

Evaluation of a Reflective Team Coaching Model as a Leadership Strategy for Nurse Managers  
to Cultivate Front Line Quality and Safety Improvement Capability

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## **Abstract**

### **Background**

The Institute of Medicine (IOM, 2010) recommends expanding opportunities for nurses to lead and diffuse collaborative improvement efforts. As leaders for the microsystem (unit) Nurse Managers are uniquely positioned to affect the outcomes of their work units, meeting quality and safety objectives. They need to be able to blend technical, managerial, communication, and relationship skills to promote quality and safety outcomes and require support for their role in leading and cultivating front line improvement. Despite making progress in improving safety in healthcare, patient harm still occurs (Chassin & Loeb, 2013).

### **Purpose**

The global aim of this project is to evaluate the impact of a team coaching model intervention on Nurse Managers' leadership development through enhanced knowledge and skill in quality improvement and outcomes of care. Sub aims of this project are (1) to evaluate the change in knowledge, abilities and skills over time and (2) to describe themes of leadership development from Nurse leaders who completed the program using final coaching development plans and focus group.

### **Design/Setting/Participants**

This project used a mixed method quality improvement design with a survey (quantitative) and focus group (qualitative) approach. Participants were five Nurse Managers in the acute care division of a multidivisional academic medical center in the Veterans Health Administration (VHA) in Roxbury Massachusetts.

**Intervention**

Coach the Coach (eCTC) program sponsored by the Dartmouth Institute Microsystem Academy, a 5-month intensive, dynamic, and highly interactive experiential learning series blending electronic and face-to-face formats to develop team coaching knowledge, skills, and abilities.

**Results**

At the completion of the program (N=5) there were statistical differences in some of the variables, mainly in the improvement skills and measurement groups. There were no significant differences in the opinion or relationship groups of variables. There was significant change in 12/23 responses in the skills group and 4/12 responses in the measurement group. 6 months after completion of the program (N=3) analysis of the data of three points of time (pre (time 1), post (time 2) and 6 months' post (time 3), determined the same results. There were no significant differences in the opinion or relationship groups as a whole and there was significant change in the skills group and measurement group.

Themes emerging from the focus group were (1) structure, accountability and encouragement (2) personal leadership skill development and (3) the art and science of coaching was not infused into the day to day work of the nurse manager. .

**Conclusions**

Leaders at all levels can influence improvement at the front lines of care. A reflective team coaching model is beneficial to the leadership development of Nurse Managers but requires an organizational structure that supports continued reinforcement and application of the

knowledge into daily practice. Creating a culture where improvement work truly becomes part of what leadership does is possible but takes commitment and help from all leadership levels.

### **Implications for Practice**

Nurse Managers need a variety of tools to be successful in managing and leading their units. Reflective team coaching is an effective leadership strategy for Nurse Managers to gain knowledge and skills in the science of improvement and develop skills in the art of coaching improvement within the context of a supportive culture. The skills associated with the art of coaching improvement are useful in many situations involving group dynamics. Incorporating reflective team coaching into leadership development plans for Nurse Managers can assist in creating the conditions to cultivate front line quality and safety improvement capability.

### **Nature and Significance of the problem**

Ensuring quality and safety in healthcare is a problem because we continue to cause harm in medical care in our healthcare systems (IOM, 2007). Compounding the quality and safety concerns, inefficient systems of care contribute to the high cost of health care in the United States. Optimizing systems to reduce preventable harm is a national priority (AHRQ, 2015). The Institute of Medicine (IOM) reported medical errors cause up to 98,000 deaths and more than 1 million injuries each year in the United States at an estimated cost of \$50 billion per year (IOM, 1999). Van den Bos et al. (2011) estimate that the annual cost of measurable medical errors that harm patients was \$17.1 billion in 2008. One of every 25 inpatients in acute care hospitals has at least one health care associated infection (Magill et al., 2014). Even with progress in safety improvements, there is more than can be done. There has been a 17 percent reduction in hospital acquired conditions from 2010 to 2013. Hospital patients experienced 1.3 million fewer hospital acquired conditions (HACs) over the 3 years, approximately 50,000 fewer

patients died in the hospital because of the reduction in HACs, and approximately \$12 billion in health care costs were saved from 2010 to 2013. (AHRQ, 2015). Caring for the health and well being of people is important work and we have to do a better job of doing so safely and reliably.

The clinical microsystem is a framework to assess and evaluate the structure, process, and outcomes of care (Mohr & Batalden, 2002). Nurse Managers are leaders for the microsystem (unit) and ensure that the unit meets quality and safety objectives. Uniquely positioned to affect the outcomes of their work units, Nurse Managers need to be able to blend technical, managerial, communication, and relationship skills to promote quality and safety outcomes.

However, research suggests that they often do not have adequate leadership skills to do so (Djukic, Kovner, Brewer, Fatehi, & Jun, 2015; Riles, Dis, Miller & McCullough, 2010). The Institute of Medicine (IOM, 2010) recommends expanding opportunities for nurses to lead and diffuse collaborative improvement efforts. Nurse Managers need support for their role in leading and cultivating front line improvement.

Team coaching, a three phase model which incorporates theory, lived experiences of practitioners and experiential learning, is an effective method of increasing the improvement capability of frontline staff (Godfrey, 2013). This means creating an environment in which the frontline staff understand the structure, processes and outcomes of care in their clinical microsystem, can identify areas needing improvement and participate in efforts to coach these improvements. Nurse Managers need to be confident in their own knowledge and skills in quality improvement to create this supportive environment for frontline staff. Therefore, the purpose of this project is to evaluate the impact of a team coaching model on Nurse Managers' skill and confidence in cultivating front line improvement.

**Background**

Although one of the recommendations of the Institute of Medicine is to expand opportunities for nurses to lead and diffuse collaborative improvement efforts (Institute of Medicine, 2010) it is unclear if the structure to support this capability currently exists in acute care settings. Do we have the structure to support high performing clinical microsystems in the acute care units?

A clinical microsystem is a small group of people who work together on a regular basis to provide care to discrete subpopulations of patients. It has clinical and business aims, linked processes, and a shared information environment and it produces performance outcomes. Microsystems evolve over time and are often embedded in larger organizations. They are complex adaptive systems, and as such, they must do the primary work associated with core aims, meet the needs of their members and maintain themselves as clinical units. (Nelson, Batalden & Godfrey, 2007, p.7)

Leadership at all levels of the organization can affect the approach to deliver care at the front line. While the strategic direction for the organization may be towards a patient centered approach to care, front line staff need time, strategy, processes and tools to deliver quality care. Staff, Nurse Managers and those who supervise Nurse Managers need new knowledge to improve care. Just as there are traits associated with high performing organizations, so too are there characteristics of a high performing clinical microsystem (Nelson et al. 2002). The context of the relationships, care processes and improvement efforts occurring in our healthcare system matters.

The Nurse Manager has to connect the ideas and priorities and organizational strategy to the operations to lead the work. There is a gap between the top of the organization and an individual front line care unit. Focusing on the customer, the patient, and the main priorities of the senior leaders and working with the unit to understand how their work fits into those priorities can narrow the gap. The Nurse Manager is the one who best knows the patient's journey and it is important for the manager to own the responsibility for that journey (Parand, Dopson, Renz & Vincent, 2014). Nurse Managers need the skills to assess the unit so that the unit can work on what matters most to them.

This gap in organizational alignment (Foster, Johnson, Nelson, & Batalden, 2007) is the "middle management problem" (M. Godfrey, personal communication, 11/4/14) where there needs to be total alignment from the top to the bottom of the organization. Focusing on and linking organizational priorities and microsystems work is an expectation of the manager in the middle. Identifying what really matters and working in a team approach to solve problems does not just happen naturally. People need to be developed. "If it is not a requirement that leaders know how to improve work and to facilitate the development of those whom they supervise, how will we ever change?" (P. Batalden, email correspondence 10/23/14).

### **Available Knowledge**

#### **Literature Review**

The computerized databases, PubMed, CINAHL, Google Scholar and PsycInfo were used to review the literature. Date ranges were not restricted however only studies published in English were reviewed. A Boolean search using AND and OR was used. Keywords clinical microsystem(s), performance, excellence and quality improvement were used initially. Further refinement of the searches included additional keywords such as Nurse Manager and leader. An

additional search was done to explore the coaching component using key words Nurse Manager, team, coaching, shared governance and autonomy. References cited in articles from the initial searches were used and offered an additional source for review, as were the resources of the Clinical Microsystem website. ([www.clinicalmicrosystem.org](http://www.clinicalmicrosystem.org))

### **Synthesis of the literature**

**Clinical Microsystems.** At times, organizational priorities and the work of the microsystem do not align and may compete for scarce resources (Williams, Dickinson, Robinson & Allen, 2009). In a review of microsystems approach in the National Health Service (NHS), the publicly funded healthcare system of England, Williams, Dickinson, Robinson and Allen (2009) identified strengths in the microsystems approach such as a potential culture shift towards ongoing change. The authors highlighted the potential struggle with a microsystem and external forces and having to manage change driven from outside the microsystem (meso or macro systems) and the internally driven changes/improvement that the unit feels are priorities.

Transformation is a process as opposed to something that happens all at once. The conclusion that transformation occurs over time with iterative changes sustained and spread across an organization has been noted numerous times. (Lukas et al. 2007; Davies, personal communication, 10/24/14.; Kabcenell, Nolan, Martin & Gill, 2010)

The clinical microsystem is a framework to assess and evaluate the structure, process, and outcomes of care. (Mohr & Batalden, 2002). High functioning microsystems are the building blocks of an organization (Nelson et al., 2002) contributing to the overall success of the organization. Stanford Hospital and Clinics (Stanford, California) employed a strategic approach of holding leaders of clinical microsystems accountable to improve performance on the Joint Commission core measures with results showing holding clinical microsystems accountable for



improving unit performance proved beneficial to macrosystem performance of the Joint Commission core measures. In the first year of the initiative (2007), the 24-metric composite compliance score for all four core measures increased from 64% to 82%. An additional benefit of the success was improved competencies and confidence of individual microsystems and improvements have now become part of daily work (Pardini-Kiely, Greenlee, Hopkins, Szaflarski, & Tabb, 2010).

A study of 79 academic medical centers found that one of the common qualities of top performers is the presence of accountability systems for quality and safety at both the microsystem and macrosystem levels. Common qualities shared by top performers included a shared sense of purpose, a hands-on leadership style, accountability systems for quality and safety, a focus on results, and a culture of collaboration (Keroack et al., 2007).

Context matters in the success of quality and safety initiatives. A study conducted by Dartmouth researchers used a comparative case study and evaluative design with leadership development and an internal improvement collaborative as interventions to apply microsystems processes and tools in two different settings. Main findings of this study were that clinical microsystem tools and processes were successfully adapted to the local context and supported development of improvement capability with measured improvement (Godfrey, Melin, Muething, Batalden, & Nelson, 2008). A systematic review of business and health care literature to identify contextual factors that might influence QI success found leadership from top management, organizational culture, years involved in QI, and data infrastructure/information systems were associated with quality improvement success. (Kaplan et al., 2010).

The field of improvement sciences in healthcare is still relatively new, the terminology used is highly variable and there is a need for ongoing research (Stevens & Ovretveit, 2013;

Kaplan et al., 2010; Parand, Dopson, Renz, & Vincent, 2014). In a consensus document of priorities for future research in improvement science, high performing clinical systems/microsystems approaches to improvement were identified as one of the categories for further exploration. Strategies or research topics within this category included frontline provider engagement, unit based quality teams and sustaining improvement and improvement processes. (Stevens & Ovretveit, 2013).

**Quality and Safety.** Leaders and managers have an essential role in creating an environment in which quality and safety are priorities and continuous improvement is part of the work. (Tucker & Edmonson, 2003; Pronovost, et al, 2004; Tucker, 2007; McSherry, Pearce, Grimwood, & McSherry, 2012). In a study to determine the conditions under which front line employees take initiative to improve their work, Tucker (2007) found a positive correlation with psychological safety and front line system improvement. Creating a work environment where it is safe to discuss operations failures supports employees and may result in higher improvement efforts by front line staff. The relationship between supportive leadership styles and positive patient safety outcomes is beginning to be reported (Wong, Cummings, & Ducharme, 2013).

In the Geisigner ProvenCare model, Nolan, Wary, King, Laam & Hallick (2011) described how performance improvement could be incorporated into the shared governance model with benefits of sustainable practice improvements (efficiency, reliability of process), staff satisfaction, and further elevation of the professional practice model.

**Nurse Managers/Quality and Safety.** As the nurse leaders closest to the patient, Nurse Managers have a pivotal role in quality and safety. "Nursing has a primary leadership function for ensuring patient safety and achieving high quality in health care organizations" (Riley, 2009, p.238). In discussing high reliability clinical microsystems Riles, Dis, Miller and McCullough

(2010) noted that it is imperative for leaders to supplement technical skills with non-technical skills and designed processes, all embedded in a culture of safety to achieve high reliability.

Nurse Managers need to be able to blend technical, managerial, communication and relationship skills to develop highly reliable units promoting quality and safety but do not always have the tools to do so.

Context matters in the success of quality and safety initiatives. "Building improvement capability is not only about skill building; it also includes creating an environment in which frontline staff can identify and participate in needed improvements" (Munch, 2015). There is a mismatch between what Nurse Managers are prepared and expected to do (Djukic, Kovner, Brewer, Fatehi, & Jun, 2015). A study of early career front line Nurse Managers found that only one in three reported being prepared with quality improvement skills. Areas that need significant improvement include repeating the improvement cycles, including measurement of current performance, applying QI tools and methods and monitoring sustainability of improvements (Djukic, Kovner, Brewer, Fatehi, & Jun, 2015).

The Nurse Manager or nursing director is responsible for communicating and operationalizing the organization's QI goals and processes to the bedside nurse, identifying specific nurse sensitive indicators that need improvement according to his or her particular patient population, and coordinating QI processes to improve these at the unit level (Barnard & Hannon, Ch. 2). Moran et al., (2002) found Nurse Managers develop leadership skills by default, informally gaining the skills needed in fragmented programs. Administrators ask senior nurses to take on leadership positions but rarely assist in ensuring that the nurse leaders have the tools and training required to perform their job well (Swearingen, 2009).

Emphasis on the local context of the improvement work is a central premise in successful team coaching, being aware of what supports or hinders improvement work. Being familiar with the organizational culture and history, learning about and responding to local concerns and tailoring process improvement guidance to change teams are important functions of a coach. Two studies found knowledge of the local context and tailoring advice to teams and leaders as important to coaching. (Godfrey et al, 2014; Gustafson, 2013). Organizational support ranged from managers showing interest and encouragement to a culture of innovation with leadership making time, finances resources available to teams.

Nurse Managers are frequently recommended for leadership roles based on strong clinical skills. However, strong clinical expertise does not translate to managerial success without additional knowledge and skills. Educational gaps in quality improving and competency in caring for patients and staffing from a systems perspective are areas where managers need help.

What is missing in the literature is discussion of the Nurse Manager and quality improvement coaching. Strating and Nieboer (2012) found teams with a manager on the team scored higher on perceived effectiveness of improvement activities but little is known about the impact of improvement coaching and Nurse Managers. Team coaching may be a way for Nurse Managers to gain confidence in improvement skills that could translate to safe and effective processes on the patient care unit

**Coaching.** Much of the literature related to Nurse Managers and coaching dealt with performance coaching or personal executive coaching. Stefanczyk, Hancock & Meadows (2013) discussed the Nurse Manager as a change coach in an exemplar of the American Organization of Nurse Executives' Care Innovation and Transformation (CIT) initiative concluding managers

need to be able to move between the role of the change agent and change coach depending upon the situation. Five themes emerged in the review of Nurse Managers, team coaching and quality improvement: (1) the benefit of coaching for improvement teams, (2) context matters, (3) importance of organizational support in the effectiveness of improvement initiatives, (4) coaching as helping/encouragement and (5) managers need help in creating environments conducive to improvement.

Certain behaviors, skills and functions associated with coaching contribute to successful improvement endeavors. Coaching skills include not only technical factors, sharing knowledge of quality improvement techniques and tools, but also the human and organizational factors that are part of change efforts.

Coaching as helping and encouraging was another theme in the literature. While the role may have been referred to as coach, facilitator or advisor, the behaviors were similar (Thor, Wittlov, Herrlin, Brommels, Svensson, Skar, & Øvretveit, J., 2004, Schein, 2011; Schein 2013; Godfrey, Thor, Nilsson, & Andersson Gäre, 2013). Helping teams apply improvement tools, stay focused on the goal, see different perspective through reframing questions, and offering encouragement were behaviors seen as supporting effective improvements.

Managers need to be confident in their own knowledge and skills in quality improvement to create this supportive environment for frontline staff. Team coaching, a three phase model which incorporates theory, lived experiences of practitioners, and experiential learning, is an effective method of increasing the improvement capability of frontline staff (Godfrey, 2013) but its effect on Nurse Managers is not known. Godfrey (2013) describes the team coaching model as a guided pathway for coaches to activate leaders and members of the microsystem through three phases of team coaching that promotes experiential learning, incorporates theory and lived

experiences of practitioners with a specific aim to cultivate improvement capability of the frontline staff. The beauty of the model is that it is responsive to the local context.

Two studies used team coaching and improvement collaboratives as interventions. (Godfrey, Andersson Gäre, Nelson, Nilsson & Ahlström, 2013; Godfrey, Thor, Nilsson & Andersson Gäre, 2013). In one study programs were designed with two national improvement collaboratives (Cystic Fibrosis Centers (CF) and Intensive Care Nurseries (ICN)) using the Dartmouth Microsystem Improvement Curriculum (DMIC) and team coaching actions. Participants included coaches (n=9), coachees (n=382) and unit leaders of the clinical microsystems in the collaborative (n=30). The main finding of this study was the improvement teams' positive perception of team coaching. Based on the findings of this study a hypothesis surfaced that team coaching could help develop improvement capabilities in interprofessional teams. A subsequent study was designed to test this hypothesis.

This subsequent study was a quasi-experimental intervention study with a pre-post design in an improvement collaborative setting with randomized team coaching using surveys, interviews and pre/post test. An intervention pilot was conducted within a patient safety improvement collaborative involving seven health care improvement teams from three hospitals in Sweden. All seven teams received the improvement collaborative intervention but were randomized to the intervention of team coaching (n=3) or not (n=4). Pre/post test results showed the intervention group had a greater acquisition of improvement skills on the Quality Improvement Knowledge Application Tool (QIKAT) than the usual collaborative group.

Four key findings of Godfrey's thesis are:

1. An understanding of the clinical microsystem by all interprofessional staff is where improvement capabilities can be enhanced with specific actions.

2. Leaders from the clinical microsystem to the top of the organization play critical roles in creating the conditions throughout the organization to support successful improvement.
3. Frontline staff need help in developing new habits of providing care and improving care
4. Coaching the interprofessional improvement teams in developing new skills is beneficial according to both frontline microsystem members and microsystem leaders (Godfrey, 2013, p95).

### **Framework**

The VA Boston Healthcare System uses the Baldrige Framework for Performance Excellence in conjunction with the VA Blueprint for Excellence for improving organizational performance. Strategies and criteria of the Baldrige and VA frameworks align with the success characteristics of high performing microsystems

#### **The Baldrige Excellence Framework.**

The Baldrige Excellence Framework is a leadership and performance management framework based on core values and concepts that represent beliefs and behaviors found in high-performing organizations. These include:

- Systems perspective
- Visionary leadership
- Patient-focused excellence
- Valuing people
- Organizational learning and agility
- Focus on success
- Managing for innovation

- Management by fact
- Societal responsibility and community health
- Ethics and transparency
- Delivering value and results

The Baldrige Healthcare Criteria for Performance Excellence include leadership, organizational strategy, customers, measurement, analysis and knowledge management, workforce, operations/process management and results. Using the Baldrige framework, the organization evaluates and improves processes along four dimensions:

- Approach: How systematic are your key processes?
- Deployment: How consistently are your key processes used throughout your organization?
- Learning: Have you evaluated and improved your key processes? Have improvements been shared within your organization?
- Integration: How do your processes address your current and future organizational needs?

Results are evaluated along four dimensions:

- Levels: What is your current performance?
- Trends: Are the results improving, staying the same, or getting worse?
- Comparisons: How does your performance compare with that of other organizations or with benchmarks?
- Integration: Are you tracking results that are important to your organization? Are you using the results in organizational decision making?

Improvement tools focus on results, use a team approach, require management by fact, are customer and market focused and require strong leadership for long-term effectiveness.

(Baldrige Performance Excellence Program, <http://www.nist.gov/baldrige>)



### **Clinical Microsystems**

Clinical microsystems theory is based on systems theory and the work of James Brian Quinn (1992). Quinn studied successful companies in the service industry to see what they were doing to achieve high quality, positive reputation and financial growth. He found that these organizations were focused on the front line relationships as the connection between the point of service and the organization's values, goals and objectives. Quinn termed this front line activity as the "smallest replicable unit", the basis for clinical microsystem research.

Donaldson and Mohr (2001) led a project supported by the Robert Wood Johnson Foundation (RWJF) with the aim of identifying best practices in small clinical units across North American that enable health care microsystems to continuously improve the quality of care. Using a cross case analysis approach, structured interviews were used to collect data from 43 microsystems providing primary and specialty care, hospice, emergency, and critical care. Based on surveys and telephone interviews carried out by Donaldson and Mohr, they identified eight themes in these units, noting that it is possible that the most effective micro-systems will demonstrate a high level of performance in each of these themes.

Mohr and Batalden (2002) used this work to develop a tool to assess the functioning of a microsystem. The authors noted limitations such as the need for further empirical testing for each of the characteristics and further testing/validation of the instrument, but concluded that the tool in its present state can provide valuable insights for a unit to focus improvements. Nelson, Batalden and Godfrey (2007) furthered this work with 20 clinical microsystems in a cross sectional observational study using qualitative methods (interviews, observations, medical record and financial review). They confirmed the eight characteristics consistent with the findings of

Donaldson and Mohr and expanded it to ten characteristics of high performing clinical microsystems.

The Success Characteristics associated with high performance are

1. Strong Leadership
2. Great Organizational Support
3. Focus on Staff (Professionals)
4. Education and Training of Staff
5. Interdependence of Care Team
6. Performance Result Focused
7. Process Improvement Focused
8. Patient-Centered (Patient Focus)
9. Community and Market Focus
10. Information & Information Technology Orientation

Translating the leadership criteria to the front line staff involves communicating the organizational vision to the clinical microsystem to understand how the unit fits into that vision and how the unit contributes to the outcomes of the organization. Nurse Managers link organizational strategy to the microsystem and make sure the clinical microsystem goals are aligned with the larger organization (macrosystem). Components of the customer criteria include being patient centric, focusing on the patient experience, using feedback to drive improvement are components of the customer criteria. What is important to customers, internal and external, should be the basis for the microsystem work. Measurement, analysis, and knowledge management relates to how well information is used and shared; are we measuring what is important and sharing the plans and outcomes with everyone? For Nurse Managers at

the frontline of care, workforce is aligned with shared governance, retention, recognition of staff, satisfaction and professional development. Operations/process management, the pursuit of continual process improvement and focusing on what the customer wants and results involves learning from results.

A study comparing the Baldrige criteria and the success characteristics of high performing microsystems to determine if the two could better inform each other found that both cover areas critical to high performance (Foster, Johnson, Nelson & Batalden, 2007). The comparison of the two frameworks supported the microsystems success characteristics as being consistent with Baldrige criteria in assessing success. Since the Baldrige criteria are considered a gold standard in performance excellence, this study supports the success characteristics as a method to assess high performance.

Many of the elements critical to successful transformation of patient care identified by Lukas et al. (2007) are consistent with the Baldrige Criteria and the success characteristics of high performing microsystems. These include (1) Impetus to transform; (2) Leadership commitment to quality; (3) Improvement initiatives that actively engage staff in meaningful problem solving; (4) Alignment to achieve consistency of organization goals with resource allocation and actions at all levels of the organization; and (5) Integration to bridge traditional intra-organizational boundaries among individual components.

**Blueprint for Excellence.** Blueprint for Excellence is a series of strategies and actions designed as the framework for a major transformation of the Veterans Health Administration (VHA) to a health-care system where veterans come first, and where timely, high-quality health care is provided consistently that will help VA rebuild trust, improve service delivery and set a course for long-term excellence and reform. It includes four themes and 10 essential strategies

intended to address the current performance of VHA, developing a positive service culture, transitioning from sick care to health care, developing agile business systems and management processes. (Veterans' Health Administration, 2014).

The themes and strategies of the Blueprint for Excellence are aligned with those of the Baldrige criteria and success characteristics of high performing microsystems.

*Theme 1:* Improve performance is aligned with the patient focus, information & information technology, performance results and process improvement characteristics of microsystems and leadership, organizational strategy, customers, measurement, analysis and knowledge management, workforce, operations/process management and results in the Baldrige criteria.

*Theme 2:* Promote a positive culture of service is aligned with patient focus, staff focus, and education and training characteristics of microsystems and customer, measurement, analysis and knowledge management and workforce in the Baldrige criteria.

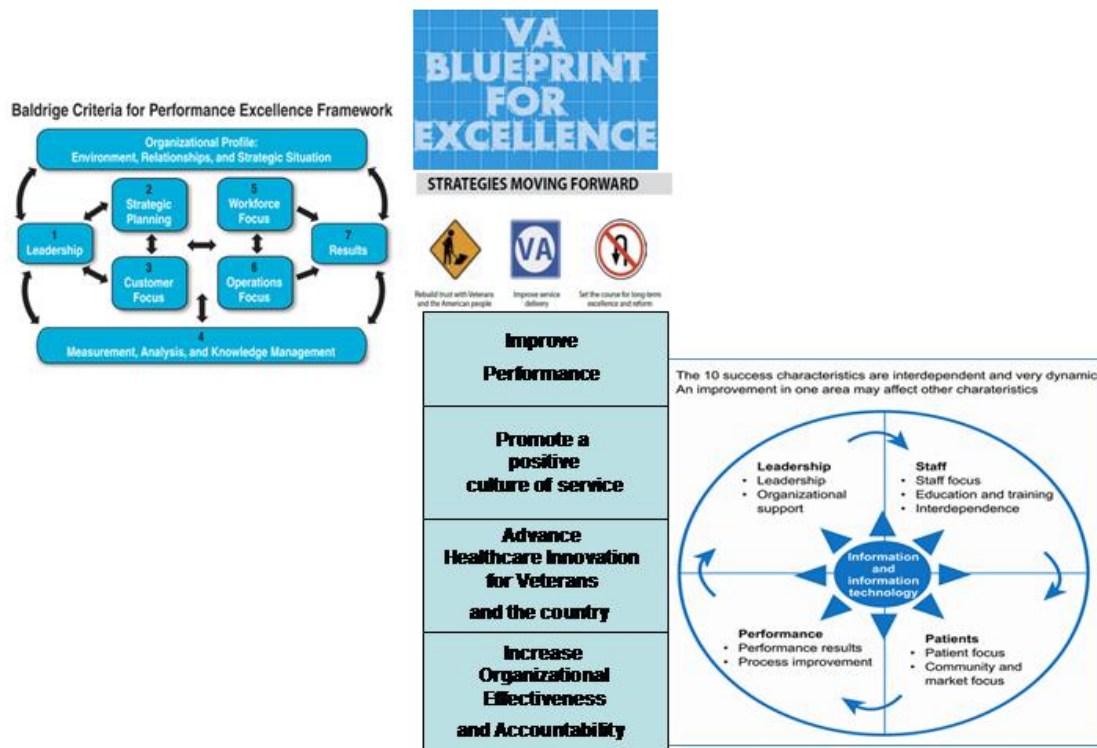
*Theme 3:* Advance Healthcare Innovation for Veterans and the country is aligned with information & information technology, patient focus, and interdependence characteristics of microsystems and organizational strategy, customers, measurement, analysis and knowledge management, workforce, operations/process management and results in the Baldrige criteria.

*Theme 4:* Increase Organizational Effectiveness and Accountability is aligned with Leadership, organizational support, performance results, process improvement and information & information technology in the microsystems model and organizational strategy, customers, measurement, analysis and knowledge management, workforce, operations/process management and results in the Baldrige criteria.

Figure 1 illustrates the three frameworks and overlap of the models. The Baldrige framework is the overarching framework for any organization, the VA Blueprint is specific to

one organization and the clinical microsystem is the framework to translate the excellence models to the frontline of care.

Figure 1



### Coach the Coach Model

The foundations of Coach the Coach (eCTC) coaching model are clinical microsystems, systems of profound knowledge and coaching as helping. While Quinn (1992) found that senior leadership in the successful service sector industries focused on the smallest replicable unit that was not the case in healthcare. Healthcare leaders did not make the connection of the microsystem excellence and organizational excellence. Whereas healthcare has traditionally relied on professional knowledge to make improvements, this knowledge alone is not enough for the transformational changes needed in today's healthcare system. Deming's System of Profound

Knowledge (Deming, 1993) provides a framework to help make the connection between the microsystem and the large organization (macrosystem).

Deming's System of Profound Knowledge brings knowledge of quality, management and leadership into four interrelated areas: appreciation for a system, knowledge of variation, theory of knowledge and psychology. (<https://www.deming.org/theman/theories/profoundknowledge>). Components of this system are embedded in improvement work. A system, as a network of interdependent components that work together to try to accomplish the aim of the system, is describing microsystems within an organization. Distinguishing between normal and special cause variation, as well as understanding its causes and predicting behavior, is critical to being able to identify and remove barriers in the system. Theory of knowledge says learning needs to be continual and organization-wide. Theories need to be developed, applied and tested to advance knowledge such as PDSA cycles, which are the basis for improvement models (Deming 1993; Langley, Nolan, Nolan, Norman & Provost 1996). The final body of knowledge psychology deals with understanding people, what motivates them and makes them want to do a good job. Management's job is to create an environment of trust, relationships, interdependence and pride of workmanship. Over 80% of the reported benefit of coaching was related to the personal experience of learning and practicing improvement (Godfrey, Thor, Nilsson, & Andersson, 2013). Group perspectives in collaboratives described the category of helping as the most beneficial (Godfrey, 2013). Schein (2001) describes helping as a complex phenomenon, a social process, with some help being helpful and some not. He suggests that the "problematic dynamics of the helping relationship can be ameliorated by engaging in an active but humbling inquiry process" (Schein, 2011, p. 83). Coaching as helping is based on the work of Edgar Schein's ten essential principles of process consulting and humble inquiry (Schein, 2011, 2013).

Schein describes helping as a complex phenomenon, a social process, with some help being helpful and some not.

## **Methods**

### **Intervention**

Five Nurse Managers from the acute care division of the VA Boston Healthcare System their direct supervisor and myself, attended the Coach the Coach (eCTC) program sponsored by The Dartmouth Institute Microsystem Academy.

Coach The Coach (eCTC) is a five (5) month intensive, dynamic, and highly interactive experiential learning series blending electronic and face-to-face formats to develop team coaching knowledge, skills, and abilities. Central to eCTC is "The Team Coaching Model" with three phases of coaching activities. This team coaching model is unique and specific to groups of interdisciplinary healthcare professionals interested in making improvements in healthcare and is used to assist the participants to grow and develop in their coaching role. As part of the program, each nurse manager coached an improvement team from another unit. Two of the managers coached a team with only nursing staff members and three coached teams with interdisciplinary team members.

The overall aim of eCTC is to improve value, safety and quality of healthcare outcomes through development of team coaching knowledge, skills and abilities to coach front line interdisciplinary clinical and supporting microsystems with knowledge, processes, and tools including the Dartmouth Microsystem Improvement Curriculum.

Expected outcomes of the program are development of

- Knowledge and skills in Clinical Microsystems fundamentals.

- Knowledge, skills and abilities in the art and science of coaching interdisciplinary healthcare groups to engage in healthcare improvement and improve group dynamics.
- A coaching plan for personal and professional development in coaching front line groups in healthcare improvement to result in improved outcomes for patients, families, staff and organizations. (<https://clinicalmicrosystem.org/ecoach-the-coach>)

### **Study of the intervention**

This is a mixed method study using a survey tool (quantitative) and focus group (qualitative). Mixed methods is “research in which the investigator collects and analyzes data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p.4).

Advantages of a mixed method approach include complementarity, practicality, incrementality, enhanced validity and collaboration (Polit & Beck, 2012). In this study, a mixed method approach was chosen because the finding from one approach (quantitative) can be greatly enhanced with a second source of data (qualitative). This study used an explanatory design with the quantitative data collected in the first phase followed by the qualitative data. The qualitative data from the second phase were used to build on or explain the quantitative results from the first phase (Polit & Beck, 2012).

### **Aims**

The global aim of this project was to evaluate the impact of a team coaching model intervention on Nurse Managers' leadership development through enhanced knowledge and skill in quality improvement and outcomes of care. Sub aims of this project were (1) to evaluate the change in knowledge, abilities and skills over time and (2) to describe themes of leadership



development from participants who have completed the program via final coaching development plans and focus group.

**Sample**

Convenience sampling was used with the same participants in both components of the study. Nurse Managers in the acute care setting of the VA Boston Healthcare System were advised of the opportunity to attend the program and the first five who volunteered were selected.

**Evaluation**

A modified Quality Improvement Assessment (QIA) was used to evaluate the effect of this team coaching model intervention on Nurse Managers' knowledge and skill in quality improvement and outcomes of care. As part of the eCTC program, Nurse Managers consented to complete the tool online before beginning the program, at the end of the program and 6 months after completion of the program. The aim of this survey was to track changes in improvement knowledge and skills related to the coaching program. The data was obtained from The Dartmouth Institute Microsystem Academy who administered the surveys and final deliverable documents of the program. Consent of the Nurse Managers for the release of the information to be used for this study was obtained.

For the focus group portion of the evaluation, a moderator guide was developed with a semi structured interview approach aimed at understanding the Nurse Manager's perspective of the impact of the program and their experience in coaching an improvement team. An independent moderator led the 60-minute discussion. The participants were informed that the session was voluntary and choosing not to participate would have no impact on their Nurse Manager role. The session was recorded to assist in the transcription of the themes and

perspectives of the focus group. The use of a focus group moderator instead of my conducting the focus group was an attempt to decrease any bias or hesitancy of open conversation. The group was informed that I would be reviewing the transcript of the discussion which have impacted their responses.

### **Ethical considerations/Human Studies**

Prior to commencing the project, ethical clearance was sought from the VA Boston Healthcare System Institutional Review Board (IRB). Since this is a quality improvement project, it was exempted from full IRB review to complete the study. Before being considered for publication, it will be submitted to the IRB. One of the potential risks included the power relationship between the author and participants. In addition, the focus group digital recordings might result in directly or indirectly identifying the individual participants. An independent focus group moderator was used to minimize potential bias. Informed consent was obtained from all participants and the digital recordings were transcribed by 3Play Media, an online transcription service, prior to being analyzed.

### **Measures/Method of Evaluation**

The survey data, final coaching development plan documents and team coaching experience reflections, originally collected by the Dartmouth Institute, were maintained in an electronic file by the author, backed up on a thumb drive. The password protected files were sent to the author from the Institute via email; the password was sent in a separate email message. The information was only used by the author(s) for the purpose of this study. The survey was completed at the beginning of the program, the completion the program and 6 months after completion. The Internet survey link was distributed to each Nurse Manager who participated in the program.

**Quantitative.** All five Nurse Managers completed the surveys at the pre-intervention and post intervention period. Only three of the Nurse Managers completed the pre, post and 6 month surveys. Because of this the data was reviewed as two sets, one with 5 participants and 2 points of time and one with 3 participants and 3 points in times. The responses in the pre coaching group were coded as “p” responses, the post coaching group were coded as “r” responses and the after 6 months’ group were coded as “s” responses. IBM SPSS Version 21.0 was used to analyze the quantitative data. For the surveys completed by all Nurse Managers (pre/post) the quantitative analysis of the surveys was reported for each item at the descriptive level, and differences between the two points in time were analyzed using Wilcoxon signed ranks test. It is used to compare two sets of scores that come from the same participants and is used to investigate changes in scores from one point in time to another.

A p-value  $\leq 0.05$  was considered statistically significant. The responses were grouped into categories.

Opinion N=2

Improvement Skills and Tools N=23

Measurement Skills and Tools N=12

Relationships/Communication N=8

The second set was analyzed using repeated measures ANOVA. This test is selected to determine changes over time at three or more data points. Variables where data was missing were eliminated; with only three points of time, any missing data resulted in less than 3 points of measure. A p-value  $\leq 0.05$  was considered statistically significant. The responses were grouped into similar categories.

Opinion N=2

Improvement Skills and Tools N=22

Measurement Skills and Tools N=10

Relationships/Communication N=8

**Qualitative.** Final deliverable documents were analyzed using an iterative process, coding for concepts. The data from the quantitative and final deliverable documents' analysis informed the moderator guide for the focus group. The moderator guide served as a framework to determine the perspectives of the participants of the coaching program with the goal of getting responses to predetermined questions. The exploratory approach involved reading and re-reading, coding the data and interpreting themes emerging from the data. The qualitative analysis of coding and condensing data to create categories and themes of the focus group transcript was performed by the author and the moderator independently in the first round. They then shared their findings and discussed any discrepancies and reached agreement on the categories and themes. The author and moderator addressed the difficulty with coding data from a small number of participants which is discussed in the limitations section. The author and moderator reviewed the text to identify patterns and categories, and then synthesized them into three main themes. The creation of categories and themes was performed by the author and moderator (JC and DG) independently to strengthen the validity of the analysis (Krippendorff, 2013).

## **Results**

### **Quantitative**

The Wilcoxon signed-rank test showed that at the completion of the program, there were statistical differences in some of the variables, mainly in the improvement skills and measurement groups. There were no significant differences in the opinion or relationship groups

of variables. There was significant change in 12/23 responses in the skills group and 4/12 responses in the measurement group.

### Improvement Skills and Tools

Table 1

Test Statistics <sup>a</sup>																						
r4 - p4	r5 - p5	r6 - p6	r8 - p8	r9 - p9	r10 - p10	r11 - p11	r12 - p12	r13 - p13	r14 - p14	r15 - p15	r16 - p16	r17 - p17	r19 - p19	r20 - p20	r21 - p21	r22 - p22	r23 - p23	r24 - p24	r27 - p27	r28 - p28	r29 - p29	r30 - p30
.458	.038	.038	.059	.059	.041	.038	.063	.038	.059	.038	.025	.038	.046	.066	.083	.083	.046	.039	.059	.063	.059	.034

The variables with significant differences are indicated the table below.

Table 2

mean pre	mean post	significance
2.8	4.2 Use brainstorming and multi voting in meetings	0.038
1.6	4 Assess the 5Ps	0.038
1.8	3.6 Create process maps (flow charts)	0.041
2.4	4 Develop specific aim statements	0.038
2.4	3.8 Identify evidence-based practice for change ideas	0.038
2	3.6 Develop PDSA cycles (Plan-Do-Study-Act)	0.038
1.4	3.6 Develop SDSA cycles (Standardize-Do-Study-Act)	0.025
1.4	2.8 Create plays for playbooks (Standard operating procedures)	0.038
2.2	3 Use LEAN improvement knowledge and tools	0.046
1.2	2.8 Create and use driver diagrams, including outcome measures	0.046
1.2	3.2 Mesosystem Improvement including feed forward and feedback data	0.039
1.2	3.6 Explore the Ladder of Inference	0.34

### Measurement Skills and Tools

Table 3

Test Statistics <sup>a</sup>											
r31 - p31	r32 - p32	r33 - p33	r34 - p34	r35 - p35	r36 - p36	r37 - p37	r38 - p38	r39 - p39	r40 - p40	r41 - p41	r43 - p43
.059	.041	.357	.038	.063	.039	.059	.059	.066	.039	.066	.357

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

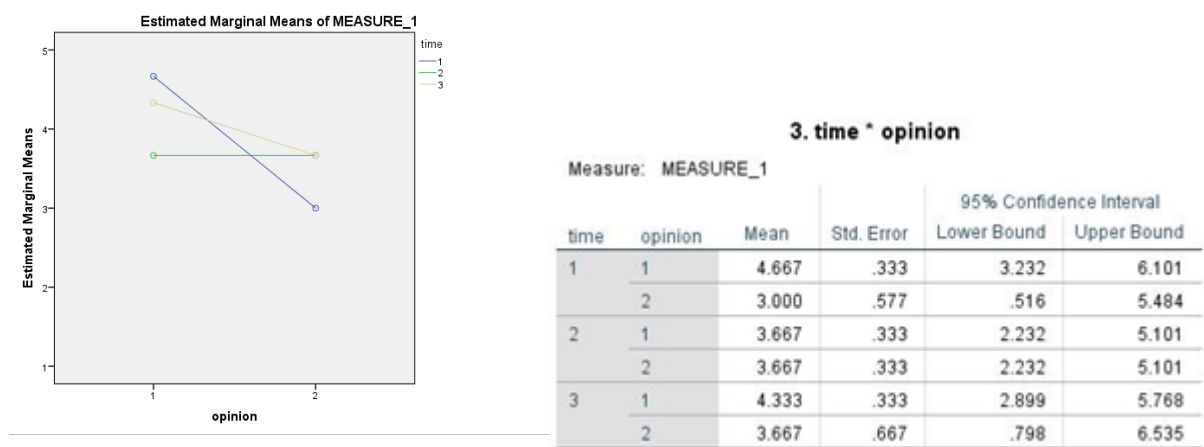
Table 4

mean pre	mean post		significance
1.8	3.6	Use Microsoft Excel (basic / fundamental skills)	0.041
1.6	4	Collect data using tick and tally sheets	0.038
1.4	3.4	Differentiate process, outcome, and balanced measures	0.039
1.2	3.4	Create and interpret Data walls and Dashboards to track improvement over time	0.039

In the analysis of the data of all three points of time (pre (time 1), post (time 2) and 6 months post (time 3), a repeated measures ANOVA determined there were no significant differences in the opinion or relationships/communication groups of variables. There were significant differences in the skills and measurement groups. In the skills group there was a significant difference between time 1 and time 2 and time 1 and time 3. There was no significant difference between time 2 and time 3. Similar to the analysis of the pre/post data, summary of the means at each point in time for the three Nurse Managers who completed all of the surveys demonstrate improvement mainly in the skills and measurement groups.

### Opinion

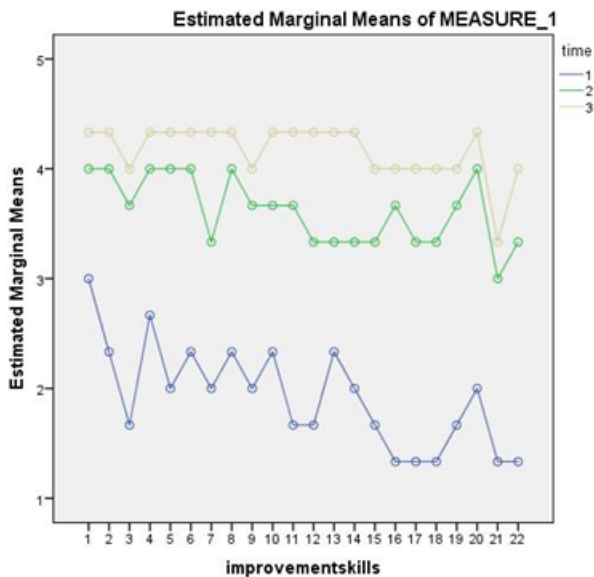
Figure 2



## Improvement Skills and Tools

There are significant differences between T1 and T2 and Time 1 and Time 3. There is no significant difference between T2 and T2.

Figure 3



## Pairwise Comparisons

: MEASURE\_1

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	-1.697 <sup>*</sup>	.121	.005	-2.219	-1.175
	3	-2.242 <sup>*</sup>	.169	.006	-2.968	-1.516
2	1	1.697 <sup>*</sup>	.121	.005	1.175	2.219
	3	-.545	.262	.173	-1.675	.584
3	1	2.242 <sup>*</sup>	.169	.006	1.516	2.968
	2	.545	.262	.173	-.584	1.675

Based on estimated marginal means

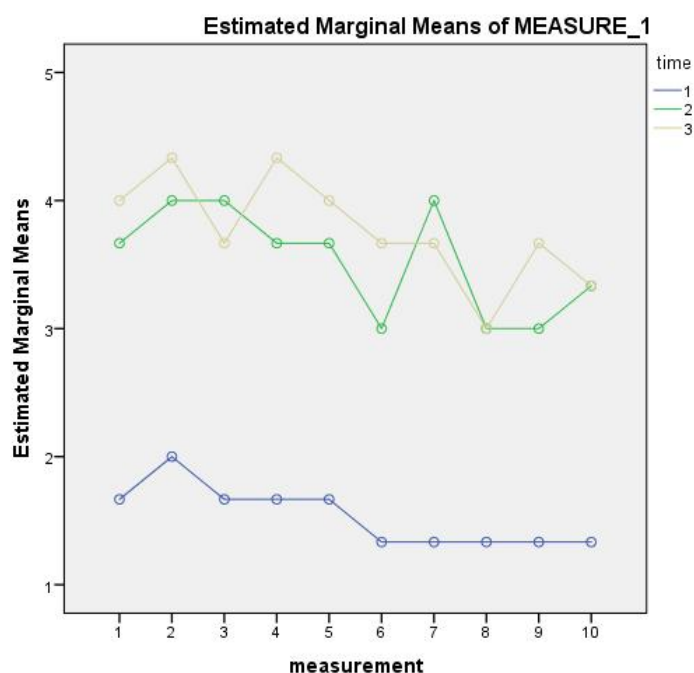
\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

## Measurement Skills and Tools

There was a significant difference between T1 and T2 ( $p=.001$ ). With such a small sample size, the difference of T1 and T3 is significant ( $p=.051$ ) although slightly above the benchmark of  $\leq .05$ .

Figure 5

**Pairwise Comparisons**

Measure: MEASURE\_1

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
1	2	-2.000*	.058	.001	-2.248	-1.752
	3	-2.233	.524	.051	-4.487	.021
2	1	2.000*	.058	.001	1.752	2.248
	3	-.233	.536	.706	-2.541	2.075
3	1	2.233	.524	.051	-.021	4.487
	2	.233	.536	.706	-2.075	2.541

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

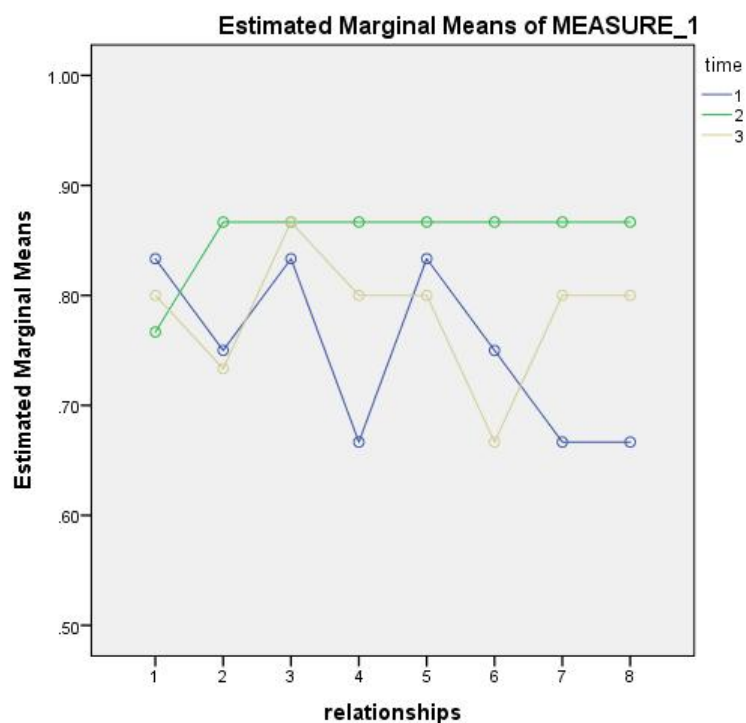
b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).



## Relationships/Communication

There was no significant difference in the relationships/communication group as a whole. However, there were some significant differences in individual variables.

Figure 6

**Pairwise Comparisons**

Measure: MEASURE\_1

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
1	2	-.104	.031	.077	-.236	.028
	3	-.033	.083	.727	-.391	.324
2	1	.104	.031	.077	-.028	.236
	3	.071	.053	.314	-.158	.300
3	1	.033	.083	.727	-.324	.391
	2	-.071	.053	.314	-.300	.158

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

The table below illustrates the summary of the findings and change over time (Table 5).

Pre	Post	6 months		Time1-Time2	Time2-Time3
4.67	3.67	4.33	How important do you consider continuous quality improvement in your professional work?	↓	↑
3.00	3.67	3.67	How confident are you that you can make a change to improve health care in your clinic?	↑	–
3.00	4.00	4.33	Use effective meeting skills (timed agendas/assign meeting roles)	↑	↑
2.33	4.00	4.33	Use brainstorming and multi voting in meetings	↑	↑
1.67	3.67	4.00	Assess the 5Ps	↑	↑
2.67	4.00	4.33	Use data to determine improvement theme	↑	↑
2.00	4.00	4.33	Create process maps (flow charts)	↑	↑
2.33	4.00	4.33	Develop specific aim statements	↑	↑
2.00	3.33	4.33	Create Fishbones (Cause & effect diagrams)	↑	↑
2.33	4.00	4.33	Identify evidence-based practice for change ideas	↑	↑
2.00	3.67	4.00	Adapt SmartChange Ideas to make improvements	↑	↑
2.33	3.67	4.33	Develop PDSA cycles (Plan-Do-Study-Act)	↑	↑
1.67	3.67	4.33	Develop SDSA cycles (Standardize-Do-Study-Act)	↑	↑
1.67	3.33	4.33	Create plays for playbooks (Standard operating procedures)	↑	↑
2.33	3.33	4.33	Use LEAN improvement knowledge and tools	↑	↑
2.00	3.33	4.33	5S (Sort, Set, Shine, Standardize, Sustain)	↑	↑
1.67	3.33	4.00	Value stream mapping	↑	↑
1.33	3.67	4.00	Create workflow diagrams/spaghetti diagrams	↑	↑
1.33	3.33	4.00	Create and use driver diagrams, including outcome measures	↑	↑
1.33	3.33	4.00	Mesosystem Improvement including feed forward and feedback data	↑	↑
1.67	3.67	4.00	Manage up in the health care organization	↑	↑
2.00	4.00	4.33	Use observation skills	↑	↑
1.33	3.00	3.33	Conduct Force Field Analysis	↑	↑
1.33	3.33	4.00	Explore the Ladder of Inference	↑	↑
1.67	3.67	4.00	Define measures (conceptual & operational definitions)	↑	↑
2.00	4.00	4.33	Use Microsoft Excel (basic / fundamental skills)	↑	↑
1.67	4.00	3.67	Collect data using tick and tally sheets	↑	↓
1.67	3.67	4.33	Develop a data collection plan	↑	↑
1.67	3.67	4.00	Differentiate process, outcome, and balanced measures	↑	↑
1.33	3.00	3.67	Create clinical value compass	↑	↑
1.33	4.00	3.67	Create and interpret Run Charts	↑	↓
1.33	3.00	3.00	Create and interpret Statistical Process Control Charts (p Charts, XmR charts)	↑	–
1.33	3.00	3.67	Create and interpret Data walls and Dashboards to track improvement over time	↑	↑
1.33	3.33	3.33	Determine when to transition to “audit” of measures	↑	–
0.83	0.77	0.8	I am confident in my ability to elicit others’ perspectives.	↓	↑
0.75	0.87	0.73	I am distinguish between interests and positions.	↑	↓
0.83	0.87	0.87	I am able to recognize resistance in team members.	↑	–
0.67	0.87	0.8	I am confident in my ability to use reflection in responding to resistance in team members.	↑	↓
0.83	0.87	0.8	I am comfortable giving negative feedback.	↑	↓
0.75	0.87	0.67	I am confident in my ability to manage my emotions in the face of conflict.	↑	↓
0.67	0.87	0.8	I am confident that I can help team members manage their emotional reactions in the face of conflict.	↑	↓
0.07	0.87	0.8	I am confident in my ability to apply conflict management skills to situations involving upset or angry colleagues.	↑	↓

## Qualitative

Final deliverable documents from the coaching program consisted of a self-evaluation scale, self-development action plan and team coaching experience reflections. The first part of the self-evaluation asked the participants to rate on the scale (0-10) where you thought you started in coaching interdisciplinary professionals at the beginning of eCTC and where you think you are on the scale at the end of eCTC.

Participant	Before	After
A	4	8
B	2	4
C	1	5
D	2	3
E	2	7
Median	2	5

The text from the eCTC Final Coaching Development Plan and Team Coaching Experience Reflection were analyzed by the author using an iterative approach to determine themes. Themes that emerged from this iterative process were: (1) learning to listen or “sit on my hands” and not jump in to fix things, (2) effective meeting skills, (3) using the skills learned to improve on the unit and within the system, (4) time and scheduling were challenging and (5) coaching is not easy. The theme of learning to listen transcended from the coaching role to something used in daily practice. “I’ve learned that you have to stop yourself from interrupting when you think you know what the other person is saying—wait until he/she is finished speaking and then repeat back what you think you heard to learn if it’s the same message that the other person was trying to convey. I’ve also learned to solicit thoughts from each member of the group about what they are comfortable with and what they feel they would like to improve on personally, i.e. being more or less outspoken”. “The best part of this coaching experience was: Learning to listen and not make assumptions. Have faith in others.”

A challenge frequently noted was time. “Patient acuity along with high census were definite factors in maintaining regular meetings” and “our pace was most impacted by the fact that our group is comprised of healthcare workers that could not always leave the bedside when scheduled to” illustrate this. “Coaching is an art- difficult to teach the concept of coaching as in there is no step 1 step 2 step 3 (which we often like in nursing), although having set steps in process improvement (ramp) helps keep things structured”.

Effective meeting skills were something most felt was a skill they would continue to use. “The biggest thing I learned was effective meeting skills. I know that might seem small but it has made a huge impact in my professional career already. I had never seen a meeting run so well and the practice and skills we got in New Hampshire at the Dartmouth Institute were so beneficial”.

Four of the Nurse Managers participated in the focus group that occurred 8 months after the program was completed. The transcript of the focus group with Nurse Managers was analyzed in a similar fashion as the final deliverable documents however as noted previously both the author (JC) and the focus group moderator (DG) initially analyzed the text separated and then compared and validated the findings. Discrepancies in codes and categories were minor and discussed by the author and moderator and both concurred with the final categories and themes. Although managers found the program helpful and continued to use some of the skills they learned in their day to day practice, they did not feel that they had many opportunities to practice as coaches. Skills mentioned by the Nurse Managers as being used were effective meeting skills, listening, and allowing the team to do the work. Frequently referenced barriers included time and variability in workflow on the unit. A benefit acknowledged by all four Nurse Managers was improvement in listening skills. “Sitting on my hands” a phrase used in the

program to describe taking no action was a difficult but rewarding skill. “I think a lot of us in our role as managers; we kind of are used to giving people the answers and not doing as much listening”. Themes that emerged from the focus group were (1) structure, accountability and encouragement (2) personal leadership skill development and (3) the art and science of coaching was not infused into the day to day work of the nurse manager.

Table 6

Codes	Categories	Themes
Better preparation upfront	Areas of improvement	Structure/Accountability/Encouragement
Ongoing support and education		
Continued communication with other coaches		
Coaching fallen by the wayside	Current state of practice	Coaching not infused into day to day work of the nurse manager as a general leadership skill
Could be doing more with coaching		
Not making changes to improve things		
Coaching improvement not a huge responsibility	Incorporating/use in Practice	
Use some skills/Might not use every skill learned on a consistent basis		
Difficult to incorporate into day to day management		
Lack of time is a major barrier		
Not as stressful for managers as those who have improvement as their primary role	Personal behavioral changes/view since attending the program	Personal Leadership skill development
Using effective meeting skills		
Allowing staff to develop and drive improvement		
Improved communication		
Developing leaders	Staff Involvement	
Pushed out of comfort zone		
Staff engaged/leading initiative		
Pride in work/feeling valued	Coaching experience	
Varied commitment from team		
Challenging to coach other disciplines/teams		

Cannot predict if use of coaching was warranted based on the demands of the unit		
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The Nurse Managers have empowered and encouraged front line staff to lead improvement efforts and the staff has responded positively. “My morale in my unit's a lot better. There's a lot more engagement. I don't know if that's related to this, but we have been putting the onus more on them of, these are issues you bring up, how we can fix them. You need to bring your own ideas, instead of us just telling you what to do. And it has improved. I never linked it to this, so I don't know if that's with this or not.” “And I see so much ownership, and they actually care about the results of this and care about how it's working on the unit, because they're the ones that are leading it. So that's the biggest thing that I've seen on my unit, is the things that my unit based council are doing, are what's important to them, and they're the ones doing the leg work and deciding how to implement it with the input from the rest of the staff. So they're really owning more of the results and how it's working”. “They’re proud when they put it in their proficiency.

Effective meeting skills, noted in the final deliverable documents, continued to be a useful skill identified in the focus group. “And that's something that I've never seen in another coaching program that I think is the most beneficial, is the effective meeting skills”. “Yeah, again, the effective meeting skills, I think we all agree on”. “Well for me, I think my meeting skills are better. When I hold meetings, I'm much more structured. “Thought it was definitely worthwhile, and although I might not use every skill that we learned from it on a consistent basis, there are some of the bigger skills like the effective meeting skills. I'm sure that we've mentioned that a million times, but I use that very frequently.”

Coaching is viewed as an activity and not necessarily part of day to day practice. In response to the survey request (6 months post) one of the managers noted “So I gave my feedback, but I think that it was a good reminder to continue on with my formalized coaching, and not just the bits and pieces of it that I've continued with, such as effective meeting skills, but really the entire compass coaching piece of it.” “I mean, we did learn some nice skills, but the program itself we definitely will not carry a lot of with us.” “It's not a huge responsibility for us. It's not going to make or break our career or our job, but I think that the tools that we used definitely can help us going forward in our careers.” Nurse Managers are caught up in the day to day chaos, “time, responsibilities, the day to day managing your units” and coaching for improvement is not viewed as infused in their daily practice. “And I mean, that's a problem with the position of Nurse Manager, is sometimes you can't think more than day to day, when your staffing's down, or there's a crisis, or whatever's going on. But I feel like now, with four years of Nurse Manager experience, I have more time to do some.” I would interpret this to mean that, with experience, the nurse manager now is able to be more proactive and less reactive.

### **Discussion and Interpretation**

#### **Significance/Implications**

Drawing conclusions from a small sample is difficult but the mixed methods design allowed for a robust source of information from a small sample. Discussions from the focus group enhanced and supported the findings from the survey data. The finding of the relationship/communication group not showing sustained improvement over the 3 points of time when there was initial improvement indicates a need for structure to sustain or continue to improve. Sustainability of any change is challenging even when the initial benefit has been realized. Processes and systems need to be in place to support the new process. The initial and

sustained improvement in the skills and measurement group combined with the initial improvement and subsequent decrease or leveling off in the relationship group suggests a need to support Nurse Managers to continue to infuse the learning into daily practice. Examining lived experiences and reflection have the potential to enhance the Nurse Manager's preparation to cultivate front line improvement capability (Horton-Deutsch & Sherwood, 2008; Stiles, Horton-Deutsch, & Andrews (2014)).

In the eCTC model, coaching is helping the team to understand their microsystem, determine what is important for that microsystem and figure out how to bring excellence to their unit. Ownership and accountability for the outcomes of the unit lie with the members of the microsystem. The coach's role is to support their ability to be independent in continuous improvement. This is how the Nurse Manager cultivates front line capability.

When the Nurse Managers were in the coaching program they carved out time to actively coach a team, practice what they were learning and share with other coaches in training. After the formal process ended, it was difficult for them to continue without a formalized structure. Nurse Managers spoke of being pushed out of their comfort zone and having difficulty coaching others who they did not supervise or from other disciplines. Although some coached interdisciplinary teams the nurse manager as a coach as opposed to the leader was a new concept. They need support to help them practice what they have learned so that it becomes comfortable. Learning organizations challenge employees to be a part of the results and provide the structure to do so. Moreover, the learning organization structure is multi-tiered with support and responsibilities at each level (Hiscock & Shulldham, 2008; Casida, J & Pinto-Zipp, G., 2008).

Nurse Managers have a responsibility for their own life-long learning, incorporating new knowledge and skills into practice and creating the conditions where front line staff can flourish,



grow and own the safe quality care they provide. Senior nursing leaders have a responsibility for creating the conditions where Nurse Managers can own the outcomes of the microsystem they lead and have the resources to do so. The organization has a responsibility for supporting the culture of a true learning organization. In addition, in this case, the Dartmouth Institute Microsystem Academy has a responsibility for providing ongoing communication, updates and a way to keep graduates of the eCTC program connected.

Nurse Managers need to blend soft skills and outcomes. Healthcare improvement is both an art and a science. Nurse Managers who completed the coach the coach program demonstrated significant and sustained differences in knowledge, skills and abilities in those elements associated with the science of improvement but less so in those associated with the art of improvement (communication and relationships). These skills are more about personal interactions and are intangible and hard to measure. The fact that they increased between time 1 and 2 but then dropped or stayed the same could be related to the fact that Nurse Managers were not assimilating the tools they used in coaching in their daily practice. Listening to others, asking for feedback from the team and getting feedback from other coaches, all practiced during the program, are techniques that support the development of relationship skills.

Although Nurse Managers described coaching as something apart from their daily practice, they also spoke of using some of the skills in their day to day management, most notably effective meeting skills. The knowledge and skills gained using the reflective team coaching model served as a leadership tool for Nurse Managers to cultivate front line quality and safety improvement capability. Nurse Managers discussed engagement and ownership of front line staff, a sense of pride in doing the work, and caring about the results because they are leading the effort. Without realizing it, they are describing the impact of cultivating front line

quality and safety improvement capability. The ability to “sit on your hands” and allow the ideas and solutions to bubble up from the front line is something that Nurse Managers found gratifying and encouraged front line staff to take ownership for their work.

Teams need help in identifying and solving the problems in their own units. “Frontline staff reported that they needed help to balance providing care and improving care” (Godfrey, 2013, p3). Nurse Managers also need help in achieving that same balance. The day to day business of the units shifts the balance towards providing care but, without the improving care component, Nurse Managers miss the opportunity to optimize the efficiency and effectiveness of care processes on their unit. Inefficient care processes frequently contribute to the frustration of front line staff.

Nurse Managers are the connectors in an organization. Batalden (personal communication, 10/23/14) described how the Nurse Manager has to keep connecting or help others make connections for the benefit of the patient. The Nurse Manager must have the skills to understand how to connect the organization and unit work.

### **Limitations**

Although all five managers completed the pre and post surveys, only three of the managers completed the 6-months post completion survey. Thus changes over three points in time could not be fully evaluated with all five participants. The two sets of data (2 points in time, 3 points in time) were analyzed separately. One of the managers was unable to participate in the focus group and this was noted in the analysis. Coding for themes was challenging because the small sample size made it hard to determine repetition of statements. The author (JC) and moderator DG) agree that reading and re-reading the transcript helped in this process. In the survey data, the response scale was changed between periods 1 and 2 on the variables related to relationships/communication. In the first survey, responses were on a 4- point scale and on the second survey were on a 5-point scale. This was corrected using a percent of

maximum conversion. The small sample size contributed to difficulty in drawing conclusions from the quantitative data but there was rich information within the qualitative data, which enhanced the conclusions. Nurse Managers may not have been full truthful and open to answers to survey questions and focus group questions due to the author's senior nursing leadership role.

### **Conclusion**

Leaders at all levels can influence improvement at the front lines of care. A reflective team coaching model is beneficial to the leadership development of Nurse Managers but must be combined with an organizational structure that supports continued feedback, reinforcement and application of the knowledge into practice. Creating a culture where improvement work truly becomes part of what we do is possible but takes commitment and help from all leadership levels.

### **Implications for practice**

Nurse Managers need a variety of tools to be successful in managing and leading their units. Reflective team coaching is an effective leadership tool for Nurse Managers to gain knowledge and skills in the science of improvement and develop skills in the art of improvement within the context of a supportive culture. The skills associated with the art of improvement, communication and relationships are ones that are useful in many situations involving group dynamics. Incorporating reflective team coaching into leadership development plans for Nurse Managers can assist in cultivating front line quality and safety improvement capability.

### **Recommendations for future study**

Future study in evaluating this intervention could include adding a structured plan within the organization for continuing to support Nurse Managers through and beyond the team

coaching program and evaluating improvement results through and after the phases of team coaching.

### **Acknowledgements**

Many thanks to my DNP project team, Brant Oliver, Marjorie M. Godfrey and Cecilia McVey for offering guidance, mentorship and support throughout this project. Thanks to Donna Glynn for assisting with the focus group and the IRB process and Tony Guarino for his assistance in the statistical analysis of the data. In addition, a special thanks to the Nurse Managers who participated in support of helping other Nurse Managers.

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## Appendices

### Team Coaching Model

 <p>THE Dartmouth INSTITUTE FOR HEALTH POLICY &amp; CLINICAL PRACTICE GEORGE SCHOOL OF MEDICINE AT DARTMOUTH</p>	<h1>Team Coaching Model</h1>		 <p>microsystem academy</p>
<b>Pre-Phase</b> <i>Getting Ready</i> <i>"Meeting them where they are"</i>	<b>Action Phase</b> <i>Art &amp; Science of Coaching</i>	<b>Transition Phase</b> <i>Reflection, Celebration &amp; Renew</i>	
<ul style="list-style-type: none"> <li><b>*Context</b> <ul style="list-style-type: none"> <li>-Review of past improvement efforts and lessons learned-tools used</li> <li>-Preliminary system review-Micro/Meso/Macro</li> </ul> </li> <li><b>*Site Visit</b></li> <li><b>*Resources(data)</b></li> <li><b>*Logistics (time)</b></li> <li><b>*Expectations</b> <ul style="list-style-type: none"> <li>-Clarity of aim</li> <li>-Leadership &amp; Team discussions about roles and logistics</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>*Relationships</b> <ul style="list-style-type: none"> <li>-Helping</li> <li>-Keep on track</li> </ul> </li> <li><b>*Communication</b> <ul style="list-style-type: none"> <li>-Virtual</li> <li>-Face-to-Face</li> <li>-Available &amp; accessible</li> <li>-Timely</li> </ul> </li> <li><b>*Encouragement</b></li> <li><b>*Clarifying</b> <ul style="list-style-type: none"> <li>-Improvement Knowledge</li> <li>-Expectations</li> </ul> </li> <li><b>*Feedback</b></li> <li><b>*Reframing</b> <ul style="list-style-type: none"> <li>-Different perspectives</li> <li>-Possibility</li> <li>-Group dynamics-new skills</li> </ul> </li> <li><b>*Improvement Technical Skills</b> <ul style="list-style-type: none"> <li>-Teaching</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>*Reflection on improvement journey</b> <ul style="list-style-type: none"> <li>-What to keep doing or not do again</li> <li>-Review measured results and gains</li> <li>-Assess team capability and coaching needs &amp; create coaching transition plan</li> </ul> </li> <li><b>*Celebration!</b></li> <li><b>*Renew and re-energize for next improvement focus</b></li> <li><b>*Evaluate coaching</b></li> </ul>	
			<i>Godfrey, MM (2013)</i>



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## Coaching Knowledge, Ability and Skills Assessment and Development Tool

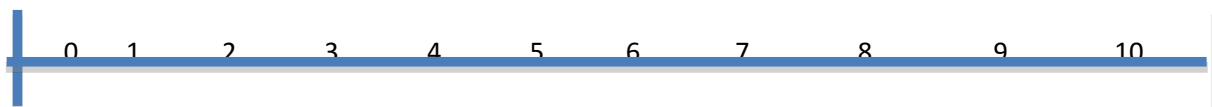
### eCTC Final Coaching Development Plan and Experience Summary

#### eCTC Final Coaching Development Plan

**Name:**

**Purpose:** Plan for continued learning as you develop your coaching capabilities and apply The Team Coaching Model. Create a personal development plan based on your reflections and future development goals.

1. Rate yourself on the scale below place an "X" where you thought you started in coaching interdisciplinary professionals at the beginning of eCTC and a "Δ" where you think you are on the scale at the end of eCTC.



**Comments about your ratings**

**Where you started as a coach:**

**Where you are now as a coach:**

***The following provides guidance for some strategies to develop your coaching skills.***

*Read about coaching and other areas of interest. Reflect, write and discuss with others about coaching. Assess your style and communication skills. Practice coaching and reflect. Evaluate your interactions. Question yourself and others.)*

2. Specify action steps for your continuous learning as a coach. Complete the sentences below to generate a self-development action plan.

1. I will discuss...
2. I will assess...
3. I will read...
4. I will reflect...
5. I will write...
6. I will question...
7. I will practice...
8. I will evaluate...

3. Review the Coaching Assessment and Development tool to identify specific skills and actions you will take to continue your coaching development. How will you continue to grow and develop as a coach?

Additional learning needs:

—  
—  
—

4. Create a 3-6 month timeline of your actions for continued coaching development including specific actions and a timeline.

—  
—  
—

**Coach:**

**Date:**

## **The Dartmouth Institute Microsystem Academy**

### **Team Coaching Experience Reflection**

Please complete the following to reflect and learn from your team coaching experience. Provide facts/information, what went well and opportunities to improve for each item.

The focus is to reflect on your coaching experience adapting the Team Coaching Model to your improvement team and local context.

#### ***Pre-Phase (Getting ready and meeting them where they are at)***

Improvement Team Name and Context:

Describe overall coaching in the Pre-Phase with this improvement team

Describe the Leadership engagement:

How was the improvement team selected and what was the team composition?

Did the team have past improvement experience? If yes, what did they learn and what would they do differently?

Describe setting expectations with each group below:

–Leader(s)

–Team

–Coach

–Did you use the Expectation Form?

-Did you use the PACE document?

What was the aim of improvement?

What early data collection was completed? (5Ps and other data/information including registries)

What communication strategy did the team develop to “get everyone in the game of improvement” and to keep all levels of the organization informed?

What logistics/resources were used such as organizational Quality Department, Data information and information technology?

### ***Action Phase (The art and science of coaching)***

Meeting Process:

–Frequency of meeting with team:

–Frequency of meeting with leader:

Coaching Actions (Provide example and documentation of your use of the following techniques):

- The Art of Coaching
  - Reframing:
  - Knowing When:
  - Encouragement and Praise:
  - Feedback:
- The Science of Coaching
  - What was the benefit of the Dartmouth Microsystem Improvement Curriculum (DMIC ramp)?
  - How did you help your improvement team stay on track-Clarity of aim (Action Plans/Gantt Charts)?
  - What measurable improvements were achieved?

What did you observe about the group dynamics or experience through virtual connections?

Rhythm and Pace observations (Regular meetings over the course of 5 months. Pace impacted by weather, by patient acuity, limited resources, etc):

Please describe your personal coaching story and reflections. What did you learn? What surprised you? Any specific events that stand out?

### ***Transition Phase (Reflection, Celebration & Renew)***

The Improvement team reviews and reflects on progress made in developing improvement capabilities and skills:

- Group assessment of meeting and improvement skills:  
(List what the team strengths are and continued support needed)
- What will be the intensity and frequency of team coaching moving forward? What will the focus and frequency of the team coaching be?

Celebration:

–How will the improvement team celebrate their efforts and successes?

How will they renew their commitment and energy for next improvement efforts?

What coaching feedback/evaluation has the improvement team given you?

How will the improvement team “orient” new staff who wish to join the improvement team?

### ***General:***

The best part of this coaching experience was:

The most challenging aspect of this coaching experience was:

Describe how I will use my experience from eCTC in my professional work:

List and describe lessons learned:




## Consent to use data and acknowledgement of permitted use of program materials



### CONSENT TO USE OF DATA AND ACKNOWLEDGEMENT OF PERMITTED USE OF PROGRAM MATERIALS

1. I understand that Trustees of Dartmouth College ("Dartmouth"), with a business address located at 35 Centerra Parkway, Lebanon, New Hampshire 03766 United State of America ("U.S.") is a research institution as well as an educational institution located in Hanover and Lebanon, New Hampshire, U.S. I understand that The Dartmouth Institute for Health Policy and Clinical Practice Microsystem Academy is a part of Dartmouth.
2. As a participant in the eCoach-to-Coach training program (the "Program") provided by Dartmouth I understand that the purpose of the Program includes advancing the professional development of practitioners in the healthcare field, developing and improving team performance specific to healthcare or clinical research improvement and providing healthcare managers and professionals with coaching training and development in order to do so.
3. I understand and agree that as part of the Program, Dartmouth will collect certain data about me and that I may provide certain information to Dartmouth about my participation in the Program that later will be used by Dartmouth to administer the Program. I understand and agree that Dartmouth will collect information that will allow Dartmouth to assess my progress in developing proficient team coaching skills ("Evaluative Data"). Such data will be defined by Dartmouth and may include, without limitation, (i) responses of members of teams which I coach as part of my professional duties to surveys soliciting their views as to my performance or effectiveness, (ii) my responses to pre- and post-training surveys and (iii) assessment of my post-training performance in specified activities.
4. I understand and agree that Dartmouth will collect certain background information about me. Such information may include, without limitation, my name, age, gender, job title, job description, number of years and types of professional experience and level of educational attainment ("Demographic Data").
5. I understand that Dartmouth, from time to time as in its discretion, may use all or some of such Evaluative Data and Demographic Data to create other data that will be stripped of identifying information ("Derived Data").
6. I hereby give permission to Dartmouth to collect the Evaluative Data and Demographic Data, to create and use the Derived Data, and to permit my employer or sponsor and employers and sponsors of other Program participants to use the Evaluative Data, Demographic Data and Derived Data (collectively, "Data") for research or any other purposes elected by Dartmouth. I further give permission to Dartmouth to permit third parties other than employers or sponsors to use Derived Data for research or any other purposes elected by Dartmouth.
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vha-10-3203 Consent for picture or voice.

 Department of Veterans Affairs	
<b>CONSENT FOR USE OF PICTURE AND/OR VOICE</b>	
CONSENT OF (Name)	
<p><small>NOTE: The information requested on this form is solicited under the authority of title 38, United States Code. The execution of this form does not authorize disclosure of the material specified below except for the purpose(s) stated. The specified material may be used within the VA for authorized purposes, such as for education of VA personnel or for VA research activities. It may also be disclosed outside the VA as permitted by law. If the material is part of a VA system of records, it may be disclosed outside the VA as stated in the 'Routine Uses' in the "VA Privacy Act Systems of Records" published in the Federal Register. A copy of the 'Routine Uses' is available upon request to the administrative office of the VA facility involved. You do not have to consent to have your picture or voice taken, recorded, or used. Your refusal to grant your consent will have no effect on any VA benefits to which you may be entitled.</small></p>	
<p><b>I hereby voluntarily and without compensation authorize pictures and/or voice recording(s) to be made of me (or of the above-name individual if the individual is legally unable to give consent) by (specify the name of the VA facility, newspaper, magazine, television station, etc.)</b></p>	
<p><b>While I am (describe the activity, if any to be photographed or recorded)</b></p>	
<p><b>I authorize disclosure of the picture and/or voice recording to (specify name and address of the organization, agency, or individual(s) to whom the release is to be made)</b></p>	
<p><b>I understand that the said picture, video and/or voice recording is intended for the following purpose(s):</b></p>	
<p><small>I have read and understand the foregoing and I consent to the use of my picture and/or voice as specified for the above-described purpose(s). I further understand that no royalty, fee or other compensation of any character shall become payable to me by the United States for such use. I understand that consent to use my picture, video and/or voice recording is voluntary and my refusal to grant consent will have no effect on any VA benefits to which I may be entitled. I further understand that I may at any time exercise the right to cease being filmed, photographed or recorded, and may rescind my consent for up to a reasonable time before the picture, video or voice recording is used.</small></p>	
SIGNATURE OF INDIVIDUAL OR OTHER LEGALLY AUTHORIZED PERSON	DATE
PERMISSION OBTAINED BY (NAME - TITLE - ADDRESS)	
SIGNATURE OF INTERVIEWER OR INDIVIDUAL OBTAINING CONSENT	DATE
PRODUCTION TITLE	PRODUCTION NUMBER
INDIVIDUAL'S NAME AND ADDRESS	<p><b>IMPORTANT:</b> This form must always be completed prior to the making or using pictures, video or voice recording(s) of any VA patient. If any patient health or demographic information is to be provided or released with the picture, video or voice recording, VA Form 10-5345, Request for and Authorization to Release Medical Records or Health Information is required prior to the release of such data to any source.</p>

## eCTC Surveys

**eCoach-the-Coach Spring 2015: PRE-Quality Improvement Assessment (QIA)-CITs**

The aim of this survey is to track acquisition of improvement knowledge and skills through your coaching program.

Each coach-in-training "CIT" will receive a pre/post report about their own improvement capability changes over the course of the program and the pre/post report of your improvement team. The aim of sharing these reports is to help guide your continued personal coaching development and to be able to clearly plan a continued improvement capability learning plan for the improvement team you have been coaching.

This survey is confidential and voluntary. If you do not want to complete this survey, there are no consequences to you.

1. Please provide your credentials (i.e. MD, RN, MPH, MS, etc.), if applicable.

\* 2. Have you ever participated in quality improvement before?

- ☐ Yes  
☐ No

If yes, please describe.

\* 3. How important do you consider continuous quality improvement in your professional work?

- ☐ Very important  
☐ Important  
☐ Neither important nor non-important  
☐ Not important  
☐ Very not important

1

\* 4. How confident are you that you can make a change to improve health care in your practice?

- ☐ Not confident at all  
☐ Somewhat confident  
☐ Reasonably confident  
☐ Confident  
☐ Extremely confident

\* 5. How confident are you with your current improvement skills?

	Not confident at all	Somewhat confident	Reasonably confident	Confident	Extremely confident
Using effective meeting skills (timed agendas/meeting roles)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brainstorming and multi-voting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing the SPs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using data to determine improvement theme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing global aim statements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating process maps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing specific aim statements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating Fishbones (Cause & effect diagrams)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying evidence based practice for change ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adapting SmartChange Ideas to make improvements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing PDSA cycles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing SDCA cycles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating plays for playbooks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAN improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5S	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value stream mapping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workflow diagrams/pagewit diagrams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Driver diagrams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mesocosystem improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feed forward and feedback data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing up in the health care organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observation skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Force Field Analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ladder of Inference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. I am:

	Extremely	Reasonably	Somewhat	Not at all
I am confident in my ability to elicit others' perspectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am distinguish between interests and positions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to recognize resistance in team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in my ability to use reflection in responding to resistance in team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable giving negative feedback.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in my ability to manage my emotions in the face of conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can help team members manage their emotional reactions in the face of conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in my ability to apply conflict management skills to situations involving upset or angry colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

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6.

	Not confident at all	Somewhat confident	Reasonably confident	Confident	Extremely confident
Defining measures (conceptual & operational definitions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using Excel to create graphs, charts, and data displays	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pareto Charts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data collection using tick and tally sheets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing a data collection plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Differentiating process, outcome, and balanced measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clinical value compass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Run Charts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Statistical Process Control Charts (p Charts, XmR charts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data walls and Dashboards to track improvement over time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining when to transition to "audit" of measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading & Lagging (Linking short term & long term measures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

eCoach-the-Coach Spring 2015: PRE-Quality Improvement Assessment (QIA)-CITs

Team communication skills