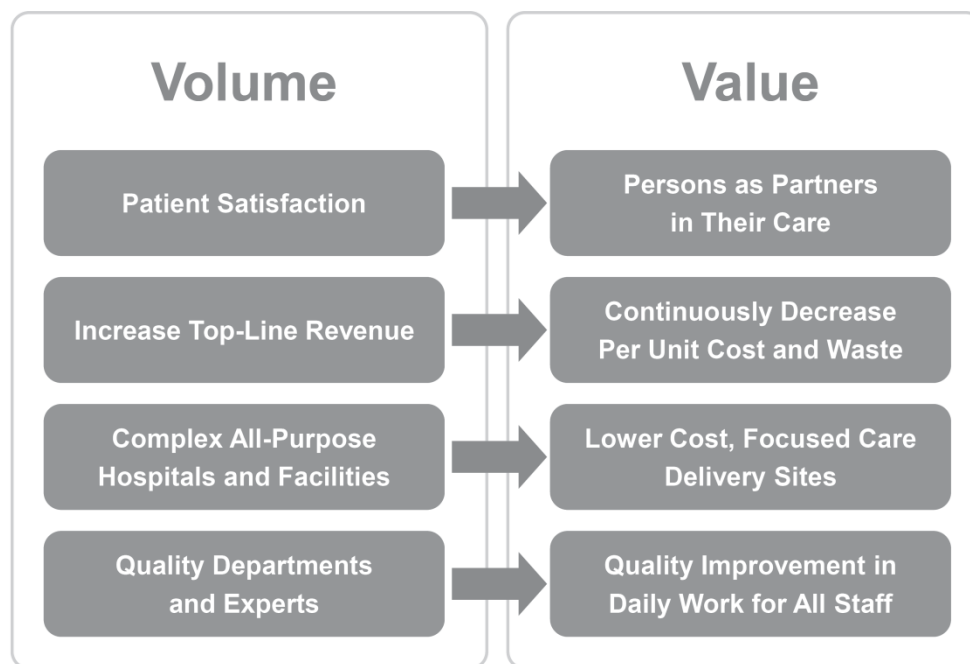
High-impact leadership requires the adoption of new mental models:

1. Individuals and families are partners in their care.
2. Compete on value, with continuous reduction in operating cost.
3. Reorganize services to align with new payment systems.
4. Everyone is an improver.

With these new mental models providing context, health care leaders define success, consider new approaches, and mobilize their staffs to adapt to the continually changing business environment and promote innovation. For example, "Individuals and families are partners in their care" requires leaders to think beyond patient satisfaction and engagement. This entails a philosophical shift away from the traditional clinical interaction of asking the patient, "What's the matter?," to a whole-person interaction characterized by asking persons (not just patients), "What matters to you?" "Compete on value" requires simultaneous improvement in outcomes, patient safety, and service, with a relentless focus on elimination of waste and reduction in operating cost. (We define operating cost as the cost of producing a "unit" of health care, which might be defined as an entire episode of care, an outpatient visit, an emergency department visit, a hospital admission, a patient day, a clinic visit, a surgical procedure, a rehabilitation session, a diagnostic test, or some other bundling of tests and procedures to produce a definable "unit" of health care. It is intended to refer to the actual cost of production by the care delivery organization, not patient charges or price.)

The transition to a value-based system also requires leaders of care delivery organizations to rethink the design and organization of care delivery. The misalignment between payment systems and care delivery organizations drives increased cost. Indeed, in *The Innovator's Prescription*, Clayton Christensen makes a compelling case that the simultaneous pursuit of multiple business models by health care delivery organizations results in increased complexity and higher cost. Finally, "Everyone is an improver" redefines how improvement work is organized and how resources are deployed. Accelerating the pace of improvement and bolstering innovation requires that everyone in the organization see themselves as having two jobs: to *do* their work and to *improve* their work. Figure 2 illustrates elements of the necessary shift in leaders' thinking (mental models) as health care delivery organizations move from a volume-based to a value-based system.

Figure 2. New Mental Models: Transitioning from Volume- to Value-based Systems

Volume	Value
Patient Satisfaction	→ Persons as Partners in Their Care
Increase Top-Line Revenue	→ Continuously Decrease Per Unit Cost and Waste
Complex All-Purpose Hospitals and Facilities	→ Lower Cost, Focused Care Delivery Sites
Quality Departments and Experts	→ Quality Improvement in Daily Work for All Staff

High-Impact Leadership Behaviors:
What Leaders Do

There are many leadership theories and approaches, all helpful in different ways, and it is not our intent to compete with or replace these models. Instead, our theory is that five High-Impact Leadership Behaviors (Figure 3) are inherent in most of these theories. These behaviors are the natural outgrowth of the mental models discussed above and align with the updated IHI High-Impact Leadership Framework described in detail later in this paper. This list of five behaviors is intended to be open-ended — the starting point for health care leaders to thoughtfully examine their own leadership behaviors and practices. If they do nothing else, leaders should adopt these behaviors and know they will be moving themselves and their organizations in a direction that facilitates the transition from volume to value, driving to better performance.

Figure 3. High-Impact Leadership Behaviors

1. Person-centeredness	Be consistently person-centered in word and deed
2. Front Line Engagement	Be a regular authentic presence at the front line and a visible champion of improvement
3. Relentless Focus	Remain focused on the vision and strategy
4. Transparency	Require transparency about results, progress, aims, and defects
5. Boundarilessness	Encourage and practice systems thinking and collaboration across boundaries

The High-Impact Leadership Behaviors collectively center on persons and community. Effective leaders raise the will for change, increase the capability of the organization on a daily basis, and drive to swift and thorough execution of changes for improvements that lead to Triple Aim results. As persons in the organization and in the community change, the culture is shaped in a new way, hopefully toward consciousness of the health of the population served, or the waste in health care, and certainly toward what matters to the persons and community they serve. For example, a leader who engages patients and community members in key improvement team meetings, or who begins each board meeting with a patient story, reinforces the vision that care focuses on what matters to the population served and builds the will within the organization to create a system that supports this behavior. The leader, through his or her own behaviors and actions, shapes the culture and fosters a person- and community-centered organization. A leader who transparently shares data on defects as well as accomplishments with patients and the community builds will and trust, signals seriousness about results, shapes a culture of openness and inquiry, and encourages connections across boundaries.

1. Person-centeredness: Be consistently person-centered in word and deed

Person-centeredness is the *sine qua non* of professionalism. The most effective health care leaders are person-centered in word and deed, seeking opportunities to interact with patients and families frequently. A leader demonstrates person-centeredness with the following actions:

- Routinely participating in rounds in the organization — whether in a medical clinic, hospital, or community service organization — to talk with patients and families;

- Consistently inviting and supporting patient and family participation at board, leadership, and improvement team meetings;

- Discussing results in terms of persons and communities, not only diseases and dollars; and

- Declaring harm prevention a personal and organizational priority.

Exemplar of Person-centeredness:

Jed Weissberg, MD, FACP, Senior Vice President, Hospitals, Quality and Care Delivery Excellence, Kaiser Foundation Health Plan and Hospitals, Kaiser Permanente

Prompted by the Institute of Medicine reports, *Crossing the Quality Chasm* and *To Err Is Human*, and the 2001 Joint Commission standard, leaders at Kaiser Permanente (KP) convened a large work group to test policies and approaches, and to identify concerns about what was then a new level of transparency and engagement with persons for whom KP provided care. With representatives from clinical care, medical staff leadership, risk management, and medical-legal, KP adopted a Communicating Unanticipated Outcomes Policy for communicating with patients and families following a medical error, and developed a training program to ensure that staff could implement the policy as intended, with empathy and skill, and with appropriate support of colleagues and the organization.

The video vignettes and role-playing exercises KP created for the staff training sessions taught lessons in overcoming their own fears (of having to admit something went wrong; of being punished), as well as appreciation of the attributes of humanity and humility. After six full months of discussion, KP came to the realization that what they were talking about implementing was already what they aspired to do when they were at their best. The goal was to ensure they did this for every patient, every time.

Exemplar of Person-centeredness:

J. Michael Henderson, MD, Chief Quality Officer, Cleveland Clinic

A decade ago, leadership in quality and patient safety was uncharted territory for Chief Quality Officer Michael Henderson at Cleveland Clinic in Ohio, but he saw an opportunity to develop clinical leadership as awareness grew in the organization that action was needed to provide safer care and improve clinical outcomes. Strong clinical skills, commitment to patient care, and the ability to build strong multidisciplinary teams are critical things that he looks for in future Cleveland Clinic leaders. Henderson believes that leaders need to think differently and adapt to new models of care to harness the power of new knowledge and the breadth of experience of all caregivers. Specific lessons learned on his journey that Henderson believes are key for successful future leaders include the following:

- Ensure that decisions and programs are patient-centered. Clinical and improvement teams should ask themselves the question, "If I were the patient, what would I want?"

- Listen. The best ideas usually come from those who do the work, so spend time with front-line caregivers and actively seek their input.

- The importance of a "patients first" culture cannot be overemphasized. Focus on employee engagement, safety, and a fair and just culture. These start with the leaders and must permeate all layers of the organization.

2. Front Line Engagement: Be a regular, authentic presence at the front line and a visible champion of improvement

The most effective leaders build trust and acquire and establish an understanding of the work at the front lines of care by regularly meeting with colleagues who deliver care at the bedside, in a clinic, or in the community, and exhibiting a genuine interest in the work performed. Behaviors like asking questions, sharing concerns, engaging in problem solving and improvement projects, and transparently discussing results (both successes and failures) help create leadership authenticity. A leader's authentic engagement and presence at the front line of care helps motivate multidisciplinary teams, especially in the context of modeling improvement thinking and methods.[18,19]

One way that Dr. Gary Kaplan, CEO of Virginia Mason Health System in Seattle, Washington, and his senior leadership team engage with front-line staff is by participating at least twice each year in week-long Lean/process redesign events with employees. Kaplan also consistently attends weekly improvement sessions at the front line. As CEO of Denver Health in Colorado, Dr. Patty Gabow led quality improvement training for over 400 employees and was actively involved in mentoring and reviewing the work of improvement teams.

At Cincinnati Children's Hospital in Ohio, all departmental managers, front-line supervisors, and employees are required to participate either as a member or a leader in a performance improvement (PI) team in order to receive a "top box score" on their performance evaluations. Front-line employees are active in defect reduction and leading or participating in 120-day improvement projects. On any given unit, run charts and control charts are posted to display their progress. Employees understand how their units' PI projects tie into the "five big dots" of the organization, according to Melody Siska, Assistant Vice President at Cincinnati Children's. Other leadership behaviors at Cincinnati Children's that promote engagement at the front line include the following:

- Regularly visit teams and work units in the organization, ask open questions and solicit ideas for improvement, while also discussing the ways each staff person's work is aligned with key strategies;

- Lead an improvement project and be transparent about what is working and what is not; and

- Transparently share results from key initiatives, both internally and externally.

Leadership engagement with front-line staff provides the opportunity for leaders to articulate how work at the point of care aligns with strategy, thus building will and promoting a culture of teamwork and patient-centeredness. Leadership engagement promotes a sense of accomplishment, pride, and joy for the workers who directly care for patients and those who support their care.

Exemplar of Front Line Engagement:

Derek Feeley, DBA, Executive Vice President, Institute for Healthcare Improvement; Former Chief Executive, Scotland's National Health Service (NHS)

As Chief Executive of Scotland's NHS, Derek Feeley experienced a devastating setback in 2011. The media broke a story revealing that one of Scotland's health care delivery systems had manipulated its reporting of patient access to hospitals, hiding the fact that patients were waiting longer for services than allowed by national standards of care. These events provoked significant political and public concern and presented a substantial challenge. Feeley was deeply concerned by the cultural issues in the NHS that had allowed dishonesty, lack of transparency, and fear to get in the way of what was best for patients.

Feeley saw the failure as an opportunity for system-wide change and improvement in cultural values and the right moment to reflect on the collective values of the entire organization. He articulated his personal values at every opportunity within the NHS, stressing how important it was for leaders in Scotland to be accessible, authentic, and open. Thus began a major process of cultural engagement, during which Feeley sought the input of the more than 10,000 staff members. The process of active engagement and listening was as important as the opportunity to shape the NHS's culture. Employees who feel engaged and involved are more likely to use the same approach when providing care for patients. As a result, NHS Scotland adopted four shared values: care and compassion; dignity and respect; openness and honesty; and quality and teamwork.

3. Relentless Focus: Remain focused on the vision and strategy

It is leadership's responsibility to create focus and urgency on high-priority efforts, starting with establishing a strategic vision for the organization and then translating that vision into an operational plan focused on the highest-leverage efforts. Relentless focus begins with framing the vision to be achieved and creating a sense of urgency.

In interviews with leaders, we discovered that most successful leaders intentionally develop and frame their "new vision," then build a sense of urgency in the organization about the need to change to achieve that vision. These leaders also talk about how they build consensus, communicate with others throughout the organization (often personal communications, across many different settings), and monitor the organization to see if others are "getting it." These leaders consciously spend time thinking about how to reinforce and role-model the vision through their own actions and behaviors.

Leadership behaviors that exemplify relentless focus include the following:

- Talk about the vision every day, clearly articulating the measurable and unambiguous improvement aims. For example, to reinforce the organization's current high-priority efforts, leaders may start every meeting with, "Remember, right now we are focused on three key safety initiatives and reducing wasted effort."

- Align leaders' weekly schedules with high-priority initiatives in the organization.

- Designate resources to high-priority efforts, and do not divert resources to projects that are not aligned with the organization's strategic plan.

- Review the results of the most critical initiatives weekly, removing barriers to progress.

- Appoint the most effective leaders to high-priority initiatives and identify high-potential leaders in training.

George Kerwin, CEO at Bellin Health in Green Bay, Wisconsin, meets quarterly with all organizational leaders to review the three to four top-priority initiatives in the organization, and to plan for the next quarter. He and his senior team review the organization-wide portfolio of initiatives to ensure that no one unit or team is overwhelmed by the high-priority efforts. That way, they can be sure that whatever is most important gets the most attention.

Exemplar of Relentless Focus:

David J. Ballard, MD, PhD, MSPH, FACP, Chief Quality Officer, Baylor Health Care System; President, STEEEP Global Institute

Leaders at Baylor Health Care System (BHCS) in Dallas, Texas, constantly reinforce the organizational vision and strategy linked to STEEEP, an acronym derived from the IOM report, *Crossing the Quality Chasm*, that calls for care that is Safe, Timely, Effective, Efficient, Equitable, and Patient-centered.[20]

The STEEEP acronym was adopted by BHCS to communicate the challenge of achieving its objective to provide ideal care, and the "steep" challenge of ascending from current levels of care to achieving the Triple Aim (better care for individuals, better health for populations, and reduction in per capita health care costs). The STEEEP message was extremely powerful in shaping a culture at BHCS focused on health care quality, from the system's board members (who are predominantly Dallas-Fort Worth area community leaders) to the more than 20,000 employees system-wide.[20]

BHCS's development, deployment, and rapid adoption of a standardized order set for heart failure exemplifies the organization's systematic approach to STEEEP care, including dedication of resources for training clinical and administrative staff in quality improvement methodology, an unwavering commitment to quality performance transparency, and use of robust, data-driven evaluations of initiatives to determine both clinical effectiveness and cost implications.[21] Baylor's experience underscores the imperative of focus on vision and strategy and the impact that local evaluation of improvement initiatives can have on buy-in and uptake. Ballard says that the focus also lays the foundation for the spread and sustainability of effective practices, leading to better clinical and financial outcomes.

4. Transparency: Require transparency about results, progress, aims, and defects

In 1905, Dr. Ernest Codman pioneered the "end result idea," contending that health care professionals should follow all patients to evaluate the results of their management and that the results be shared transparently with the public.[22] Codman's idea was heretical a century ago, but today it is recognized as the beginning of quality and person-centeredness. He understood that studying outcomes and transparency in sharing results promoted meaningful change and superior results.

Transparency is a powerful catalyst for organizational change and learning. It entails sharing data that demonstrates both positive results and defects, and helps reveal opportunities for improvement. Leaders need to be open and firm about the organization's commitment to — and expectation for — transparency and a path to action for eliminating defects.

Jim Anderson, former CEO of Cincinnati Children's Hospital Medical Center in Ohio, took a bold and then-unprecedented step when he supported displaying patient safety results and adverse event summaries on the hospital's website. Transparency means acknowledging major problems and motivates the actions to find the solution. Transparency means being candid with other stakeholders in the health care system. For example, in the intensive care units, Cincinnati Children's displays the current infection rates on computer monitors at each bedside for staff and parents to see. Dr. Uma Kotagal, Senior Vice President for Quality and Transformation, says sharing data with competitor organizations about results of discharge processes and transfers has contributed to reducing readmissions and facilitated transferring patients to the setting with the best performance for a specific procedure.

One characteristic of high-reliability organizations (i.e., those that deliver the best care for every patient, every time) is that they relentlessly concentrate on what could go wrong. High-reliability institutions fastidiously investigate near misses and failures, and then act deliberately to redesign processes and systems of care and support services. Transparency surfaces the ideas, and generates the energy and the will for action and self-analysis.[23]

Leaders cannot be transparent without key data on use of services, costs of care, and health outcomes. They must ensure that their organizations' information systems provide the data needed to identify gaps, so these gaps can then be addressed. Transparency about the health of the population served requires systems that track patients through the community health care system, from location to location and provider to provider, and show which persons are not reaching health goals such as blood sugar and cholesterol levels and healthy weights. When leaders practice transparency, they are by necessity supporting capable information systems. For example, when cystic fibrosis (CF) patients at Cincinnati Children's Hospital Medical Center were experiencing improved nutritional status as part of an improvement effort, the staff was gratified and optimistic. When Dr. Maria Britto, the leader in chronic illness care, and the CF team examined the results by insurer, they discovered that children on Medicaid were not realizing the same gains in nutritional status as those with commercial insurance, indicating that poverty might be a factor in outcomes. Because of the hospital's transparent sharing of data, the CF team began adding specific interventions to address nutritional failure for patients who were not responding to the standard approach. Within two years, data showed that the disparity had all but disappeared.

Deliberate use of transparency for transformation enables accountability and trust to develop, and promotes self-study and learning. Active transparency begets humility, and humility begets trust, the currency of leadership.[24] The most successful health care organizations and leaders collect the most meaningful data on the most important patient care features and then relentlessly work to improve them.[19] A leader's transparency has many salutary effects; transparency helps to:

- Build the will to improve care;

- Shape the culture into one of openness, with attention to eliminating defects;

- Raise improvement capability through access to real-time data;

- Track the progress to results such that mid-course corrections are possible;

- Engage partners and empower teams across boundaries; and

- Provide patients and community members with opportunities to participate in improvement and motivate change.

Exemplar of Transparency:

William C. Rupp, MD, CEO, Mayo Clinic of Florida

CEO Bill Rupp has set an expectation that his clinical teams at Mayo Clinic in Jacksonville, Florida, post relevant patient-centered performance data in the hallways for all families, patients, and staff to see. He leads morning rounds to review results with staff and discuss their efforts to improve them.

At the first two all-staff meetings after he started his new role as CEO, Rupp was asked publicly about the hospital's specific infection rates. He knew the exact numbers by memory; this sent a strong message to all colleagues that the leader truly cared about patient harm and that it was front of mind for him (and that a CEO knew more than just the financials). He used transparency bolstered by relentless focus on process improvement as keys to success. As Rupp explains, "If you display important results for everyone to see, you catalyze meaningful action. Patient results engage medical professionals; financial results do not."

5. Boundarilessness: Encourage systems thinking and collaboration across boundaries

The concept of boundarilessness bridges two closely connected leadership behaviors. The first is the genuine, action-generating receptivity and openness to ideas, or "mental boundarilessness." It can be applied to an active search beyond one's immediate confines for best practices when approaching problems. It is a model for successful engagement across boundaries, fostered by greater social capital, and an attribute of a learning organization.[25] Leaders who play a key role in modeling and leading engagement across boundaries should establish the expectation for both adoption and active diffusion of practices and learning. Mental boundarilessness is tightly coupled with innovation and displayed by behaviors that emphasize curiosity — asking open-ended questions, encouraging others to seek and try new ideas, encouraging and promoting diversity, and encouraging non-traditional approaches to problem solving.

The second type of boundarilessness is reflected in the leader's willingness to cross traditional boundaries, both internal and external, in the pursuit of Triple Aim results. With an increasing proportion of care aimed at persons with chronic conditions, care delivery organizations of all kinds will need to work together and with social service organizations to coordinate care across the continuum and deliver person-centered care. Their shared aim is seamless, coordinated care that answers the question, "What matters to me?," for the people receiving care. Leadership across organizational boundaries requires new actions and relationships.

Collaboration is a natural dividend of properly executed boundarilessness, connecting colleagues on multidisciplinary teams and from different parts of the organization, and with partners from outside the organization as necessary. Leaders must be skilled at building and maintaining teams, and lack of such skills is a common reason why leaders fail.[26]

How do leaders demonstrate boundarilessness?

- They ask open questions.
- They visit improvement teams, work units, and other organizations.
- They harvest ideas from within the organization and from other leaders and organizations.

- They seek shared aims and advocate for win-win scenarios with physician practices and other community service providers.

- They are generous with attention and connections.

- They share resources.

- They utilize systems thinking to frame problems and challenges for those they lead.

When boundaries are removed, will builds around shared aims and a shared vision emerges, a culture of openness becomes possible, and new capabilities, ideas, and resources become available. The Center for Creative Leadership calls this "boundary spanning leadership" — "the capability to create direction, alignment, and commitment across boundaries in service of a higher goal."[27]

Exemplar of Boundarilessness:

Peter J. Knox, Executive Vice President, Bellin Health

At Bellin Health in Wisconsin, leaders know that success relies on the whole community. Executive Vice President Pete Knox has created a series of win-win arrangements for the health system that reach across organizational boundaries. For example, Bellin developed easy-access "minute clinics" to remove boundaries to primary care; provided physical therapists as trainers for local school sports teams that also are helping the schools raise the activity level of staff and students who are not athletes; and partnered with local employers to provide effective ambulatory care and occupational health.

Exemplar of Boundarilessness:

Dan Wolterman, MBA, MHA, President and CEO, Memorial Hermann Health System

Approximately five years ago, Dan Wolterman, President and CEO of Memorial Hermann Health System in Texas, recognized the need to accelerate the development of the Clinical Integration network and its alignment with the strategic objectives of health reform. Long before the implementation of the Affordable Care Act, funding was made available to create a Primary Care Medical Home network with the goal of strengthening the physician-patient relationship and organizing around patient-centric practices. These cross-practice committees have overseen process changes in office-based care that have transformed the local practice of medicine for patients and physicians. This model delivers value across the community by helping patients stay healthy through the use of sophisticated monitoring and care management activities, which have led to improved patient satisfaction, better health care quality, increased involvement of patients, and lower costs over time.

Exemplar of Boundarilessness:

Gary Kaplan, MD, Chairman and CEO, Virginia Mason Health System

Innovation is a pillar of Virginia Mason's strategic plan. As a result, its leaders understand the necessity of innovation and continually speak to its importance. Virginia Mason uses Lean methodology as the platform for innovation, to build on current processes and measure success. The organization invests in training physicians on idea-generating techniques to harvest robust information and ideas, and sponsors ongoing innovation grants to encourage improvement.

Physician engagement is also accomplished through participation in rapid-cycle improvement workshops. At these workshops, front-line physicians and clinical staff learn and work to redesign

care processes in what Virginia Mason describes as a "see/feel experience of self-discovery." In addition, they develop compacts to clarify expectations between the physician and the organization, defining "what every physician has every right to expect from the organization" and "what the organization has every right to expect from the physician." The compact formalizes expectations and provides a foundation for measuring performance.

Virginia Mason believes that a deep understanding of the current state is essential to identify opportunities for improvement that lead to a better future state. Dr. Kaplan believes value stream maps of all major process flows require staff to work across boundaries. Virginia Mason has progressed in this approach to understand how a specific process fits within the value stream. For example, the joint replacement process actually begins in the primary care physician's office. Truly understanding the current state requires looking both upstream and downstream. Accordingly, Virginia Mason's metrics are designed to measure the total value stream map rather than its individual components, which encourages systems thinking and collaboration across boundaries.

Each of these five High-Impact Leadership Behaviors accomplishes several leadership aims at once. For example, a leader who demonstrates person-centeredness by engaging patients or community members in key planning or improvement meetings, or by starting each meeting with a patient story, will reinforce a vision and build will, shape the culture, and of course foster a person- and community-centered organization. Taken together, they serve as a simple but powerful guide for the daily behavior of an effective health care leader.
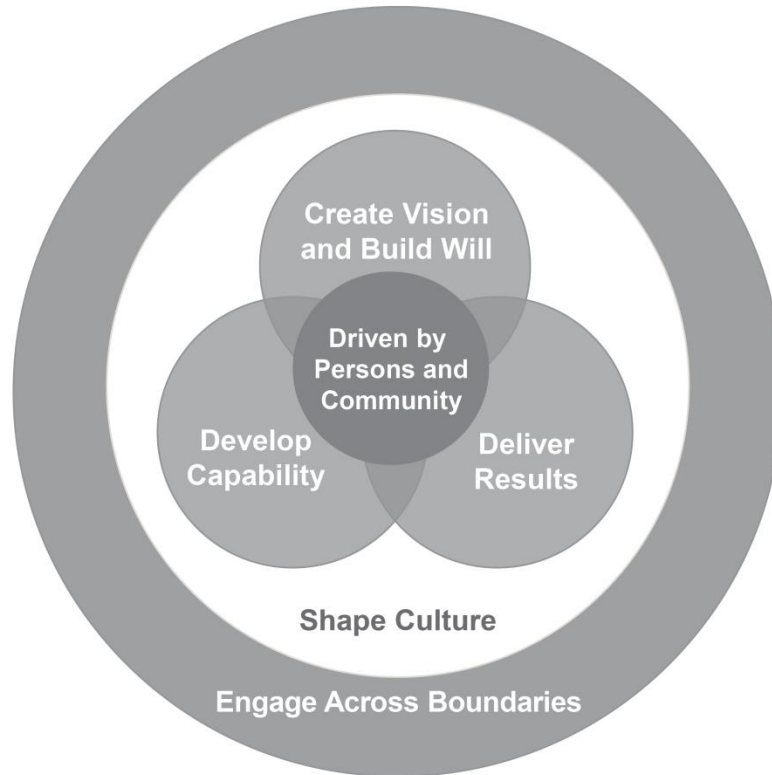
The IHI High-Impact Leadership Framework: *Where Leaders Focus Efforts*

The High-Impact Leadership Behaviors describe how effective leaders behave; in this section, we present a framework that suggests where effective leaders focus their efforts. The IHI High-Impact Leadership Framework (Figure 4) provides a visual map of the critical domains in which leaders of care delivery organizations, departments, and microsystems must focus their efforts and resources to drive improvement and innovation to achieve Triple Aim results for the populations they serve. The actions and initiatives pursued within each domain of the framework are shaped by the new mental models and supported by the practice of the High-Impact Leadership Behaviors previously described.

The framework is a practical method of focusing and organizing leadership efforts for leading improvement and innovation. It is built on social science leadership research and the collective learning of IHI and others over the past decades.[1,15,16] Specifically, the framework builds on the leadership thinking and work of Tom Nolan, Don Berwick, Maureen Bisognano, James Reinertsen, and many others at IHI who, over the years, have helped motivate health care leaders to drive improvement and address system-wide change. The updated IHI High-Impact Leadership Framework is a distillation of broad leadership experience, practices, theories, and approaches. It also represents the natural evolution of four major IHI works: *Leadership Guide to Patient Safety*, *Seven Leadership Leverage Points for Organization-Level Improvement in Health Care*, *Execution of Strategic Improvement Initiatives to Produce System-Level Results*, and *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*.[11-14]

The IHI High-Impact Leadership Framework explicitly addresses three new required leadership efforts and actions: *driven by persons and community*; *shape desired organizational culture*; and *engage across traditional boundaries of health care systems*.

Figure 4. IHI High-Impact Leadership Framework

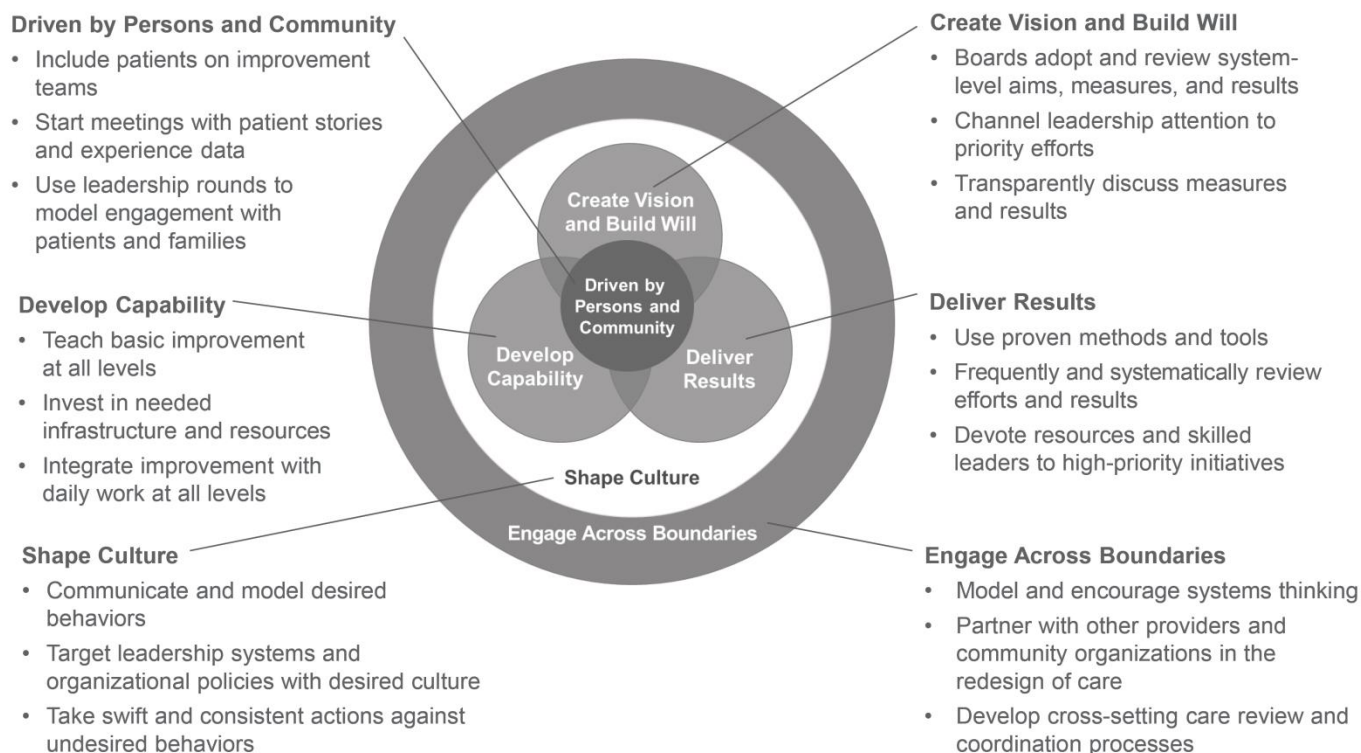## The Domains of the IHI High-Impact Leadership Framework

The use of nested circles in the framework is intentional. The Venn diagram at the center conveys the interdependence of the three core leadership domains of vision and will, capability, and results (an evolution of IHI's *Will*, *Ideas*, and *Execution* framework),[12] with persons and community at the center as the driver. Culture is shaped by the collective influence of leadership behaviors and actions. Culture in turn supports will building, capability development, and delivering results in the organization, and provides for sustainability and momentum for spread. The outermost circle emphasizes the need for leaders to engage across traditional boundaries, regardless of whether those boundaries are internal departmental or external organizational boundaries.

Many leadership initiatives and efforts will likely support progress in multiple domains of the framework. The power of the High-Impact Leadership Behaviors is that they cut across and support efforts in all six domains of the leadership framework. For example, Robert Colones, President and CEO of McLeod Health in Florence, South Carolina, leads his senior leadership team on daily rounds of patients. This person-centered leadership behavior involves interviewing patients and staff to learn what is going well and what is not going so well. He "huddles" with the leadership team after the rounds to review what has been learned and take appropriate actions, as necessary. The High-Impact Leadership Behavior, "Person-centeredness," practiced by Colones and his senior leadership team clearly supports the Driven by Persons and Community domain in

the leadership framework, and it also is critical to supporting the team's efforts in all other domains: build will, develop the capability of the senior leadership team, deliver results, shape the organizational culture, and engage across boundaries.

The six domains of the framework collectively represent the critical areas in which leaders at all levels of health care delivery systems must engage and focus their actions, behaviors, and efforts, and provide resources in order to drive improvement and innovation. Figure 5 provides some high-level examples of leadership actions, behaviors, and efforts for each domain. In the following sections of the paper, we explain why each domain is important and provide examples for each domain.

Figure 5. IHI High-Impact Leadership Framework with Examples

Driven by Persons and Community
- Include patients on improvement teams
- Start meetings with patient stories and experience data
- Use leadership rounds to model engagement with patients and families

Develop Capability
- Teach basic improvement at all levels
- Invest in needed infrastructure and resources
- Integrate improvement with daily work at all levels

Shape Culture
- Communicate and model desired behaviors
- Target leadership systems and organizational policies with desired culture
- Take swift and consistent actions against undesired behaviors

Create Vision and Build Will
- Boards adopt and review system-level aims, measures, and results
- Channel leadership attention to priority efforts
- Transparently discuss measures and results

Deliver Results
- Use proven methods and tools
- Frequently and systematically review efforts and results
- Devote resources and skilled leaders to high-priority initiatives

Engage Across Boundaries
- Model and encourage systems thinking
- Partner with other providers and community organizations in the redesign of care
- Develop cross-setting care review and coordination processes

Driven by Persons and Community

We have deliberately placed this domain at the center of the framework to underscore leaders' duty to truly embrace person- and community-centered care. In essence, nothing should be designed, developed, or improved for patients and community members without their being part of the process. Leaders should clearly and concisely describe and demonstrate to staff what is meant by patient and family engagement, why it is important, and how it fits with the organization's strategy. If leaders at every level effectively convey how each individual in the organization contributes every day to patient experience, then the potential for excellent patient experience outcomes increases dramatically.[28] By beginning meetings with a patient's story of their health care experience, leaders reinforce the understanding that staff in the organization are impacting lives, not numbers. Dr. Gary Kaplan, CEO of Virginia Mason Health System, begins board of directors

meetings with a patient story, some positive and some illustrating opportunities for improvement. Inviting patients and families to leadership meetings emphasizes the need to consider the human impact of health care systems.

Persons and the community at the center of the framework means engaging them and listening in ways never imagined a decade ago. At Cincinnati Children's Hospital and Medical Center, patients and/or their parents participate as equal members on every improvement team. The team carefully selects and supports their participation. The patient and parent members see the data from improvement efforts, suggest change ideas, and study results with the team. Parents say, "The clock is ticking for my child. What takes so long to improve this?" Patients say, "You might think it is better for me to have the foods I like, but what about making my own schedule for therapy?" Leaders at all levels engage patients, families, and the community in improvement and care redesign and transparently share results.

The Patient- and Family-Centered Care methodology developed by Anthony M. DiGioia, MD, an orthopedic surgeon at UPMC in Pennsylvania, integrates patient and family voices into the health care delivery system while focusing on decreasing waste and improving care. Involving patients in the design of health care processes ensures efficiency without the need for added resources. The perspective of patients and families clearly and quickly identifies aspects of the care experience that are less than ideal from their points of view, and aspects of the care experience that may also compromise outcomes and increase waste and costs. Engaging patients and families as full partners in redesigning care delivery not only meets the needs of patients, families, care providers, and the organization, but also directly ties into the Triple Aim of improving the individual experience of care, improving the health of populations, and decreasing the cost of care delivery.[29]

Community-centered care can be seen most clearly when visiting FQHC community clinics like CommUnityCare in Texas or Pueblo Community Health Center in Colorado. These clinics' boards of directors are community members, with a required majority from the patient populations they serve. Their staff are members of the community, and they have many connections to make community engagement easy. To understand what community-centered care means, it is worth reviewing what the leaders do in these organizations. First, they know and talk about community health measures as well as their own organization's performance measures. They sponsor and lead (not just appear at) community health events. They donate their organization's resources to health screenings, health education programs, and on-site care delivery (e.g., mobile mammography, mobile dentistry, etc.). They raise funding for community programs that do not necessarily benefit their organization. They practice boundarilessness.

In Colorado, Pueblo Community Health Center CEO Donald Moore has formed a new community coalition with representatives from local hospitals, public health, and social service organizations to pursue Triple Aim results across the entire community. In Austin, Texas, CommUnityCare is a key player in a new Community Care Collaborative that is redesigning access and care under a Medicaid waiver from the Centers for Medicare & Medicaid Services. At Denver Health, a public safety net hospital in Colorado, Dr. Patty Gabow and other leaders believe the local community and population they serve need a truly integrated health care delivery system. They developed relationships with behavioral health care providers, home health services, and long-term care facilities because those services were not readily available within the Denver Health system. They understood the importance of linking the community's mental health with physical health. In order to increase the community's access to health care services, they worked with schools and social services to facilitate enrollment for Medicaid services. They moved from a medical home to a medical neighborhood model.

Create Vision and Build Will

Achieving results at the system or organizational level requires building will at all levels. The commitment of senior leaders is indispensable to make a new way of working attractive and the status quo uncomfortable. Senior leaders need to create urgency around the need for and acceptance of change. Reliance on past norms and practices must be considered unacceptable.[13]

The repeated articulation of a clear and compelling vision for the organization's future is a key to building will. If done well, all staff should be able to link this vision of the future with organizational strategic goals. Lack of clarity increases fear, misalignment of efforts, and barriers to change. For example, a leader might say, "We want to be the best delivery system in our market." While simple and easy to remember, this goal is open to many interpretations. Contrast that with a leader who might say, "We want to be an organization in which every patient and family says that their wishes were respected. Respected patients heal faster, they partner in their care, they recommend us to others, and this helps us reduce harm and thrive in the community." The nurse assistants in primary care clinics then begin to understand how including screening for depression as part of the patient visit will ensure that patients get the care they need to stay well. Their leaders help them make these connections.

Board engagement and adoption of system-wide aims for reducing patient harm and delivering the right clinical care helps build organizational will and alignment. Building will at the board level also helps to ensure that the difficult changes required have backing and support at the highest levels of governance and are sustainable. Declaring a key initiative the leader's "improvement project" demonstrates focus and aligns efforts around essential changes. A more formal method to achieve the same aim is to integrate the organization's key strategies and aims into employee performance appraisal systems. This approach, along with the inclusion of measureable goals, creates an awareness of how individual success is tied to organizational success.

Internal and external transparency regarding organizational performance also builds will. It shows that leaders care and are unafraid to look for opportunities for improvement. It demonstrates leadership responsibility and openness to new ideas. Publicly posting departmental or unit data such as infection rates, wait times, patient falls, or occupational injuries encourages employee awareness, generates ideas for improvement, and creates work unit accountability for results. At Orlando Health in Florida, Dr. Jamal Hakim, Chief Quality Officer, and Anne Peach, RN, Vice President of Patient Care and Chief Nursing Officer, regularly share with the board and leadership a list of the first names of patients who have been harmed in the previous quarter. In addition, Peach posts scorecards, run charts, and other visual displays of data on nursing units to track progress on harm reduction.

Providing access to performance data to patients, families, and the community demonstrates a commitment to and perceived urgency of achieving organizational excellence. Bellin Health and Virginia Mason both regularly share performance data with local employers and engage them in efforts to reduce health care costs for their employees.

Building will also involves connecting emotionally with staff. Mary Brainerd, CEO of HealthPartners in Minneapolis, Minnesota, commissioned a play from Mixed Blood Theatre Company to help build will in her organization. The *Fire in the Bones* initiative was designed to raise awareness among employees about the dramatic transformation the organization was undertaking to deliver care that was safer, timelier, effective, efficient, equitable, and patient-centered.[30]

Brainerd describes *Fire in the Bones* as a play that depicts friends' responses to the death of a patient and raises questions as to whether better care could have provided a different outcome. The play dramatizes some of the flaws in the health care system and demonstrates how better care could result in improved outcomes. HealthPartners staff did prework before the play, and after each performance leaders held an open discussion. It was a way to create a dialogue and a common experience for more than 9,000 employees.

Develop Capability

Organizations that have intentionally developed improvement capability throughout their microsystems have a strategic advantage when it comes to accelerating and sustaining system-level improvement; they have an efficient and effective means of getting everyone involved in accomplishing their strategic plan.[12] It also fosters new ideas and solutions. Senior leaders must develop and maintain the infrastructure — including organizational structure, people, policy, budget, and resources — that supports organizational capacity and capability for embracing change and innovation.

To effectively execute improvement projects throughout an organization, leaders must devote resources to establishing capable improvement leaders in every microsystem.[13] Employees at every level within the organization must possess a basic knowledge of improvement methods and tools. The importance of front-line staff understanding of and comfort with using improvement methods and tools cannot be overstated. Front-line staff have the greatest opportunity to identify waste, possible risks for errors, and potential opportunities for improvement. Furthermore, the successful testing, modification, and spread of change ideas rely heavily on the commitment of these staff. Encouraging the front line to identify solutions and conduct small tests of change fosters a sense of ownership and dedication to successful implementation.

Brent James, MD, MStat, Chief Quality Officer at Intermountain Healthcare in Utah, believes it is important for leaders to advance the theory and practice of quality by constantly learning, participating in, and contributing to the ongoing professional discussion of how best to deliver "the best medical result at the lowest necessary cost."

At Virginia Mason, all staff are trained in and use the Virginia Mason Production System, an adaptation of the Toyota Production System that is based on principles of Lean management. All staff have the expertise to make improvements in their work, and leaders at every level are responsible for ensuring that improvement is part of everyday work. Leaders review key results with front-line staff daily and work with staff to identify improvements, elicit ideas, and track progress. The Chief Executive leads the work for the entire organization every Tuesday at 7:00 AM. This duty is not delegated to quality improvement professionals. At Virginia Mason, everyone is an improver.

The motto of the quality department at Cincinnati Children's is "to be the best at getting better." They measure their efficiency by tracking staff time and effort in a "Level of Effort" computerized system. All quality improvement staff are asked to track their time and the number of tests applied to their assigned project. Their goal is to move the quality department staff away from meetings and instead engage them at the front line of care, actually running tests of change. Staff are expected to conduct a minimum number of tests per week per project. This approach is expected to accelerate the rate of improvement and is used to measure the time and effort the organization invests to improve a specific problem.

Capability also requires the training infrastructure to support and develop employees. For example, the Mayo Clinic Quality Academy offers 27 courses that cover a multitude of specific

approaches and tools, including Lean, Six Sigma, change management, failure modes and effects analysis, project management, and champions training, among others. A leadership development and recognition offering within the Academy is the Quality Academy fellows program, which recognizes team-based improvement work and knowledge. Mayo Clinic has certified more than 33,000 employees as Bronze, Silver, or Gold Fellows.

Senior leaders must develop and maintain an infrastructure that supports organizational capacity and capability for embracing change and innovation. Employee involvement in generating improvement opportunities will fall short if the organization lacks an infrastructure to support the implementation of the identified improvements. If successful improvement projects are to scale up, spread, and change the performance of the entire system, then leaders must build a system of leaders capable of rapidly recognizing, translating, and locally implementing change concepts and improved designs.[13]

It is also necessary for leaders to focus on organizational design and structure to ensure that the organization is sufficiently aligned to support the changes.[31] Texas Health Resources is a large multi-facility integrated delivery system serving North Texas. CEO Doug Hawthorne realized early in his efforts to lead a transition from volume to value and to achieve Triple Aim results for the populations served that a different organizational structure was required. His solution was to move from a traditional function-based organizational structure (i.e., hospital group, physician organization, etc.) to a geography-based organizational structure co-led by a physician/business leader dyad that jointly have operational responsibility for all care delivery sites and functions within a geographic region.

Fostering diversity is another strategy for creating capability. The lack of diversity can reduce the exchange of ideas and stifle debate. Diverse groups outperform those that lack mixture. Variety generates more thoughtful processing. "Unconscious bias" is common; diversity is an antidote.[32,33]

Successful leaders continually plan and develop the talents of their successors. We know that organizations that prioritize leadership development realize more impact on their business.[34-38] Strong evidence-based literature supports the premise that it is possible to effectively grow emerging leader talent while advancing strategy, increasing employee retention and engagement, and delivering a measurable return on investment.[39-50]

James Dilling, Administrator of the Value Creation Office at the Mayo Clinic in Rochester, Minnesota, uses a systems engineering approach to deliver high-value practices. Working in health care quality for the last three decades has taught Dilling to appreciate that improving the care of patients is a journey; not a project or a priority, but instead a constantly managed effort built into the business strategy of the organization.[16] Early efforts focused on building will and capabilities around improvement, but it soon became clear that the organization was creating pockets of excellence. After a great deal of research and exploration, Mayo developed a diffusion model to address this gap in organizational capabilities. The model includes governance changes, cultural shifts, hardwiring standards into the practice, and further engagement of patients.[51]

Having the right talent in the right job is another critical factor for developing capability. In the IHI white paper, *Seven Leadership Leverage Points*, having the right team in place and engaging physicians in the work are two of the leverage points. Having the right team with the right talent to achieve the vision is the responsibility of the board and senior leadership. Having physicians and other clinicians not just engaged in improvement, but leading clinical efforts to achieve Triple Aim results is a critical success factor.

Deliver Results

Health care organizations cannot achieve optimal performance by merely trying harder, studying harder, or working harder. Success is not about more improvement projects. Closely related to the Develop Capability domain, Deliver Results is about the need for leaders to ensure that the resources and organizational agility are in place to deliver desired results in patient experience, cost, and clinical outcomes for the populations served. It also highlights the need for leaders to focus on results and to ensure that the right structure, tools, and methods are in place to ensure successful execution and delivery of not just any results, but the Triple Aim results aligned with the vision.

Delivering results starts with the measurable strategic aims of the organization that then cascade down throughout the organization so that all staff understand how their work and efforts contribute to the aims. Then, at every level of a health care service and delivery organization, results for experience, outcomes, and cost can and should be systematically tracked and reviewed for measurable improvement and Triple Aim progress.

Delivering results relies on focus, and setting and managing priorities. It is the job of leaders to "make sense" of the competing priorities, manage the pace of change, and ensure that true priority efforts are properly resourced. Four steps are fundamental for delivering results:[12]

- Setting breakthrough performance goals;

- Developing a portfolio of high-priority projects to support the goals;

- Deploying resources to the projects that are appropriate for the aim; and

- Establishing an oversight and learning system to increase the chance of producing the intended results.

The first step of setting ambitious performance goals involves creating a vision and building will, as discussed above. Once this is done, the priorities will be clear, and selecting a small group of projects that support the goals — and getting those projects underway immediately — shows the intention to deliver on results and creates focus.

Skilled leaders and adequate resources for each high-priority project are critical success factors for delivering results. This may include allocating staff and leadership time, funding for testing changes, and providing technical support. And beyond a strong project set-up, a robust oversight and learning system is needed to inform project teams, leaders, and other staff in the organization about progress and challenges. The learning mobilizes leaders and staff alike to make whatever corrections are needed.

Intermountain Healthcare is a nonprofit system of 22 hospitals serving patients and plan members in Utah and southeastern Idaho. Brent James, MD, Chief Quality Officer, counts Intermountain's results in terms of lives. He reports that, as a result of their efforts over the past decade, preventable deaths are avoided for more than 1,000 patients per year, and several thousand individuals are spared the pain and trauma of safety errors. James believes his main role is to build the infrastructure that enables his colleagues to deliver on the high-priority safety and care initiatives. He also believes the most effective interventions change the environment in ways that make it easier for clinicians to do what they want to do anyway.

Shape Culture

Leaders must establish an organizational culture that supports achievement of the vision and aims. Organizational culture is the active reflection of the leaders' vision, behaviors, structure, and systems. The culture is a reflection of how values are "lived" through actions, as demonstrated by the behaviors of everyone, particularly leaders, in the organization. It is "the way we do things around here."

In addition to senior leaders, middle managers and informal leaders also have a strong influence on and responsibility for shaping culture. Leadership actions that help shape culture include the following:

- Set a vision for how the organization behaves (e.g., "In this organization, we listen carefully and respond to what is most important for our patients and their families").

- Identify the most important actions that exemplify the desired culture (e.g., "Staff persons must notify a supervisor and get help if they have any doubt that they cannot safely take care of a patient, for example, moving a patient, giving a medication, managing several high-need patients, or providing adequate supervision in the community").

- Create the infrastructure that makes it possible for staff to follow these actions, including training, coaching, supervision, and tracking results.

- Adopt the most important behaviors themselves and track their own progress.

Organizational cultures adapt and change over time. Two examples illustrate this. Many ambulatory practices have a culture that says, "We take care of *our* patients when they are with *us*, and *you* take care of the same patients when they are with *you*." This approach may work well in a volume-based payment system, but achieving a better patient experience, decreased use of unwanted and unneeded services, and being proactive about the health of the population will require real coordination and collaborative problem solving. No longer will there be profit in the "we take care of our own patients" approach. Leaders who have built incentives for a culture and behavior that reinforces coordination of care and shared management of patients will see it tested, then implemented, and ultimately become the norm within the culture. At this point, the culture will be reflected in the phrase, "Around here, we work as a seamless team."

In health care, it is still common to find organizations whose cultures reflect "the physician is always right" behavior. This behavior creates fear and makes it difficult for leaders to foster open communication and teamwork among physicians, nurses, and other care team members; adopt evidence-based care practices; and deal with disruptive physician behavior. Shifting to a culture that values standard work and teamwork is necessary for the delivery of reliable care. When senior organizational and physician leaders role-model the desired behaviors associated with a culture in which "do no harm" replaces "the physician is always right," and leaders take visible actions against unwanted behaviors, the "old rules" begin to change and are replaced. When fear is lessened, staff will speak up, and physicians will adopt different approaches to communication and teamwork. Eventually, staff will say, "This is a place where I am respected for speaking up if I think a patient is about to be harmed."

A well-known example of shaping a culture of safety comes from the experience of Paul O'Neill at Alcoa. As the new CEO of this large multinational company, he decided that employee safety was the key to improved performance. Very quickly, he demanded data on worker injuries from the leaders in each division in ways that forced them to act daily on safety issues. Once they adopted

those behaviors, the middle managers specified new behaviors for front-line workers related to equipment, teamwork, and reporting near misses that changed forever their attitude about workplace injury. For example, today, no one in the company would allow anyone working at the front line to do so without wearing a hard hat. Safety is part of the culture.[52]

Other leadership actions that shape the culture include encouraging new ideas and methods; transparent discussion of concerns; demonstrating flexibility and problem solving; role-modeling improvement in daily work; and genuine patient, family, and community engagement. Leaders who address the cultural aspects of improvement and innovation will be poised for success and long-term sustainability.

Engage Across Boundaries

To achieve Triple Aim results for the populations they serve and move toward truly person-centered care, leaders of care delivery organizations must engage others — families, other providers, community resources — beyond the walls of their organizations in the work of redesigning care to be more efficient and effective.[17]

Reducing hospital admissions is a classic example of working across organizational boundaries to improve care for patients. Reducing readmissions also requires working with families and patients in ways that do not fit the classic fee-for-service delivery model. IHI's STate Action on Avoidable Rehospitalizations (STAAR) initiative was a multistate, multistakeholder approach to dramatically improve the delivery of effective care at a regional scale. Delivering high-quality health care requires crucial contributions from many parts of the care continuum, and effective coordination and transitions between providers and between care settings. The best transition out of the hospital will only be as effective as an activated reception into the next setting of care. The core processes, communication tools and norms, and handoff and follow-up delineations of responsibility and care coordination activities are all ripe for improvement — as the following three examples from STAAR demonstrate.

The Kitsap County Community Care Transitions Program in Washington State is co-led by Harrison Medical Center, a 297-bed community hospital serving Kitsap County and Stafford Healthcare. A steering committee comprising key hospital staff and representatives from skilled nursing facilities (SNFs), home health, primary care, hospice, and elder services convenes monthly to discuss findings from diagnostic reviews, review data, and set priorities for the continuum-wide initiatives. In addition, nine of the ten SNFs in the county convene monthly to identify best practices and standardize care transitions processes across facilities. All SNFs are invited into the hospital once per month to review cases of readmitted residents to determine specific opportunities for improvement based on the findings from these reviews.

Holyoke Medical Center in Massachusetts formed a cross-continuum team that includes community providers and social service agencies to initiate its care transitions improvement work as part of the STAAR initiative. The team conducted site visits between various skilled nursing facilities and the medical center, which served to debunk preconceived notions about the challenges and opportunities within each care setting and paved the way for greater cooperation in jointly improving transition efforts between settings. Holyoke's cross-continuum team has also embraced broader community efforts; for example, a management company overseeing community housing for seniors partnered with the cross-continuum team to provide smoking cessation education for their seniors, and the team also began working closely with a local area high school on health and wellness efforts.

Engagement across boundaries is just as important within an organization as it is between organizations. The reliable spread of best practices and knowledge from one unit to the next within organizations remains a challenge. Leaders must focus on standardizing what works across internal boundaries, breaking down the artificial barriers of silos and organizational structure. Leaders model and encourage teamwork and systems thinking within their organizations, helping others understand the downstream impact of the care they deliver on individual patients and populations.

CareOregon, a nonprofit Medicaid health plan based in Portland, applied IHI's Breakthrough Series Collaborative model in their five clinics, with the goal of improving services for enrollees at high risk of poor health outcomes. From the start, CareOregon wanted clinical teams to pursue changes in their work around five guidelines — team-based care, proactive panel management, patient-centered care, advanced access, and behavioral health integration — but organizational leaders did not dictate how the teams were to accomplish this goal.[53] Senior leaders provided employees with guidance, and staff were given the autonomy to identify the best methods for meeting those goals in their work across boundaries. CareOregon's work spans inpatient, behavioral health, and ambulatory care — for example, securing community health services to help patients so they don't have to go back to the hospital; utilizing patient navigators; identifying behavioral health services that integrate with primary care — all of which improves outcomes and reduces utilization of acute care. This approach paid off, as CareOregon succeeded in improving the quality of care for its patients while reducing overall per capita cost of care to the insurer or the state.

Social capital is fundamental to successfully working across boundaries, both internal and external, and for organizational learning. Social capital is the good will, trust, and interconnectedness between colleagues and organizations that accrues from the capability of leaders and employees to work together for common purposes. Social capital is requisite for leaders to achieve successful diffusion of best practices across the continuum of care and integral to achieving high reliability.[54,55] The diffusion and communication networks must be purposely engineered and nurtured.

Conclusion

High-impact leadership is not just for senior leaders, but is required at every level of care delivery organizations in order to deliver Triple Aim results. Value-driven, high-reliability health care sustained by improvement and innovation requires leaders at all levels to think with new mental models about the challenges and their role, practice cross-cutting High-Impact Leadership Behaviors, and focus their leadership actions through the lens of the IHI High-Impact Leadership Framework to achieve Triple Aim results for the populations they serve.

Over the past 25 years of experience and observation, IHI developed key concepts and an approach to leadership for improvement and innovation in health care. Building on this foundation, three interdependent dimensions of leadership have now been incorporated into an approach for focusing and organizing leadership efforts for leading improvement and innovation: new mental models, High-Impact Leadership Behaviors, and the IHI High-Impact Leadership Framework. The framework explicitly addresses three new areas of required leadership efforts and actions: driven by persons and community; shape desired organizational culture; and engage across traditional boundaries of health care systems.

The High-Impact Leadership Behaviors, required for leaders throughout the organization, have thus far been implemented and found effective for a group of leaders, both in and outside the health care industry. Time and experience will show if adopting new mental models and these specific behaviors will continue to magnify leaders' effectiveness as they take on the challenges in

the changing health care environment. The goal now is to provide an even larger group of leaders with the most direct path to a more person- and community-centered, effective, and agile organization. In short, there is much to be learned.

We invite organizations to test, adapt, and share the models, behaviors, and framework offered in this white paper. As with previous frameworks, this one will benefit from learning and feedback, and IHI intends to harvest and improve on the ideas and concepts with the community of leaders. We invite feedback on what is helpful, what is missing, and what are the next steps for building strong leadership and more reliable improvement in patient experience, cost of care, and population health.

Appendix A: IHI 90-Day Innovation Project

Project topic: Essential Behaviors for Leaders in the New Health Care Environment (August 2013)

Aim: This project was designed to answer the question, "What do the most effective leaders do to successfully transition their organization from a volume-based payment system to a value-based payment system?" To answer this question, we convened an expert meeting and conducted interviews with various health care leaders.

Expert Leaders Meeting Participants

- Donald M. Berwick, MD, President Emeritus and Senior Fellow, IHI

- Pat Courneya, Medical Director, HealthPartners

- David Ford, Former CEO, CareOregon

- Rod Hochman, MD, President and CEO, Providence Health & Services

- George Kerwin, President and CEO, Bellin Health

- Brad Perkins, MD, Chief Transformation Officer and Executive Vice President for Strategy and Innovation, Vanguard Health Systems

- David Pryor, MD, Chief Medical Officer, Ascension Health

- Michael Pugh, MPH, President, MdP Associates

- Stephen Swensen, MD, Director, Leadership and Organization Development, Mayo Clinic

- Penny Wheeler, MD, Chief Medical Officer, Allina Health

- John Whittington, MD, IHI Faculty

- Gary R. Yates, MD, President, HPI and the Sentara Quality Care Network, Sentara Healthcare

Expert Leader Interviews

- Carl Couch, MD, President, Baylor Quality Alliance

- Patty Gabow, MD, Former CEO, Denver Health

- Doug Hawthorne, CEO, Texas Health Resources

- Gary Kaplan, MD, Chairman and CEO, Virginia Mason Health System

- Lee Sacks, MD, Executive Vice President and CMO, Advocate Health Care

- Dan Wolterman, MBA, MHA, President and CEO, Memorial Hermann Health System

References

[1] Swensen SJ, Dilling JA, Harper CMJ, Noseworthy JH. The Mayo Clinic value creation system. *American Journal of Medical Quality*. 2012;27(1):58-65.

[2] Swensen SJ, Dilling JA, Mc Carty PM, Bolton JW, Harper CMJ. The business case for health care quality improvement. *Journal of Patient Safety*. 2013;9(1):44-52.

[3] Goodall AH, Kahn LM, Oswald AJ. Why do leaders matter? A study of expert knowledge in a superstar setting. *Journal of Economic Behavior and Organization*. 2011;77(3):265-284.

[4] Bennis W, Nanus B. Leaders: *The Strategies for Taking Charge*. New York: Harper and Row; 1985.

[5] Bennedsen M, Perez-Gonzalez F, Wolfenzon D. *Do CEOs Matter?* Working paper. Copenhagen Business School; October 2006.

[6] Bertrand M, Schoar A. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*. 2003;118(4):1169-1208.

[7] Dirks KT. Trust in leadership and team performance: Evidence from NCAA basketball. *Journal of Applied Psychology*. 2000;85:1004-1012.

[8] Jones BF, Olken BA. Do leaders matter? National leadership and growth since World War II. *The Quarterly Journal of Economics*. 2005;120(3):835-864.

[9] Kahn LM. Managerial quality, team success and individual player performance in Major League Baseball. *Industrial and Labor Relations Review*. 1993;46(3):531-547.

[10] Kaplan SN, Klebanov MM, Sorenson M. *Which CEO Characteristics and Abilities Matter?* NBER Working Paper No. 14195. Cambridge, MA: National Bureau of Economic Research; 2008.

[11] Botwinick L, Bisognano M, Haraden C. *Leadership Guide to Patient Safety*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. Available at: http://www.ihi.org/knowledge/Pages/IHIWhitePapers/LeadershipGuidetoPatientSafetyWhitePaper.aspx.

[12] Nolan TW. *Execution of Strategic Improvement Initiatives to Produce System-Level Results*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement, 2007. Available at: http://www.ihi.org/knowledge/Pages/IHIWhitePapers/ExecutionofStrategicImprovementInitiativesWhitePaper.aspx.

[13] Reinertsen JL, Bisognano M, Pugh MD. *Seven Leadership Leverage Points for Organization-Level Improvement in Health Care (Second Edition)*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: http://www.ihi.org/knowledge/Pages/IHIWhitePapers/SevenLeadershipLeveragePointsWhitePaper.aspx.

[14] Bisognano M, Kenney C. *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*. San Francisco: Jossey-Bass Publishers; 2012. Available at: http://www.ihi.org/knowledge/Pages/Publications/PursuingtheTripleAimSevenInnovatorsShowtheWay.aspx.

[15] Nelson-Peterson DL, Leppa CJ. Creating an environment for caring using lean principles of the Virginia Mason Production System. *Journal of Nursing Administration*. 2007;37(6):287-294.

[16] Swensen SJ, Dilling JA, Milliner DS, et al. Quality: The Mayo Clinic approach. *American Journal of Medical Quality*. 2009;24(5):428-440.

[17] Berwick DM, Nolan TW, Whittington J. The triple aim: Care, health, and cost. *Health Affairs (Millwood)*. 2008;27(3):759-769.

[18] Schwendimann R, Milne J, Frush K, Ausserhofer D, Frankel A, Sexton JB. A closer look at associations between hospital leadership walkrounds and patient safety climate and risk reduction: A cross-sectional study. *American Journal of Medical Quality*. 2013 Sep-Oct;28(5):414-421.

[19] Bohmer RMJ. The four habits of high-value health care organization. *New England Journal of Medicine*. 2011;365(11):2045-2047.

[20] Ballard DJ. *Achieving STEEP Health Care*. Boca Raton, FL: CRC Press; 2013.

[21] Ballard DJ, Ogola NS, Fleming BD, et al. Impact of a standardized heart failure order set on mortality, readmission, and quality and costs of care. *International Journal for Quality in Health Care*. 2010;22(6):437-444.

[22] Mallon WJ. *Ernest Amory Codman: The End Result of a Life in Medicine*. Philadelphia: Saunders; 2000.

[23] Weick KE, Sutcliffe KM. *Managing the Unexpected: Assuring High Performance in an Age of Complexity*. Hoboken, NJ: John Wiley & Sons, Inc.; 2001.

[24] Swensen SJ, Cortese DA. Transparency and the "end result idea." *Chest*. 2008;133(1):233-235.

[25] Ashkenas R, Ulrich D, Jick T, Kerr S. *The Boundaryless Organization: Breaking the Chains of Organizational Structure*. Hoboken, NJ: John Wiley & Sons, Inc.; 2002.

[26] *Why Global Leaders Succeed and Fail: Research Highlights*. Philadelphia: Right Management, Inc.; 2011. Available at: http://www.right.com/wps/wcm/connect/right-us-en/home/thoughtwire/categories/thought-leadership/why-global-leaders-succeed-and-fail

[27] Lee L, Horth DM, Ernst C. *Boundary Spanning in Action: Tactics for Transforming Today's Borders into Tomorrow's Frontiers*. Organizational Leadership White Paper Series. Greensboro, NC: Center for Creative Leadership; February 2012. Available at: http://www.ccl.org/leadership/pdf/research/boundarySpanningAction.pdf

[28] Balik B. Leaders' role in patient experience: Hospital leadership must drive efforts to better meet patient's needs. *Healthcare Executive*. 2011 Jul/Aug; 26(4):76-78. Available at: http://www.ihi.org/knowledge/Pages/Publications/LeadersRoleinPatientExperience.aspx.

[29] Bisognano M, Kenney C. *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*. San Francisco: Jossey-Bass Publishers; 2012:221.

[30] *Pursuing Perfection: The Journey to Organizational Transformation: An Interview with Mary Brainerd, CEO, HealthPartners Medical Group and Clinic*. Institute for Healthcare Improvement. Available at: http://www.ihi.org/knowledge/Pages/ImprovementStories/TheJourneytoOrganizationalTransformationAnInterviewwithMaryBrainerdCEOHealthPartnersMedicalGroupandC.aspx.

[31] Golden B. Transforming healthcare organizations. *Healthcare Quarterly*. 2006;10:10-19.

[32] Phillips KW, Liljenquist KA, Neale M. *Better Decisions Through Diversity*. Evanston, IL: Kellogg Insight; October 2010.

[33] Kandola B. *The Value of Difference: Eliminating Bias in Organisations*. Oxford: Pearn Kandola Publishing; 2009.

[34] Bassi L, McMurrer D. Maximizing your return through people. *Harvard Business Review*. 2007;85(3):115-123.

[35] Bersin J. *High-Impact Talent Management: Trends, Best Practices, and Industry Solutions*. Bersin & Associates; 2007.

[36] Day DV, Lord RG. Executive leadership and organizational performance: Suggestions for a new theory and methodology. *Journal of Management*. 1988;14(3):453-464.

[37] Griffith RW, Hom P, Gaertner S. A meta-analysis of antecedents and correlates of employee turnover. *Journal of Management*. 2000;26(3):479.

[38] Menaker R, Bahn RS. How perceived physician leadership behavior affects physician satisfaction. *Mayo Clinical Proceedings*. 2008;83(9):983-988.

[39] Avolio BJ. Estimating return on leadership development investment. *The Leadership Quarterly*. 2010;21:633-644.

[40] Phillips JJ, Phillips PP. Measuring ROI in executive coaching. *International Journal of Coaching in Organizations*. 2005;3(1):53-62.

[41] Cho Y, Wittrock M. *Psychological Principles in Training: A Handbook for Business, Industry, Government and the Military*. New York: Macmillan; 2000.

[42] Dillworth RL, Willis VJ. *Action Learning: Images and Pathways*. Malabar, FL: Krieger Publishing Co.; 2003.

[43] Hill CC, Leonard HS, Sokol MB. *Action Learning Guide: Real Learning, Real Results*. Personnel Decisions International; 2006.

[44] Marquardt MJ, Leonard HS, Freedman AM, Hill CC. *Action Learning for Developing Leaders and Organizations: Principles, Strategies and Cases*. Washington, DC: American Psychological Association; 2009.

45 Buckingham M, Coffman C. *First Break All the Rules: What the World's Greatest Managers Do Differently*. New York: Simon & Schuster; 1999.

46 Harter JK, Schmidt FL, Hayes TL. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*. 2002;87(2):268-279.

47 Kouzes J, Posner B. *The Leadership Challenge (4th edition)*. Hoboken, NJ: John Wiley & Sons; 2000.

48 Lockwood NR. Leveraging employee engagement for competitive advantage: HR's strategic role. *SHRM Research Quarterly*; 2007.

49 Ryan A, Schmit M, Johnson R. Attitudes and effectiveness: Examining at an organizational level. *Personnel Psychology*. 1996;Winter:853-882.

50 Ostroff C. The relationship between satisfaction, attitudes and performance: An organizational level analysis. *Journal of Applied Psychology*. 1992;77(6):963-974.

51 Dilling JA, Swensen SJ, Hoover MR, Dankbar GC, Donahoe-Anshus AL, Murad MH. Accelerating the use of best practices: The Mayo Clinic model of diffusion. *Joint Commission Journal on Quality and Patient Safety*. 2013;39(4):167-178.

52 Spear SJ. *Chasing the Rabbit*. New York: McGraw Hill; 2009.

53 Bisognano M, Kenney C. *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*. San Francisco: Jossey-Bass Publishers; 2012:105.

54 Leonard M, Graham S, Bonacum D. The human factor: The critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*. 2004;13:85-90.

55 Barrington L, Silvert H. *CEO Challenge 2004*. New York: The Conference Board; August 2004.