Transforming Care at the Bedside

How-to Guide:

Spreading Innovations to Improve Care on Medical and Surgical Units

Transforming Care at the Bedside (TCAB) is a national effort of the Robert Wood Johnson Foundation and Institute for Healthcare Improvement designed to improve the quality and safety of patient care on medical and surgical units, to increase the vitality and retention of nurses, and to improve the effectiveness of the entire care team. For more information, go to http://www.ihi.org/ or http://www.rwjf.org/goto/tcabtoolkit.

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The Institute for Healthcare Improvement (IHI) is a not-for-profit organization leading the improvement of health care throughout the world. Founded in 1991 and based in Cambridge, MA, IHI is a catalyst for change, cultivating innovative concepts for improving patient care and implementing programs for putting those ideas into action. Thousands of health care providers, including many of the finest hospitals in the world, participate in IHI's groundbreaking work.

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Introduction

Launched in 2003, Transforming Care at the Bedside (TCAB) is a national program of the Robert Wood Johnson Foundation (RWJF) and the Institute for Healthcare Improvement (IHI) that engages leaders at all levels of the health care organization to:

- Improve the quality and safety of patient care on medical and surgical units;
- Increase the vitality and retention of nurses;
- Engage and improve the patient's and family members' experience of care; and
- Improve the effectiveness of the entire care team.

As of September 2007, the ten hospitals participating in phase III of TCAB received technical assistance from IHI faculty, which consisted of individuals selected for their expertise in quality improvement, innovation, change management, transformational learning, and change strategies. With the support of these faculty members, the TCAB hospitals were charged with dramatically improving performance through a focus on five design themes:

- Transformational Leadership
- Safe and Reliable Care
- Vitality and Teamwork
- Patient-Centered Care
- Value-Added Care Processes

The hospitals participated in phase III of TCAB by creating and testing new concepts, developing exemplary care models on medical-surgical units, demonstrating institutional commitment to the program, and pledging resources to support and sustain these innovations. A number of hospital teams across the United States have joined these ten initial participants in applying TCAB principles and processes to dramatically improve the quality of patient care on medical and surgical units (these units, as well as those at the original sites, are referred to as "TCAB units" throughout the guide). Newer

participants include more than 60 hospitals in IHI's Learning and Innovation Community, also called "Transforming Care at the Bedside," and 67 hospitals in the American Organization of Nurse Executives (AONE) TCAB program. For more information on the TCAB programs and participating sites, please see the following:

- IHI website http://www.ihi.org/IHI/Programs/StrategicInitiatives/TransformingCareAtTheBedside.htm
- RWJF TCAB brochure http://www.rwjf.org/files/publications/other/TCABBrochure041007.pdf?gsa=1
- RWJF TCAB Toolkit http://www.rwjf.org/qualityequality/product.jsp?id=30051
- AONE website http://www.aone.org/aone_app/aonetcab/index.jsp

The full power of Transforming Care at the Bedside to empower front-line staff and bring about high-leverage changes to improve care at the bedside is fully realized only when effective and proven practices are spread across an entire hospital or health system. The capacity of an organization to spread new practices is closely linked to its ability to sustain gains achieved through the implementation of these new practices. "Sustaining the gains" requires that an organization ensures that new practices and behaviors become a permanent part of its "way of doing business." By describing the experience of TCAB hospitals within a larger conceptual framework for spread, this guide captures lessons learned to date about effective strategies for spreading TCAB practices, which may allow other organizations to effectively spread effective and proven practices more easily.

This How-to Guide is divided into four sections:

- **Section One** provides an overview of the key components needed to sustain and spread improvements, including the IHI Framework for Spread.

- **Section Two** outlines a practical step-by-step sequence of activities to lay the foundation for spread, create a plan for spread, and implement and refine the plan for spread. Section Two also includes real-world examples from TCAB hospitals and tips about best practices for achieving spread and sustainability.
- **Section Three** includes two case studies.
- **Section Four** provides tips and tools from TCAB hospitals.

Section One: Overview of Spread Strategies

Too often an exciting and innovative practice that is enthusiastically embraced by staff and patients remains an isolated and often short-lived occurrence within our hospitals and systems. The spread of innovative ideas sometimes occurs spontaneously but often requires a concerted effort by leaders within organizations or communities to accelerate the rate of spread. The IHI Framework for Spread identifies seven key components to consider when developing and executing a spread plan for any topic area or any set of improvements. These components include leadership, the organizational "set-up" to support spread, the description of the new or better ideas, methods of communication, nurturing the social system, measurement and feedback systems, and knowledge management.

> Nolan KM, Schall MW (editors). *Spreading Improvement Across Your Health Care Organization.* Chicago: Joint Commission Resources and the Institute for Healthcare Improvement; 2007:1-24.
>
> Massoud MR, Nielsen GA, Nolan K, Schall MW, Sevin C. *A Framework for Spread: From Local Improvements to System-Wide Change*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. Available at: http://www.ihi.org/IHI/Results/WhitePapers/AFrameworkforSpreadWhitePaper.htm.

Because the Framework includes a large number of activities, it is often helpful for organizations to consider spread-related activities in three phases:

1. **Getting Ready for Spread:** During the first phase project leaders confirm that the topic is a key strategic objective of the organization; assign executive and day-to-day leadership for the spread initiative, including establishment of a spread team; and determine the availability of the ideas to be spread.

2. **Developing an Initial Spread Plan:** During the second phase the spread team develops an aim for spread, an organizational structure to support spread, a communication plan, and a measurement plan.

3. **Executing and Refining the Spread Plan:** During the final phase, spread leaders establish feedback systems for monitoring progress, adjust the spread plan as needed, and support ongoing activities to sustain achieved gains.

Section Two: Activities to Support the Spread of TCAB

Section Two explores how to effectively apply the concept of three phases of spread-related activities and strategies for spread to the work of Transforming Care at the Bedside.

1. **Getting Ready for Spread**
   a. **Connect TCAB to the strategic plan of your organization**
   b. **Identify an executive sponsor who is responsible and accountable for spread**
   c. **Assign a capable day-to-day manager for spread**
   d. **Create a spread team and find a "home" for TCAB in your organization**
   e. **Ensure that the pilot unit(s) reach their goals**

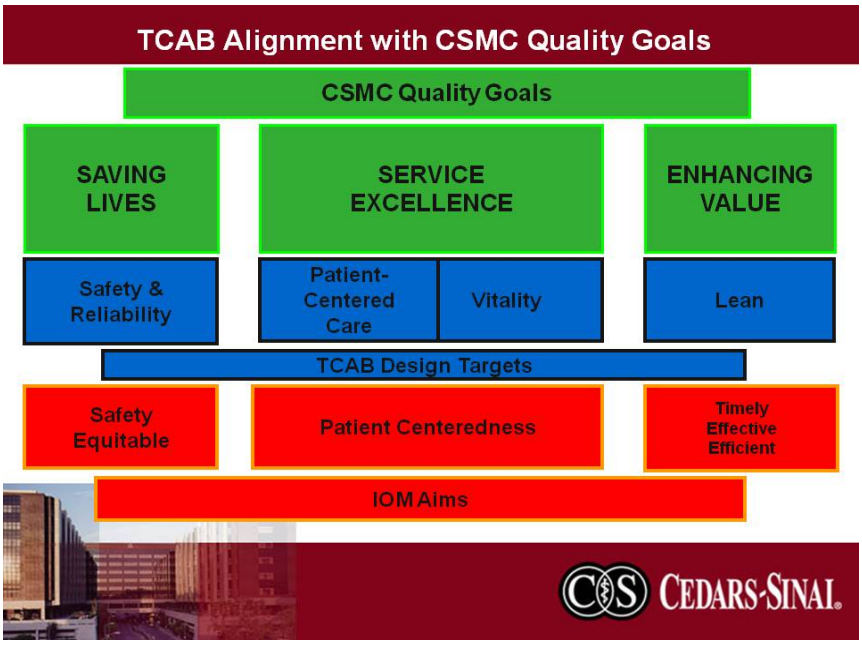
1a. Connect TCAB to the strategic plan of your organization. For TCAB to be a successful endeavor at your organization, senior leaders must ensure that the strategic plan of the organization includes TCAB-related performance expectations that are tied to specific aims (e.g., achievement of zero codes). TCAB leaders and hospital or system leaders can assess the organization's level of commitment to TCAB and ensure alignment between organizational priorities and the TCAB initiative. For an example of an assessment tool, see the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Quality Improvement and Innovation*.

> Rutherford P, Phillips J, Coughlan P, Lee B, Moen R, Peck C, Taylor J. *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: http://www.ihi.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/Tools/TCABHowToGuideEngagingStaff.htm.

Cedars-Sinai Medical Center in Los Angeles ensured that the connection between the organization's strategic plan and the TCAB goals was clear by creating a diagram that

illustrates the relationship between the organization's quality goals and the TCAB aims (see Figure 1).

Figure 1: Cedars-Sinai Medical Center TCAB Alignment with Strategic Plan



To help facilitate the inclusion of TCAB goals in your organization's strategic plan, senior leaders can:

- Include in your organization's strategic plan specific TCAB aims, such as the empowerment of front-line staff and patient safety goals
- Communicate the importance of TCAB to your organization's short-term and long-term goals when meeting with front-line staff
- Ensure that TCAB is a regular item on the agenda of your organization's executive leadership committees and board meetings
- Align TCAB's methods and goals to other major organizational initiatives such as Magnet Status, Malcolm Baldrige National Quality Award initiatives, and Shared Governance

1b. Identify an executive sponsor who is responsible and accountable for spread.

To ensure success of TCAB spread, a member of your organization's executive leadership group, such as the CEO or CNO, should designate an executive sponsor.

The executive sponsor should provide guidance and support to the day-to-day manager for spread (see Section 1c below) as well as to patient care units that are targeted for participation. It is imperative that the sponsor has the authority to make decisions that will enable units to test and implement changes related to the TCAB initiative. The exact title of the sponsor may differ from organization to organization depending on its size and leadership structure. For example, for a multi-hospital or multi-facility system the responsibility for the initiative would likely rest with a leader at the corporate level. This leader would assign leadership responsibility at the facility level to ensure alignment across the system.

At the University of Pittsburgh Medical Center (UPMC) Shadyside, the system leaders identified an executive sponsor at the corporate level (nursing executive in the Quality Improvement Division) and sponsors at each hospital (CNOs). TCAB unit leaders (the manager and staff project champions) were charged with day-to-day oversight of TCAB activities. Improvement specialists, individuals with expertise in change management who are housed in the corporate Center for Quality Improvement and Innovation, partnered with TCAB unit leaders and staff to coach and to guide development of quality improvement capacity. Senior leaders at each affiliated hospital designated the director of nursing or another senior clinical or nursing leader to serve as executive sponsor for the project.

The role of executive sponsor includes the following:

- Meet with the CEO, CNO, and other senior leaders to clarify needs and expectations for involvement in the TCAB initiative (i.e., which hospitals, departments, and units will be involved, expected results based on hospital dashboard or performance measures, resources that will be allocated, and required clinical or administrative support).
- Meet regularly with the day-to-day manger for spread (see Section 1c below) to review progress and address emerging issues.
- Identify a regular reporting schedule so that the senior leadership team can effectively support and guide the effort.

- Be a visible and enthusiastic supporter of the work (e.g., attend kickoff meetings on the units, conduct unit walk-throughs to demonstrate support and identify issues needing attention).
- Remove any barriers to the success of the initiative by enlisting support and resources from departments such as IT, quality improvement, and ancillary services that are not directly involved in testing.

1c. Assign a capable day-to-day manager for spread. The spread leader is responsible for organizing and carrying out the work associated with TCAB. The exact title or position of the spread leader may differ from organization to organization depending on which department holds responsibility for the TCAB initiative. Spread leaders can be improvement specialists, quality improvement specialists, patient safety officers, nurse leaders, or internal consultants. The time commitment for the day-to-day management of TCAB spread may vary depending on the size of the organization, availability of other staff to support the effort, and the expected timetable for engagement of the spread units. The minimum time required to effectively lead the TCAB spread effort ranges from 0.5 full-time equivalent (FTE) to a 1.0 FTE, with less time required if the spread leader is able to delegate some responsibilities (i.e., data collection and reporting, communication messages, direct support to all spread units, etc.) to other staff. It is imperative that the spread leader develops and maintains an effective working relationship with the executive sponsor.

The role of the spread leader includes the following:

- Meet with the executive sponsor to develop a spread plan (see Section 2 below) and identify the resources required for successful spread. At a minimum, the spread plan should include development of a communication plan, a measurement system, identification of resources and support for new spread units, and a system for communicating progress of the initiative to leadership and the spread units.
- Review progress and emerging issues on a regular basis (i.e., at least monthly).

- Provide regular progress reports to the executive team and feedback to the spread units.
- Implement and refine the spread plan over time as needed.

In selecting spread leaders, hospital leaders should look for and/or develop those individuals who have the following skills and competencies:

- Communication skills to coach and work collaboratively with the executive sponsor and other hospital leaders, and provide ongoing personal encouragement and support to unit managers and front-line staff.
- A systems view that enables the spread leader to understand the relationships across departments and disciplines, and to bring sometimes disparate players to the table.
- Interpersonal and leadership skills that enable the spread leader to create the will for change by relying on influence (and persuasion) in situations where there is no formal reporting relationship between the spread leader and participants in TCAB initiatives.
- Improvement and change management skills that enable the spread leader to provide guidance and support to unit managers and front-line teams when identifying, testing, and implementing new ideas.
- Ability to see and gather new ideas and connect people with similar interests and improvement activities that could benefit from shared learning.
- Ability to focus on goals and a persistence to meet those goals through collaborative learning and improvement.

Additional skills and competencies and guidance on developing leaders for TCAB initiatives can be found in the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*.

Organizational resources often needed to support the work of the spread leader include:

- Mid-level nursing directors that oversee TCAB spread units to support and guide the spread effort

- Information systems to collect data and create regular reports on progress and results
- Assistance with improvement skills from the quality improvement department
- Assistance of communications staff with creation of newsletters and poster displays, and with media coverage
- Support from human resources staff to align initiative goals with the organization's education and training programs

1d. Create a spread team and find a "home" for TCAB in your organization. The executive sponsor and the spread leader should identify other individuals who can help lead the spread effort by serving on the spread team. The team members should be selected based on the total portfolio of projects identified in the overall plan for spread in the organization. For example, if the spread plan includes improvements related to patient falls or pressure ulcers, the patient safety officer might be invited to be part of the spread team. If the initiative to be spread focuses on increasing time in direct nursing care, a lead nurse manager or director might be included on the team. Ideally, the spread team will include individuals who represent a mix of the expertise required for the spread plan (e.g., clinical experience, line- or department-level management skills, support services expertise, experience with successful change implementation in a pilot unit, etc.). It is imperative that the executive sponsor and the spread leader secure the time necessary for team activities by negotiating with the supervisors of potential team members.

A TCAB spread team for a single hospital typically includes the spread leader, the executive sponsor, the unit manager or staff leader from the pilot unit (see Section 1e below), representatives from the spread units, a physician champion, and administrative or clinical leaders from other disciplines or departments, such as pharmacy, dietary, transport, ancillary services, information systems, and quality improvement. In contrast, the spread team for a multi-hospital system typically includes the corporate-level spread leader, the corporate-level executive sponsor, designated facility-level spread leaders and senior administrative leaders, representatives from the spread units, a corporate-

level physician champion, and administrative or clinical leaders from other disciplines or departments, such as pharmacy, dietary, transport, ancillary services, information systems, and quality improvement.

The spread team often is part of—or has a relationship with—an already existing leadership body, committee, or council. This relationship can help integrate TCAB into the organization's structure and priorities and is especially helpful in avoiding the perception of TCAB as a "special project" rather than an integral part of the patient care system. Examples of TCAB "homes" include the Nursing Leadership Council and the Nursing Quality Council at Long Island Jewish Medical Center, the Center for Quality Improvement and Innovation at UPMC, the Nursing Practice Council at Seton Northwest Hospital, and a Patient Safety Center at other organizations.

Members of the spread team should:

- Meet at least monthly to review the progress of the spread units and to identify problems, issues, and needed resources.
- Provide spread units with necessary resources such as regular reporting of data, quality improvement training, and training on team facilitation.
- Plan and support unit-level introductions to TCAB, serving as faculty and coaches as appropriate.
- Visit the spread units to encourage the staff and learn first-hand about progress and issues.
- Help to develop communication messages that build momentum, attract new units, support already established spread units, and link the spread unit to other departments and disciplines.

1e. Ensure that the pilot unit(s) reach their goals. The success of the pilot units in achieving the desired performance provides evidence within the hospital that dramatic change is possible, builds interest and excitement, and generates the expertise and experience needed to spread TCAB to other units. Innovative ideas from other organizations often must be adapted to be effective within another culture and

organizational structure. To ensure the desired performance of the pilot unit, project leaders should assist the pilot unit with adaptation of best practices, interventions, and specific improvement tools.

Another key step for ensuring the desired performance of the pilot unit is careful, considered selection of the unit to serve as the pilot for the spread initiative. Ideal characteristics of a pilot unit include the following:

- Director and unit manager who are supportive of TCAB
- Openness to new ideas
- Stable leadership and staff members
- Staff that function well as a team
- Some past experience with improvement-related activities such as setting aims, analyzing processes, testing, and measuring improvement

Another important factor to consider when selecting a pilot unit is the relationship between this unit and other units that will be involved with TCAB. For example, if the staff on the pilot unit are well-respected or recognized as formal or informal leaders by staff on the other units, the spread of ideas from the pilot unit may occur more rapidly than otherwise might be the case.

Some organizations find it helpful to designate more than one pilot unit or to pilot different changes on different units, particularly if they are working on reaching multiple targets such as reducing both falls and readmissions. For example, at Cedars-Sinai Medical Center the initial pilot unit for TCAB focused on reducing readmissions. A second pilot unit tested ways to increase the time that nurses spent in direct patient care.

2. Developing an Initial Spread Plan

- **a. Develop an aim for spread**
- **b. Develop an organizational structure to support spread**
- **c. Develop a communication plan for spreading information**
- **d. Develop a plan for measurement of spread**

2a. Develop an aim for spread. The executive sponsor and the spread leader should work with the organization's senior leadership to create an explicit statement that clearly defines the specific goals for spread that the organization intends to achieve. The organization's aim statement for spread then becomes a blueprint for specific action items, which are included in the spread plan (see Sections 2b, 2c, and 2d).

A spread aim statement should include:

- The ideas, processes, or systems to be spread
- The target unit(s) for spread
- The timeframe for spread activities
- The target levels of system performance to be achieved (i.e., target goals)

For further guidance on formulating and aim statement, see Section Four for the Spread Aim Statement Worksheet.

The Ideas, Processes, or Systems to Be Spread

For spread of TCAB initiatives to be successful, organizational leaders must clearly identify which of the specific changes related to each of TCAB design themes from the TCAB framework will be the focus of their spread effort (i.e., "what" is being spread). The following section of an aim statement from The University of Texas MD Anderson Cancer Center includes their intention to spread both the TCAB "practices, processes, and philosophy" and "selected TCAB innovations and practices" related to all the design targets. The specific innovations and practices that they spread from the pilot unit to other units included Rapid Response Teams, electronic shift-to-shift reports, daily goal setting with patients, white boards in patient rooms, and multidisciplinary rounds.

> *By [April 2008], we will transform patient care at the bedside on all our inpatient units by increasing vitality, reducing waste, improving reliability and focusing on patient-centered care by spreading TCAB practices, processes and philosophy to all of our inpatient units. Selected TCAB innovations and practices will be spread to all units under the auspices of the patient care delivery model, "Connected Through Caring"….*
>
> Transforming Care at the Bedside Framework and Design Themes. Available at: http://www.ihi.org/IHI/Programs/StrategicInitiatives/TransformingCareAtTheBedside.htm?TabId=1.

Target Units for Spread

The target populations for TCAB are the specific units that the organization intends to engage in adopting the "what," as discussed above. Organizational leaders of a single hospital need to decide whether spread will include all medical-surgical units as well as other specialized units such as rehabilitation, skilled nursing, etc. Organizational leaders of health systems will also need to decide whether to include all hospitals and facilities in the system in the spread activities or only selected ones. It is important to be clear on the target units for spread since the spread plan will differ depending upon the number and type of units, and the organizational connection among the units. Issues to consider in identifying target units for spread and a plan to reach them are discussed below (see Section 2b).

Timeframe for Spread Activities

Spread leaders should give careful consideration to the timeframe specified in the aim statement because it will dictate the pace of activities required to reach all targeted units within the prescribed time period. The chosen timeframe also may affect the expected level of system performance (discussed below). Leaders also should take into account the availability of required resources when specifying a timeframe for spread activities.

Target Levels of System Performance to Be Achieved

Organizational leaders should select the performance targets for the changes they intend to spread—and any others that may be affected by those changes. For example, if an organization's aim statement includes changes specifically related to patient-

centeredness for the initial phase of work, then leaders should anticipated the impact of those changes not only on patient-centeredness measures but also on other design targets, such as patient safety or reducing waste.

The University of Texas MD Anderson Cancer Center's aim statement included targets for each of the TCAB design themes that were related to their organizational strategic priorities:

- To reduce adverse events to 5 or less per 1,000 patient days
- To reduce incidents of category 3 or higher harm from falls to 1 or less per 10,000 patient days
- To reduce preventable codes on designated medical-surgical units to zero (reduction of all codes in a cancer hospital is probably not realistic)
- To reduce voluntary turnover of nurses to 5 percent or less annually
- 95 percent of patients are willing to recommend the Cancer Center
- To reduce unplanned readmissions within 30 days to 5 percent or less (there are planned readmissions for certain treatments)
- To ensure that nurses spend 70 percent or more of their time in direct patient care activities
- To adopt and maintain selected innovations for spread as planned

Once organizational leaders have identified the aim to be spread, the executive sponsor, spread leader, and other senior leaders should develop a comprehensive spread plan that addresses the question of how the changes will be spread. Leaders should consider the following steps (see Sections 2b, 2c, and 2d below) when developing a plan for spread. A Spread Plan Checklist is provided in Section Four to assist spread leaders in developing their spread plans.

2b. Develop an organizational structure to support spread. Spread leaders should consider the issues that follow when using existing organizational structures or developing new ones to support their spread aim.

Start with the Full Scale in Mind

The full scale of the spread effort is determined by the spread aim (i.e., identifying the target units for spread). The spread plan should match the scope and complexity of the spread aim. For example, the spread plan for a single hospital will differ from a plan to support spread for a multi-hospital system. Whereas the elements of the plans will be similar, the leaders involved at different levels of the organization and the required resources will differ depending on the size and structure of the organization.

Ensure TCAB Activities Are Linked to Operational Decision-Making Bodies

As mentioned in Section 1d, locating responsibility for TCAB in existing structures or initiatives within the hospital or system helps prevent the perception that TCAB is a "special project" rather than an integral part of the patient care system. Linking TCAB to an operational or decision-making committee or council is especially effective, because the linkage helps set the expectation of full participation by all units. The link also helps identify specific improvements for system-wide spread that may be generated by the units and then reviewed by the committee or council prior to broad dissemination

Assess Organizational Readiness

A leadership group is best situated to assess the readiness of an organization for broad application of a TCAB-related improvement. Through regular communication and reporting channels, the group also is well positioned to set the expectation that the improvement will be adopted. For example, the decision to spread their Condition H and Liberalized Diet initiatives was made by the COO for the UPMC system. When the COO saw how successful these improvements were at the pilot site, she immediately suggested spread across the system.

Condition H (Help) Brochure for Patients and Families. Available at: http://www.ihi.org/IHI/Topics/CriticalCare/IntensiveCare/Tools/ConditionHBrochureforPatientsandFamilies.htm.

UPMC Liberalized Diet Program. Available at: http://extra.upmc.com/071130/Default.htm.

Use Formal and Informal Unit Leaders to Help Test and Implement Ideas

Make use of both formal and informal leaders on the units when testing and implementing the ideas generated through the TCAB process. Unit managers play an important role in supporting and guiding TCAB-activities within their units. For example, they may schedule and lead regular team meetings, coordinate data collection, and serve as a link to hospital- or system-wide spread efforts. Connecting with unit leaders helps to integrate TCAB into the day-to-day activities of the unit and provides a natural reporting network from the unit to the senior leadership. (The professional development and support of unit managers as they take on this new role is discussed in Section 2c.) Informal leaders, sometimes referred to as TCAB Champions, also can play an important role in supporting TCAB activities within the unit. They may work with the unit manager to identify new ideas to test, act as leaders within the unit, build support, and identify issues that need to be addressed.

Leverage the Natural Connections Between Similar Units

The staff of units in similar hospital service areas (e.g., all medical units, all surgical units) often have formal (i.e., staff meetings) and informal (e.g., cross-unit coverage) connections that may facilitate the adoption of new ideas. For example, spreading TCAB to specialized units that lack an existing connection to medical units may require new channels of communication, such as special meetings or planned visits between staff of the two units.

Establish an Initial Timetable for Engagement of New Units

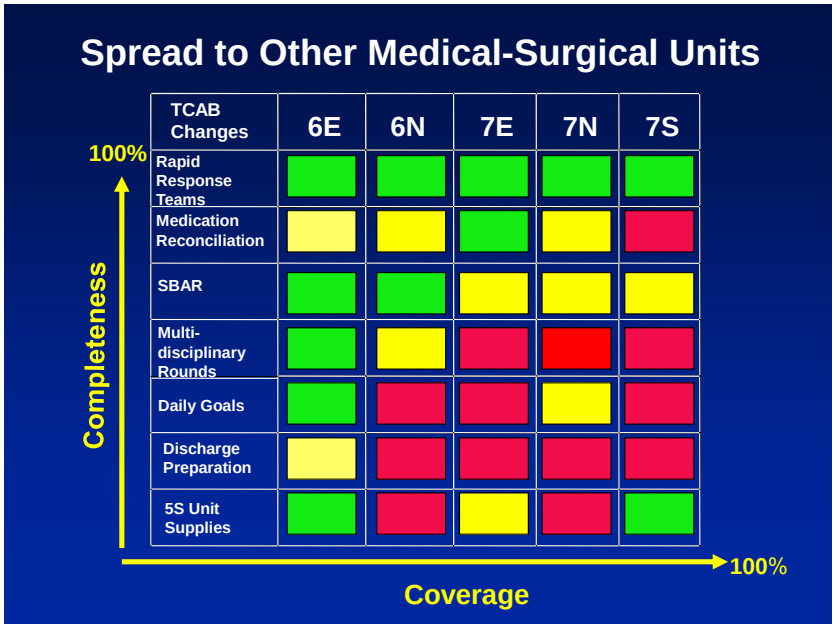
The pace of engagement of the spread units depends on the number of units to be reached and the resources available to support them. Leaders at Children's Memorial Hospital in Chicago used a sequential approach to reaching the six medical-surgical units in their hospital, with a planned roll-out that called for engagement of a new unit each month over a six-month period. UPMC leaders initially began with a sequential approach. However, they shifted to bringing on cohorts of units as they gained confidence in their engagement system. Leaders at UPMC also found the cohort approach was a way to better leverage their resources. This format also built informal

channels of support between units making the transition to TCAB, much like a group of new graduates making the leap from a supervised student to independent practitioner.

Consider Both Completeness and Coverage in the Spread Timetable and Approach

The completeness approach focuses initially on the spread of a package of changes to a small number of units that includes all the TCAB design themes (see the TCAB Framework). In contrast, the coverage approach focuses on the spread of a single change (e.g., snorkeling, Rapid Response Teams, etc.) independently across all units in the target population. Testing and implementing the total package of changes in the pilot unit(s) takes longer with the completeness approach, but may result in a more dramatic impact on all the performance measures in the pilot and spread units. On the other hand, the coverage approach engages units more quickly, but it may take longer to show results for all performance measures. Figure 2 illustrates the coverage approach. In this sample case, Rapid Response Teams were tested at the pilot unit and then rolled out to all four spread units.

Figure 2: Completeness and Coverage



Example of a useful tool to map out and track spread of changes across units.
Colors indicate the extent of adoption of specific improvements.
[P = Pilot Sites; S = Spread Sites; Green = Implemented; Yellow = Testing; Red = No Activity]

Both approaches can be used effectively to spread TCAB. Questions to consider in selecting an approach include:

- What approach will result in the largest benefits and build support for TCAB?
- How can available resources best be used?
- Are some ideas considered foundational and therefore should be introduced first, or do ideas need to be presented as a package?
- Which approach can best help the spread leaders learn? For example, would adoption of specific changes across different types of patient care units help leaders better understand the implications of spread than complete adoption of changes on a unit-by-unit basis?
- Is there broad support for TCAB or would it be better to start in specific areas of the organization?

A number of TCAB hospitals have applied the coverage approach by spreading the specific component of TCAB to engage front-line staff in generating new ideas, testing and implementing them in each spread unit, and then making the changes available for wider adoption across their organizations. (For more information, see the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*.) Engaging front-line staff in this way also builds their capability for improvement as they take on subsequent improvement activities related to other design targets. Leaders can support this type of approach by holding "kickoff" programs for individual units or groups of units that are ready to ready to be involved. During the meetings spread leaders and members of the lead pilot unit can encourage unit leaders and front-line staff to generate and prioritize ideas to test, and provide guidance on methods for testing.

A less resource intensive coverage approach used at Long Island Jewish Medical Center is called the "snorkel in a box" method. This technique provides unit leaders with the information necessary to run a snorkel themselves. (A snorkel is a shortened idea generation process that incorporates storytelling and brainstorming, adapted by TCAB from IDEO's "deep dive" process. See the *Transforming Care at the Bedside How-to*

Guide: Engaging Front-Line Staff in Innovation and Quality Improvement for more information.) Spread leaders provide additional support as needed. The coverage approach generally results in the creation of new ideas from a large number of units once members of the spread unit gain experience and mature in their ability to generate and test new ideas. At this juncture, spread leaders and the organization's leadership should develop and implement methods to spread the emerging ideas (see Section 2c below).

> Rutherford P, Phillips J, Coughlan P, Lee B, Moen R, Peck C, Taylor J. *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: http://www.ihi.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/Tools/TCABHowToGuideEngagingStaff.htm.

2c. Develop a communication plan for spreading information. The spread leader, in consultation with the executive sponsor and the other members of the spread team, is responsible for developing and implementing a communication plan. Such a plan presents an image of a change-oriented organization to those not directly involved. This is helpful in the campaign for culture change since this image creates "expectations" of acceptance for new ideas. It also creates pride among the staff when changes are successful. The communication plan must also identify key audiences and include specific messages for describing TCAB that address their perspectives and concerns.

Communication about TCAB serves two purposes: 1) attracting adopters who are interested in TCAB; and 2) providing information for those who decide to become involved. Leaders should ensure that activities to support both purposes continue throughout the spread effort. The underlying rationale for the communication plan should be based on an appreciation for the important decision-making process that individuals go through when exposed to a new idea (or set of ideas) and contemplate whether, when, and how they might apply the new ideas to their own practice. Even within organizations where leadership has made the decision that specific improvements will be made by all units, the involvement of staff in generating new ideas

and/or adapting improvements from others is an important ingredient for long-term success.

Attracting Individuals Ready to Participate

Key audiences for TCAB include senior leaders, directors, unit managers, physicians, and the administrative and clinical leaders of pharmacy and ancillary departments such as lab, radiology, dietary, and transport. The Sample Communication Plan in Section Four includes possible communication messages and possible channels or mechanisms for attracting these audiences to TCAB. An important consideration when developing an initial communication plan is the existing cultural differences between departments or facilities. For example, some units or facilities may have a history of being more independent-minded or less experienced in improvement projects than others. These units may need to be approached in different ways than those that previously have been involved in improvement or innovation efforts. Meeting with unit managers and front-line staff prior to formal involvement can help to identify any issues that should be addressed in communication messages.

To build support for TCAB and identify individuals and teams willing to become engaged in TCAB spread leaders can:

- Hold special hospital-wide meetings or forums to highlight the activities and results of the TCAB pilot unit. Some organizations have found it effective to conduct these presentations as part of already existing house-wide meetings, such as periodic performance or quality improvement annual events or symposia. Hospitals participating in the TCAB initiative found the visual display of information about TCAB, either on the unit or in more public spaces in the hospital (e.g., foyers, cafeterias, etc.), to be an effective method for spreading information and building interest and support. To maximize the effectiveness of these meetings, forums, or visual displays, spread leaders need a predetermined plan for identifying and meeting the varying needs of different audiences (e.g., individuals with an interest in participating, individuals who want more information, individuals who have no previous knowledge of improvement

initiatives). In addition, spread leaders must include a plan for follow up with specific individuals or units as part of the planning process for such events. For example, as part of their plan to introduce TCAB to new units, the spread leaders at both UPMC and Seton Northwest Hospital contacted all staff nurses, unit managers, and unit directors who had expressed interest after house-wide events.

- Make the work of the pilot sites visible by encouraging individuals or groups to visit the pilot site or taking advantage of naturally occurring opportunities for sharing information. For example, at Cedars-Sinai Medical Center, the spread leader invited the unit managers of spread units to attend meetings of the pilot site team to learn how to effectively run meetings and how to organize and lead the work. A more spontaneous opportunity for spreading the work of the pilot team occurred at The University of Texas MD Anderson Cancer Center. When the pilot unit began testing changes to introduce peace and quiet time for patients, word spread quickly through the hospital that the unit had become a more pleasant environment for staff as well as patients. Because they wanted to try the change themselves, other units soon joined the effort despite not yet formally going through the introduction to TCAB process on their unit.

Providing Information to Support Action

Once leaders and front-line staff on a unit decide to become involved in a spread effort, spread leaders will need to create a communication plan to organize the activities necessary for supporting the efforts of the new units. Spread leaders should consider the following when developing their communication plan:

- Set clear expectations. The leaders and front-line staff in a potential spread unit must understand all the implications and responsibilities associated with TCAB involvement. They also need to clearly understand the type and degree of support and guidance they can expect from spread and department leaders. The main expectations for the team are to: 1) form a multidisciplinary team and agree to generate and test new ideas related to the overall aim of TCAB in their organization; 2) keep the spread leaders informed about tests and their results;

and 3) share their findings with other units. See the Terms of Engagement in Section Four, an example of a clear statement of expectations developed by UPMC.

- Build the capability of unit managers and front-line staff. Unit mangers or other unit-based leaders initially may need support in running snorkel events, organizing and facilitating regular meetings, tracking tests and results, communicating with staff about issues and problems, making presentations to leadership, and balancing the demands of the TCAB effort with day-to-day responsibilities. Spread leaders can provide support to unit managers through one-on-one coaching, regular meetings of unit managers to discuss progress and issues, and resources such as a toolkit for TCAB. (For more information, see the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*.) At Cedars-Sinai Medical Center, spread leaders supported unit leaders by holding monthly skills labs for the unit managers and front-line staff. These labs focused on a variety of topics, such as collecting and displaying data and running effective Plan-Do-Study-Act (PDSA) cycles.

- Provide opportunities for collaborative sharing and learning. TCAB hospitals have used a number of initiatives to promote and enhance learning among unit staff, including:
    - Annual events that highlight performance improvement such as quality days or other improvement events
    - Weekly team meetings and more frequent “huddles” of front-line staff to share their tests, identify lessons learned, and make plans for additional testing
    - Weekly meetings of unit managers to share cross-unit activity, identify issues, and build the leadership skills of the unit managers

- Monthly meetings of units managers and staff to share their tests, identify and resolve common problems, and identify promising ideas that others can adapt
- One-on-one check-in calls or meetings between spread leaders and unit managers to identify needed resources or support and to track the status of testing and results

The experience at UPMC illustrates how TCAB networking meetings can facilitate the spread of ideas and changes to various sites across the system. During a meeting that highlighted the TCAB work, units at different hospital sites were introduced to the idea of a pain poster displayed in the patient's room, which identifies the time of a patient's next dose of pain mediation. Several units at different hospital sites initiated use of the poster on their units. Use of the poster also spread to other surgical units within the hospital based on results reported at the TCAB meeting.

The spread leaders at Seton found the combination of monthly and quarterly meetings to be an effective method to facilitate and accelerate learning and to build and sustain momentum for the TCAB spread effort. They have a monthly meeting for teams from the TCAB spread units—the unit managers are strongly encouraged to attend, as well as any team members that might be available. In that meeting they share initiatives underway in each unit and what successes or surprises they have experienced. They also do some "just in time" training, look at data that has been turned in from the time and motion study, announce upcoming events, and network with each other.

The quarterly meetings are usually focused on a particular TCAB design theme and the work in the meeting all relates to that. These meetings may involve guest speakers, a panel discussion, or other type of presentation of information. Teams bring their storyboards about what they have worked on during the quarter, and

they are asked to verbally report on those storyboards—an activity that has proven to be an extremely popular feature of the meetings.

- Use a variety of methods to provide information and continue to build interest and support for the work of the pilot and spread units. Spread leaders should implement different communication methods to disseminate information, including:
    - Visual displays that show data and describe tests underway or completed at the unit
    - Storyboard presentations at hospital-wide or system-wide meetings
    - Newsletters, flyers, and information bulletins (see Section Four for an example of an internal newsletter from UPMC)
    - Videos, photographs, and other visual forms of communication to describe the story of TCAB
    - Electronic methods for sharing information such as intranets, wikis, and extranets. These tools may be very useful, but must be kept up-to-date and meaningful, which often requires management by the spread leader. Spread teams at Cedars-Sinai Medical Center used the hospital's Public Folders for posting data reports. Other hospitals used SharePoint or other electronic sharing systems to post documents for improvement teams, toolkits and resources, and as a vehicle for discussion groups.

- Make wise use of messengers from the pilot unit. Unit managers or other individuals on the pilot unit who emerge as TCAB leaders can be effective messengers for spreading TCAB to other units. However, spread leaders must carefully leverage the time these leaders spend communicating with other units, so they have sufficient time to devote to sustaining achieved gains and continuing improvement work on the pilot unit. Effective ways to make these leaders' expertise available to others include: inviting staff from other units to visit the pilot unit rather than pulling pilot unit staff away from their unit; encouraging the pilot unit staff to serve as mentors for others by attending meetings where several spread units, rather than relying on one-to-one coaching; creating video

presentations of the pilot unit staff for viewing by multiple audiences; and partnering an experienced TCAB unit with a novice TCAB unit, or one that has expressed interested.

2d. Develop a plan for measurement of spread. Spread initiatives should include two types of measures: those that show the impact of changes on system performance and those that show the extent of spread of new ideas. Spread leaders need to collect data pertaining to both kinds of measures.

Performance (Outcome) Measures

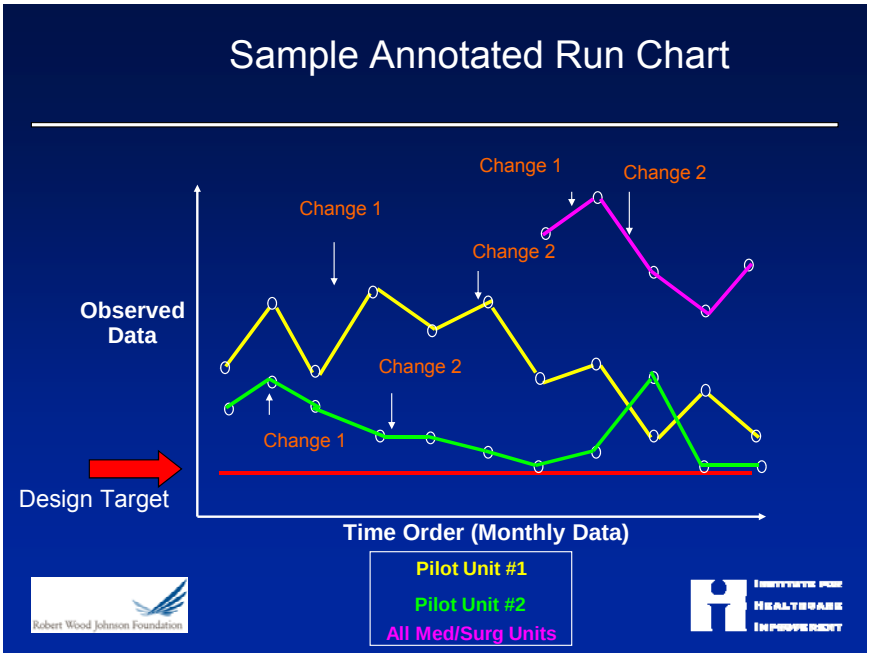
As discussed in Section 2a, a spread aim for TCAB should specify the level of system performance expected as a result of TCAB involvement. Each TCAB measure has a target goal associated with it. These goals can be adopted as written or adapted by each hospital or system.

> TCAB Measures. Available at: http://www.ihi.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/Measures/.

An effective strategy for generating reports of TCAB measures on a regular basis is to combine or coordinate the TCAB measures with those already being collected by the hospital or system. This strategy ensures that TCAB results are embedded into the ongoing hospital or system dashboard of measures that are reviewed regularly by leadership and shared with the staff at the unit level. Data collected and distributed in this way serve as a barometer of the impact of TCAB on each of the targets outlined in the spread aim statement and on the strategic goals of the organization. For example, Cedars-Sinai Medical Center created a table to show staff how to collect the data needed for TCAB by clearly differentiating the measures that require unit staff collection and those that can be tracked using existing data collection processes. To reduce additional work for the front-line staff, the organization minimized the amount of data that required collection by the unit.

Data on the performance measures are most effectively displayed using an annotated run chart that shows data related to each team's spread aim plotted over time. Figure 3 illustrates how plotting data with an annotated run chart helps spread leaders track data from the pilot unit(s) separately from spread unit data, and to see the relationship between the introduction of improvements over time (i.e., Changes 1 and 2 annotated on the graph) and the performance of the different units.

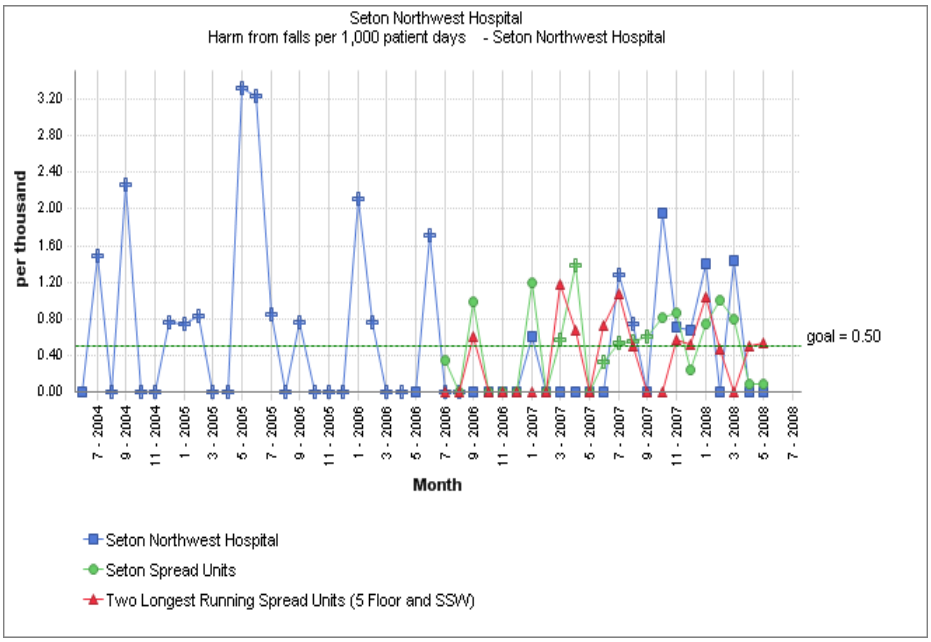
Figure 3: Sample Annotated Run Chart



Spread leaders can use such a graph to monitor the continued improvement on the pilot unit and the progress of the spread units, and to provide feedback to all TCAB units as well as the leadership during the course of the spread effort.

Figure 4 from Seton Northwest Hospital shows the progress over time of the hospital pilot unit and the spread units at all facilities at the Seton Family of Hospitals in reducing harm from falls.

Figure 4: Seton Northwest Hospital Harm from Falls per 1,000 Patient Days



In addition to reviewing the data related to the target goals in the aim statement, spread leaders may want to review the data that the spread units use during testing of specific changes. These data often are process-level measures such as “Percent of staff who report finding a new change of shift process easy to use” or “Percent of patients who feel more confident in their ability to manage their medications after discharge.” If there are a large number of spread units, the spread leaders may not be able to review data for all tests conducted by the units, but they should help unit leaders identify meaningful and relevant measures that can guide improvement and be incorporated into the regular reports on the unit’s progress.

Monitoring the Rate of Spread

Spread leaders can effectively monitor the activity of the spread units with a spreadsheet that captures the status of the specific changes or improvements under way in each unit (e.g., testing, implementing, ready for spread.) The Spread Tracker template is an example of such a spreadsheet (see Section Four). Examples of spreadsheets from Seton Northwest Hospital, UPMC, and MD Anderson are also provided in Section Four.

Spread leaders can adapt the Spread Tracker template as needed, based on the size of the system and number of units involved in spread. For large systems, leaders may want to use separate spreadsheets for each facility. Spread leaders may find it helpful to track the changes being tested in the units in greater detail than is possible with the Spread Tracker.

Spread leaders should develop a plan for obtaining data on the progress of TCAB spread on a regular basis. The ideal collection method will vary depending on the size of the spread effort and the time and resources available to spread leaders. Possible data collection methods include: regular in-person unit visits by spread leaders; regular conference calls between the spread leader and unit leaders to review tests and progress; monthly data and progress reports from each spread unit of a hospital or from the spread leaders of each facility of a multi-hospital system; and regular reports by the unit leaders at monthly meetings of the spread leader and spread units.

3. Executing and Refining the Spread Plan

- **a. Establish feedback systems to monitor progress**
- **b. Adjust the spread plan as needed**
- **c. Sustain the gains achieved in pilot and spread units**

3a. Establish feedback systems to monitor progress. In addition to building a system for the regular collection of data and information on the activities and progress of the spread units, the spread leader needs to establish a regular schedule for sharing this information with the executive sponsor and other senior leaders. The spread leader should prepare summary reports on the spread effort as a whole as well as information on individual spread units as described in Section 2d. These summary reports also can be shared across the organization to allow individual spread units to compare their progress to that of other units.

One way of making these data easily available is by using an organization's internal communication systems, such as the intranet systems used by Cedars-Sinai Medical Center and others. Based on the leadership review, the spread leader can then make recommendations to the spread units about how to accelerate their progress. This guidance should specify the steps that units should take to generate, test, and implement improvements related to their goals.

3b. Adjust the spread plan as needed. As the spread effort gets underway, spread leaders should be prepared to adjust their plans and activities if either the spread units are not attracted to participation or their work is not progressing to the degree expected. Spread leaders would do well to consider the following questions as they assess the progress of the spread of TCAB:

- *Are communication messages and channels of communication effectively attracting participation by the spread units?*
  Spreading new ideas seldom proceeds exactly as planned. For this reason, senior leaders, day-to-day managers, and team members must remain in close communication about spread progress and be ready to address obstacles as they arise.

- *Are the spread units engaged in TCAB making progress? Do they need additional information and support?*
  Early adopters—individuals who accept and implement changes relatively soon after project initiation—are important to the spread process. Team members should identify these individuals, support activities that will move early adopters to action, and address any issues they identify. Once early adopters have moved to action, team members should describe these successes in the spread communication plan, which will encourage others to adopt the new action. Spread leaders also should assess the need for additional steps to encourage early adopters to take action, such as peer-to-peer interactions, site visits, mentoring, and group discussions.

- *Is the measurement system working to generate useful information for both leaders and spread units? Are any adjustments needed in the data collection or feedback process?*
  Spread leaders should ensure that data on the rate of spread and measures related to the spread aims are reliably collected and made available for regular review and feedback to leaders and spread units. Leaders may need to make adjustments in the data collection and feedback plan to ensure that teams are reliably collecting and distributing data and taking appropriate actions based on the data.

- *As new ideas emerge from the spread units, are they being made accessible to other units so as to maximize the successes of all spread units?*
  As the spread process matures and the number of spread units grows, spread leaders may need to adopt additional methods for sharing information and innovations. For example, in addition to regular meetings, leaders may decide to use organizational intranets or other electronic methods to share the growing number of new ideas and effectively manage the spread process.

- *Has the pilot unit been able to continue its work and sustain achieved gains while simultaneously helping to support new spread units? Are any adjustments needed in the degree of involvement of pilot units in the spread effort?*
  If the pilot units show a decline from initial levels of improvement, the spread leader should explore whether this could be caused by the involvement of the pilot unit(s) in the broader spread activities. If this is the case, the spread leader can work with the unit(s) to better leverage their time and energy. For example, the spread leader might suggest that the staff from the pilot unit(s) provide guidance in a group setting, such as meetings and conference calls, rather than by acting as individual coaches to spread units. A worksheet for spread leaders to use in assessing the progress of their spread efforts is provided in Section Four (Spread Activity Assessment Tool).

3c. Sustain the gains achieved in pilot and spread units. An organization's ability to maintain or sustain the gains achieved through the implementation of improvements initiatives is closely connected to the effective spread of improvements within the organization. To sustain achieved gains, leaders must ensure that new practices and behaviors become a permanent part of an organization's "way of doing business." To ensure that gains achieved in both pilot and spread units are maintained, leaders should:

- Continue to hold senior leadership responsible for TCAB even after the initial spread work is complete, and ensure alignment of TCAB with the strategic goals of the organization.
- Establish regular methods for collecting data on TCAB measures. Linking the measures to an organization's "dashboard" is one way to ensure that the data will be collected, connected to the strategic aims of the organization, and reviewed by senior leadership.
- Use feedback systems to ensure that leaders and staff respond appropriately to TCAB-related data. To maintain the gains of a set of improvements, related data must be monitored, reviewed, and linked to action steps. Linking TCAB to organizational, unit, and leadership performance goals is an effective way to uphold the importance of the work.
- Imbed TCAB in the operational systems of the hospital by assigning responsibility for TCAB to line, department, and unit leaders. Clearly defining responsibility for TCAB in this way ensures that TCAB-related activities become the expected work of the unit. It also ensures that TCAB-related responsibilities are linked to ongoing quality improvement, patient safety, and other organizational priorities.
- Make use of existing policies and procedures to ensure the continuation of new processes and systems. Incorporating TCAB-related activities into these policies and procedures also helps ensure their continuity and permanency.

Section Three

Section three includes two case studies that describe how two organizations used the TCAB process.

- Case Study 1: Seton Family of Hospitals, Austin, Texas
- Case Study 2: University of Pittsburgh Medical Center (UPMC) Shadyside, Pittsburgh, Pennsylvania

Case Study 1: Seton Family of Hospitals, Austin, Texas

How a system accelerated the rate of TCAB engagement by all nursing units by refining its initial plan for spread, from one based on a voluntary timetable to one with a more directed approach for initiating spread across all units.

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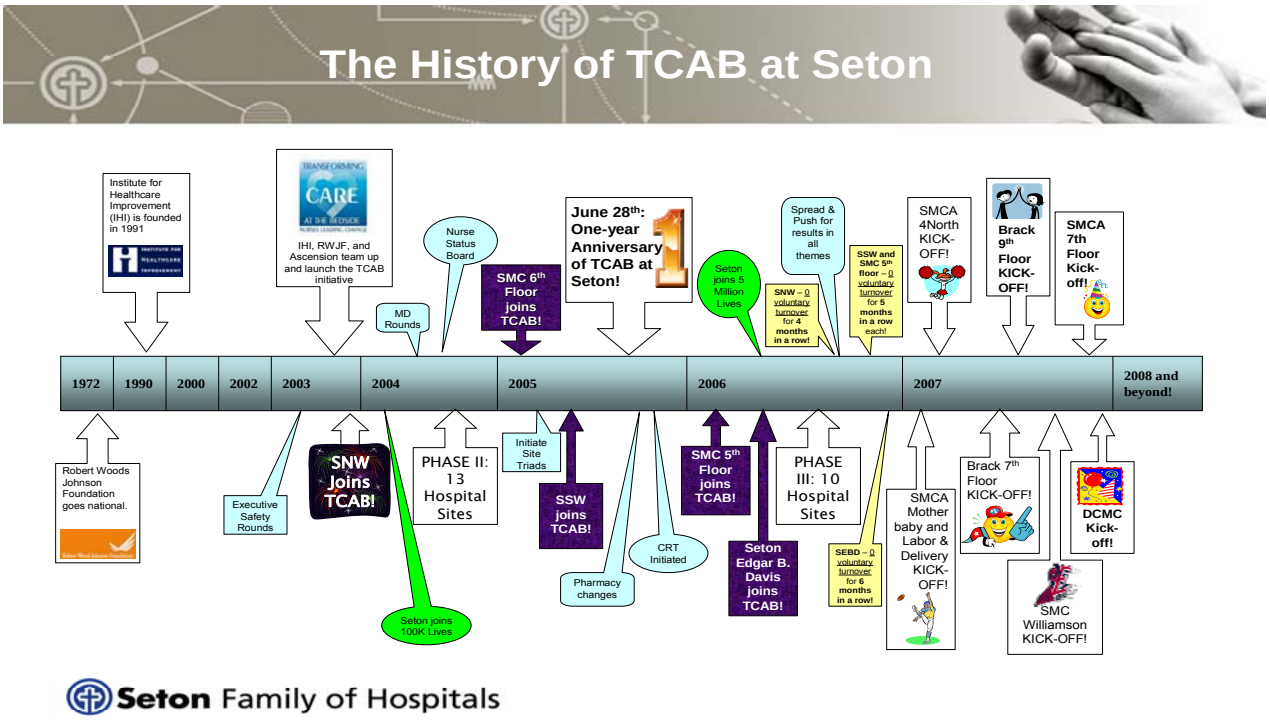
Overview of Spread Results

Between February 2005 and April 2008 the Seton Family of Hospitals spread the TCAB approach from the initial medical-surgical pilot unit at Seton Northwest Hospital to 21 units across eight hospitals in their system, including two perinatal units (see Figure 5).

Figure 5. The Spread of TCAB at Seton Family of Hospitals



Background

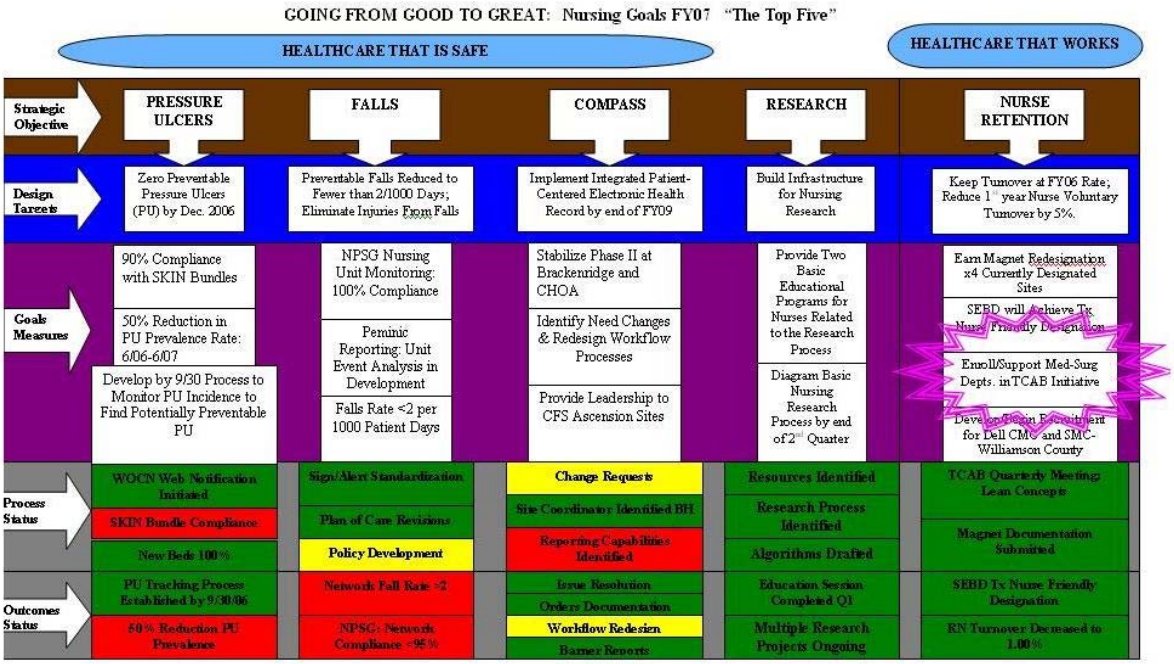
The Seton Family of Hospitals is a not-for-profit health care system that serves a population of 1.7 million in an 11-county region in Central Texas. A member of the

Ascension Health network, the health care system comprises five urban acute care hospitals, two rural hospitals, and a mental health hospital. All eight hospitals in the Seton network were involved in the TCAB spread initiative.

Spread Aim

The overall goal of the Seton network for the TCAB initiative was to introduce 15 medical-surgical units to the TCAB process over an 18-month period, with project completion slated for June 2007. In addition to this overall goal, the network set specific TCAB-related targets (e.g., staff turnover rate, specific safety-related goals), which were included in the strategic goals of the hospitals (see Figure 6).

Figure 6: Seton Family of Hospitals Nursing Goals FY07



Foundation for Spread

The chief nursing executive and vice president for nursing served as strong advocates for TCAB. They presented to the corporate leadership the results for the pilot unit, which included a reduction in nursing turnover rates and an increase in nursing time at the bedside, and won the endorsement for the spread of TCAB to all hospitals and units in

the system. They also ensured that resources were provided to support the effort by appointing two TCAB project leaders within the Network Nursing Practice Department to be responsible on a day-to-day basis for spreading TCAB. The network supported the initiative with other resources, such as dedicated support from the Quality Improvement Department for data collection for the system-wide measures related to TCAB. In addition, the chief nursing executive and the vice president of nursing personally demonstrated their support for TCAB by visiting targeted units and asking staff specific questions about TCAB-related activities. These executives also participated in orientation sessions for new TCAB units.

Developing and Executing the Spread Plan

Because the Seton network includes both small, rural hospitals and large, more urban facilities (some of which have units with more beds than their rural counterparts), executive leaders decided that spread of TCAB activities would be best achieved by encouraging introduction and uptake of the TCAB process itself, rather than specific practices harvested from the pilot unit at Seton Northwest or other hospitals participating in the RWJF/IHI TCAB initiative. This approach allowed each unit to adapt specific practices to their particular circumstances and requirements. In addition, the network spread specific best practices that had been identified by its pilot TCAB unit. To this end, the nursing executive committee and the nursing leadership team pinpointed the most relevant best practices for system-wide spread: rounds, huddles, communication white board in patient rooms, patient quiet time, and supplies at the bedside. Unit-specific expectations for results were developed based on input from each unit.

The network's overall spread plan included a process for identifying teams and providing support to allow these teams to hold weekly team meetings, initiate small tests of change around a particular issue, and implement new practices based on tests of change.

The network's initial plan for spread included a system-wide kickoff meeting to introduce TCAB methodologies and begin working with staff from the most willing units at first. Following the kickoff event the project leader began working with four units, assisting them with their unit meetings, planning tests of change, and facilitating team building. However, by December 2006, no additional units had come forward.

At the time, the leadership group for TCAB spread at Seton included the TCAB pilot units, the chief nurse officer (CNO), vice president for nursing practice, project coordinators, and a part-time measurement expert. The group assessed the situation and decided to implement an acceleration plan. Beginning in January 2007, the CNO communicated to all the nursing directors and managers that participation in the TCAB project was no longer optional but was mandatory for all nursing units. The network hired an additional project leader. Together, the two project leaders visited the directors and managers of non-participating units and developed timetables for their participation.

Each targeted unit was introduced to the TCAB process through a structured kickoff meeting in the unit. In this three-hour meeting, leadership described the history of TCAB at the network and participants were taught specific skills required to initiate the project. For example, teams were instructed on how to brainstorm using the snorkel approach and how to choose an appropriate topic to address with the TCAB process. Each unit established a multidisciplinary team that met weekly and was supported by a TCAB champion (from the pilot unit or a more experienced TCAB spread unit) or a TCAB project leader. The project leader maintained regular contact with the unit manager by phone or face-to-face meeting to troubleshoot any problems and ensure that the team stayed on track.

The project leaders supported peer learning through both monthly and quarterly meetings for the spread units. The monthly meetings brought together the unit managers and key staff from each unit with the TCAB project leaders for reporting and training (e.g., observational skills.) The quarterly meetings involved all the staff from

units participating in TCAB. These meetings focused on a particular TCAB design theme and allowed for networking among the participating teams. At each meeting the teams brought a storyboard and presented their work in testing changes related to a theme that was highlighted at the previous month's meeting. Just-in-time training on particular topics was also provided at these meetings. The Seton network found it exceedingly helpful to provide meeting attendees with a motivational story or event for inspiration to carry back to the team members at the front lines of care. These quarterly meetings also were useful in attracting additional units to the project. New units were invited to the meetings to learn about the TCAB process and witness firsthand the TCAB potential for empowering staff and achieving improvement results.

While spreading the TCAB process to a number of different teams, the spread leaders found it helpful to develop a set of definitions to describe the teams' development status. Having clear definitions of a team's status allowed the network to assess progress and identify methods for supporting individual teams. The development status definitions distinguish between novice, strong, and advanced teams.

Novice Team:

- Meets weekly, manager and director engaged and present in meetings
- Has begun small tests of change with PDSA documentation
- Working on building team and seeing failure in a positive light

Strong Team:

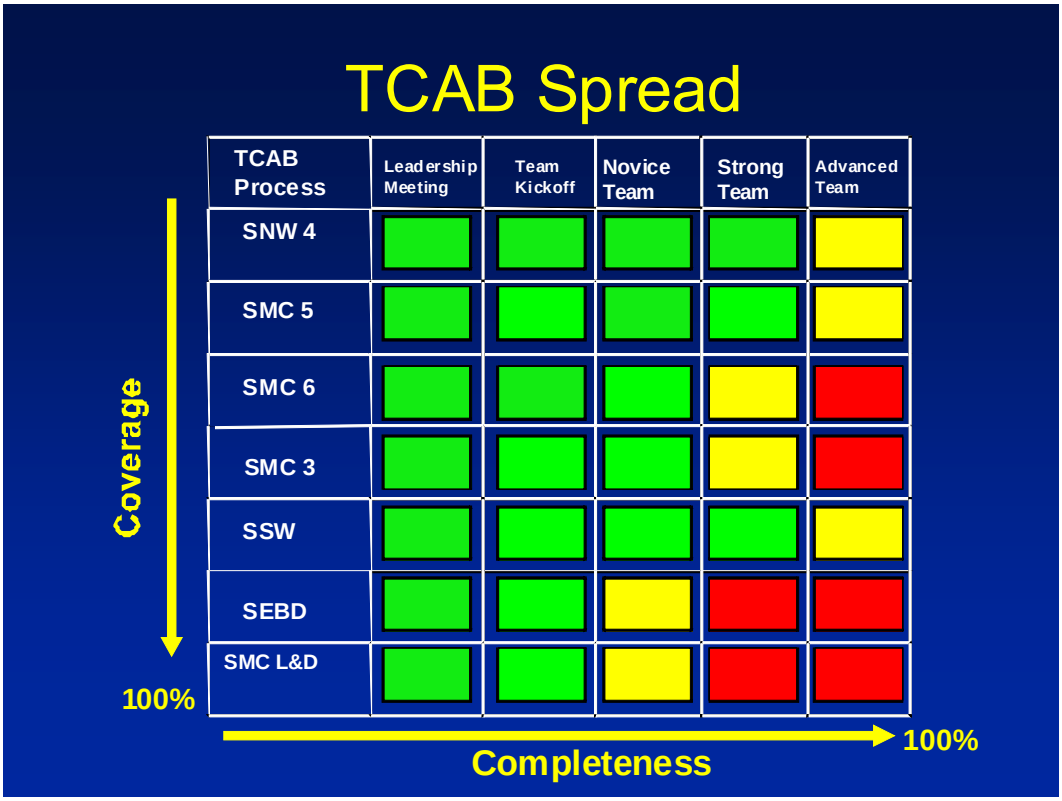
- Characteristics of a novice team, plus
- Has implemented more than three successful initiatives in the unit
- Is submitting measures (e.g., PDA, Voluntary Turnover, Adverse Drug Events)

Advanced Team:

- Characteristics of a novice team, plus
- Has met or exceeded TCAB performance targets
- Mentors other teams

The spread leaders applied the concepts of coverage and completeness to their oversight of the spread process. Using the team status definitions, Seton tracked the progress of teams targeted for TCAB spread. A chart (see Figure 7) captured both coverage (i.e., how many units had been introduced to the TCAB process) and completeness (i.e., development progress of each team). Now that all targeted teams have been introduced to the TCAB process, Seton will continue its focus on completeness—that is, supporting teams in their progression to Advanced Team status.

Figure 7: Seton Family of Hospitals Coverage and Completeness

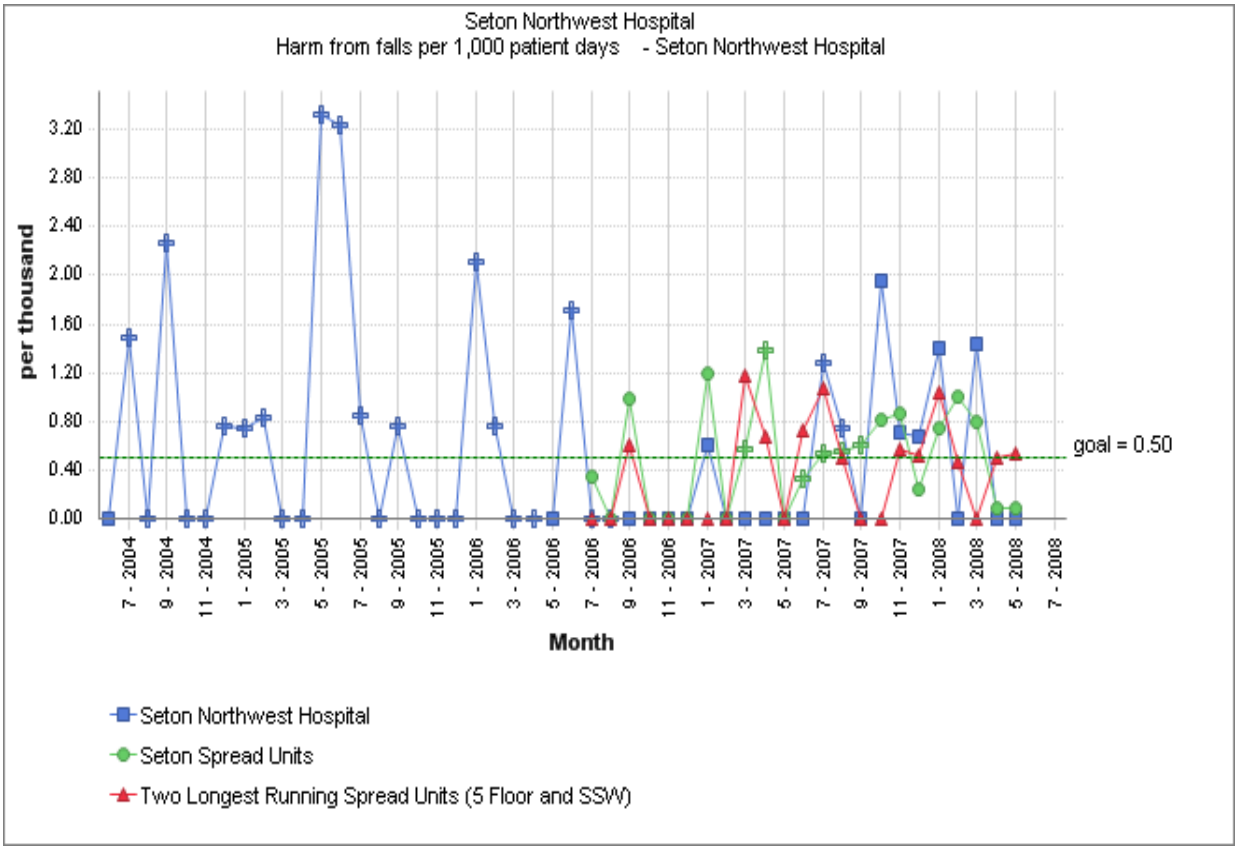


Results

At project completion, in June 2007, the Seton Family of Hospitals had exceeded its initial goal of 15 units; 17 units had been introduced to the TCAB process within the proceeding 18 months. This number increased to 21 units by April 2008. Of these units, five had begun submitting monthly progress measures.

By the end of the 18-month project, the other twelve units were being introduced to the measures, with plans to begin submitting data in the near future. Figure 8 shows the progress made in reducing harm from falls in the spread unit at Seton Northwest Hospital as well promising results in the spread units across the system (including the two longest running spread units and the additional spread units).

Figure 8: Seton Northwest Hospital Harm from Falls per 1,000 Patient Days



In addition to tracking outcome measures, the Seton network also followed team status and tracked all TCAB initiatives tested and implemented by the participating units. Initiatives were tallied on a spreadsheet accessible to all teams and categorized by TCAB design theme: Transformational Leadership; Safe and Reliable Care; Vitality and Teamwork; Patient-Centered Care; and Value-Added Care Processes. Thus, a team looking to test specific initiatives to improve Vitality and Teamwork could easily identify initiatives tested by other units. The team could then query those units for specific help in implementing the initiative within their particular circumstances.

Lessons Learned

Those involved in the Seton spread initiative identified four key lessons learned from the project. First, as the project leaders sought to engage units in addition to the four that had willingly volunteered for participation, they often encountered staff resistance, regardless of the enthusiasm of the pilot team or other spread teams or the results they achieved. Seton found that helping the resistant unit identify and frame an existing problem was an effective way to jump-start the unit's interest in spread initiatives. Once the unit staff saw improvement associated with the project, "selling" the spread initiatives was not necessary.

Second, Seton found that engagement of unit-level management in the project also was critically important. Staff may be reluctant to change work patterns and practices until they perceive that the unit manager is supportive and involved. Seton facilitated unit manager engagement by providing them with designated work time to conduct TCAB-related tasks and by empowering them to make autonomously small tests of change. Often, interested unit managers were the key to successful spread of TCAB to units with directors who were not initially supportive of the process.

Third, Seton found that spread initiatives required time and perseverance from all members of the unit teams. At times it seemed advantageous to cancel weekly meetings, especially when a portion of the staff were just finishing shifts at meeting time. However, Seton found that continuing with planned meetings and activities was important for maintaining momentum. Seton also found it helpful to perpetually display storyboards and other visual reminders of progress.

Fourth, Seton found that a significant learning curve existed for understanding and implementing the TCAB philosophy. Leaders had to learn to relinquish some degree of control over front-line staff, trusting their professional capabilities and empowering them to conduct small tests of change, even when the result was failure. Both teams and leaders had to begin to view failures as positive learning experiences, setting the stage for later initiatives that would succeed.

The TCAB spread leaders at Seton are continuing to execute and refine their spread plan, expanding both the scope and depth of TCAB's reach within their system. Currently they are working on consolidating and standardizing the data tracking process across teams to allow for better monitoring and the ability to provide the units with feedback on their progress in achieving and sustaining results on the TCAB measures. The Seton Family of Hospitals believes that these and other adjustments to their spread efforts will move them closer to their goal of transforming patient care and creating a joyful environment for all caregivers.

Case Study 2: University of Pittsburgh Medical Center (UPMC) Shadyside, Pittsburgh, Pennsylvania

How a hospital system applied a standard approach to spreading TCAB to a large number of new nursing units, leveraging common resources while fostering the professional development and independence of the unit leaders and staff.

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Overview of Spread Results

Between October 2005 and April 2008, the University of Pittsburgh Medical Center (UPMC) spread TCAB methodologies to 15 sites in their health care system. Their effort involved two levels. First, within UPMC Shadyside (the location of the pilot TCAB unit) TCAB was spread to all inpatient nursing units across 21 departments from October 2006 through April 2008, becoming the first UPMC hospital to become "totally TCAB." The nursing units in these departments included 14 medical-surgical units, five intensive care units (ICUs), one step-down unit, and one pre-admission/short stay unit. Second, between October 2006 and May 2007, the TCAB spread effort expanded across the UPMC Health System to include at least one unit in 14 additional sites (12 hospitals, one outpatient cancer center, and the School of Nursing).

Background

With more than 4,000 licensed beds, the University of Pittsburgh Medical Center serves more than four million patients each year. In addition to its 20 acute care hospitals, the UPMC network comprises a variety of facilities, including cancer centers, outpatient treatment centers, specialized imaging and surgery facilities, in-home care, rehabilitation sites, behavioral health care, and nursing homes.

Spread Aim

The overall goal of UPMC was to spread the TCAB approach first from the initial pilot site to the 14 remaining medical-surgical units and six critical care areas at UPMC Shadyside, and also to medical-surgical units throughout the system. In addition, the

system aimed to facilitate the sharing of specific innovative practices across all inpatient units to communicate prior accomplishments and to select the optimal practices for each unit to adopt.

Specific TCAB goals for the hospital system included:

1. Increase to 95 percent the proportion of patients that report they would recommend the hospital to family or friends.
2. Increase to at least 70 percent the proportion of clinicians' time spent in direct patient care.
3. Achieve a rate of voluntary turnover of 5 percent or less per year.
4. Eliminate Condition A calls on medical-surgical units. (Condition A is the Rapid Response Team alert activated by staff when a patient is in cardio-respiratory arrest.)

UPMC set an aggressive timeframe for achieving change: the system aimed to spread the TCAB approach to all medical-surgical units at UPMC Shadyside by June 2007. Between October 2005 and September 2006, the hospital had spread TCAB to three additional nursing units, totaling four of 14 medical-surgical units house-wide. Their initial spread plan was to convert the remaining 10 units over the following nine months, and to spread the TCAB approach to at least one nursing unit in all hospitals across the system by January 2007.

Foundation for Spread

The pilot unit at UPMC Shadyside tested a number of improvements related to several of the TCAB design themes. Among the most successful improvements were the patient liberalized diet that was related to the Patient-Centered Care theme and the use of Condition Help (H), which focused on improving Safe and Reliable Care. As part of the testing process, the team collected input from patients and families through surveys and informal feedback about specific tests. Both sets of changes tested proved to be beneficial to patients and energized and empowered the unit's staff.

Liberalized diet, new menus boost patient satisfaction. University of Pittsburgh Medical Center EXTRA! newsletter. 2007 Nov 30;18(24). Available at: http://extra.upmc.com/071130/Default.htm.

Condition H (Help) Brochure for Patients and Families. Available at: http://www.ihi.org/IHI/Topics/CriticalCare/IntensiveCare/Tools/ConditionHBrochureforPatientsandFamilies.htm.

TCAB adoption was supported by executive leadership at the hospital. The vice president of patient care services at UPMC Shadyside, who at that time was Tami Merryman, set the expectation that TCAB would become "the way the hospital did business." She also enabled the pilot unit to coordinate with staff from other departments and units for assistance in testing and implementation. For example, the pilot unit was able to work directly with the Dietary Department on menu preparation, meal delivery, and redefining the roles and responsibilities of dietary staff. This leader also designated time for staff to receive support from a resource role she had formed five years prior, the quality improvement specialist, who coached and facilitated rapid redesign projects across her division. When created in 1999, the improvement specialists were part of a "Clinical Design Initiative" function that served only UPMC Shadyside. In 2006, when Ms. Merryman (who is now chief quality officer) established the UPMC Center for Quality Improvement and Innovation, this group joined her to form a corporate center responsible for system-wide performance improvement initiatives, including TCAB. It is currently staffed with nine improvement specialists and six data analysts.

Developing and Executing the Spread Plan

Leadership for the UPMC system made the decision to spread TCAB activities across the nursing units within the system. While specific changes such as Condition H and the liberalized diet were introduced and implemented in all medical-surgical units, the spread plan for TCAB focused on the engagement of front-line staff in identifying issues and solutions that could be tested and refined through focused action and learning. One of the first spread units served to promote TCAB by attracting the attention of staff from other units. For example, this unit developed and displayed a poster in the patient's room about managing pain, which included the time the patient's next pain medication dose was available. Staff from other units noticed the poster and requested it for use in

their own units, thus fostering informal discussions about the TCAB process and spread of change ideas.

In September 2006, leadership held a system-wide kickoff meeting to initiate TCAB spread. The meeting included a keynote address, during which the speaker oriented TCAB spread initiatives with existing performance improvement framework within the UPMC system. Representatives from 13 hospitals attended. Soon after the kickoff event, the 13 hospital leaders sent unit managers and staff to join in the initial wave of the TCAB spread by participating in the first system-wide learning community session. Also in attendance were representatives from two Schools of Nursing in the Pittsburgh area. During the session, improvement specialists from UPMC's Center for Quality Improvement and Innovation provided education about TCAB concepts, taught participants how to perform a "deep dive" (a focused idea generation process developed by IDEO), and highlighted existing tools and interventions. The attendees also toured the four TCAB units at the UPMC Shadyside site where TCAB work was displayed and discussed.

For units that began participation in TCAB work in subsequent waves of the spread effort, UPMC held unit-based kickoff meetings in which facilitators described TCAB theory, explained the deep dive process, gave instruction on the use of the rapid cycle testing methodology (the Model for Improvement and PDSAs), and provided information for the unit to communicate and connect with the system-wide TCAB initiative. Prior to the kickoff meeting, units were required to designate two nurses as TCAB champions. These individuals were responsible for coordinating tests of change with the unit staff. The units also were encouraged to identify a physician champion to assist with removal of obstacles and a patient champion to provide feedback. Several units did follow through and have incorporated the physician and patient voice into their TCAB mission.

The spread of TCAB at UPMC relied heavily on the unit managers. These individuals acted as key contacts within the units and were responsible for identifying potential TCAB champions, assuring changes undergoing testing were measured, tracked and

documented, and facilitating team huddles to initiate testing and review results of testing. Unit managers received initial orientation for these roles during the kickoff event and ongoing support from an improvement specialist, who provided just-in-time education on the Model for Improvement, methods for making small tests of change, and other relevant topics.

UPMC set expectations for units participating in the TCAB spread initiative. Units interested in participating were required to sign an "engagement contract." Upon signing, these groups were designated as novice units and were assigned 16 hours per month support from an improvement specialist. All participating units were expected to document in detail both the types of changes tested and the associated results. Unit managers and staff representatives were expected to report on TCAB-related work at division-level meetings and at system-wide TCAB learning sessions.

In addition to support from an improvement specialist, the participating units across the UPMC system received ongoing education through periodic learning sessions. During learning sessions, the participants viewed team presentations, as well as presentations from system leaders and improvement specialists, joined in storyboard networking sessions, and spent time in team planning. The sessions also provided opportunities to query improvement specialists and to learn from more experienced team members.

At the UPMC Shadyside Hospital campus, the CNO continued to employ site-specific improvement specialists. In addition to providing TCAB support as described above, they coordinated networking opportunities for TCAB units. Once a week, the TCAB unit managers and the TCAB nurse champions attend a performance improvement meeting led by the improvement specialists and CNO. On a monthly basis, staff from all units participating in TCAB meet with an improvement specialist to discuss progress, address barriers, and engage in peer-to-peer learning.

When leaders at UPMC decided to spread TCAB to the entire system, they selected eight of the 10 TCAB measures for use, especially focusing on the use of measures that

units were already tracking, such as voluntary turnover and patient satisfaction. The system developed a standard spreadsheet to facilitate data collection across all TCAB units. The same template is used currently. (See Section Four for the UPMC Standard Data Collection Form.) In addition to the system-level data collection, UPMC collects information on specific changes that have been tested and whether the changes have been spread to other units. (See Section Four for the UPMC Spread Tracker.)

Refining the Spread Plan

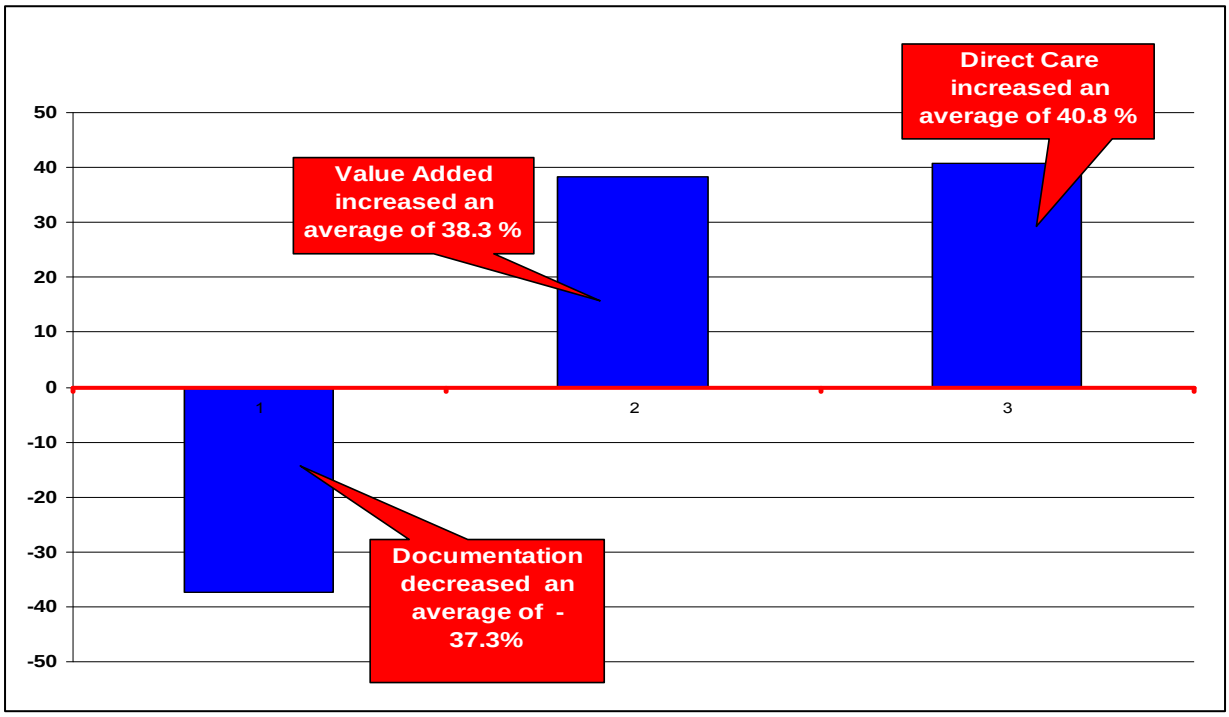
Originally, UPMC Shadyside site planned to orient new units to the TCAB process on a monthly basis, with unit-based kick off meetings for one or two teams each month for 9 months. However, leaders and facilitators found that it was more efficient to schedule the orientation of units based on the number of units available and interested and the level of support available at a given time. For this reason, UPMC created cohorts of units that would begin their engagement with TCAB at the same time. A group of six units were oriented to TCAB in October 2007, and a final group of nine units recently joined the TCAB mission in April 2008 to fully convert all inpatient units to the TCAB methodology. This spread approach was an effective team building strategy as units that converted together bonded and supported each other and the previous units served as their preceptors through the transition.

UPMC also found that it was essential to set clear expectations at initiation about available support resources. The initial wave of spread teams developed an expectation for a high-level of support from improvement specialists—a level that was not sustainable once additional teams were participating in TCAB spread. The system found that setting the expectation that novice teams would receive a high-level of support at initiation, which would be followed by a "weaning" process during which improvement specialists would be available on an as-needed basis only.

Results

AIM: Increase to at least 70 percent the proportion of clinicians' time spent in direct patient care.

Figure 9: UPMC Proportion of Clinicians' Time Spent in Direct Patient Care

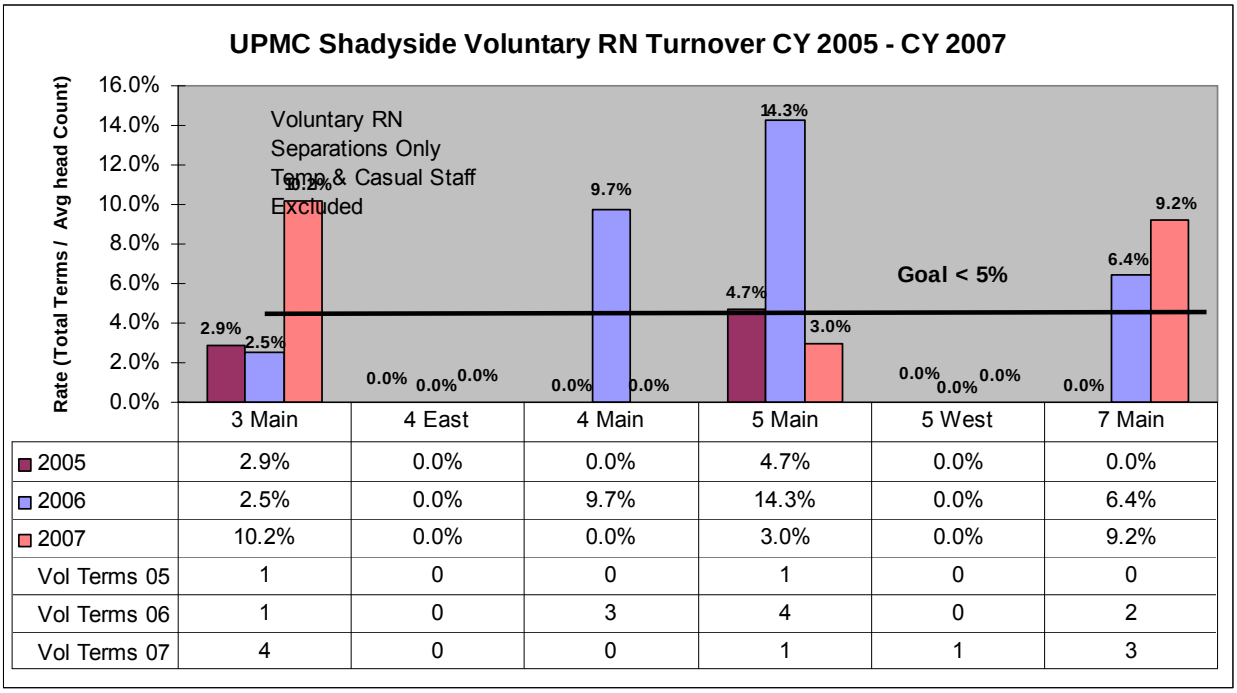


The data shown in Figure 9 have been difficult to capture due to the sharing and consistent operation of the personal digital assistant (PDA) devices that were used to collect value-added care data (see the *Transforming Care at the Bedside How-to Guide: Increasing Nurses' Time at the Bedside*). However, for the data that were collected, one unit at UPMC Shadyside reached the 70 percent target in one isolated month. Direct care rates have slightly increased during the TCAB journey, and currently range from 50 to 60 percent of the nurses' time. Across the UPMC system, of the units that collected adequate PDA data, the spread leaders at UPMC observed an overall 40.8 percent increase in direct care time.

Rutherford P, Bartley A, Miller D, et al. *Transforming Care at the Bedside How-to Guide: Increasing Nurses' Time in Direct Care*. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: http://www.ihi.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/Tools/TCABHowToGuideIncreasingNursesTimeinDirectPatientCare.htm.

AIM: Achieve a rate of voluntary nurse turnover of 5 percent or less per year.

Figure 10: UPMC Shadyside Voluntary Nurse Turnover CY 2005-CY 2007

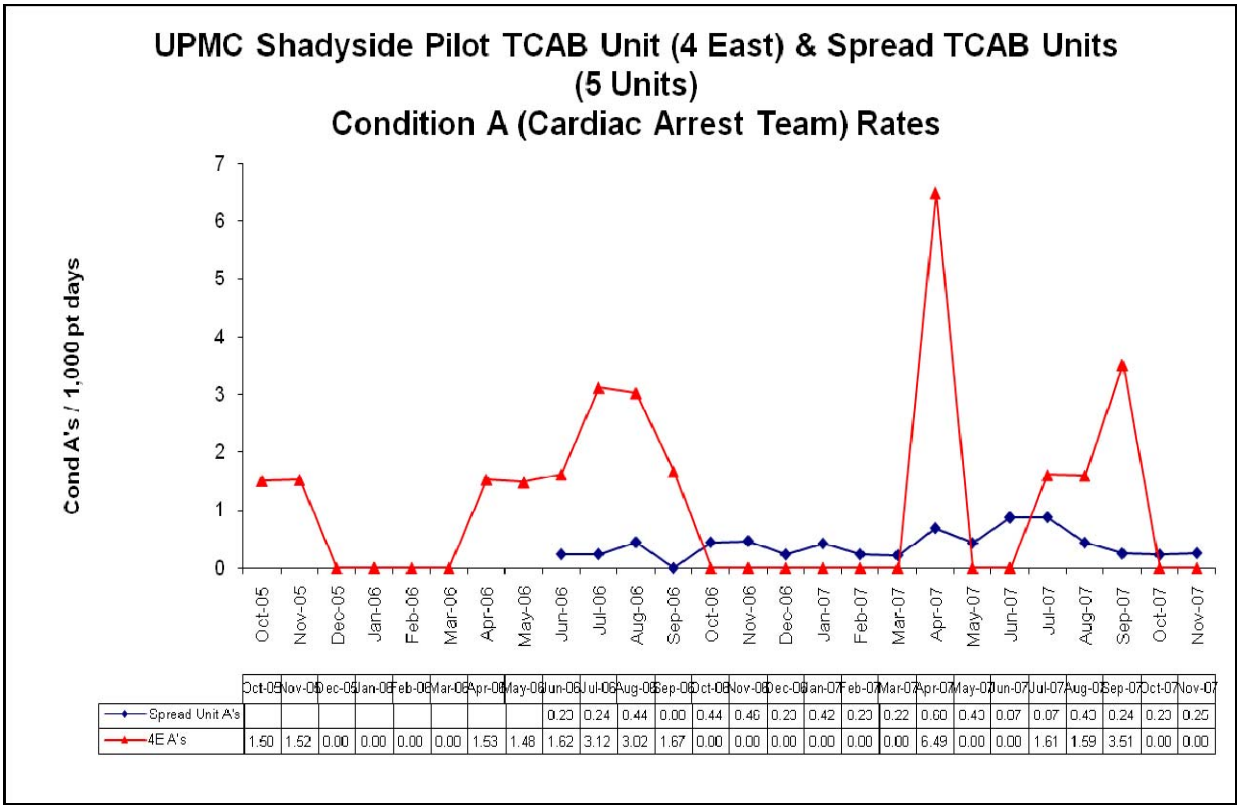


	3 Main	4 East	4 Main	5 Main	5 West	7 Main
2005	2.9%	0.0%	0.0%	4.7%	0.0%	0.0%
2006	2.5%	0.0%	9.7%	14.3%	0.0%	6.4%
2007	10.2%	0.0%	0.0%	3.0%	0.0%	9.2%
Vol Terms 05	1	0	0	1	0	0
Vol Terms 06	1	0	3	4	0	2
Vol Terms 07	4	0	0	1	1	3

Yearly voluntary nurse turnover has been zero on the pilot TCAB unit at UPMC Shadyside for years 2005, 2006 and 2007 (see Figure 10). Three of the five spread units have seen significant drops in voluntary turnover and have achieved the goal of less than 5 percent, with two of them reaching zero in 2007 (2006, 2007 data). Across all TCAB units in the UPMC system, there has been an overall 1.32 percent drop in voluntary turnover.

AIM: Eliminate Condition A calls on medical-surgical units.

Figure 11: UPMC Shadyside Condition A and C Rates (2007)



	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07
Spread Unit A's									0.23	0.24	0.44	0.00	0.44	0.46	0.23	0.42	0.23	0.22	0.60	0.43	0.07	0.07	0.43	0.24	0.23	0.25
4E A's	1.50	1.52	0.00	0.00	0.00	0.00	1.53	1.48	1.62	3.12	3.02	1.67	0.00	0.00	0.00	0.00	0.00	0.00	6.49	0.00	0.00	1.61	1.59	3.51	0.00	0.00

The data in Figure 11 indicate that UPMC has accomplished its goal with a Condition A rate of zero for 14 of 25 months on the UPMC Shadyside pilot TCAB unit. And while the rate of Condition A per 1,000 patient days is less than 1 percent on TCAB spread units, the UPMC spread leaders are continuing to work towards zero on this measure.

Lesson Learned

Emphasis on TCAB as the way the system is now operating has been an essential element in the success of TCAB spread at UPMC. The system has found it helpful when presenting TCAB to staff to simplify the process as follows:

- What is the problem that needs to be fixed?
- Have we watched the problem in real time (i.e., directly observed it) so that we understand it?
- What can we do to fix it?

As these questions are asked, it is critical to have the voice of staff and patients included in the response. Additionally, as the process is observed, it is important to identify any waste in the process and strategies to eliminate it.

UPMC also has found it helpful to identify a specific individual responsible for providing support to participating units and to clarify the level of support available. The organization has found it helpful to support teams' independence with selecting the problems on which they focus and the changes they choose to test. Such independence provides staff with the intrinsic reward of working on problems about which they feel passionately.

In the future UPMC plans to focus on encouraging implementation of some similar changes across units, similar to the way the Condition H and the liberalized diet innovations were spread from the initial pilot unit. Coordinated by the UPMC Center for Quality Improvement and Innovation and with approval by nursing leadership, the implementation of the best ideas that emerge from the TCAB initiative will allow for both collaboration and competition between units and will accelerate achievement of system-wide performance goals.

Section Four: Tips and Tools

The following pages include tips from the TCAB hospitals and useful tools mentioned throughout the guide.

- Tips
- Spread Aim Statement Worksheet
- Sample Aim Statement
- Spread Plan Checklist
- Sample Communication Plan
- Sample Terms of Engagement
- Sample TCAB Newsletter
- Spread Tracker Template
- Sample Spread Trackers
    - Seton Family of Hospitals
    - The University of Texas MD Anderson Cancer Center
    - UPMC
- Spread Activity Assessment Tool
- UPMC Data Collection Form

Tips for Getting Ready for Spread

1. **When introducing the TCAB approach to non-medical or surgical units, be mindful of cultural differences.**

   James A. Haley Veteran's Hospital found that it was especially important in introducing TCAB to specialized rehabilitation units to be aware of how open staff are to ideas that come from outside of the unit, or whether the patients on different units have different needs that have to be taken into account. Staff on such units may identify very strongly with their already established patterns and processes. In such situations it is better to introduce a general concept and encourage staff to apply the concept to what is important to them and their patients. For example, the Spinal Cord Unit (SCI) started with the general concept of "the need for a patient-centered feeding process." On this unit many patients need assistance with feeding and the food would get cold while patients were waiting for staff to get to them. The new process the staff tested and implemented was the training of lay volunteers to assist with patient feeding.

2. **Link TCAB improvements to other hospital or system-wide initiatives.**

   Spread leaders can play a key role in "sense-making"—helping front-line staff understand the connection between the TCAB initiative and other major priority areas within the organization. For example, leaders at Iowa Health System utilized the engagement of front-line teams in generating ideas and adopting changes at the front line to improve patient safety as part of a larger system-wide effort to reduce harm for patients.

3. **Use catchy campaigns to generate and sustain interest.**

   MD Anderson Cancer Center named their effort to encourage reporting of "near misses" and potential problems the "Good Catch" initiative. Through use of the baseball theme, units received points for each "good catch" they reported and enough points lead to pizza parties for the unit. The quality improvement department and nursing leadership review the "good catch" data to identify trends and system issues.

4. **Build on staff enthusiasm for specific issues.**

   Whether generated during a formal snorkeling process or through regular unit meetings and/or informal discussion, staff are often energized to work on issues that are of particular importance to them and their patients. Spread leaders should use these opportunities as a way to engage staff, provide support and training for testing, and link these efforts to the overall TCAB initiative. Spread leaders at Wentworth-Douglass Hospital built on the interest of a small group of nurses who wanted to do change of shift at the bedside as a way to encourage improvement efforts linked to providing more patient-centered care.

5. **Link the TCAB initiative to accreditation requirements.**

   The James A. Haley Veteran's Hospital found that it was helpful to cross-walk the TCAB areas of focus with the balanced scorecard for CARF, the accrediting body for rehabilitation facilities. This helped to build interest in TCAB within their specialized units. The same approach can be used with other external accreditation requirements and also for internal organizational dashboards of quality-related data.

6. **Avoid using "lingo" that is foreign to the staff.**

   Using language that front-line staff may not understand or that may even be off-putting sets up barriers to involvement and support of TCAB. Spread leaders can avoid this problem by ensuring that the TCAB process is described in terms that staff can relate to and easily understand. For example, spread leaders at Children's Memorial Hospital realized that such terms as "snorkel" made the process sound foreign and complicated. They also discovered that staff needed some background knowledge of improvement methods such as the PDSA cycle, so they developed methods to teach how to test ideas by keeping it simple and helping staff approach testing improvements step by step.

Tips for Developing an Initial Spread Plan

1. **Use the expertise of the initial pilot unit wisely.**

   The knowledge and experience of the pilot unit is invaluable to the spread process, but if their time and energy is not leveraged well then burn-out can occur. The pilot unit is a valuable resource that must be well-utilized within the overall spread plan. For example, rather than having the pilot unit visit new units personally, new units can visit the pilot unit in cohorts and pilot unit staff can then share their experience across multiple units at once. Spread leaders should continually look for new front-line leaders as they emerge from the spread units. They can then add to the internal expertise of the organization.

2. **Use external networking connections to spread TCAB to other hospitals.**

   Nursing leaders at MD Anderson Cancer Center made presentations about TCAB to the Texas Nursing Association, both at the state and local levels, which helped generate interest in TCAB goals and methods. Opportunities for external connections include state hospital associations, professional associations, nursing and other schools for health professions, and city or regional hospital or professional groups.

   Prairie Lakes Health System used connections with other rural hospitals in its region and nationally to share the system's experience with TCAB. TCAB leaders there found that site visits between other rural hospitals was an effective way to share experience with TCAB and promote interest among similar hospitals. Using virtual means of communication, such as email and conference calls, were especially helpful in reaching facilities for which travel and time away from the hospital were especially challenging.

3. **Meet every week.**

   Meeting regularly—no matter what—is important to reinforce the importance of TCAB and the commitment to the process of testing and learning. Spread leaders at The University of Kansas Hospital, Seton Northwest Hospital, and

other hospitals using the TCAB method recognized the importance of regular meetings, even when some staff were on vacation or had conflicts with other meetings or responsibilities. Keeping the drumbeat going through regular and consistent attention is a key ingredient to sustained change and improvement.

4. **Pat attention to measurement.**
   Measurement becomes especially important when spreading from pilot to spread units. While using measures to track improvement, spread leaders at The University of Kansas Hospital found that it is especially important to identify specific hospital-wide targets for improvement that all units can use to track their progress when moving from the pilot unit to spread. These "big dots" (i.e., system-level measures) such as number of adverse drug events or patient falls then become a way to focus energy and attention on TCAB.

5. **"Keep it simple" is a key to the effective use of data.**
   To build a results driven approach to improvement it's helpful to simplify data collection and use by both using "just enough" data and by simplifying the display of data. For example, spread leaders at Wentworth-Douglass Hospital found that using simple pie charts helped generate interest and commitment to making changes to increase nursing time at the beside. See the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement* for a more detailed discussion of ways to collection and display data, including the use of run charts.

6. **Spread discreet improvements in addition to the TCAB method.**
   Spread leaders at Wentworth-Douglass Hospital found that spreading specific improvements while at the same time introducing TCAB to new units worked well to accelerate the spread of multiple ideas across multiple units. For example, the use of a "yacker tracker" as a way to measure and reduce noise levels on the unit was spread from the pilot unit to all units quickly by the spread leaders. This is an example of using both a coverage approach (introducing a specific change

to all units) with a completeness approach (introducing the TCAB method and multiple changes across the TCAB area of focus) for spread. See additional discussion of the coverage and completeness approaches to spread in Section 2b above.

Tips for Executing and Refining the Spread Plan

1. **You can never do enough snorkeling.**

   The TCAB method of engaging front-line staff in brainstorming and making plans to test ideas (i.e., snorkeling) can be used repeatedly on the units—not just at the beginning of the TCAB process. While snorkeling is often part of the process of initialing engaging front-line staff in TCAB, spread leaders at The University of Kansas Hospital found that snorkeling can also be used to generate new ideas and also to rekindle energy and enthusiasm for the effort over time. For additional information on the snorkel process, see the *Transforming Care at the Bedside How-to Guide: Engaging Front-Line Staff in Innovation and Quality Improvement*.

2. **Encourage the natural spread of "hot items."**

   Certain changes that are developed on pilot units may spread rapidly when they become known to other units. Spread leaders can help jump-start this process by making successful changes visible to others and then watching for, and also encouraging and facilitating, the spontaneous interest in the changes by other units. For example, when the pilot unit at MD Anderson Cancer Center implemented patient quiet time—the designation of certain hours when loud noises and disturbances were discouraged on the unit—this change was almost immediately embraced by a number of other units. Spread in this case was facilitated by the rounding of physicians, dietitians, and other staff who rotated among units. The importance of making improvements visible across all units is discussed in more detail in Section 2c above.

Spread Aim Statement Worksheet

Use this template to develop an aim statement for your organization to use in planning and carrying out the spread of TCAB innovations. A sample aim is included for reference.

What do you intend to spread?

Start with a general vision statement of what you want to accomplish, and then add detail to specify exactly what improvements in care for patients you want to make.

What is your target level of facility or system performance?

Use the TCAB design targets as your key measures. You may also select additional outcome or process measure goals related to the improvements that you intend to spread.

Who is your target population (i.e., to whom will you spread the improvements)?

Include the number and location of the hospitals, departments, or units that you intend to reach.

What is your timeframe?

If you wish, you may identify a short-term (6 to 12 months), intermediate (1 to 2 years) and long-term (3 to 5 years) timeframe.

Sample Aim Statement

What we intend to spread:

We will transform our hospital so that patients and their families receive patient-centered, safe, reliable, and value-added care from an empowered and supported care team. In order to reach this vision we will spread all the innovative TCAB practices beginning with:

1. Multidisciplinary rounds (including setting daily goals)
2. Peace and quiet time on the nursing units
3. A nursing capacity/traffic light system
4. Rapid Response Teams
5. Scheduled discharges

Our target levels of system performance:

Our target levels of system performance include:

- Adverse events are reduced to 5 (or less) per 1,000 patient days
- 95 percent compliance with all key clinical process measures (all or nothing) for the top 3 clinical conditions in nursing units
- Voluntary nurse turnover is 5 percent or less (per year)
- 95 percent of patients report that they will recommend the hospital to family or friends
- Clinicians spend at least 70 percent of their time in direct patient care

Our target population and timeframe:

Our spread plan has two phases: Within the next 6 months, we will spread the improvements listed above from our pilot unit to all 10 patient care units in our hospital. As our pilot unit identifies additional improvements through testing and implementation, we will share those practices with our 10 spread units. We intend to test, implement, and spread all the TCAB innovative ideas throughout our hospital and achieve our target levels of hospital-wide performance by June 2008.

Spread Plan Checklist

Spread Activity	Status/Action Needed	Person Responsible
Leadership		
A senior leader has been designated to be responsible for spread		
TCAB is part of our organization's strategic plan		
There is a day-to-day leader for spread		
We have a spread team (e.g., the senior leader, day-to-day leader, members of the pilot site team, and representatives of the spread units)		
Set-Up		
We have identified the units to which we intend to spread TCAB		
We have clearly stated what it is that we are spreading (e.g., TCAB method, specific improvements, etc.)		
We have stated the expected level of performance on the TCAB measures for the target units		
We have at least an initial timeframe for the spread work		
We have a plan to reach all our target sites (e.g., initial kickoffs, regular meetings of spread units, using unit meetings to discuss changes being tested, linking pilot unit to spread units, etc.)		

Spread Plan Checklist (page 2)

Spread Activity	Status/Action Needed	Person Responsible
Better Ideas		
We have compiled evidence from the pilot site to share with new sites (i.e., process and outcomes data, patient and provider stories/testimonials, etc.)		
We have developed materials and tools that easily explain TCAB and/or the specific innovations that are being introduced to the target units		
Communication		
We have identified all the target audiences for our communication about TCAB from within the hospital and/or the spread units		
We have identified the communication channels (meetings, printed materials, electronic messages, etc.) we can use to spread awareness of TCAB		
We have identified the communication channels (peer-to-peer meetings, unit-to-unit meetings, etc.) we can use to spread information about how to "do TCAB" or how to apply specific innovations developed on the pilot unit(s)		
We have set up opportunities for the leaders to communicate with the target units, and for the target units to communicate with the leaders		

Spread Plan Checklist (page 3)

Spread Activity	Status/Action Needed	Person Responsible
Social System		
We know who the champions, influencers, mentors, willing volunteers, etc., are within our target units		
We have a plan for working with each of these groups as part of our spread work		
We know how the members of the social system exchange information (e.g., informally, formal meetings, etc.)		
We have developed a plan for utilizing these methods of information exchange to facilitate spread		

Sample Communication Plan

Audience	Messages	Tactics
Affiliate Executive Leaders	Many adverse drug events (ADEs) are preventable and they add considerable unnecessary cost and patient suffering. Our work will begin with culture building and specific tools to prevent ADEs. We need your help; please support our efforts visibly and engage in "executive walkrounds." 1. Gain support from your board and medical staff 2. Let employees know the importance of this work 3. Engage in executive walkrounds and ask employees what unsafe conditions or processes they have seen 4. Talk about this work during other meetings with employees and physicians 5. Help us remove barriers to the work	1. Focus on messages to the senior executive teams at the system and affiliate hospital levels first 2. Provide key leaders and champions with scripting information and data on the critical needs 3. Plan rollout of messages through multiple effective venues at the system and regional levels 4. Provide toolkit for executive walkrounds with specific questions focused on preventing adverse drug events 5. Provide awareness reports to the board and quality councils 6. Set up feedback mechanisms – e.g., reports of progress and changes made in local newsletters and other periodicals 7. Translate drug event data to lives harmed 8. Once internal communications are flowing and successful changes are being made, begin reporting in external periodicals
Middle Managers	Employees see things every day that will help us understand and prevent the conditions and activities that contribute to adverse drug events. We need to collect the critical information from our employees and quickly address their medication safety concerns.	1. Provide awareness reports at the hospital and local system management team meetings 2. Provide toolkits for unit briefings 3. Provide awareness information about executive walkrounds and how to set them up to include unit managers' participation

Sample Communication Plan (page 2)

Audience	Messages	Tactics
Middle Managers (continued)	1. Test unit briefings for one week. Use the survey tools to determine whether employees think: • The briefings help improve quality of care • Contribute to improve safety • Should continue past the week of testing 2. Enter all of the findings from unit briefings and executive walkrounds into the database to look for patterns	4. Provide databases for collecting findings during unit briefings and executive walkrounds and supply feedback reports on aggregate data 5. Assist in identifying appropriate messaging venues for all areas, units, and departments 6. Provide posters, news articles, and updates on aggregated findings and changes made 7. Identify stories of real patients and staff impacted by the improved processes and failures in the old processes
Physician Leaders	Many ADEs are preventable; these ADEs cause: • Unnecessary pain and suffering for our patients; and • Unnecessary medical costs. We need your help to make a difference: • We don't need you in lengthy meetings, but do need your participation • Your participation in hallway discussions of ideas we are testing and short, concise meetings will make a big difference.	1. Monthly medical staff executive meetings 2. Medical staff meetings and department meetings 3. Medical group leadership and membership meetings 4. Medical staff newsletters 5. Champion recruiting and coaching meetings

Sample Communication Plan (page 3)

Audience	Messages	Tactics
Nursing Leaders	Nurses have critical knowledge of flawed processes and unsafe conditions that contribute to adverse drug events. We need to change our culture to a non-blaming or "just" culture and encourage our staff to speak up when they see unsafe conditions or actions.	1. Regular meetings of chief nurse executives 2. Local hospital senior leadership meetings 3. Hospital nurse leaders' monthly meetings 4. Clinic nursing leaders' monthly meetings
Staff Nurses	We can reduce adverse drug events through: • Holding unit briefings to identify unsafe conditions and processes • Collaborating with our pharmacists to improve conditions and processes • Reporting ADEs and near misses • Becoming aware of system issues that contribute to errors • Testing new medication handling and administration processes	1. Unit meetings 2. Unit briefings 3. Coaching meetings 4. Journal clubs 5. Hospital and clinic newsletters 6. Unit posting boards 7. Executive walkrounds
Pharmacists	Here is our burning platform that will engage others to the cause of reducing adverse drug events. The useful tools from IHI will help us accelerate our collaborative work	1. Regular system-wide meetings of pharmacy directors 2. Department meetings 3. Hospital and clinic newsletters 4. Special focus improvement meetings 5. Unit briefings with nursing 6. Frequent emails
Multidisciplinary Improvement Steering Teams (Local and system-wide)	Working together we CAN make a difference Together WE can make a difference Change package and toolkits Coaching Encouragement Removing barriers	1. Kickoff meeting 2. Weekly/monthly huddle meetings 3. Monthly phone calls 4. Quarterly system-wide progress reporting 5. Learning sessions 6. Coaching visits 7. Frequent emails and listserv

Sample Terms of Engagement

UPMC Learning and Innovation Community
Transforming Care at the Bedside [TCAB]
TERMS of ENGAGEMENT and SUCCESS

This document outlines the responsibilities of hospital or outpatient care sites and the UPMC Center for Quality Improvement & Innovation for the system-wide Transforming Care at the Bedside initiative. Please review and sign as evidence of agreement to these terms.

Requesting Site:

- Identification of site key contact for communications and data accountability
- Understand level of engagement with the UPMC TCAB Learning and Innovation Community is to assist site in learning the tools and then going back to implement changes locally
- Senior leadership to come to TCAB pilot unit for brief 15 minute report out bi weekly
- Coordinate all meetings and planning sessions related to TCAB
- Vice President and Director will follow the patient pathway for first hand observation of the patient experience
- Perform rapid cycle testing of changes [at least two per month] depending on the scope pf work
- Agreement that front line manager participate in TCAB activities at least 8 hours a week [new testing, design of work, staff communication, etc]
- Support front line staff in time to perform testing
- Keep leadership informed on progress, issues in report out or via other means that are site specific
- Share site TCAB unit measures [voluntary turnover, time in direct patient care, codes a/c, team development survey and patient satisfaction]
- Attend quarterly TCAB Learning Community programs
- Send manager of pilot unit to the Perfecting Patient Care University sponsored and paid for by the Jewish Health Care Foundation [JHF] Grant
- Agreement to present one test of change program to JHF
- Mange the distribution and hot sync of the PDA for the monthly nursing workload measures

Center for Quality Improvement and Innovation [CQI2]:

- Support site in the deep dive, baseline observation, baseline measures, test of change, initial PDA start up and staff satisfaction assessment
- Purchase first PDA for site paid out of Jewish Health Care Foundation Grant
- Create PDA network at UPMC for collecting PDA measures from all sites
- Pull in site leadership when obstacles are presented that can not be resolved
- Identify when CQI2 representative will be on site, this will be negotiated but will average 16 hours a month, total of on-site and related activity
- Provide quarterly TCAB Learning Community porgrams for pilot sites, topic of focus will be driven around the design targets of vitality, patient centeredness, safety and efficiency
- Prepare site specific power point of activity in the TCAB learning community to include initial problem, measure, test of change and outcome
- Share site outcomes and test of changes with the UPMC Learning Community

Vice President:_____ Date:_____
Department Director: _____Date: _____
Key Contact :_____ Date:_____
Director, CQI2: _____ Date: _____

Sample TCAB Newsletter:
University of Pittsburgh Medical Center (UPMC)

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In this month's update:

Mark Your Calendar!

The next TCAB Learning Community will be October 29, 2007 located at the Herberman Conference Center at the UPMC Shadyside Campus. Registration coming soon!

Back to this month's update

Monthly TCAB Highlights

Many sites are using the UPMC TCAB list serve and sharing wonderful ideas with one another. As a reminder, reaching the list serve is easy - you can reach it via the Outlook folder – UPMC TCAB.

12 North Abdominal Transplant Unit at UPMC Presbyterian: The objective was to increase awareness of patients who have medications in the room for their 3-day self medication education program by creating a visual cue to the staff nurses. The problem was that staff were not aware of which patients were in the self-medication program. We created a Self Medication Card Alert and specified a caregiver (PNCC) to place the card alert in the cart The new process begins a PNCC obtains self medications from Pharmacy, they place a "self med" card in the patient folder in the med cart. 7 nurses on daylight were asked about the usefulness of the visual cue and all agreed it is a great reminder. "Sometimes self meds get left out of report and the card with notes on it is very helpful The other Abdominal Transplant Unit requested the cards for their use. Considering spread to the CT transplant population and perhaps other services.

3200 Med Surg at Magee-Womens Hospital: This is a follow-up to the highlight from April 2007. The Time 2 Turn board on the right is the most recent addition to the board. The board was created as a visual cue that informs the staff when a patient with a Braden score <13 needs to be turned. Prior to implementation, the unit director surveyed 20 staff

members and asked if they were aware of the last time that the patient was repositioned – 100 percent of the time, the staff member did not know. Following implementation of this board, the unit director repeated the survey and the results showed that the staff knew when the patient needed to be turned 100 percent of the time. Next steps are getting families involved through an education pamphlet created and placed in the patient's room.

Back to this month's update

TCAB Spread

Learning communities, newsletters, list-serv questions, and hosting other TCAB units have really encouraged sharing among our group. The link below is our UPMC TCAB website and the document named "UPMC Test of Change Master Listing" lists various tests of change that have already been tested and implemented on other TCAB units within the UPMC system. We hope the test of change list can be used to help solve a problem on your unit. We will update the list and continue to place it on the UPMC Infonet. Please call Cindy Liberi at 412-802-8065 if you have questions.
(http://cccmsweb3/sites/WebStrategy/TCAB/default.aspx)

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In the News/Resources

New Arizona Hospital Aims to Improve Care with Evidence-Based Design Elements, Technologies (East Valley Tribune, 07.29.07)

Tennessee Hospital Group Launches Center to Improve Nursing Work Environment, Patient Safety (THA News Release, 07.26.07)

During Patient Hand-Overs (Joint Commission International Center for Patient Safety, Patient Safety Link, August) 2007)

Relieve the Pressure and Reduce Harm (IHI.org)

Robert Wood Johnson Foundation Awards Grant to Design and Promote National Policies that Reflect Nursing's Contribution to Quality (RWJF News Release, 07.25.07)

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Spread Tracker Template

A=Planning B=Start C=In Progress D=Fully Implemented

	Pilot Unit 1	Pilot Unit 2	Spread Unit 1	Spread Unit 2	Spread Unit 3
Change 1	D	C	A	B	C
Change 2	D	C	B	B	C
Change 3	D	C	A	A	C
Change 4	D	C	B	A	B
Change 5	C	D	C	C	A
Change 6	C	D	C	C	A
Change 7	C	D	A	C	A
Change 8	C	D	A	C	A

Seton Family of Hospitals Spread Tracker

NOTE: The following is a snapshot from the Seton Family of Hospitals Spread Tracker spreadsheet.

Innovation	***Design Area***	SNW	SEBD	SMC 5	SSW	SMC 6	SMC 3
24-hour checklist–completion of required paperwork within 24 hours	Value-Added		P	I		A	
Adopt a server (each assigned to a staff member to clean and stock)	Value-Added	I					
CA cart for supplies	Value-Added					T	
CA task sheet redesign	Value-Added				I	T	
Efficiency room datascope @ every bedside/server cabinets	Value-Added				A		
IV Cart Standardization	Value-Added					A	
New Med Education MAR	Value-Added				I		
Pre-Printed Med Labels	Value-Added				I		
Pre-Printed/kardex & MAR	Value-Added				I		
SPHR assessment form	Value-Added				I		
Medication Return boxes	Value-Added	I	T			T	
Nursing supplies by each end of the hallways	Value-Added					I	
Pre-Printed/assembled discharge packets; top 3dx	Value-Added				P		
Reorganization of Supply rooms	Value-Added	I					
Revising MARs for OB GYN bundle	Value-Added	P					
Revising OB orders	Value-Added	P					
Take a bag, leave a bag–leave an IV bag in the server for the next person	Value-Added			I			
Voice Care for CA	Value-Added				A		
Wallaroo for Medication space	Value-Added	I	T				
Alzheimer's toy box	Patient-Centered					I	
Bedside Pharmacy Consult	Patient-Centered				I		

I=Implemented	T= Testing	P=Plan to Implement/Test	A=Abandoned

The University of Texas MD Anderson Cancer Center Spread Tracker

NOTE: The following is a snapshot from the University of Texas/MD Anderson Cancer Center Spread Tracker spreadsheet.

Start Date: Phase II started April 2004	Project Description: MDACC is one of 13 hospitals nationally working with the Institute of Healthcare Improvement in partnership with the Robert Wood Johnson Foundation to focus on rapid cycle tests of change related to ideas that meet project design targets of vitality, safety & reliability, patient-centered care and value-added care. Premise is that nurses at the bedside on medical-surgical units using their ideas and those of their patients are well positioned to make significant changes to bedside care.
Completion Date (if applicable): Phase III will be completed by April 2008.	

Please list major tasks that impact the project.

ID	Task	Person(s) Assigned	Start Date	Completion Date	Status Update
1	TCAB Pilot - SBAR	G10E and P5	XXXX	11/2005	Implementation Complete
2	MDRs	G10E and P5	XXXX	11/2005	Implementation Complete
3	Give pathway on admission; discuss discharge date and put on white board	G10E and P5	XXXX	11/2005	Implementation Complete
4	Use Teach Back method for giving discharge instructions	G10E and P5	XXXX	11/2005	Implementation Complete
5	Expand team huddle to include staff related info	P5	XXXX	12/2005	Implementation Complete
6	I am sheet for patients	P5, P3, G10E	XXXX	3/2006	Implementation Complete
7	Admission/Discharge Checklist use	P5 and G10E	XXXX	12/2005	Implementation Complete
8	Get patient(s) on each TCAB unit team	P5 and G10E	2/2006		In process; P5 pt. identified
9	C.N.A. acuity system	G10E, P5	2/2006	3/2006	Implementation Complete
10	Staff picture magnets on white board	P5 & G10E; to expand to all inpt units	04/2006 Fall '06	11/06	In process – Boards are on site and being installed. Implementation to occur when critical mass are installed.
11	MD/RN Collaboration Teams	G10E & P5	01/2006		In process

University of Pittsburgh Medical Center (UPMC) Spread Tracker

NOTE: The following is a snapshot from the UPMC Spread Tracker spreadsheet.

Initiatives on TCAB Units

GREEN = Implemented Yellow = In Progress White = Has Not Started

TCAB Initiative	4 East /SHY	4 Main /SHY	South Side/Med Surg	5 Main /SHY	5 West /SHY	3 Main /SHY	7 Main /SHY	ICU/McK	CVU/McK	South Side/Surg Ortho	South Side/CMU
Kickoff/TCAB											
Deep Dive											
Staff Satisfaction Survey											
Palm Pilot measures											
Patients involved in unit TCAB meeting											
Liberalized Diet											
Thinking About Your Discharge Flyer											
Peace and Quiet Time											
Magnetic Discharge Cues											
Staff Photo Board											
Questions About My Care Tablet											

Spread Activity Assessment Tool

Assessing Your Current Spread Activities for TCAB

Organization _____ Your Name _____

Directions: Please score each section from the perspective of your spread aim (i.e., whether you are spreading both the TCAB method [the "HOW"] and/or the specific improvements [the "WHAT"] from your pilot unit(s) to other units in your hospital and/or system). For each category, please circle the point value that best describes the level of activity that currently exists in your hospital and/or system.

I am completing this assessment from the perspective of spread ….
___ Within one hospital only
___ Across multiple hospitals in a system (Please specify the number of hospitals ____)

Leadership
Leadership's primary responsibility for spread is in **s**etting the agenda and assigning responsibility for spread. Consider the following in assessing your level of activity for leadership:

- We have a senior leader who is responsible for spread.
- TCAB is part of our organization's strategic plan.
- There is a day-to-day leader for spread.
- We have a spread team made of up the senior leader, day-to-day leader, members of the pilot site team, and representatives of the spread units.

Score: 0 1 2 3 4 5

Areas within Leadership where you are particularly strong:

Areas within Leadership where you would like to learn from others:

Set-Up for Spread
Establishing a strong foundation for spread involves identifying the target population and the initial strategy to reach all sites in the target population with the new ideas. Consider the following in assessing your level of activity for set-up:

- We have identified the units to which we intend to spread TCAB.
- We have clearly stated what it is that we are spreading (e.g., TCAB method, specific improvements).
- We have stated the expected level of performance on the TCAB measures for the target units.
- We have at least an initial timeframe for the spread work.
- We have a plan to reach all our target sites (e.g., initial kickoffs, regular meetings of spread units, using unit meetings to discuss changes being tested, linking pilot unit to spread units, etc.).

Score: 0 1 2 3 4 5

Spread Activity Assessment Tool (page 2)

Areas within Set-Up where you are particularly strong:

Areas within Set-Up where you would like to learn from others:

Better Ideas

Effectively spreading the TCAB method and/or specific innovations involves a description of the new ideas and evidence to "make the case" to others. Consider the following in assessing your activity in spreading better ideas for TCAB:

- We have compiled evidence from the pilot site to share with new sites (i.e., process and outcomes data, patient and provider stories and testimonials, etc.).
- We have developed materials and tools that easily explain TCAB and/or the specific innovations that are being introduced to the target units.

Score: 0 1 2 3 4 5

Areas within Better Ideas where you are particularly strong:

Areas within Better Ideas where you would like to learn from others:

Communication

A communication plan for spreading TCAB involves identifying methods to share awareness of TCAB as well as technical information about how to apply the innovations to the new units. Consider the following in assessing the development of your communication plan:

- We have identified all the target audiences for our communication about TCAB from within the hospital and/or the spread units.
- We have identified the communication channels (meetings, printed materials, electronic messages, etc.) we can use to spread awareness of TCAB.
- We have identified the communication channels (peer-to-peer meetings, unit-to-unit meetings, etc.) we can use to spread information about how to "do TCAB" or how to apply specific innovations developed on the pilot unit(s).
- We have set up opportunities for the leaders to communicate with the target units, and for the target units to communicate with the leaders.

Score: 0 1 2 3 4 5

Areas within Communication where you are particularly strong:

Areas within Communication where you would like to learn from others:

Spread Activity Assessment Tool (page 3)

Social System

Understanding the relationships among the people who will be adopting TCAB and the specific innovations generated from TCAB will enhance your ability to spread more rapidly. Consider the following in assessing your current progress in understanding and fully utilizing your social systems for spread:

- We know who the champions, influencers, mentors, willing volunteers, etc., are within our target units.
- We have a plan for working with each of these groups as part of our spread work.
- We know how the members of the social system exchange information (e.g., informally, formal meetings, etc.).
- We have developed a plan for utilizing these methods of information exchange to facilitate spread.

Score: 0 1 2 3 4 5

Areas within Social System where you are particularly strong:

Areas within Social System where you would like to learn from others:

Measurement and Feedback

Collecting and using data about process and outcomes to better monitor and help guide the target units is a central role for the spread leader and the spread team. Consider the following in assessing your activity in measuring progress and following up with both the spread units and the leadership:

- We have a method to gather data on the TCAB measures from the spread units.
- We have a method to track the spread of the TCAB method to the spread units.
- We have a method to track the testing and/or implementation of specific innovations within the spread units.

Score: 0 1 2 3 4 5

Areas within Measurement and Feedback where you are particularly strong:

Areas within Measurement and Feedback where you would like to learn from others:

Spread Activity Assessment Tool (page 4)

Knowledge Management

Observing and using the best methods for spread as they emerge from the practice of the organization enables you to adjust your spread plan based on the experience of the spread units. Consider the following in assessing your activity in understanding how well the spread process is going:

- We have a way of gathering information from the front-line spread units about how they are progressing in adopting TCAB and/or specific innovations.
- Our spread team meets regularly to review progress and make any needed adjustments in our spread plan.

Score: 0 1 2 3 4 5

Areas within Knowledge Management where you are particularly strong:

Areas within Knowledge Management where you would like to learn from others:

Other activities that you are currently doing that you think are especially important to a successful spread of TCAB and/or specific innovations? Please list them here:

UPMC Standard Data Collection Form

TCAB MEASURE DATA

HOSPITAL: SHADYSIDE

UNIT: 4 MAIN

MEASURE	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
CODE RATE - A's												
# A CODES												
CODE RATE - C's												
# C CODES												
PATIENT DAYS												
TURNOVER RATE												
VOL SEPARATIONS												
AVG FTEs												
TEAM DEV/STAFF SATIS												
# SURVEYS												
PATIENT SATISFACTION												
TOP BOX												
# SURVEYS												
PDA DATA												
% Time Documentation												
% Value Added Time												
% Direct Patient Care												