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Types of Internal Facilitation Activities in Hospitals Implementing Evidence-Based Interventions

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Abstract

Background: Implementation models, frameworks and theories recognize the importance of activities that facilitate implementation success. However, little is known about internal facilitation activities that hospital personnel engage during implementation efforts.

Purpose: To examine internal facilitation activities at ten critical access hospitals in rural Iowa during their implementation of TeamSTEPPS, a patient safety intervention, and to identify characteristics that distinguish different types of facilitation activities.

Methods: We followed ten critical access hospitals for two years after the onset of implementation, conducting quarterly interviews with key informants. Based on the transcripts from the first two quarters, a coding template was developed using inductive analyses. The template was then applied deductively to code all interview transcripts. Using comparative analysis, we examined the characteristics that distinguish between the facilitation types.

Results: We identified four types of facilitation activities—Leadership, Buy-in, Customization, and Accountability. Individuals and teams engaged in different types of facilitation activities, both in a planned and an ad-hoc manner. These activities targeted at both people and practices, and exhibited varying temporal patterns (start and peak time).

Conclusion: There are four types of facilitation activities that hospitals engage in while implementing evidence-based practices, offering a parsimonious way to characterize facilitation activities. New theoretical and empirical research opportunities are discussed.

Practice Implications: Understanding the types of facilitation activities and their distinguishing characteristics can assist managers in planning and executing implementations of evidence-based interventions.

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Appendix

Supplemental Digital Content 1. Case study illustrating the four types of facilitation activities more in depth

Keywords

Facilitation activities; Implementation; Hospitals; PARIHS; TeamSTEPPS

Introduction

Despite strong efforts, patient safety and quality issues in hospitals persist (Chassin, 2013). To tackle these complex issues, there is a growing interest in developing and applying theories, models, and frameworks for guiding the implementation of quality improvement initiatives (Nilsen, 2015). This is particularly salient for the implementation of externally developed evidence-based practices or interventions, which requires fitting the intervention into the organization and taking appropriate actions to maximize the improvement (Kilbourne, Neumann, Pincus, Bauer, & Stall, 2007; Grol, 2001). One of the more prominent implementation frameworks is Promoting Action on Research Implementation in Health Services (PARIHS), which proposes that a successful implementation is a function of the evidence that supports the intervention, the context in which the intervention is implemented, and the way implementation is facilitated (Kitson, Harvey, & McCormack, 1998; Kitson et al. 2008).

While all three PARIHS elements (i.e., evidence, context, and facilitation) have been supported in the empirical literature (Helfrich et al., 2010), a recent study revealed that facilitation was the primary focus of many practitioners' efforts to apply the PARIHS framework in their implementation practices (Ullrich, Sahay, & Stetler, 2014). In our previous research, we found that facilitation was the most important element for early implementation success (Ward, Baloh, Zhu, & Stewart, 2015). However, scholars acknowledge that there is a lack of theorizing on facilitation, the active ingredient within PARIHS, and that the variation in the content of facilitation and its impact is poorly understood (Berta et al., 2015; Harvey & Kitson, 2016). In this study, we explore this variation by examining what types of facilitation activities small and rural hospitals engage in implementing TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety), a widely disseminated patient safety program, and what characteristics distinguish different types of facilitation activities in this implementation context.

Background

The PARIHS framework proposes that facilitation is “the process of enabling (making easier) the implementation of evidence into practice” (Harvey et al., 2002, p. 579). It entails both a role—the facilitator—and a set of strategies and activities—the facilitation process (Dogherty, Harrison, & Graham, 2010; Berta et al., 2015; Harvey & Kitson, 2016). Individuals in the facilitator role can be either internal or external to the organization and should have the skills and abilities to carry out the role. The facilitation process ranges from task-focused (e.g. technical help, project management) to holistic-focused (e.g. coaching, empowering) strategies and activities (Harvey et al., 2002; Stetler, Damschroder, Helfrich, & Hagedorn, 2011). Harvey and Kitson (2016) recognized that the theoretical foundations of the PARIHS framework are eclectic, and that the concept of facilitation needs refinement.

They trace facilitation to two theoretical sources: 1) humanist psychology (Rogers, 1969; Heron, 1989) that focuses on enabling others rather than telling, persuading, or coercing others to act; and 2) improvement theories (e.g. Deming, 2000) that focus on local engagement and ownership in implementation.

Berta et al. (2015) suggested that facilitation can enhance uptake and application of research evidence and innovation in health services organizations by stimulating higher-order learning and generating organizations' external and internal absorptive capacity. They argued that specific facilitation processes and activities can be mapped onto key organizational learning concepts such as absorptive capacity meta-routines discussed by Lewin, Massini & Peeters (2011). For example, establishing effective internal communication channels can be linked to, and is expected to contribute to, the internal routine of sharing knowledge and superior practices across the organization. The authors contended that charting such relationships has the potential to guide future research to explain why certain facilitation activities work in a particular context.

Several studies have examined facilitation activities empirically and identified more than 50 specific activities across several implementation stages (Dogherty et al., 2010; Dogherty, Harrison, Graham, & Keeping-Burke, 2014; Elnitsky, Power-Cope, Besterman-Dahan, Rugs, & Ullrich, 2015). The activities start with planning for change (e.g. highlighting a need for change, performing a practice audit), continue with leading and managing change (e.g. identifying a leader, adapting evidence to the local context) and monitoring progress and ongoing implementation (e.g. problem solving/addressing issues, empowering group members), and end with evaluating change (e.g. linking implementation to patient outcomes, acknowledging success). These studies found that facilitation efforts involve both internal and external facilitators (Dogherty, Harrison, Baker, & Graham, 2012) who work both as individuals and groups (Dogherty et al., 2010; Dogherty et al., 2012; Elnitsky et al., 2015). Bidassie and colleagues found that facilitation activities change over time, from assessing the context, relationship building and providing tools early on, to encouraging and cheerleading, celebrating successes and creating ownership to sustain changes towards the end. (Bidassie, Williams, Woodward-Hagg, Matthias, & Damush, 2015).

Although prior research has reported many examples of facilitation activities, the findings tend to focus on specific activities carried out by external facilitators. Further, the results on facilitation effectiveness are often mixed (Harvey & Kitson, 2016) possibly due to the effectiveness of specific activities that could vary across implementation contexts. This highlights the need to develop higher-level categories of facilitation activities and summarize characteristics of closely related activities that distinguish them from other types of activities. Empirically derived categories will help generalize our understanding of how facilitation works in a particular implementation context to other contexts, and have the potential to guide facilitation practices.

The context for this study is the implementation of TeamSTEPPS in critical access hospitals (CAHs). TeamSTEPPS was developed by the Agency for Healthcare Research and Quality (AHRQ) and the Department of Defense as an evidence-based intervention to improve teamwork and communication in healthcare settings for ultimate patient safety (Clancy &

Tornberg, 2007). It is comprised of numerous tools and strategies, which allows organizations to tailor the implementation based on their particular needs (King et al., 2008). The implementation requires a team of hospital staff to attend a standardized training on evidence-based teamwork skills and practices. These team members then become Master Trainers and, upon return, train other hospital staff and implement TeamSTEPPS tools and strategies (AHRQ, 2014).

Small and rural hospitals often have limited infrastructure and resources to support quality improvement initiatives (Casey & Moscovice, 2004; Paez, Schur, Zhao, & Lucado, 2013). When implementing TeamSTEPPS (and other initiatives), they mostly rely on internal facilitators who may not have the same skills and resources as external facilitators to carry out facilitation actions. This implementation context enables us to study types of facilitation activities carried out by internal facilitators. Further, TeamSTEPPS is a complex and adaptable intervention that requires active and continued facilitation efforts. By following multiple hospitals' implementation over time, it offered an excellent opportunity to observe the variation and characteristics of facilitation activities as they naturally unfold.

Methods

Research design and sample.

We used a longitudinal qualitative research design where we prospectively studied implementation of TeamSTEPPS in ten Iowa CAHs. A total of 14 CAHs attended the 2011 and 2012 Master Trainer Training offered by the Iowa Department of Public Health FLEX program and Telligon, Iowa's Quality Improvement Organization. While all 14 hospitals were recruited for the study, we excluded four hospitals from the analyses because they suspended TeamSTEPPS activities shortly after the onset of implementation. The University of Iowa Institutional Review Board approved the study protocol.

Data collection.

Site visits and semi-structured interviews were conducted quarterly for two years, beginning when hospital staff returned from Master Trainer Training. All interviews were conducted by experienced members on our research team, and inquired about the implementation purpose and goals, progress, barriers and facilitators, and other factors relevant to the implementation of TeamSTEPPS. A total of 281 interviews were conducted with 77 key informants, including the Master Trainers, executive sponsors, unit or department managers, and frontline staff involved in TeamSTEPPS implementation. After obtaining their verbal consent, the interviews were recorded, transcribed, and anonymized. Table 1 shows the characteristics of the sample hospitals and key informants. All ten hospitals are CAHs. Eight of the hospitals are affiliated with large health systems. Table 1 shows the roles of our interviewees at each hospital, which consisted of Master Team Trainers, Executive Sponsors, and others who were involved in the implementation (e.g., staff who joined the hospital after the onset of TeamSTEPPS and became part of the implementation team). Master Team Trainers were interviewed consistently over time.

Data coding and analysis.

Data coding involved both inductive and deductive analytic approaches (Patton, 2014; Bradley, Curry, & Devers, 2007). First, we used inductive analysis to examine patterns and themes of facilitation activities and to develop a coding template. Four coders independently read the transcripts from the first two quarters to identify facilitation activities, defined as activities/actions taken by individuals or teams to make implementation easier, to help promote it, and move it forward (Harvey et al., 2002; Kitson et al., 2008; Stetler et al., 2011), and identified preliminary themes or categories. Emergent themes were discussed in a group meeting where similar themes were compared, and merged into overarching categories if the purposes and targets of these similar facilitation activities were determined to closely match one another. Four types of facilitation activities were identified in this process for which the coders discussed the labels until a consensus was reached – Leadership, Buy-in, Customization, and Accountability (described below). These four categories then served as a coding template for coding the rest of the interviews.

Next, the coding template was deductively applied to code the transcripts from all eight quarterly interviews. A pair of coders read each transcript independently, extracted the relevant text (quotes) into a spreadsheet, and marked which of the four types of facilitation it reflected. Coders were instructed to pay special attention to new activities and themes/categories that emerged in the subsequent quarters. Although coders did find new activities, no new facilitation types were identified in this process. All quotes were then independently reviewed by the investigators and the coders to determine how well the quotes reflected their respective facilitation types. Differences were reconciled in a group meeting, and only the most relevant quotes were retained for subsequent analyses.

Finally, the investigators used a comparative analysis (Gibbs, 2007) to examine characteristics that differentiate the four types of facilitation activities. For each type of activities, we coded information on who primarily engaged in those activities, what was the target of the facilitation effort, and whether facilitation was planned or ad-hoc. We also compared the temporal patterns (i.e., start point and peak time) of different activities based on how frequently each type of activities was mentioned in each quarterly interview.

Results

We identified four different types of facilitation activities that CAHs engaged in during the first two years of TeamSTEPPS implementation – Leadership, Buy-in, Customization, and Accountability. Below, we describe the four facilitation types (exemplar quotes are presented in Table 2) and compare the types based on their key distinguishing characteristics. In the online appendix, we present a case study to illustrate the different types of activities more in-depth (see Case Study, Supplemental Digital Content 1).

Leadership activities involve leading people to create and maintain the planned change. Two subsets of Leadership activities emerged in our analysis. First was the activities directed at the intended users of TeamSTEPPS tools (e.g. frontline nurses), such as role-playing the use of TeamSTEPPS tools, rewarding proper use of tools, and empowering team behaviors (e.g. situation monitoring). Facilitators tended to engage in these activities to ensure the use

of tools and behaviors at the frontline or the site of implementation (e.g. medical/surgical unit). The other subset of Leadership activities was directed within the implementation team. The implementation team usually consisted of several team members where one or two took on a leadership role. They not only led the team, but also represented the team when engaging with administration or in organization-wide meetings. These activities primarily aimed to inform others of TeamSTEPPS activities and ensure proper coordination of its implementation with other programs and quality initiatives.

Buy-in activities are efforts to ensure support and engagement from the intended users as well as other stakeholder groups (e.g. administration). These activities included presentations and training sessions, anticipating and dealing with resistance to change, as well as creating small wins and building momentum for further spread of TeamSTEPPS. Facilitators engaged in these activities to create a shared understanding of what TeamSTEPPS is and how its tools can help improve safety and quality of care.

Customization activities included tailoring of the TeamSTEPPS tools to fit the organization's particular needs and circumstances, setting up environmental triggers to remind and guide staff using the tools, as well as integrating TeamSTEPPS with other programs and quality initiatives. These activities aimed at making the use of TeamSTEPPS tools easier and, in turn, to maximize the uptake and adoption among intended users.

Accountability activities included using staff evaluations, observations, audits, and reminders to sustain the implementation. They aimed at holding the staff accountable for appropriate and consistent use of TeamSTEPPS tools. A subset of these activities also included holding the implementation team accountable for the progress of TeamSTEPPS implementation.

The four types of facilitation activities can reinforce one another (e.g., Leadership activities that represent the team and implementation effort in various occasions may contribute to obtaining Buy-in from other organizational members) and co-occur during the implementation. But comparative analysis indicated that they can be distinguished based on four primary characteristics (Table 3). The first distinguishing characteristic encompasses who fulfills the facilitator role. Certain facilitation activities tended to be carried out by individual facilitators, while others by the facilitator team as a whole. This is one of the factors that distinguished between Leadership and Buy-in activities where Leadership activities tended to be carried out by individual facilitators, especially those in leadership roles (formal or informal), while Buy-in activities tended to involve input from a team of facilitators. This distinction was less pronounced for Customization and Accountability activities.

The second distinguishing characteristic was the target of the activities, which could be generally divided into two types – people and practices. This characteristic helps to distinguish Customization activities, which were focused on practices (e.g. tools, processes, and strategies), from other facilitation activities, which focused on people.

The third distinguishing characteristic was whether the facilitation activities were planned. Buy-in and Customization activities were mostly planned ahead of time and then carried out

according to the plan. Other activities, such as most of the Leadership activities and some cases of Accountability activities occurred ad hoc as facilitators engaged in them when the situation called for it (e.g. during a board meeting; on the floor).

The last distinguishing characteristic is related to temporal patterns. Two aspects of the temporal patterns seem to differentiate the facilitation types: start point and peak time. Certain activities began even before the onset of the implementation. This was most evident for Leadership and Buy-in activities, while Customization and Accountability activities started after the onset. Judged by how often different types of activities were evident, Leadership, Buy-in and Customization activities peaked early (in the first 6 months of implementation), while Accountability activities peaked later in the process (about one year into the implementation).

Individually and combined, these four characteristics help illustrate internal facilitators' patterns of engagement. First, facilitators engaged in Leadership activities more as individuals and on an ad-hoc basis, while they engaged in Buy-in activities more as teams and in a more planned manner. This suggests two rather different, but complementary processes of facilitation, which place different demands on the facilitators. Engaging in ad-hoc facilitation activities usually requires acting alone, because the situations where they need to act are not always predictable. The occasion might not otherwise directly relate to the implementation effort, such as during a staff meeting or a casual hallway conversation. The facilitator must be alert and mindful to recognize the situation at hand is related to the implementation and respond appropriately. For example, when a nurse struggles with using a standardized handoff tool, facilitators need to recognize the opportunity to intervene and help out by encouraging or by demonstrating how to use it. On the other hand, engaging in planned activities such as obtaining Buy-in enables them to work as a team where they can more carefully deliberate and include perspectives of several team members. They need to focus on the task at hand to work well as a team. For example, the team may anticipate resistance from certain nurses, in which case they could develop and execute a plan that highlights the patient safety aspect, or they could start the implementation on a shift that is more receptive to change.

Second, internal facilitation activities focus both on people as well as on practices. While most of the activities we observed focused on people, the more technical activities focusing on practices commonly paralleled them (most notably with Customization activities). This dual focus requires the team to have a diverse skillset (people and technical skills), as well as good knowledge of the intervention and how it fits with their daily routines and other initiatives at the hospital. Hospitals in our study had teams composed of individuals with diverse backgrounds and positions, ranging from frontline staff to chief-level executives (C-suite). This allowed them to combine their knowledge of TeamSTEPPS with the more tacit knowledge of their organization and daily routines, and deal with the various people- and practice-related challenges.

Last, facilitation activities also follow different temporal patterns. This reflects a degree of ordering in activities, in part necessitated by the nature of implementing externally developed interventions such as TeamSTEPPS. Thus, certain Leadership and Buy-in

activities first occurred before the actual implementation, while Customization and Accountability followed after the facilitators became more familiar with their task and began the implementation. For example, several hospitals in our study assessed how TeamSTEPPS fit with their needs and circumstances (Zhu, Baloh, Ward, & Stewart, 2016) before selecting and sending the team to Master Trainer Training. It was only after the training that the Master Team Trainers knew enough about TeamSTEPPS to be able to engage in Customization and Accountability activities. These findings suggest that facilitators need to stay fluid and apply different facilitation approaches as the quality initiative implementation unfolds.

Discussion

In this study, we identified four types of facilitation activities hospitals engaged in during the first two years of TeamSTEPPS implementation—Leadership, Buy-in, Customization, and Accountability—and a set of characteristics that distinguish them. These findings suggest that facilitation is a multifaceted construct, spanning several organizational levels, varying in time, and focusing on both people and practices.

Our findings are consistent with the existing literature on facilitation. In particular, all four types of facilitation activities reflect the task-focused and holistic-focused purpose described in the foundational research (Harvey et al., 2002), but to varying degrees. For example, Customization is more task-focused, while Leadership is more holistic-focused. Furthermore, our findings are congruent with studies that show both individuals and groups engage in facilitation activities (Dogherty et al., 2010; 2012; Elnitsky et al., 2015) and that types of facilitation activities change over time (Bidassie et al., 2015). Specific facilitation activities that we observed are also similar to those identified by Dogherty and colleagues (2010), such as increasing awareness of and helping overcome resistance to change (an example of Buy-in) and performing/assisting with evaluation (an example of Accountability). Importantly, we extend the literature by identifying different types of facilitation activities and the characteristics that distinguish them – facilitator, target, planned nature, and temporal pattern. While the four facilitation types are interconnected and represent a unified effort, the distinguishing characteristics can help us explain the underlying mechanism of each type and suggests what may be required to engage in these activities.

The four types of facilitation activities allow us to extend theoretical understanding of facilitation. Organizational learning theory provides a promising theoretical home for facilitation (Berta et al., 2015; Harvey & Kitson, 2016). While internal facilitation activities largely correspond to internal absorptive capacity, Leadership activities can also contribute to the external absorptive capacity by identifying the value of externally generated knowledge and transferring such knowledge back to the organization, especially before and early into the implementation (Berta et al., 2015; Lewin et al., 2011). This is perhaps especially prominent in small, rural hospitals, where staff and clinical managers have limited time to perform external functions. Larger hospitals and hospitals employing external facilitators may have more pronounced meta-routines of external absorptive capacity.

Identifying high-order categories of facilitation activities helps to link facilitation research to additional theoretical foundations that offer explanations on why and how certain types of facilitation works. Leadership literature is a prominent stream in organizational and management studies, and has been linked to quality improvement in healthcare (e.g. Ferlie & Shortell, 2001). Studies of social influence (Cialdini & Goldstein, 2004) or resistance to change (Ford, Ford & D'Amelio, 2008) can be informative for Buy-in activities. In addition to improvement theories and models (Deming, 2000), re-invention and diffusion of innovations theory (Rogers, 2003) may offer important insights for Customization. Finally, human resource management can help us understand Accountability more fully (Frink & Klimoski, 2004). These theoretical perspectives can guide future research in specific facilitation areas.

While we focused on facilitation activities and did not focus on the role of the facilitators and how they perform, future studies can look at the effectiveness of facilitator teams through the lens of team literature – for example, team mental models (Mohammed, Ferzandi, & Hamilton, 2010) can help us understand how facilitators coordinate planned and ad-hoc activities. Facilitators in teams are often comprised of individuals with different levels of experience (Harvey & Kitson, 2016). Thus, their knowledge, skills and abilities can importantly influence the outcome of their activities, which can perhaps be conceptualized as moderators of facilitation effectiveness. For example, we might expect that more expertise is needed to engage in Leadership activities effectively, while Customization activities perhaps require more on-the-ground knowledge of the work routines and more technical skills.

Practice Implications

There are several implications for practice. By focusing on types of activities rather than particular activities, we can more parsimoniously characterize facilitation efforts in implementing evidence-based interventions. All hospitals in our study engaged in all four types of facilitation activities, albeit to different degrees, suggesting that these four types of facilitation activities reflect more general patterns than specific activities. This can help practitioners anticipate and prepare for the range of activities they will need to engage in during their implementation efforts, as well as aid in comparing facilitation activities across hospitals.

The different types of facilitation activities suggest that a wide range of skills and abilities is required to perform them, and that multiple people need to engage in the activities, both as individuals and as a team. While we did not set out to study the role of the facilitators and their skills and abilities, the four types of facilitation activities indicate what is needed to perform them. This can help managers and facilitators match specific activities to individuals deemed most suitable to perform them. For example, those in more senior leadership positions are likely most appropriate for Leadership activities, because they tend to be in position to influence other high-level groups, such as physicians.

In addition, the timing and sequencing of activities suggest a possible link to implementation process models. Process models are those that represent the implementation as a sequence of

steps or phases needed to bring about the desired change (Van de Ven, 2007). In this study, we observed Leadership and Buy-in activities began before the onset of implementation, in the phase often referred to as adoption (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004), and Accountability activities became more prominent later into the implementation, which is consistent with many process models of implementation (Damschroder et al, 2009). Accountability activities may continue to play a large role in the sustainment phase, the phase that follows implementation. These temporal patterns indicate that a certain continuity exists between different phases of the process, and can aid in planning and executing the implementation both before and after the onset.

The findings and implications need to be considered in light of certain limitations of our study. We relied exclusively on the data obtained in the interviews. Thus, certain activities may have been omitted, especially those carried out by people not interviewed. However, we interviewed the people most engaged in the implementation (namely, Master Team Trainers) every three months to minimize selection and recall biases. Our study sample was also limited and included only small, rural hospitals in Iowa who chose to attend the standardized training for a widely-used package of evidence-based practices. Additional research is needed to establish generalizability of these findings to other settings, and to other interventions. However, these characteristics also represent one of the strengths of this study – by using a homogenous sample, several extraneous influences were, at least to some extent, controlled by the design.

This study has several other strengths. While the current study focused on TeamSTEPPS, the findings are relevant to many quality initiatives for several reasons. TeamSTEPPS is a collection of tools and strategies which present participating hospitals with a smorgasbord of approaches for addressing quality and patient safety needs. Hospital staff attend Master Trainer Training to be introduced to change management principals and popular quality initiative approaches, and then return to their hospitals to decide how to proceed. Thus, implementation choices are not driven externally, but instead fall to hospital staff to decide what and how to use various implementation approaches. Thus, the findings on how facilitation develops during TeamSTEPPS implementation is likely similar to how it unfolds during other quality improvement initiatives disseminated nationally. This type of pragmatic design adds substantially to research studying implementation of these efforts in their natural settings.

Another important feature of this study is its focus on CAHs that sent staff to learn about a popular quality initiative. The vast majority of hospital implementation research focuses on academic and large medical centers. The learnings from those settings do not necessarily carry forward to smaller healthcare settings. Critical access hospitals have limited financial and human resources that usually preclude bringing in outside expertise, especially in the form of external facilitators. Thus, the findings of how facilitation worked in these ten CAHs are crucial for helping small hospitals and healthcare settings better implement efforts to enhance quality.

Conclusion

In summary, we identified four types of facilitation activities of ten CAHs implementing TeamSTEPPS over the span of two years, the characteristics that distinguish them, and discussed implications for research and practice. We believe our findings offer useful insights for both practitioners and researchers interested in implementation of evidence-based practices and other externally developed interventions, as well as patient safety and quality improvement in general. Future research will need to validate our findings, and establish the antecedents and consequences of different types of facilitation activities.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1:

Hospital and Interviewee Characteristics

Hospital ID	System Membership	Interviewees
Hospital A	State System A	3 C-Suite 3 Clinical managers 1 Nurse 1 Respiratory therapist
Hospital B	Independent	1 Quality/patient safety manager 1 Quality/patient safety specialist 2 Clinical managers
Hospital C	State System A	1 C-Suite 1 Clinical manager 8 Nurses
Hospital D	State System A	2 C-Suite 2 Clinical managers 3 Nurses 1 Certified nursing assistant
Hospital E	Independent	1 Quality/patient safety manager 2 Quality/patient safety specialists 1 Clinical manager 4 Nurses 9 Other staff
Hospital F	State System A	2 Quality/patient safety managers 1 Professional development manager 1 Clinical manager 3 Nurses
Hospital G	State System A	1 C-Suite 1 Quality/patient safety manager 1 Quality/patient safety specialist 3 Clinical managers
Hospital H	State System B	1 C-Suite 1 Quality/patient safety manager 1 Clinical manager 6 Nurses
Hospital I	State System B	1 Quality/patient safety manager 1 Clinical manager 1 Radiologist
Hospital J	Regional System	1 C-Suite 1 Quality/patient safety manager 3 Clinical managers

Table 2:

Exemplar Quotes for the Four Types of Facilitation Activities

Leadership - leading people to create and maintain the planned change	
•	“We had an incident occur and she was involved in that incident, so I walked her through how had a huddle been used in that incident, the end result may have been very different, and she totally agreed.” (Hospital I)
•	“Then we go over wins, to celebrate positive things that have been said, because I think you’re quick to hear what you did wrong, but you’re not quick to hear what you did right.” (Hospital G)
•	“My position is over Quality and Patient Safety and the other people are clinical...So I took the lead because I felt like my schedule and my focus on my job allowed me to do some of that legwork for them.” (Hospital J)
Buy-in - ensuring support and engagement from the relevant stakeholders	
•	“Small departments, small wins. We thought that would be the easiest way to start and I think we also are starting with the departments with the most flexible managers, who are willing to get behind it.” (Hospital I)
•	“Sometimes the message on why is this task important and why are we doing these actions gets missed...We make sure that our physicians know [it is for patient safety]. Then they buy in and go, yep, I need to be doing that.” (Hospital J)
•	“We had total buy-in from all the managers and staff, but it took time. We educated the staff, we took them off site. We...educate [them] on basically our culture.” (Hospital A)
Customization - improving the fit between the intervention and organization’s circumstances	
•	“We want to make sure that we look at the process thoroughly and find out how we can set up to take the least amount of time for the staff, be efficient, and get the appropriate documentation on the chart.” (Hospital B)
•	“There’s instructions at each huddle board...[and] all the boards are made the same...It’s very uniform so you can know what to expect from one huddle to another to another.” (Hospital C)
•	“We can make small changes. If they don’t work we can change again. We’re small enough...and we have a lot of freedom to modify and use it as we see fit.” (Hospital J)
Accountability - monitoring and evaluating the implementation and use of tools	
•	“We do audits every once in a while to make sure the in-room whiteboards [used in shift-change handoffs] are updated.” (Hospital H)
•	“You have to see whether [the bedside shift handoff] is occurring. I don’t need to come every day, but I will randomly show up every once in a while, willing to call them on it to say, “Why isn’t this happening? Are you uncomfortable with speaking in front of the patient? What can I do to make it so that you can give report?” (Hospital D)
•	“They’ve been turning in their log sheets [for briefs] to Administrator A, so we went through those and we saw that the nurses were not necessarily doing them all the time.” (Hospital I)

Table 3.

Key Distinguishing Characteristics of the Four Facilitation Types

Facilitation type	Facilitator	Target	Planned/Ad-hoc	Start point	Peak time
Leadership	Individuals	People	Ad hoc	Before onset	Early
Buy-in	Team	People	Planned	Before onset	Early
Customization	Both	Practices	Planned	After onset	Early
Accountability	Both	People	Both	After onset	Later

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