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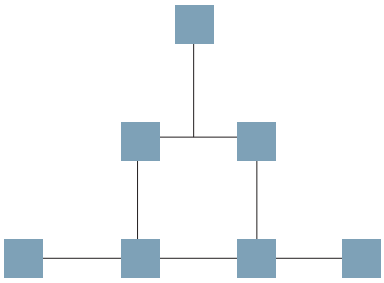

Innovation Series 2008

Seven Leadership Leverage Points

For Organization-Level Improvement in Health Care

Second Edition

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We have developed IHI's Innovation Series 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.

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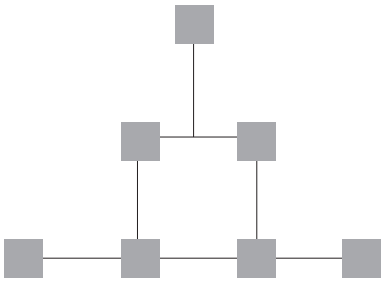

Innovation Series 2008

Seven Leadership Leverage Points

For Organization-Level Improvement in Health Care

Second Edition

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Foreword to Second Edition

It is almost three years since we published the First Edition of our white paper, *Seven Leadership Leverage Points for Organization-Level Improvement in Health Care*, and in that time we have learned a great deal about what it takes to achieve results in quality and safety at the level of entire organizations and care systems. A primary source of our learning has been the application by committed leaders of one or more of these leverage points in the 100,000 Lives and 5 Million Lives Campaigns, in the course of which hundreds of organizations have achieved major improvements in system-level measures such as mortality rates and prevalence of harm. The Campaigns continue to be an extraordinarily rich source of learning to improve and extend our theory—*and it is a theory*—of "leverage" for leaders.

In addition to the Campaigns, the Institute for Healthcare Improvement (IHI) has also learned a great deal about what works (and, importantly, what doesn't) from a diverse set of sources ranging from our involvement in national initiatives such as the The Health Foundation's Safer Patients Initiative in the UK, large-scale collaborative programs such as the 200+ organizations in IHI's IMPACT network that are participating in Learning and Innovation Communities, in-depth work with IHI's Strategic Partners, and direct fieldwork and interviews with health care clients as well as industry leaders outside health care. We have noticed, for example, that many of the leverage points work well in the field without much modification, whereas others seem to need some reframing, or a special emphasis on particular elements within the leverage point, or even substantial revision.

Much of this ongoing learning about the role of leaders in quality has been distilled into three IHI white papers that deal either directly or indirectly with one or more of the original Seven Leadership Leverage Points. The 5 Million Lives Campaign's "Get Boards on Board" intervention, for example, expands Leverage Point One, on the adoption and oversight of aims at the highest levels of governance, into the exceptionally detailed *Governance Leadership "Boards on Board" How-to Guide*.[1] Leverage Point Six, on engaging physicians, has been the subject of intense interest, which in turn has led to the publication of IHI's white paper, *Engaging Physicians in a Shared Quality Agenda*.[2] And the work of Tom Nolan and the IHI Innovation Team has resulted in a very thoughtful new framework and white paper on the critically important issue of *Execution of Strategic Improvement Initiatives to Produce System-Level Results*,[3] which has relevance to several of the original leverage points, particularly Leverage Points One (adopting aims), Two (developing and overseeing the execution of a strategy to achieve breakthrough aims), and Seven (building improvement capability).

Finally, as with any organically growing set of interconnected leadership theories, there is a constant need for "sensemaking." In particular, many leaders have expressed the need for a "cross-walk" between frameworks, so that they can place their understanding of elements of various frameworks into some sort of meaningful context. For example, how does the IHI framework for strategic improvement (Will, Ideas, and Execution) relate to the Seven Leadership Leverage Points? What is the fit between the Framework for Execution and the leverage points?

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Because we have gained a lot of new knowledge and field examples, and are also faced with questions about relationships among various IHI frameworks, we thought this would be a good time to write a Second Edition of the *Seven Leadership Leverage Points* white paper. In doing so, we aim to:

- Propose "Version 2" of the Seven Leadership Leverage Points, incorporating our learning since the original white paper was published in 2005, particularly the learning on the subject of execution.
- Provide a number of specific examples of the field application of each leverage point (rather than the extended "for example" of the 100,000 Lives Campaign that we employed in the First Edition).
- Describe the relationship between the Seven Leadership Leverage Points and other IHI leadership frameworks.

Finally, it is important to point out that this new and improved set of leverage points is still a theory, and a theory at the "descriptive" stage of development, at that.[4] By "descriptive" we mean that we are able to describe *associations* between each leverage point and results, but we are NOT able to ascribe specific *cause and effect*. In other words, the leverage points theory is not yet a "normative" theory, in that we cannot make the following statement: "If you as a leader do these seven things, you will get dramatic system-level results." But we can say, with perhaps greater confidence than three years ago, "Where organizations *are* getting significant results, several of these leverage points appear to be strongly in place."

We hope you find the Second Edition of the S*even Leadership Leverage Points* white paper useful in your own leadership work, and we invite all readers to give us feedback from their own field observations, so that this management theory can continue to grow and improve.

James L. Reinertsen, MD
February 2008

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Context and Background

Leaders of health care delivery systems are under pressure to achieve better performance. Through mechanisms such as mandatory public reporting, pay for performance, and "non-payment for defects," regulators, payers, communities, and informed patients are pressuring leaders to produce *measured performance results*. These results are often framed for specific circumstances (e.g., "reduce rates of wound infections after cardiac surgery") and sometimes specified at the system level (e.g., "reduce rates of all forms of harm during hospitalization").

Many hospital and health system leaders have themselves become personally and painfully aware of defects in their own organizations and office practices—needless deaths, harm, suffering, delays, feelings of helplessness, waste, and inequities—and with a lot of hard work, some have become quite skilled at achieving *project-level* reductions in these defects (e.g., lower rates of central line infections in a particular ICU). But it is much harder to achieve *organization-level* results—for example, reduced rates of all hospital-acquired infections, across all units and services. Increasingly, it appears that while health care CEOs and other leaders *want to make these changes happen, they don't have a tried-and-true method by which to bring about system-level, raise-the-bar change*. Specifically, health system leaders often say that they are pretty clear about what they should be working on, but far less clear about how they should go about that work.

Leadership models and frameworks can provide a roadmap for leaders to think about how to do their work, improve their organizations, learn from improvement projects, and design leadership development programs.[5] The core of the comprehensive IHI strategic improvement framework is *Will*, *Ideas*, and *Execution*[3]: in order to get organization-level results, leaders must develop the organizational *will* to achieve them, generate or find strong enough *ideas* for improvement, and then *execute* those ideas—make real improvements, spread those improvements across all areas that would benefit, and sustain the improvement over time. And when this Will-Ideas-Execution framework is fully fleshed out with the addition of two other core components, "Set Direction" and "Establish the Foundation," 24 specific elements emerge into an overall leadership system for improvement called the IHI Framework for Leadership for Improvement (see Figure 1).

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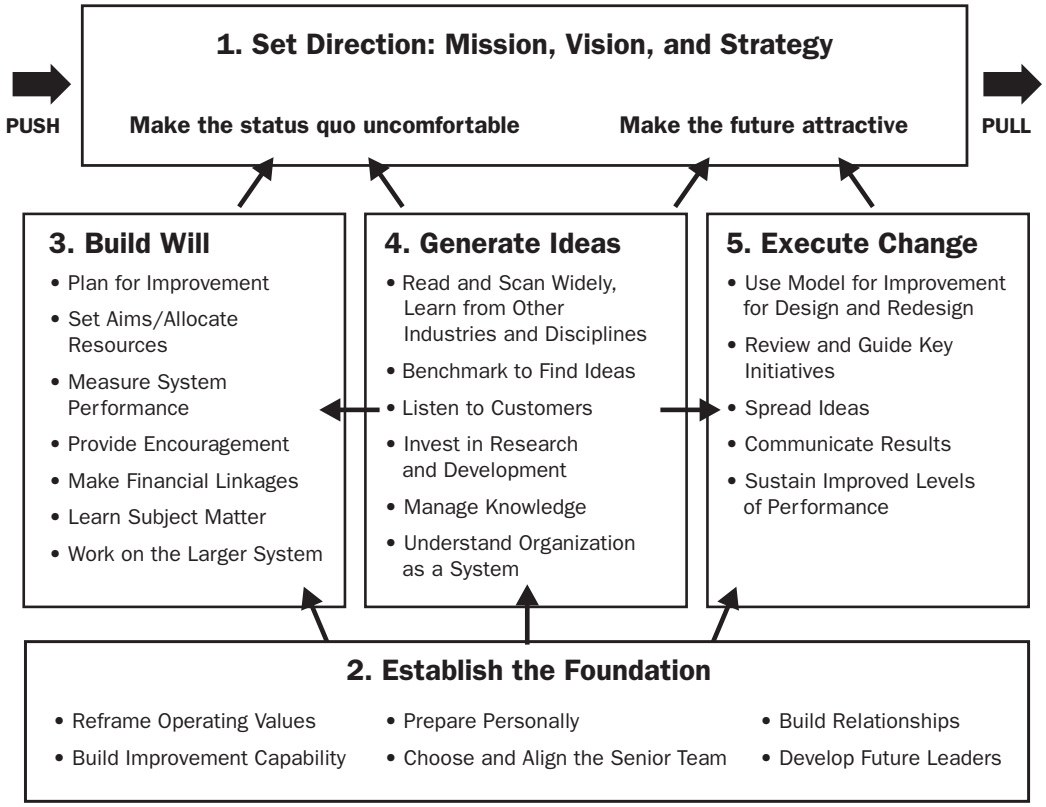
Figure 1. IHI Framework for Leadership for Improvement



Leaders can be daunted by the breadth and depth of this sort of comprehensive model. Even though the 24 individual elements are quite clear, many of them are still fairly broad in scope (e.g., "Plan for Improvement" or "Review and Guide Key Initiatives"). So leaders often look at comprehensive models such as this and ask questions such as "But *how* exactly do I 'Plan for Improvement' or 'Review and Guide Key Initiatives'?"

The Framework for Execution[3] is a superb example of an answer to the "But *how*…?" question. This framework expands and explains a system for execution of large-scale change, and provides concrete and specific examples of what leaders do and how they do it, in organizations that are highly capable of execution (see Figure 2).

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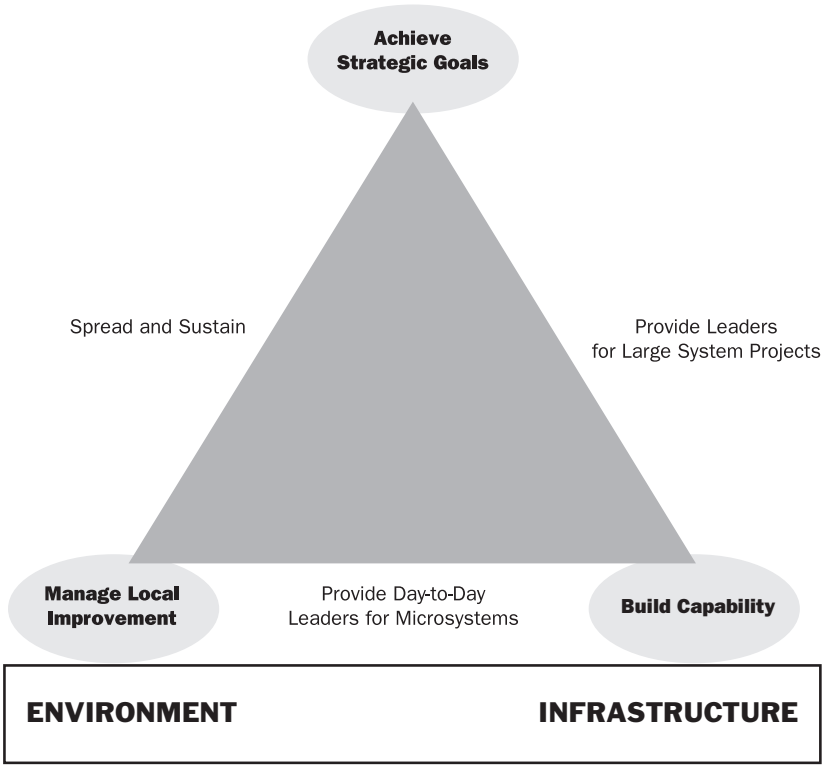
Figure 2. A Framework for Execution



The Seven Leadership Leverage Points framework, on the other hand, was developed in large part to answer a second type of question that leaders were asking:

- "This is a very broad framework; are there one or two places where I could get started, where my actions might have the greatest effect?"
- "We can't work on 24 things at once. If we had to place our bets on a few specific leadership actions within this framework that would be highly likely to bring about system-level results, what would they be?"

Executives appeared to be asking about "leverage": specific activities for leaders, and specific changes in leadership systems, in which a small change might bring about large, positive, system-level results. This white paper is an attempt to answer that question—that is, where leaders might place their bets to achieve system-level results.

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The foundation for our answer about *leverage* comes from at least four different sources:

1. **Complex Systems Theory:** Complex adaptive systems such as health care organizations and communities cannot be specified and managed in detail. It is highly likely that small changes in certain critical aspects of these systems might bring about surprising and unpredictable amounts of improvement or deterioration in overall system performance. If leaders could choose the right system attributes ("leverage points") and make small, perhaps difficult, but important changes, very large performance change might result.

2. **Observed Performance of Leaders and Health Systems:** We have been able to watch the actions of leaders in organizations participating in IHI's Pursuing Perfection and IMPACT initiatives, as well as in the 100,000 Lives and 5 Million Lives Campaigns, and simultaneously to observe the performance of those systems. Where system-level change has occurred, we have attempted to infer from these sources what some of the leadership leverage points for improvement might have been. For example, we have observed that system-level improvement does not occur without a declared aim to achieve it, and that *how* the aim is declared and adopted by leaders appears to be very important. These leverage points are based largely on qualitative data—more anecdotes and stories about the work of leaders than a solid research base. Nevertheless, these stories are powerful, and serve to support and refine the theory.

3. **Hunches, Intuition, and Collective Experience:** The authors come from a variety of backgrounds in health care and have tapped into our collective experience to postulate some of these leverage points—particularly those that surface as recurrent "difficult moments" for leaders. For example, it is our sense that the business case for quality is still fragile in many health care organizations, and therefore that if the chief financial officer (CFO) were somehow to become a champion for system-level improvement in quality, dramatic improvement would become much more likely.

4. **Ongoing Research and Development of Management Theories and Methods:** In the three years since the First Edition of the *Seven Leadership Leverage Points* white paper was published, we have learned a lot about topics such as execution, governing boards, transparency, and physician engagement, to mention just a few. We have attempted to weave this learning into the Second Edition of the *Seven Leadership Leverage Points* white paper, with a particular focus on the several areas of synergy between the IHI Framework for Execution and the Seven Leadership Leverage Points.

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It might be helpful to note what these leverage points are *not*:

- The leverage points are not intended to be a comprehensive framework for the leadership of organizational transformation. That is a much broader subject, addressed by approaches such as The Baldrige National Quality Program.
- The leverage points are not a substitute for a coherent quality method such as the Toyota Production System or the Model for Improvement. In fact, the organizations in which the leverage points would be applied are assumed to have adopted a coherent quality framework.

Finally, we would emphasize that we have framed these as *leadership* leverage points. In other words, we believe that these activities are the particular responsibility of the senior leaders of organizations.

This paper has three sections:

1. A detailed explanation of the Seven Leadership Leverage Points and specific examples of their application in health care, where available
2. A brief overview of the changes to the Seven Leadership Leverage Points from the First Edition (2005) to the Second Edition (2008)
3. A self-assessment tool (Appendix A) to help administrative, physician, and nursing leaders of health care organizations design and plan their work using the Seven Leadership Leverage Points

Leverage Point One: Establish and Oversee Specific System-Level Aims at the Highest Governance Level

A broad quality aim is part of the mission statement of most health care organizations. But if leaders are to achieve new levels of performance at the system level, we believe that governing boards must:

- Establish solid measures of system-level performance—for example, hospital mortality rate, cost per adjusted admission, adverse drug events per 1,000 doses—that can be tracked monthly, if not more frequently;
- Adopt specific aims for breakthrough improvement of those measures;
- Establish effective oversight of those aims at the highest levels of governance and leadership; and
- Commit personally to these aims and communicate them to all stakeholders in a way that engenders heartfelt commitment to achieving them.

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Establishing system-level performance measures helps to answer the questions, "What are we trying to achieve, and how are we doing at it?" Sometimes referred to as the "big dots" (a reference to the visual display of critical data points for important measures that reflect the quality of care delivered), well-chosen system-level measures collectively define what is ultimately important to the stakeholders of the organization. Collectively, they provide an answer to the question, "How good are we?"

To help measure the overall quality of a health system and to align improvement work across a hospital, group practice, or large health care system, IHI and colleagues developed the Whole System Measures.[6] For each measure, IHI set an ambitious goal that would represent breakthrough performance—performance that exceeds previous believed "limits"—referred to as the "Toyota Specification." The Whole System Measures provide an excellent example of a balanced set of world-class, system-level ("big dot") quality performance measures from which an organization's leaders might choose a few dimensions in which to seek breakthrough performance. The measures are intended to complement an organization's existing balanced scorecard, measurement dashboard, or other performance measurement system.

The tables below list the Whole System Measures, the relevant Institute of Medicine (IOM) Dimension of Quality, and the Toyota Specifications. Table 1 shows the performance ("Toyota") specifications for system-level measures, while Table 2 shows the performance specifications for specific components of the care system.

Table 1. Whole System Measures and Toyota Specifications: System Level

IOM Dimension of Quality	Whole System Measure	Toyota Specification
Patient-Centered	Patient Experience Score *[Response to the question in the How's Your Health database, "They give me exactly the help I want (and need) exactly when I want (and need) it."]*	72% of Patients Report, "They give me exactly the help I want (and need) exactly when I want (and need) it."
Effective and Equitable	Functional Health Outcomes Score	5% of Adults Self-Rate Their Health Status as Fair or Poor *[Self-rating will not differ by income]†*
Efficient	Health Care Cost per Capita *[Surrogate measure: Medicare Reimbursement per Enrollee per Year]‡*	$3,150 per Capita per Year $5,026 per Enrollee per Year

† Due to the lack of nationally available data using the Functional Health Survey-6+, IHI used self-reported health status data from the Centers for Disease Control and Prevention Health-Related Quality of Life Surveillance *report.*

‡ Due to difficulty with calculating Health Care Cost per Capita, a surrogate measure of Medicare Reimbursement per Enrollee may be used for ease of collection.

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Table 2. Whole System Measures and Toyota Specifications: Component Level

IOM Dimension of Quality	Whole System Measure	Toyota Specification
Safe	Rate of Adverse Events	5 Adverse Events per 1,000 Patient Days
Safe	Incidence of Nonfatal Occupational Injuries and Illnesses	0.2 Cases with Lost Work Days per 100 FTEs per Year
Effective	Hospital Standardized Mortality Ratio (HSMR)	HSMR = 25 Points Below the National Average
Effective	Hospital Readmission Percentage	30-Day Hospital Readmission = 4.49%
Effective	Reliability of Core Measures	10^{-2} Reliability Levels
Patient-Centered	Patient Satisfaction with Care Score	60% of Patients Selected the Best Possible Score
Timely	Days to Third Next Available Appointment	Primary Care: Same-Day Access Specialty Care: Access Within 7 Days
Efficient	Hospital Days per Decedent During the Last Six Months of Life	7.24 Hospital Days per Decedent During the Last Six Months of Life

Several aspects of Leverage Point One deserve emphasis, based on what has been learned over the last three years:

- The responsibility for adopting aims and overseeing measures cannot be delegated by the board. What the governance board pays attention to gets the attention of management, physician leaders, and, ultimately, the entire organization.
- Aims must be focused. It is unrealistic to set breakthrough aims across the entire spectrum of performance. In fact, it is highly unusual for any organization, in or out of health care, to achieve breakthrough levels of performance in more than one or two dimensions during any one year.
- It is impossible to overemphasize the importance of the data feedback loop that boards use to oversee the achievement of system-level aims. For strategic breakthrough aims, the primary question that the data must answer for boards is "Are we improving? Are we on track to achieve our aim(s)?" To allow boards to answer this question, measurement of performance must:
    - Use consistent operational definitions so that the board can track the trajectory of performance over time;

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  - Be timely (no more than a month's lag between data and review); and
  - Not necessarily be risk-adjusted or use "rates of events per number of interactions." (These sorts of measurements tend to be more complex, can delay feedback loops, and are primarily used to answer a different question, "How do we compare to other organizations?")

- It is not enough for boards to review performance measures. When they hear *stories* of the patients and families whose lives have been affected by quality and safety events, boards will drive for improvement with a much greater sense of urgency and commitment.
- Boards must develop the capability to oversee quality and safety. The best boards are bringing in members who are experts in quality methods in manufacturing and other industries, and are investing in education of all the trustees.
- It is often helpful to develop specific scorecards of measures to track progress on efforts such as a hospital's work on the 5 Million Lives Campaign, or its major strategic goal to reduce hospital-acquired infections, rather than have key data elements related to these initiatives simply reported out and mixed together with all other quality and reporting metrics. Initiative-specific scorecards create context, which facilitates both understanding and monitoring of progress.
- When boards start holding management accountable for achievement of breakthrough aims, the trustees start asking tough questions. This sends signals throughout the organization that can be a powerful force for culture change.

Ascension Health's board provides us with an excellent example of the practices described above. In 2003, the board of this 70-hospital system adopted a specific, focused breakthrough aim: zero preventable deaths and injuries by the end of 2008. The boards in each region have incorporated review of patient stories about preventable deaths into their meeting agendas, and the boards must approve the action plan to prevent similar events in the future. Furthermore, the regional boards do not simply accept every action plan passively, but often send the management team back to develop more robust solutions to serious safety risks. The Ascension system tracks the risk-adjusted mortality rate on a monthly basis, and has built the achievement of their aim—zero preventable deaths and injuries—into the management performance expectations. The results at the system level are shown in Figure 3.

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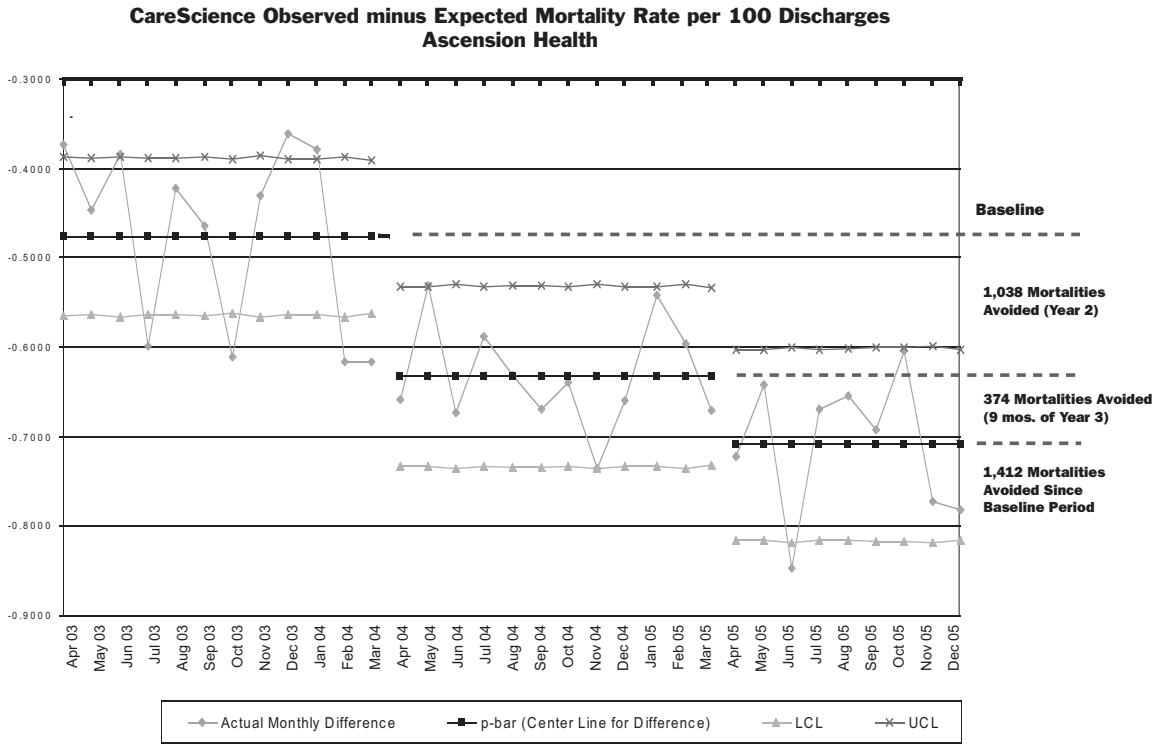
Figure 3. Example of Board Oversight of Performance Measurement for System-Level Aims at Ascension Health



Leverage Point Two: Develop an Executable Strategy to Achieve the System-Level Aims and Oversee Their Execution at the Highest Governance Level

Execution tends to be the weakest link in the Will-Ideas-Execution triad. As depicted in the Framework for Execution in Figure 2 above, and as described in detail in IHI's *Execution of Strategic Improvement Initiatives* white paper,[3] there are four critical steps for leaders who wish to achieve breakthrough results:

1. The senior team and board must adopt a few focused breakthrough quality and safety aims (as described in Leverage Point One, above).
2. The senior executive team must develop a plan—a "rational portfolio of projects"—with the scale and pace needed to achieve their aims.
3. Key projects must be resourced with capable leaders, both at the large project level and at the day-to-day microsystem level.

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4. The management team must monitor and respond to data from the field at multiple levels in order to steer the execution of the strategy. Leaders must get answers to the questions, "Are we executing our strategy?" (data about the progress of the portfolio of projects) and "If we're executing the strategy, is it working?" (data about the system-level measures that the organization is trying to move to a new level).

From field observations over the past three years of how senior executives go about building executable strategies and getting results, we emphasize the lessons that follow about the four critical steps to successful execution.

- Just as the board cannot delegate the adoption and oversight of system-level quality aims, the executive team cannot delegate the building and execution of a plan to achieve the aims. The era when quality aims could be delegated to "quality staff," while the executive team works on finances, facility plans, and growth, is over. System-level breakthrough aims are by their very nature strategic, and require the energy and attention of the entire organization, led by the CEO and the entire executive team.

- One good way to build a rational portfolio of projects is to develop a cascaded series of goals and drivers (see Figure 4). In this method, the senior executive team adopts one or two breakthrough goals and for each goal posits up to three "drivers"—structures, processes, or cultural patterns that would need to be put in place, or changed, in order to achieve the goals. Each of the chosen drivers is assigned to an individual member of the senior executive team as a goal to be achieved, and that executive then brings a group together at the next level to address a new driver question, "What would have to be changed or put in place in order to achieve this goal?" The conversations about goals and drivers then cascade in a similar fashion through additional levels of the organization, until the answer to the driver question looks like a project—i.e., something that could be executed by a specific team in a focused manner over, say, 90 days. The result of this cascaded series of goals and drivers is not only a good project plan, but also a highly visible, well-communicated logic of the plan wherein each person, at every level, knows their part and how those parts fit into the whole.

- IHI's experience in the field keeps reinforcing the old truth: "Culture eats strategy for lunch." When thinking through drivers of major system-level quality and safety aims, cultural drivers should be near the top of any leader's list. Patterns of behavior that are driven by underlying values, habits, and beliefs—the organization's culture—will dominate every other possible driver and may jeopardize changes to processes and structures unless they are explicitly addressed. Some examples of such patterns of behavior around safety practices might be the following:

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  - "We follow the safety rules…unless we're really busy."
  - "Those are good rules for infection prevention, but they really don't apply to me."

- The Framework for Execution describes other methods by which an executable project portfolio can be developed, but all effective methods seem to share the two features described below.

  1. A good method for execution ensures that the system-level aims have a powerful influence on choices of projects throughout the organization. Managers are not being asked, "How does what you're already working on in your department support the system-level aim?" Instead, the primary question is, "What do we need to do in order to accomplish the aim?" The first question results in what one frustrated manager reported: "We do all this strategic planning, and set these grand goals, and then the plan to accomplish the goals looks pretty much like every department simply rationalized its pet projects." The second question results in a portfolio of projects with the scale and pace needed to accomplish the stated aim.

  2. A good method forces focus. The example in Figure 4 depicts the logic chain for only one driver at each organization level. In reality, a cascaded set of conversations, with two or three drivers at each level, will branch many times, resulting in a fairly large number of projects once the process has played out to the project level. If leaders do not focus on one or two aims, supported by three or fewer drivers, then the cumulative burden of projects that results is overwhelming for front-line staff (especially when added on top of their daily work!).

- Large, complex projects must be led by capable leaders who are given the time to do the projects or the projects will not be successfully executed. Outside of health care, in companies capable of execution, the individuals chosen to lead a project of strategic importance are carefully chosen, and given time (for example, 50 percent to 100 percent of their time for six months) to complete a major strategic project. In contrast, health care organizations often ask leaders to take on major projects as "add-ons" to already daunting workloads.

- Even with careful attention to developing a logical portfolio of projects, creating focused aims, and enabling well-resourced and supported project leadership, a plan to achieve system-level breakthrough aims requires guidance and oversight from the senior executive team. A successful leadership system for execution has two critical components: 1) obtain data and feedback regularly on whether a) the strategic project portfolio is being executed, and b) the strategy is working; and 2) have senior executives regularly review and respond to timely, useful data on these two questions. This type of system ensures that leaders take timely action to resolve issues that may be prohibiting execution (e.g., break down barriers, provide resources for project leaders, or replace project leadership). If projects seem to be executed well, but little progress on system-level measures is seen, the senior team then takes action to revise the strategic project portfolio or ramp up the scale and pace of implementation.

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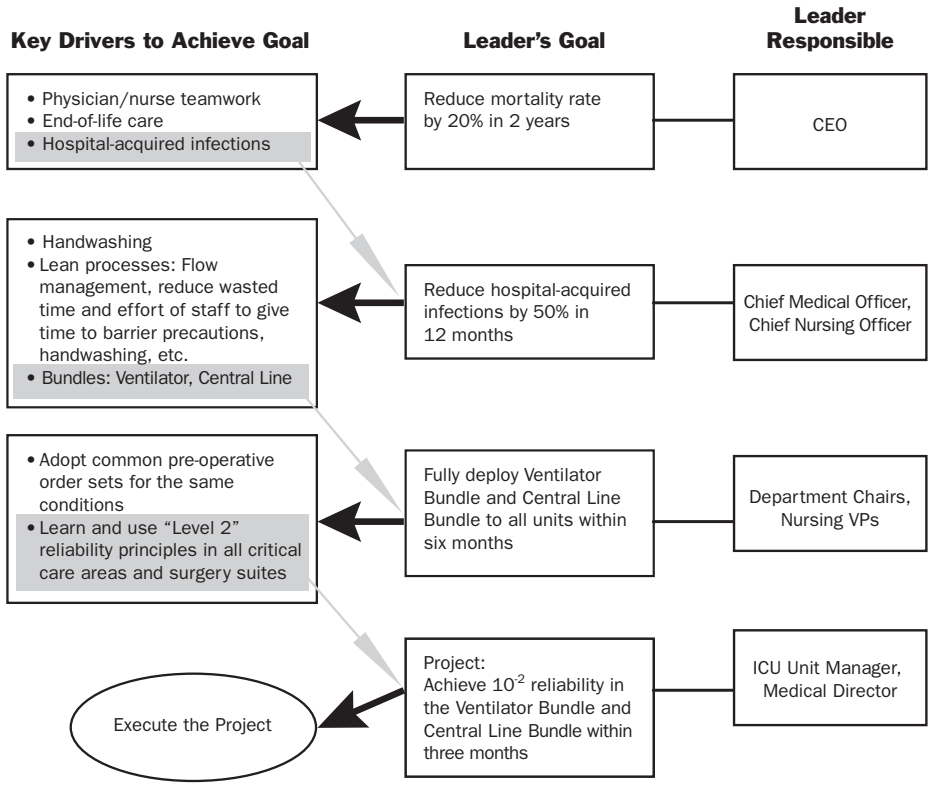
Figure 4. Example Cascading Series of Goals and Drivers



Leverage Point Three: Channel Leadership Attention to System-Level Improvement: Personal Leadership, Leadership Systems, and Transparency

The currency of leadership is attention. What leaders pay attention to tends to get the attention of the entire organization, and all potential resources for channeling leadership attention, whether formal or informal, should be connected to the aim: personal calendars, methods of data display, meeting agendas, project team reviews, executive performance feedback and compensation systems, hiring and promotion practices, to name a few. We have begun to notice three key ways in which effective senior leaders channel attention to system-level improvement: personal leadership, leadership systems, and transparency. In concert, these three methods form a powerful leverage point for achieving system-level results.

Personal Leadership

The staff pay attention to the organization's senior executives and, in particular, to what they do with their time. If an organization establishes a new breakthrough safety aim (e.g., "eliminate

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hospital-acquired infections") as part of its strategic planning process and the CEO and other senior executives continue to do exactly what they did the year before—attend the same meetings, visit the same project teams, read and ask questions about the same reports, ask for data about the same performance measures—then the staff's interpretation of this new goal is, "Well, it's a nice thing to aim for, but they don't really take it seriously, so why should we?"

Executives are constantly sending signals about what they believe to be important. Some signals are negative (e.g., arriving late to the meeting, not asking questions, taking a phone call during the meeting, and leaving early). Other signals tell the staff that executives really care about achieving the stated quality aim. Examples of positive signals might include the following:

- **Prioritize Calendars:** Leaders can change their personal schedules to make time for data review, meetings with project leaders, and other activities that support the work.
- **Conduct Project Reviews:** Senior executives can send powerful signals by personally performing reviews with project teams—asking about their project aims, connecting the work of the team to the overall organization aims, focusing on results, helping the team to overcome barriers, and providing encouragement.
- **Tell Stories:** Positive organizational "buzz" can be created by the stories that executives tell in their formal and informal communications. If the stories reinforce the cultural changes and practices needed to achieve breakthrough aims (e.g., a story about a manager's willingness to do multiple rapid tests of change and the great results achieved), they will encourage more rapid adoption of the needed patterns and practices.

Leadership Systems

Personal leadership is a powerful way to channel attention, but even the best personal leadership needs to be supported by good leadership systems—the interrelated set of structures and processes by which leaders work. It's a great beginning for a senior executive to remake her calendar to include project meetings, conduct project team reviews, and tell great stories that reinforce the desired culture changes and behaviors. However, if senior executive meeting agendas, data reviews, messages communicated at quarterly staff meetings, and featured items in the weekly newsletter do not all support the quality and safety aims, these defects in the "leadership system" will lessen the effect of that executive's individual efforts.

A simple way to test the effectiveness of leadership systems is to find out what performance data are "top of mind" for senior executives and other managers. In most health care organizations, the vast majority of executives will know the last month's operating margin and service satisfaction scores. But very few will know the last month's mortality rate, or number of hospital-acquired infections, or number of decubitus ulcers. This is because the *leadership systems* are different for finance than

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they are for quality and safety—the reliability and timeliness of measurement and reporting, the frequency and depth of management reviews, and so forth.

In organizations that achieve system-level results, the key data related to quality and safety tend to be "top of mind" for executives, not just for the quality staff. The COO of an extremely high-performing community hospital—when asked about the most recent data for several key performance measures, which he quickly rattled off without reference to documents or other support—said the following about the basic elements of a good system for channeling leadership attention to system-level improvement:

> "We get the key measures updated monthly. At each weekly management meeting we go over one of the categories—safety, for example—in depth, and take actions to make sure we're on track. We post the numbers each month on every bulletin board in the hospital, so I get a lot of questions about them as I walk around. Besides, I just finished up our quarterly staff communication meetings where the main priority is to explain these numbers to all the staff. After all, a portion of my paycheck, and of all the staff's paychecks, depends on how we do against these numbers!"

Transparency

Perhaps the most powerful method of channeling leadership attention is to harness the power of transparency. (In fact, this is such a potent tactic that we debated whether "Harness the Power of Transparency" might stand alone as a new Leverage Point Eight.) The fundamental force behind this method is simple: if the public (regulators, media, community, patients) are paying attention to all of your quality and safety performance data (and not just the numbers that you're proud of), then those people inside the organization will tend to work with greater urgency to improve performance (especially the numbers they aren't proud of). Or, put more memorably: "If you're going to be naked, it's good to be buff."[7]

The Wisconsin Collaborative for Healthcare Quality provides an excellent example of the power of transparency. A group of health care systems worked with employers to design and publicize a 40-item quality and safety report. The systems agreed to report all the data they had, good or bad, and also agreed that they would not use any of the data for marketing. When the first reports went to the public, each organization was the best in the state in at least one of the 40 measures, and each was also the worst in the state in another of the 40 measures. John Toussaint, CEO of ThedaCare, a participant in the Collaborative, describes the internal reaction at ThedaCare to having publicly displayed data they were not proud of:

> "Within hours, the doctors in that department were in my office angrily asking me, 'How dare you send out those numbers to the public? We look bad!' After I calmed them down a bit, I said, 'Well, maybe the numbers are bad because we *are* bad.' It took about a week to solve the problem and make dramatic improvements in the numbers. We had been working on that

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issue for a couple of years, without getting anywhere. And once it went to the public, we solved it in a week."

Health system leaders often express reservations about transparency because they fear that patients will choose other hospitals or medical groups if they see unflattering data. The past few years of experience, along with the limited data from formal studies of public transparency,[8] should reassure hospital marketing departments that, in general, public reporting does not lead to shifts in market share and volumes, even when the reports show the hospital in a bad light.[9]

Other hindrances to transparency include fear of malpractice suits and worry that philanthropy will dry up if donors hear about poor performance measures. Neither of these fears appears to be valid. The vast majority of malpractice suits have nothing to do with errors or actual performance data, but rather are the result of broken trust relationships. And our experience with donors suggests that they recognize that no hospital is perfect, and they feel valued and respected when they are treated with honesty about hospital performance.

Leverage Point Four: Put Patients and Families on the Improvement Team

The most commonly cited reason for failure of organizations to reach breakthrough aims is the failure of the senior leadership group to function as an effective team, with the appropriate balance of skills, healthy relationships, and deep personal commitments to achievement of the goals. CEOs who want to achieve quality and safety goals must constantly ask themselves, "Do I have the right senior team in place to get the job done?" Getting this difficult judgment correct, and acting on it, is a critical task for the CEO, and is therefore a key leverage point for system-level performance improvement.

We recognize that while getting the senior leadership team right is extremely important, this challenge is fairly broad and universal (i.e., every CEO faces this question, for every kind of strategic aim). We therefore reframed Leverage Point Four to make it less "generic" and much more focused. Instead of "Get the Right Team on the Bus," we have zeroed in on team members who usually aren't even considered candidates to be on the bus—*patients*—and have restated Leverage Point Four as "Put Patients and Families on the Improvement Team."

Our rationale for this change is straightforward. Quite simply, we have observed that in a growing number of instances where truly stunning levels of improvement have been achieved, organizations have asked patients and families to be directly involved in the process. And those organizations' leaders often cite this change—putting patients in a position of real power and influence, using their wisdom and experience to redesign and improve care systems—as being the single most powerful transformational change in their history. Clearly, this is a leverage point where a small change can make a huge difference.

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What does Leverage Point Four look like in action? The following are four examples.

Daily Patient Conversations with Senior Executives

The entire senior management team at McLeod Regional Medical Center in Florence, South Carolina, starts each day by gathering outside the CEO's office and then going to a patient care unit. Each member of the senior team visits three or four patient rooms, talks with the patients and nursing staff, asks patients about their experiences, and gives patients the daily newspaper. The whole process takes about 30 minutes, including a standing debrief with the entire team. Patients and staff see the senior team as personally engaged in making the care system better, and the senior executives hear ideas and concerns directly from patients in ways they have never done before. One powerful consequence is the effect these conversations have on the executives themselves, who typically feel energized and inspired to improve the care system with much greater urgency and commitment than they would without the patients' words ringing in their ears every morning. The results at McLeod's 550-bed hospital are spectacular: a 40 percent drop in mortality rate, some of the very best CMS Core Measure scores in the nation, and a dramatic drop in adverse drug events—including a seven-month run with zero harm from medications.[10]

Family-Centered Rounds

At Cincinnati Children's Hospital in Ohio, it has become routine to give parents the choice to be full participants in the daily "work rounds" as nurses, house staff, and teaching faculty give progress reports, do examinations, discuss differential diagnoses, and make treatment plans. The process provides parents with direct, unfiltered communication about everything that is happening with their child, and also invites parents to provide information and participate in decisions in an unprecedented fashion. Parents are involved in ensuring that medication orders are correct and helping to create discharge goals. Families routinely say they now feel they are truly part of the care team. In the words of Steve Muething, a pediatrician and Assistant Vice President of Patient Safety: "Family-centered rounds began as a flow initiative and there was much resistance. Five years later it is a core value of our organization. Nurses and physicians believe care is better and safer and the teaching improves when parents are active participants in rounds. Teams are now uncomfortable when parents *aren't* involved in rounds."

Structural Integration of Patients and Families

Stimulated in part by a well-publicized patient death from an overdose of chemotherapy, Dana-Farber Cancer Center in Boston, Massachusetts, began asking patients and families to participate in the design of safer care processes. This institution now has over ten years of experience inviting patients and families to become full members of virtually every committee, task force, and improvement team in the organization. Over 400 patients and families are now actively involved as volunteers in these roles at any one time, as full participants in decisions about care design, safety improvements,

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facility planning, operations management, and strategic issues—essentially everything important about the organization. Although many internal staff members were skeptical about this change at the beginning, they now wonder how they ever ran Dana-Farber without having patients and families deeply involved. Two "results" stand out among many performance highlights: There have been no more fatal medication safety events in the 11 years since they began this structural and cultural change, and philanthropic support (by many of the same volunteers who help to run the organization) reached the astounding level of $160 million in 2006—without a major capital campaign.[11]

Patient Stories at Board Meetings

Every meeting of the Board Quality Committee at Delnor-Community Health System in Geneva, Illinois, features a patient story about a harm event, helping the organization "put a face on the problem" rather than just seeing abstract reports of measurements. Typically, a patient (or family member) is invited to tell what it was like for them to experience a surgical site infection, or some other quality defect. Board members then ask questions to clarify their understanding of the experience. Although these conversations take only 20 to 30 minutes during the actual meeting, there is a lot of preparation involved—to invite a patient or family member (not all want to participate), prepare the patient and family for the meeting, discipline the board not to get into ad hoc problem-solving during the meeting, and so forth. The effect on the board members has been powerful. They now ask questions of the medical staff and administration with greater passion and urgency, and they expect results. It might be a coincidence, but it is over a year since Delnor has had a ventilator-acquired pneumonia or a central line infection, and the mortality rate at Delnor has dropped some 40 percent in two years.[12] There are other ways in which boards and senior leaders can hear patient stories,[13] but none are as powerful as having the patient in the room.

The principles behind Leverage Point Four are nicely articulated in the "Patient- and Family-Centered Care" approach of the American Hospital Association,[14] as follows:

- All people (patients, families, and staff) will be treated with dignity and respect.
- Health care providers will communicate and share complete and unbiased information with patients and families in ways that are affirming and useful.
- Patients and families participate in experiences that enhance control and independence.
- Collaboration among patients, family members, and providers occurs in policy and program development and professional education, as well as in the delivery of care.

The most important learning from the last three years of experience is that these principles must be translated into specific structural and process changes if they are to have an effect on the organization's culture. The most powerful of these structural and process changes—the one with the most

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leverage—is to "Put the Patient in the Room."[15] At least four things happen when patients and families work alongside health care professionals to improve quality and safety:

- **Self-Serving Conversations Cease:** Many complaints (e.g., "We can't do it that way because that would require us to cooperate with that other cardiology group with which we compete") sound unseemly when patients and families are in the room.
- **The Whole System of Care Comes into Play:** Patients experience care across multiple departments, medical groups, and organizations. They want solutions that work for them, not just for one part of the system.
- **Better, More Innovative Ideas Come Forward:** Patients and families are a tremendous wellspring of ideas for improvement and redesign, if we listen to their voices.
- **Physicians and Nurses Feel Supported and Inspired:** When patients are on committees and task forces, they become a source of energy and positive reinforcement for care professionals.

For all these reasons, we believe that Leverage Point Four—Put Patients and Families on the Improvement Team—is not only an important force in driving the achievement of measured results, it is also the leverage point with the greatest potential to drive the long-term transformation of the entire care system.

Leverage Point Five: Make the Chief Financial Officer a Quality Champion

One particular member of the senior executive team stands out, in our view, as a critical leverage point for large system change: the CFO. The connection between quality improvement and business performance is still weakly made in most health care organizations, but that is changing. The combination of pay-for-performance programs, major changes to the Medicare payment system, and the elimination of increased payment for eight "never events" has put quality and payment on the radar screens of many health care CFOs. Additionally, a number of organizations have begun to try to understand the true financial impact of harm events such as falls, medication errors, and delayed care. Others are examining the comparative cost of care when evidence-based care protocols are utilized.[16] CFOs are finding significant opportunities to improve patient care margins by reducing and eliminating error and clinical waste.

Traditionally, the successful health care CFO is a master of the revenue stream, able to maximize contracts and payment systems. Cost-reduction efforts have generally been in reaction to external changes in the market or payment systems and are mostly one-time events focused on reducing the cost of labor, supplies, and vendor contracts (i.e., the *inputs* to the processes of care). But when compared to CFOs in other industries, health care CFOs have typically not focused on improving the *processes themselves*—taking out wasted time and effort, eliminating defects that require rework,

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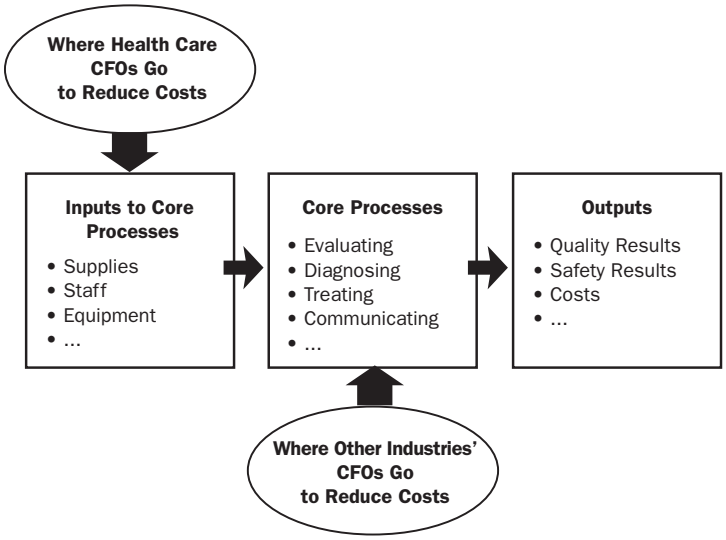
and so forth. To a large extent, the core processes of health care—diagnosing, treating, communicating with patients, etc.—have been something of a "black box" and off limits to health care CFOs.

Figure 5. CFO Cost Reduction Efforts: Health Care vs. Other Industries



Leverage Point Five reflects our belief that health care organizations would be far more likely to achieve dramatic improvement in system-level measures of *both financial and quality performance* if health care CFOs were to become strong drivers of quality-based elimination of waste, and if their commitment were translated deeply into the budgeting, capital investment, and innovation and learning systems of an organization.[17]

The strongest examples of Leverage Point Five in action tend to come from organizations such as Virginia Mason Medical Center in Washington, Park Nicollet Health Services in Minnesota, ThedaCare in Wisconsin, and McLeod Regional Medical Center in South Carolina that have adopted lean management principles (in particular, the Toyota Production System).[18] In these health care systems, efforts to both reduce costs and to improve quality are primarily focused on the processes of care. Any reduction in input costs (supplies, personnel, etc.) comes about as a *result* of having removed waste from the process, not as a new constraint on an unimproved process. Examples of what these organizations are achieving by engaging the CFO in improvement of core care delivery processes include the following:

- Improving time available for care delivery: McLeod has eliminated 112 minutes of wasted nursing documentation time per cardiac patient, freeing up nurses to provide higher levels of quality and safety.[19]

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- Improving throughput and avoiding capital costs: By using lean techniques to manage flow, Park Nicollet now routinely processes 64 patients per day through the same endoscopy facility that once struggled to care for 30 to 32 patients per day, with less strain and effort on the part of nurses and physicians. Patients and staff are delighted, and $3 million in capital expenditures were avoided.[20]

- Making more secure long-term financial plans: ThedaCare has seen so much reduction in waste from their first couple of years of widespread application of the lean methodology that the CFO has built a long-range financial plan that does not require any price increases.[21]

Some patterns are emerging from these examples and others like them:

- **Organizations with CFOs who are engaged in improvement efforts have adopted *quality as the strategy,* not one of many strategies.** The key marker of this strategy is seen when times get tough: these organizations invest more, not less, in quality when they are under financial pressure.

- **These CFOs take a personal role in process improvement and waste removal.** It isn't enough to cheer on the sidelines; CFOs must be teachers and practitioners of quality methods, and actively seek out process improvement opportunities. A good example at Park Nicollet has been the huge reduction in administrative waste that resulted from the elimination of the entire budgeting process—three months of management time and energy expended every year in what the CFO realized was pure waste.[22]

- **These CFOs encourage serious investment in development of improvement capability.** When quality is the strategy, organizations recognize the significant investment that must be made to develop capable leaders of improvement at all levels and they make the commitment to build this capability (see Leverage Point Seven).

- **CFOs are beginning to shift their focus to cost per unit as opposed to revenue per unit.** Because most hospital payment systems involve a fixed form of payment (e.g., DRGs, case rates, bundled outpatient rate, Ambulatory Surgical Center rate, per diem rate), many CFOs are making the connection that eliminating infections, medication errors, falls, and delays in care are strategies for reducing their average per unit cost of production and increasing the margin on care delivery. Taking it one step further, some CFOs are beginning to ask what it should cost to treat pneumonia, replace a hip, or deliver a baby, for example, establishing a per-unit cost standard for various high-volume reasons for admission. Rather than asking managers to cut dollars from a budget, these organizations are asking managers to decrease the cost per unit of production by eliminating clinical and administrative waste.

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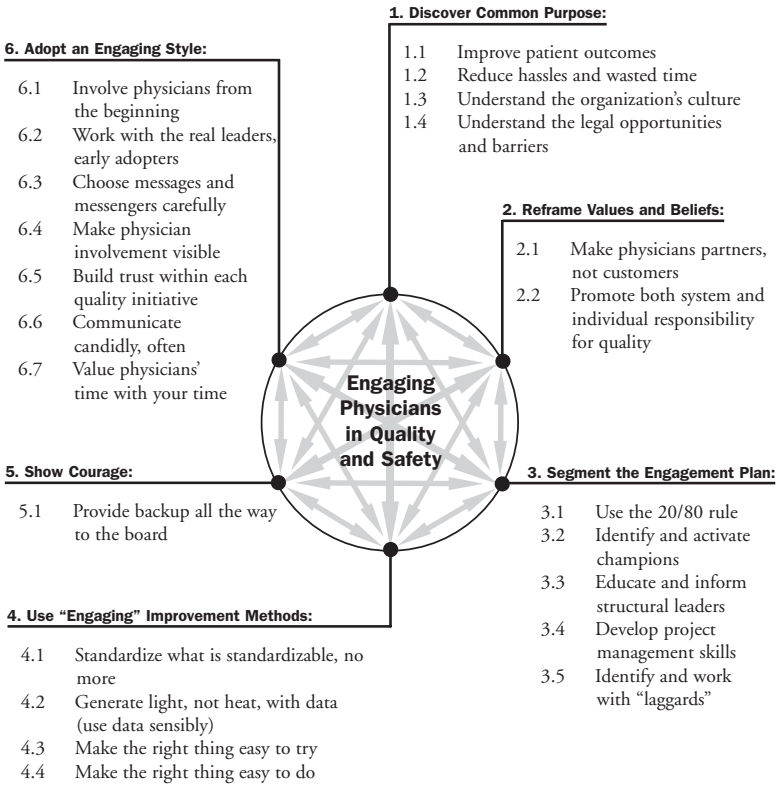
Leverage Point Six: Engage Physicians

Clearly, all members of the health care team need to be engaged if leaders are to succeed in making quality and safety improvements. So why single out physicians? This leverage point arises from the reality that whereas physicians by themselves cannot bring about system-level performance improvement, they are in a powerful position to stop it from moving forward, and therefore their engagement is critical. Simply stated, leaders are not likely to achieve system-level improvement without the enthusiasm, knowledge, cultural clout, and personal leadership of physicians.

"Yes, but *how* do we engage physicians?" Since the First Edition of this white paper was published, this has been the most common question asked by hospital and health system executives. IHI's answer to this question is structured around the framework depicted in Figure 6 and is described in detail in the *Engaging Physicians in a Shared Quality Agenda* white paper.[2] That white paper builds on the principles articulated in the initial Seven Leadership Leverage Points and utilizes continued learning from organizations that have achieved breakthrough levels of performance with a high degree of physician engagement (e.g., McLeod Regional Medical Center and Immanuel St. Joseph's–Mayo Health System in Minnesota).

Figure 6. IHI Framework for Engaging Physicians in Quality and Safety



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Each of the six elements of this framework is important by itself, but physician engagement is more likely when leaders work across all the elements. Specific examples of how hospital and health care system leaders are using the framework to engage physicians are described below.

Discover Common Purpose

The key idea here is to learn what the physicians' quality agenda is, and to harness *your* quality efforts to *their* agenda. "Physicians' quality agenda" is not an oxymoron. Doctors care deeply about their patients' outcomes, and they also care deeply about wasted time (especially their own). In contrast, doctors are less excited about improving the hospital's publicly reported quality scores, reducing length of stay, or removing waste in the supply chain—all of which they tend to think of as "the hospital's problem, not mine."

Hospital leaders can address this gap by how they frame aims and measure results. Physicians care about mortality and harm—quality and safety *outcomes*—much more deeply than they care about process measures, and one way to engage them is to make sure that the organization's aims focus on outcomes that are meaningful to doctors. For example, instead of aiming to "be in the top tenth percentile of CMS Core Measures," a hospital might establish an aim to "reduce the risk of needless deaths in the hospital." One *strategy* to accomplish this aim might be to improve the reliability of CMS Core Measures for acute myocardial infarction and pneumonia.

Reframe Values and Beliefs

Both administrators and doctors need to reexamine and reframe some of their core values and beliefs if true engagement in quality and safety is to occur. Administrators must begin to think of doctors as partners rather than as customers. Doctors must begin to see their responsibility for the system's quality results, and not just for their own personal quality performance. These sorts of deep cultural changes do not happen overnight, and won't happen just because we wish them to. One example of process that might be redesigned to help drive changes in values and beliefs is the traditional "Morbidity and Mortality Conference." Typically in these conferences it is the *doctors* who ask, "Did someone make an error of judgment or of technique in this case?" The redesigned process would focus on *doctors and administrators* asking a very different question: "What were the systems factors—culture, structure, processes—that contributed to this death, and what could we do together to change these factors?" Over time, as this question is repeatedly asked and addressed with real action, physicians will start to feel more like valued partners in the hospital's operations, and they will also begin to work *on* the system of care, not just *in* the system of care.

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Segment the Engagement Plan

One of the most immediately practicable elements of the IHI Framework for Engaging Physicians in Quality and Safety uses the principle of segmentation. Not all physicians need to be engaged in any particular quality initiative, and those that must be engaged do not need to be engaged in exactly the same way. The idea is to develop a segmented plan for engaging physicians—one plan for a few physician champions, another plan for the physicians who might be members of the actual improvement team, yet another plan for the structural leaders of the medical staff who might need to adopt a new hospital policy based on the work of the team, and so forth. It is important when designing each of these segmented plans to include a plan to engage those physicians who are likely to block recommendations that emerge from the project team or policies recommended by the structural leaders.

Use "Engaging" Improvement Methods

Executives realize that doctors have often been cynical about quality improvement in the past because the methods—ways of involving physicians in improvement work, data reporting, etc.—are almost guaranteed to *disengage* them. For example, asking busy doctors to join an improvement team that meets every two weeks during the time doctors would otherwise be making rounds; using the vast majority of the meeting time for activities that don't require physician input; gathering data month after month without testing any changes, then sending out flawed performance data on quality measures to individual doctors and asking them to improve.

The process for standardizing clinical processes is another example where redesign is needed to better engage physicians. Typically, when doctors are asked to standardize their approach to a clinical situation, they design a protocol, care pathway, or guideline—a specification of what should be done, using the best evidence. Visually, the process looks something like Figure 7—a series of conference room meetings, often stretched out over months, during which the evidence is debated and different doctors and specialties argue their favorite points—all about *what* should be done, in theory. There is little discussion about *how*, *who*, *when*, *where*—the practical aspects of actually executing a guideline in any given clinical setting—and no testing of any of the ideas in the real world to see whether any of this works. Is it any wonder that few doctors choose to use the final product, when it is eventually sent forth into the clinical world with the hopes that the doctors will "opt in"?

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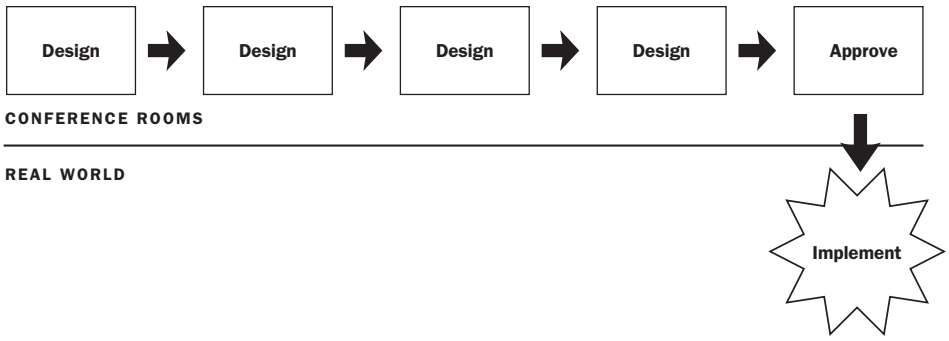
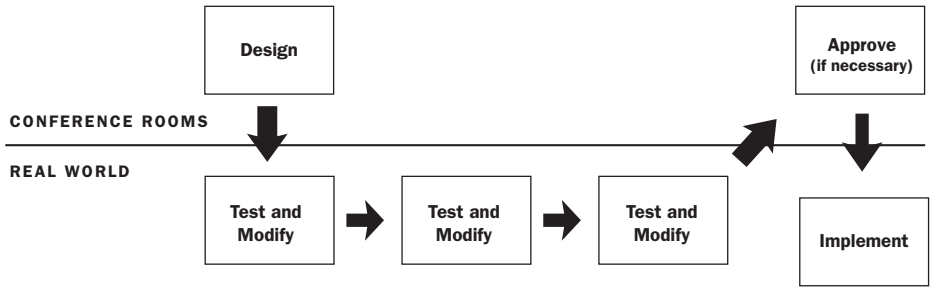
Figure 7. The Typical Approach to Standardizing Clinical Processes



A much better way to standardize clinical processes, one that engages physicians, is to spend no more than one meeting on the *what* of a guideline and use small tests to refine the design for the local setting (see Figure 8). There is usually a good "starter kit" for a clinical protocol or guideline available from a national, reputable source—good enough for most clinical settings as an initial protocol. The main work of the standardization team is not to reinvent the science behind this protocol, within each hospital. Rather, their focus is on how to make the existing protocol work within the local context. The team tests various methods for *how*, *who*, *when*, *where*, initially on a very small scale, making frequent changes to improve implementability. Tests of change increase in scale, until most doctors find themselves able to use the protocol in their patient care. At that point, the guideline or protocol is adopted with the expectation that doctors *opt out* if they don't wish to use it. After all, through its testing the team has demonstrated that the vast majority of doctors can use the protocol and it works well in daily practice.

Figure 8. Standardize Clinical Processes: Refine the Design for the Local Setting Using Small Tests of Change



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Show Courage

Change is required to make improvements in quality and safety; this change is not easy, especially when one powerful voice speaks out against it. Physicians are among the most powerful voices in health care organizations and their collegial nature makes them reluctant to challenge other doctors. "Monovoxoplegia," or "paralysis by one loud voice," is a common phenomenon that occurs in doctors' meetings, improvement teams, executive team meetings, and even in board rooms, where lay board members often sit silent when one doctor speaks up against a proposed change.

There is no simple answer to overcome "monovoxoplegia," but the basis of an effective approach relies on building an organizational culture of courage—the courage to ask questions, to challenge the status quo, and to support the doctors and nurses who do wish to make improvements. Courage of this sort is beautifully illustrated by Donna Isgett at McLeod Regional Medical Center, and the question she now asks physicians when they balk at using evidence-based practices: "Are you saying that you value your individual autonomy more than you value your patients' outcomes?" Knowing that they will be *supported all the way to the board* enables all clinicians, including doctors, to ask tough questions. Courage is infectious.

Adopt an Engaging Style

To achieve the best improvement results, leaders must keep in mind certain characteristics in the physician professional culture, including their focus on individual patients, a deep sense of individual responsibility for patient outcomes, the tendency to overestimate the risk of changes in practice, and valuing individual experience over data and formal studies. Below are some ideas, more fully described in the *Engaging Physicians in a Shared Quality Agenda* white paper, for developing a "style" that engages physicians in improvement.

- **Involve Physicians from the Beginning:** Don't hand them a final or near-final version of proposed changes.
- **Work with the Real Leaders:** In most groups of physicians, there are typically one or two opinion leaders. They might not be the "titled" leaders within the organization, but they have earned the respect of their peers and can influence others. To facilitate change and improvement, these real leaders must be involved in the improvement work.
- **Choose Messengers and Messages Carefully:** Physicians often give credibility in part to who delivers the message, so it is important to plan how a proposed change is described and by whom (e.g., a specialist, a general practitioner, a physician with specific specialty qualifications, etc.). Furthermore, terms such as "accountability" and "performance reports" can have unintended meaning, and communication should be designed to be engaging rather than inflammatory.

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- **Be Transparent, Especially with Data:** Physicians generally don't trust interpreted data, so give them access to the raw data. Even if they never look at the data, they will value knowing that you trust them to do so.
- **Value Their Time with Your Time:** If an executive leader asks physicians to take time to engage in a "critical strategic initiative" but can't be bothered to attend meetings himself, then the doctors feel manipulated and undervalued, and physician engagement will suffer accordingly.

Leverage Point Seven: Build Improvement Capability

Three years of field experience have reinforced the critical importance of Leverage Point Seven. It would do little good for an organization to implement Leverage Points One through Six—adopt aims at the board level; develop brilliant plans to achieve the aims at the executive level; channel attention to the aims with transparency and executive time; engage patients in designing changes to achieve the aim; link financial and clinical improvements to the aim; and engage physicians in the aim—if no one in the organization were technically capable of making, sustaining, and spreading improvements (Leverage Point Seven).

To effectively execute improvement projects throughout an organization, leaders must devote resources to establishing capable leaders of improvement in every microsystem. If successful 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. The list of capabilities required of senior leaders to drive system-level improvement is long, but includes at a minimum the ability to know, use, and teach the following:

- The Model for Improvement and small-scale rapid tests of change[23]
- A coherent improvement strategy such as the Toyota Production System[24]
- Concepts and practices of high-reliability organizations[25]
- Sophisticated practices in flow management[26]
- Concepts and practices of scale-up and spread of improvements[27]
- Concepts and practices of safety systems[28]

Park Nicollet Health Services provides an example of the level of investment in improvement capability that might be required if quality is to be *the* strategy for an organization, rather than just *a* strategy. In an organization of approximately 5,500 full-time equivalent employees, CEO David Wessner has taken 39 of his best managers "off the line" to become deeply trained process improvement leaders, with a full-time focus on facilitating rapid, sustained improvement in quality and safety. He plans to grow this

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group of leaders to at least 100 people, over and above the normal complement of staff in areas such as infection control, Joint Commission accreditation, and other typical quality and safety functions.

Over the past three years since the initial leverage points were developed, one of the most consistent findings has been that senior executives tend to overestimate the capability for improvement within their organizations. Simply sending a few staff to a couple of conferences and adding "quality and safety" to job descriptions will not begin to address the critical need for capable improvers at every level in health care organizations.

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Summary of Changes to the Seven Leadership Leverage Points

The table below provides a brief overview of the changes to the Seven Leadership Leverage Points, based on IHI's learning between publishing the First Edition of the white paper in 2005 and this Second Edition in 2008.

Leverage Points	Key Changes in the Second Edition (2008)
One Establish and Oversee Specific System-Level Aims at the Highest Governance Level	• Emphasis on the critical role of the board in quality • Learning about the power of stories and data at the board level
Two Develop an Executable Strategy to Achieve the System-Level Aims and Oversee Their Execution at the Highest Governance Level	Learning about what it takes to execute change on a large scale: • Focus on one or two major aims • Rigorous steering of the execution plan using good data from the field • Resourcing strategic improvements with capable improvers and change leaders as their primary job responsibility
Three Channel Leadership Attention to System-Level Improvement: Personal Leadership, Leadership Systems, and Transparency	• Confirmation and examples of the power of leadership attention to improvement aims • A major new emphasis on the power of transparency to drive improvement and change
Four Put Patients and Families on the Improvement Team	• Original leverage point focused on establishing the most effective senior leadership team • Revised leverage point focuses exclusively on the transformational role of patients and families on leadership and improvement teams
Five Make the Chief Financial Officer a Quality Champion	• Learning about the potentially powerful role CFOs can play in improvement once they see "reduce waste in core processes" as the primary driver of cost reductions, rather than the traditional approach of "reduce inputs to (defective) core processes"
Six Engage Physicians	• Developed an entirely new framework for engaging physicians in a shared quality agenda, with extensive examples
Seven Build Improvement Capability	• Continued reinforcement of the critical need to build capable improvers at every level as an important underpinning for the other six leverage points

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Appendix A:
Leadership Leverage Points Self-Assessment Tool for System-Level Results

The self-assessment is a discussion and action tool designed to help the administrative, physician, and nursing leaders of a health care organization design and plan their work in order to lead to a significant reduction in one or two system-level measures (e.g., mortality rate, harm rate, nosocomial infection rate, or chronic disease outcome measure). The self-assessment should be completed by the senior leadership team of the organization, first as individuals and then together as a group to review the results and plan actions that will address any leadership leverage points that need attention.

Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
1. Establish and Oversee Specific System-Level Aims for Improvement at the Highest Governance Level			
Senior leadership team has developed specific "how much, by when" aims for system-level measures of quality and safety.			
Board has adopted the aims and is overseeing their achievement using system-level measures of progress against the aim.			
Patient stories about harm or quality issues (either in person, by videotape, or as told by front-line personnel) are part of every board meeting.			
Accountability for achieving the aims is clearly established in the board's executive performance feedback system.			

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Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
2. Develop an Executable Strategy to Achieve the System-Level Aims and Oversee Their Execution at the Highest Governance Level			
Senior leadership team has developed a plan to achieve the aims that is focused on the right drivers, and has the necessary scale and pace.			
Senior leadership team has resourced the projects that are necessary to achieve the aim with effective leaders.			
Leadership team is steering and adjusting both the strategy to achieve the aim and its execution, based on weekly and monthly review of measures.			

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Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
3. Channel Leadership Attention to System-Level Improvement			
Senior executives personally do executive reviews with key project teams working on the aims.			
Measures of progress on each project, and on the overall aims, are widely distributed throughout the organization and the community, even if you aren't proud of the measures (transparency).			
Leaders are given sufficient time to work on key projects (the work is not just added on to an already busy schedule).			

Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
4. Put Patients and Families on the Improvement Team			
Patients and families are deeply involved in all improvement and redesign teams.			
Each member of the senior executive team is engaged and committed to achieving the aim, and views this as part of his or her core work.			

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Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
5. Make the CFO a Quality Champion			
CFO can articulate the business case for each improvement initiative and is a primary driver of quality improvement.			
Finance representatives are integrated into improvement project teams to support the business case needs.			
When times are tough, we invest *more* in quality since it is our primary strategy for removing waste and improving efficiency.			

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Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
6. Engage Physicians			
The executive team understands and shares the medical staff's intrinsic motivation for quality (outcomes, wasted time…).			
The medical staff are regarded as partners in the delivery of care, not as customers of the hospital.			
There is a clear plan for developing physician engagement that recognizes the multiple "segments" of the physician staff (champions, structural leaders, others).			
We use quality methods that encourage physician engagement in quality rather than drive them away (sensible use of data, make the right thing easy to do).			
Executive, physician, and nurse managers are confident of support all the way to the board level, and have the courage to engage physicians in difficult conversations and avoid "monovoxoplegia" (paralysis by one loud voice).			
Capable physician leaders have been appointed to each project, and are supported with good data and analytic resources.			

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Leadership Leverage Points	Action Needed / Action Planned	By Whom	By When
7. Build Improvement Capability			
The entire senior leadership team (including CEO and senior managers) knows and uses the technical and change leadership knowledge required to achieve the aims and execute the strategies: • Content knowledge for each strategy • Model for Improvement and rapid tests of change • A coherent improvement strategy • Scale and spread • Reliability science • Flow management • Safety systems			
The senior leadership team can, and does, teach the technical and change leadership knowledge to others in the organization.			

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