

# Spreading Innovations in Health Care: Approaches for Disseminating *Transforming Care at the Bedside*



It is no secret that the U.S. health care system has serious shortcomings in consistently providing high-quality, safe care to patients nationwide. It has been six years since the well-respected Institute of Medicine documented the chasm that exists between the quality of care Americans should receive and the care they actually do receive, yet nearly every day, consumers learn of a new report highlighting deficiencies in the medical care they experience.

In the wake of these concerns, multiple efforts across the health care system have proven that the quality of care delivered to patients in hospitals can be dramatically improved through a series of innovations that help caregivers share information and provide the right care at the right time for their patients. But with every successful innovation that is identified, tested and implemented, a major challenge remains: can successful quality improvement efforts be effectively and efficiently spread from one location to another across the diffuse U.S. health care system?

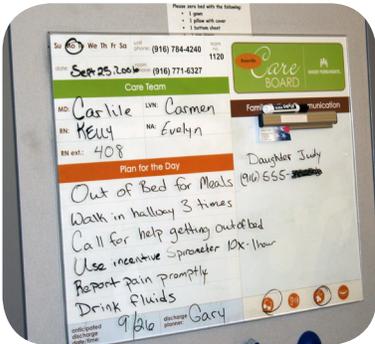
During TCAB, participating hospitals are coached on how to identify, develop, test and share prototype strategies to improve the quality of care. Staff at the participating hospitals test a number of changes in the way they organize and provide care, and many of the innovations are subsequently adopted as usual practice.

TCAB is not a traditional quality improvement program. One of the primary characteristics that sets it apart is its focus on the process of engaging frontline staff and unit managers to spearhead change. Ideas for transforming the way care is delivered in units come not from the executive suite or quality improvement department, but from the nurses and other care team members who spend the most time with patients and their families. These teams identify where change is needed, suggest and test potential solutions and decide whether those innovations should be implemented. Participants in the early phases of the program believe it has been extraordinarily successful.

Before asking a larger group of hospitals to adopt TCAB strategies that have previously been found promising, RWJF decided to look at dissemination efforts within the three major hospital systems with the longest-running TCAB experience. The premise was that these systems—considered to be leaders in nursing quality improvement—could help identify the possibilities and challenges of spreading health care innovation to other units, hospitals and health systems. In particular, evaluators wanted to understand whether some of the most successful program innovations could be spread and replicated directly, and if the larger TCAB processes

## Testing the Spread of Quality Innovations

The spread of quality innovations is being encouraged by the Robert Wood Johnson Foundation (RWJF) and the Institute for Healthcare Improvement (IHI) in their national *Transforming Care at the Bedside* program (TCAB). Launched in 2003, TCAB is a multi-phase, national initiative to improve the work environment on hospital medical-surgical units, and thereby increase the quality of patient care and nurse engagement.



## KAISER PERMANENTE NORTHERN CALIFORNIA

Kaiser Permanente is the nation's largest health plan network, with a total of 31 hospitals and 437 medical centers serving 8.2 million members in nine states and the District of Columbia. Approximately 3.2 million patients are members of the northern California region of Kaiser Permanente. Kaiser implemented this spread case study in three hospitals in this region: Kaiser Sacramento, Kaiser Santa Rosa, and Kaiser Roseville.

## ASCENSION HEALTH

Ascension Health is a nonprofit Catholic health system that serves patients in 20 states. National headquarters are located in St. Louis, Mo. The system includes more than 67 hospitals located on the East Coast and throughout the Midwest. The spread evaluation focused on two sites: Our Lady of Lourdes Memorial Hospital, located in Binghamton, N.Y., and Sacred Heart Hospital, located in Pensacola, Fla.

## THE UNIVERSITY OF PITTSBURGH MEDICAL CENTER HEALTH SYSTEM

The University of Pittsburgh Medical Center Health System (UPMC) is comprised of 19 hospitals serving 29 western Pennsylvania counties. The health system includes three main hospitals, five specialty hospitals, six community hospitals, and three regional hospitals. A medical-surgical unit at UPMC Shadyside participated in the early phases of the TCAB initiative, and the spread effort targeted three additional units at the hospital and a unit at UPMC South Side, a teaching hospital in the system serving the South Side community of Pittsburgh, Pa.

that helped front line staff identify and test these changes could be spread as well.

RWJF commissioned a team of evaluators from the University of California, Los Angeles, and the RAND Corporation to document and assess the spread efforts of Kaiser Permanente of Northern California, Ascension Health System and the University of Pittsburgh Medical Center Health System (UPMC). Each participated in the initial phases of the TCAB program and was interested in spreading successful nursing innovations to multiple units across their systems.

Innovations that were spread during this demonstration were among the most popular ones adopted during the early phases of TCAB. Among others, they included:

- Ensuring better coordination of care by conducting bedside rounds in multi-disciplinary groups (such as nurses and physicians) or at change of shift.
- Helping put the patient at the center of his or her care by hanging white boards in every patient room to note things like the name of staff caregivers on each shift, upcoming procedures scheduled and the patient's daily goals.
- Improving work flow and emphasizing team responsibilities for patient care by adding red/yellow/green boards—essentially white boards hung in central nursing locations with colored magnets used to indicate the workload status of each shift nurse. If a nurse moved a red magnet next to his name, it meant he was overloaded and needed assistance; yellow signaled that he was busy, but all right; and green indicated a light workload and the ability to help others.

## Lessons from a Spread Trial: Eight Steps to Success

The evaluation process showed that TCAB innovations—and the TCAB process itself—can be effectively replicated. Results signaled that large health systems can successfully transmit quality improvement changes to diverse hospitals or units within their systems. With a carefully planned, coordinated and implemented process, all three organizations effectively spread their quality improvement interventions, sometimes employing and transferring the larger TCAB processes for identifying and implementing changes.

Although all demonstration sites were successful in spreading innovations or processes, there were clear differences in how each hospital engineered spread. This was most evident in management of the change process, where two differing but equally successful approaches for coordinating change emerged: a top-down approach, or a bottom-up approach.

The top-down administration of the spread involved a planned implementation of a pre-defined quality intervention. This traditional approach to quality improvement viewed spread as the controlled dissemination of a specifically designed and tested innovation. Little of the TCAB change-development process was utilized, as the goal was that staff would uniformly adopt the prescribed changes throughout the system.

In the alternative bottom-up approach, the spread was handled utilizing more of the TCAB process for identifying quality improvements. Frontline staff members were taught the “how to” of the TCAB collaborative process, then teams were formed to identify areas for

## EIGHT FACTORS FOR SUCCESSFUL SPREAD

- 1. A designated spread organizer.** A major contributor to the success of spread was the clear designation of individuals to oversee and support the spread effort. Each demonstration site had someone who acted as the liaison to all of the spread participants and played a key role in aligning the forces for change and overcoming any challenges that developed.
- 2. Carefully selected unit(s) for spread.** Spread managers gave careful consideration to unit characteristics in selecting the first group of spread units. Most focused on maximizing the likelihood of success by choosing stable units or units with histories of positive change efforts, but some focused on addressing challenges by selecting units characterized by high turnover or histories of resistance to change.
- 3. Off-site, multi-hospital meetings for sharing ideas, learning and support.** Camaraderie and energy for the spread process was developed when hospitals staffs collaborated with a larger community of participants. They felt like they were part of a quality movement and exchanged valuable experiences. This project included events such as joint kick-off meetings and collaborative learning sessions to share ideas and enthusiasm.
- 4. Designated nurse champions to promote innovations and spread.** As the primary gatekeepers in the medical units, participation of front line nurses was crucial to the success of the quality improvement efforts in this demonstration. The process showed that the selection and involvement of nurse champions aided managers in promoting change. Careful consideration was given to the best qualities for the nurse champion, with those selected most frequently being described as “unit leaders” in informal work settings.
- 5. Ongoing communications.** Continual communications about the improvement efforts was instrumental in developing awareness and broad support for spread throughout all levels of the demonstration sites. Communications materials observed during this project included posters, guidebooks, a newsletter, conference calls and a list-serve.
- 6. A major role for the unit manager.** At all demonstration sites, the unit managers played a central role in assisting in the spread task, and his or her buy-in was critical to success. The unit manager was seen as instrumental in organizing and facilitating the change activities. This was evident in hospitals engaging in either top-down interventions or bottom-up TCAB innovations.
- 7. Allocated resources for staff to work on spread.** Because quality improvement processes are primarily “people driven,” an investment in staff time to work on spread activities was seen as an important allocation of resources. Successful spread units reserved time for staff to work on quality and spread activities and provided stipends, as necessary, to help support these activities.
- 8. Clear and demonstrated support from senior leaders.** At every site, hospital leaders and executives were a powerful influence in quality improvement. Without their early, active and visible support for identifying new patient safety and quality processes and innovations, it would be extremely difficult for any innovations to be implemented—let alone spread. Hospital leaders during this project were linchpins to providing resource allocation, removal of bureaucratic barriers, building enthusiasm and setting expectations.

improvement, develop strategies and test the innovations. This ensured adaptation of strategies that were germane to the specific care setting and laid the foundation for future quality improvement efforts within the units.

Regardless of whether they adopted a top-down or bottom-up approach to spreading innovations, evaluators noted that a common set of eight strategies were employed by each of the successful hospital systems. These included things such as a designated spread organizer, careful selection of spread units, identifying nurse champions, stressing the importance of ongoing communications, proper allocation of resources and demonstrated support from leaders—all indicators of a change process that had been well planned and executed.

Ultimately, the assessment demonstrated that the effective dissemination of quality improvement efforts was achievable across diverse units and hospitals. Even with differences in setting, processes and methodology, the three hospital systems were each successful in spreading nursing innovations. All participants agreed, however, that rather than a spontaneous phenomenon, the effective spread of quality improvement efforts required significant planning, resources and leadership.

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