What’s in Your Bundle?
Building a Communication Map of Relational Coordination Practices to Engage Staff in Individualizing Care

Amy E. Elliot, PhD; Sonya Barsness, MSG

ABSTRACT

The Problem: Nursing home providers are often challenged to focus on multiple priorities, including supporting individualized care, meeting regulatory expectations, and staying in sync with reimbursement guidelines.

The Resolution: Nursing homes can integrate a delivery system of relational coordination practices into daily operations to establish regular communication, critical thinking, and problem-solving among and with staff closest to the resident. This system promotes the use of effective approaches that improve quality of care and life, and ultimately results in better organizational outcomes.

Tips for Success: This article provides a pragmatic, real-life tool developed from the evaluation in the form of a Communication Map, which displays the full delivery system that evolves from the practices and resulting communication conduits.

Keywords: nursing home, individualized care, person-centered care, communication, delivery systems
INTRODUCTION

Individualized care is at the heart of nursing home laws and regulations. In recent years, the Centers for Medicare and Medicaid Services (CMS) took steps to accelerate the adoption of individualized care through several national priorities and initiatives, such as the new Interpretive Surveyor Guidelines on Quality of Life; the revised Minimum Data Set (MDS 3.0) assessment tool; the CMS National Partnership to Improve Dementia Care to reduce off-label use of antipsychotic medications by individualizing care; and the Quality Assurance Performance Improvement (QAPI) program, which emphasizes resident choice and individualized care. Yet, even as all these issuances assert the centrality of individualized care, sustainable transformations require practical guidance for nursing homes to implement the organizational practices that achieve individualized care as the norm. It is also a pragmatic reality that providers may not have the time and resources to identify practices that support individualized care when they are increasingly focused on reimbursement models geared toward value-based purchasing and bundled payment components.

**Purpose**

The purpose of this article is to present the results of a process evaluation of 21 nursing homes engaged in implementing a framework of communication practices theorized to support an individualized care delivery system. The study is based on the work of Barbara Frank and Cathie Brady of B&F Consulting, which is based in New England, and their method for engaging staff in individualizing care to improve outcomes for residents. The method puts in place four foundational organizational practices: 1) consistent assignment; 2) regularly scheduled huddles; 3) quality improvement huddles closest to the resident; and 4) the involvement of certified nursing assistants (CNAs) in care plan meetings. B&F Consulting’s method provides an infrastructure for staff closest to the residents to routinely share residents’ individualized needs, customary routines, and daily condition, and problem solve within the immediate circle of daily care and the interdisciplinary team through dynamic communication conduits (Pioneer Network, 2015). Used together, these four practices, known as relational coordination practices, are theorized to create a system to design and use effective, highly individualized approaches that improve quality of care and life, and ultimately result in better organizational outcomes.

Without these practices, staff responsible for organizational oversight and support may not have regular, easy access to the information from the staff at the point of care (as illustrated in Exhibit 1). Clinical leaders are then less able to provide timely support to respond to residents’ daily needs. When it takes too long for timely information about residents’ conditions and needs to be shared and acted on, residents may experience avoidable declines.

**Background**

While communication has been identified as a critical component of achieving positive outcomes in nursing homes, it has not been fully explored in research (Kolanowski, Van Haltisma, Penrod, Hill, & Yevchak, 2015; Scott-Cawiezell et al., 2004). In the literature, communication in nursing homes is addressed in
Communication has been identified as a critical component of achieving positive outcomes in nursing homes.

Limited yet varied dimensions, while also demonstrating meaningful impact to nursing home staff and residents. It is, at times, described as a broad construct, defined as a general exchange of information. In one study, nursing home staff members were asked to describe aspects of their work environment that impacted their ability to provide rehabilitative care, and they most frequently cited the quality of communication as having the largest influence (Scott-Cawiezell et al., 2004). Another study operationalized communication through measuring “staff cohesion,” and found that in nursing homes with lower staff cohesion, residents were at higher risk for pressure ulcers and incontinence (Temkin-Greener, Cai, Zheng, Zhao, & Mukamel, 2012).

Exhibit 1. Without Relational Coordination.

Developed by Amy Elliot, PhD, Sonya Barsness, MSG, and Barbara Frank. Based on B&F Consulting’s method for engaging staff in individualizing care, incubated in Pioneer Network’s National Learning Collaborative.

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is important to note that complexity theory also suggests that traditional top-down hierarchical approaches to communication from management actually hinder self-organization by disabling staff from sharing information, connecting with each other, and being exposed to diverse perspectives.

Communication systems as vehicles for achieving individualized care can also be conceptualized through person-centered care. Central to person-centered, individualized care is the need for information about a resident’s likes, dislikes, preferences, and history. In their study exploring how nursing home staff members obtain information needed to implement person-centered care to residents with dementia, researchers found that pertinent information was not being consistently shared with staff, and current systems for sharing information were not effective (Kolanowski et al., 2015).

The lack of an integrated approach for communicating this information is concerning as it suggests the lack of deep systems change that serves as a sustainable foundation from which person-centered practices, such as individualized care, can grow. A piecemeal approach can also threaten sustainability. For example, consistent staffing, while in itself beneficial, is limited if staff members do not have the opportunity to share their knowledge about residents with the rest of their team. Relational coordination is a theory that promotes an integrated approach in uncertain and time-constrained environments through shared knowledge and goals (Gittell, Weinberg, Pfefferle, & Bishop, 2008). Research has shown that relational coordination ensures communication that is timely, frequent, and problem-solving, and that results in improved quality of care in nursing homes and other health care settings (Gittell et al., 2000; Gittell, Godfrey, & Thistlethwaite, 2013; Havens, Vasey, Gittell, & Lin, 2010).

B&F expanded on this theory in nursing homes through a framework of relational coordination practices that provide an internal communication network with the resident as the network hub. With consistent assignment as the home base, the network infrastructure supports individualized resident care through enhanced communication driven by shift huddles, moving quality improvement out of the conference room to staff closest to the resident, and involving certified nursing assistants in care planning.

1) **Consistent assignment** is a practice geared toward developing relationships between residents and the staff closest to them. With consistent assignment, the same certified nursing assistants and nurses provide care for the same residents every day they are working throughout the resident’s stay (Pioneer Network, 2015). By minimizing the number of different staff who care for each resident, consistent assignment fosters relationships and an understanding of resident needs so that staff can more efficiently address and individualize concerns related to quality of care and quality of life. For example, consistently assigned direct caregivers would more quickly notice if Mrs. Smith is behaving abnormally (e.g., not eating or agitated).

2) **Huddles** are quick meetings for staff to share and discuss important information and plan and coordinate action (Pioneer Network, 2015). Huddles occur at regularly scheduled times, such as the start or end of a shift. Huddles build on consistent assignment and provide a communication channel for individual residents’ preferences, needs, and/or concerns through a two-way exchange between direct care and clinical staff. For example, direct care staff would have a conduit to immediately share Mrs. Smith’s change in behavior with clinical staff, and this would quickly address clinical issues (e.g., pneumonia) that may otherwise go unnoticed until complications arose.

3) **Quality Improvement (QI) huddles closest to the resident** make the point of care delivery the hub for prevention and improvement efforts. These are “as needed” huddles that focus deeply on one person or area of concern, such as investigating a fall or preventing distressed behaviors (Pioneer Network, 2015). QI huddles bring interdisciplinary staff who will be implementing approaches together to problem solve and develop workable solutions to prevent avoidable adverse events and promote...
good outcomes. In Mrs. Smith’s example, staff could call a quick QI huddle with other members of the interdisciplinary team to ensure Mrs. Smith is observed by all staff for changes during her recovery.

4) **Involving certified nursing assistants in care planning** means that consistently assigned certified nursing assistants join the care plan meeting as contributing members of the care team. With their knowledge of residents’ daily life, they are turned to for timely, actionable information about residents that helps set the direction for the care provided (Pioneer Network, 2015). In Mrs. Smith’s example, certified nursing assistants could share Mrs. Smith’s daily routine and brainstorm with the family on ways to support her recovery.

In 2012, Pioneer Network partnered with B&F Consulting in the National Learning Collaborative for Engaging Staff in High Quality Individualized Care. Pioneer Network is a national, nonprofit organization devoted to making fundamental changes in values and practices to create a culture of aging that is life-affirming, satisfying, humane, and meaningful (commonly referred to as “culture change”). In this role as a national hub of dialogue in culture change and individualized care, Pioneer Network served as the convener of the National Learning Collaborative, where 52 nursing homes (convened by five state culture change coalitions and four corporate partners) in eight states received education and training on how to operationalize individualized care using the four foundational communication practices. Homes participating with the Learning Collaborative reported that implementing these four organizational practices improved their ability to learn about and honor residents’ customary daily routines, and this resulted in improved clinical outcomes in areas such as mobility, falls prevention, re-hospitalizations, and antipsychotic medication use.

**Current Study**

This current study describes a 2014 process evaluation of 21 (of the total 52) nursing homes that participated in Pioneer Network’s National Learning Collaborative for Engaging Staff in High Quality Individualized Care. The purpose of this process evaluation was to study the sustainability of practices and the efficacy of the relational coordination system to support regular communication, critical thinking, and problem-solving among and with staff closest to the resident one year after homes received

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**Exhibit 2. Site Visit Process.**

<table>
<thead>
<tr>
<th>Site Visit Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-site visit questionnaire</td>
<td>Prior to the site visit, the administrator completed a pre-site visit questionnaire to self-report on each of the four practices. This questionnaire facilitated the authors’ understanding of the perceived status of implementation prior to the site visit and to plan for observations of the sustainability and fidelity of the relational coordination practices in the home.</td>
</tr>
<tr>
<td>Semistructured interview and observation tools</td>
<td>Each site visit included interviews with, on average, five staff members that typically included the administrator, director of nursing, certified nursing assistant(s), and other staff as determined by those most involved with adoption of the practices in the homes. Conveners also conducted observations to document any commonalities and differences in the implementation of the relational coordination practices as conducted day to day.</td>
</tr>
<tr>
<td>Post-site visit call</td>
<td>Conveners recorded notes via a standardized document and collected additional materials, including videotapes and supporting materials (e.g., sign-in sheets, problem-solving tools) from each nursing home. Project evaluators also spoke with conveners within a few days after each site visit to discuss general impressions and highlight areas that conveners found particularly interesting, surprising, and/or informative in the notes.</td>
</tr>
</tbody>
</table>
training and support through the Collaborative. Anecdotal reports from the 2012 Learning Collaborative supported practical knowledge during the learning sessions and action periods as participants applied lessons learned from each other; however, as teams customized practices to their individual nursing homes and integrated them into daily operations, the practices could take many forms with varying effectiveness. Without a thorough “on-the-ground” assessment, the level of variation, efficacy, and sustainability of the practices would be unknown. Hence, this process evaluation provided a detailed study of homes’ operational experiences.

METHOD

Overview of the Study

The large and diverse group of nursing homes participating in the National Learning Collaborative afforded an opportunity to study the implementation process of a variety of homes through post-Collaborative site visits. The process for site visits was developed over several months. Data collection tools were developed and pilot-tested to support the process. The nine Learning Collaborative conveners (one designated individual for each of the five state coalitions and four corporate partners that conducted the Collaborative learning sessions) were asked to visit a minimum of two nursing homes from their state or corporate Collaborative partner. Several conveners met with three homes, resulting in a total of 21 site visits to Collaborative homes from April to July of 2014. Throughout the four-month period, project evaluators provided materials and support to conveners, including interview and observation guides, phone support, and guidance in data collection, as illustrated in Exhibit 2.

To ensure and promote consistency, the authors developed and pilot-tested semistructured interview and observation tools to guide the process. For example, the observation tool for huddles included observations such as, “Who did you observe leading the huddle?” and “Who did you observe contributing (e.g., speaking) during the huddle?” Open-ended interview questions focused on implementation details, challenges, and outcomes. For instance, questions relating to certified nursing assistants’ involvement in care plan meetings included, “How are meetings scheduled to support CNA involvement?” and “How is CNA time in care planning meetings covered by other staff?” and “Do you see benefits to these practices? If so, for who (e.g., staff, residents, families)?”

Data Analysis – Consolidated Framework for Implementation Research

To support a more rigorous analysis of the site visit findings, the authors used the Consolidated Framework for Implementation Research. The Consolidated Framework for Implementation Research (CFIR) is a comprehensive framework that includes five domains: innovation, characteristics of the adopter, outer setting, inner setting, and process of implementation. The CFIR allows researchers to understand the context in which implementation occurs and to identify factors that influence the success of implementation efforts.
for Implementation Research (CFIR) to analyze the content, evaluate implementation progress and contextual factors, and to identify core components (Damschroder & Lowery, 2013). This technique allows for researchers to identify constructs through open-ended data collection and retrospective analysis. The authors’ analysis revealed seven CFIR constructs as most relevant to this project (see Exhibit 3). Site visit homes were rated on each of these constructs (-2, -1, 0, +1, +2) based on the strength and valence (positive or negative influence) of the qualitative data.

The authors also identified six of the 21 nursing homes as “high-implementation,” based on the number and the fidelity (determined as consistent with Collaborative training and guidelines) of relational coordination practices observed during site visits. This allowed the authors to compare construct ratings between the high-implementation homes and the other homes to determine qualitative correlations, patterns, and the influence of constructs on implementation performance.

RESULTS

The authors’ analysis (as highlighted in Exhibit 5) revealed common themes in facilitators and barriers to implementation of the four relational coordination practices. The analysis of patterns in ratings between high-implementation and other homes also distinguished Evidence Strength and Quality and Executing of Practices as the two Consolidated Framework for Implementation Research constructs that most strongly distinguished the facilities with high-implementation (defined as homes with an integrated delivery system of the four practices). Three constructs (Relative Advantage, Adaptability, and Network and Communication) displayed slight discernable patterns by level of implementation. Two constructs, Trialability and Complexity, did not display any discernable patterns between homes.

These findings also informed the development of a Communication Map for engaging staff in individualizing care (Exhibit 6). As the authors compared the data gathered across sites, the authors developed insights into the emerging communication “delivery systems” that link organization-wide initiatives and localized needs. Commonalities of findings analyzed through the site visits illustrate this takeaway as homes continually reported the ability to “plug into” the system of relational coordination practices for localized and individual needs (e.g., Why is Mrs. Smith not eating today?), as well as organization-wide initiatives, such as reducing the use of antipsychotic medications or preventing avoidable hospitalizations. Hence, the Communication Map was the authors’ method of displaying and representing the full delivery system that evolved from the interconnectedness of the practices and resulting communication conduits.
### Exhibit 3. Consolidated Framework for Implementation Research Constructs.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Description in the Context of the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence Strength and Quality - Innovation Characteristic Construct</td>
<td>Interviewees’ perceptions of the quality and validity of evidence supporting the belief that the practices will have desired outcomes, as well as self-reports of the range and the impact of qualitative and quantitative outcomes</td>
</tr>
<tr>
<td>Relative Advantage - Innovation Characteristic Construct</td>
<td>Interviewees’ perception of the advantage of implementing the relational coordination practice versus the process in place prior to the Collaborative</td>
</tr>
<tr>
<td>Adaptability - Innovation Characteristic Construct</td>
<td>Interviewees’ perceptions and observations regarding the degree to which each of the four practices could be adapted, tailored, refined, or reinvented to meet local needs</td>
</tr>
<tr>
<td>Trialability - Innovation Characteristic Construct</td>
<td>Interviewees’ reports on the ability to test the practices on a small scale in the organization and to be able to reverse course (undo implementation) if warranted</td>
</tr>
<tr>
<td>Complexity - Innovation Characteristic Construct</td>
<td>Interviewees’ perceived difficulty of implementation, reflected by duration, scope, radicalness, disruptiveness, centrality, intricacy, and number of steps required to implement</td>
</tr>
<tr>
<td>Networks and Communications - Inner Setting Construct</td>
<td>The nature and quality of webs of social networks and the nature and quality of formal and informal communications within an organization as reported by interviewees and through observation</td>
</tr>
<tr>
<td>Executing of Practices - Process Construct</td>
<td>The ability of the home to carry out or accomplish practice implementation based on interviews and observations</td>
</tr>
</tbody>
</table>

### Exhibit 4. Example Consolidated Framework for Implementation Research Construct Matrix by Implementation Type.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Home 1 High</th>
<th>Home 2 High</th>
<th>Home 3 High</th>
<th>Home 4 Other</th>
<th>Home 5 Other</th>
<th>Home 6 Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence Strength and Quality</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>.5</td>
<td>0</td>
</tr>
<tr>
<td>Relative Advantage</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Adaptability</td>
<td>1</td>
<td>1.5</td>
<td>1.5</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trialability</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Complexity</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Networks and Communications</td>
<td>2</td>
<td>1.5</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Executing of Practices</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-1</td>
<td>-1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: matrix comprised of mean evaluators’ ratings*
### Exhibit 5. Consolidated Framework for Implementation Research Analysis.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Implementation Patterns</th>
<th>Facilitators and Outcomes</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence Strength and Quality</td>
<td>***</td>
<td>Resident choice; relationships; satisfaction (resident and staff); clinical (e.g., falls, alarms, anti-psychotic reductions); QI integration</td>
<td>Lack of evidence (tracking)</td>
</tr>
<tr>
<td>Relative Advantage</td>
<td>**</td>
<td>Communication loop; relationships; certified nursing assistant buy-in; resident choice; care plan integration, documentation</td>
<td>Lack of implementation of all practices</td>
</tr>
<tr>
<td>Adaptability</td>
<td>**</td>
<td>Problem-solving, certified nursing assistant buy-in; interdisciplinary communication; documentation; resident knowledge, relationships</td>
<td>Turnover; size of home</td>
</tr>
<tr>
<td>Trialability</td>
<td>n/a</td>
<td>Pilot test</td>
<td>Size of home</td>
</tr>
<tr>
<td>Complexity</td>
<td>n/a</td>
<td>Certified nursing assistant buy-in; problem-solving</td>
<td>Lack of problem-solving</td>
</tr>
<tr>
<td>Networks and Communications</td>
<td>**</td>
<td>Leadership support; certified nursing assistant buy-in; interdisciplinary communication; relationships</td>
<td>Informal communication</td>
</tr>
<tr>
<td>Executing of Practices</td>
<td>***</td>
<td>Resident knowledge; QI integration; care plan integration; improved documentation</td>
<td>Parallel and top-down huddles; lack of implementation of all practices</td>
</tr>
</tbody>
</table>

** Distinct discernable patterns  ** Slight discernable patterns  n/a No discernable patterns

### Executing of Practices

Consolidated Framework for Implementation Research ratings distinguished strong patterns in this construct, with high-implementation homes scoring the highest possible rating of “2” for summary statements. The reason for this differential was largely due to the variation in the implementation of huddles. For example, several homes reported in the pre-site visit questionnaire that huddles were already in place prior to the Collaborative (e.g., not implemented or improved through the Collaborative); however, site visit observations confirmed that these were not huddles but more traditional models of intershift report lacking two-way communication. This was a common phenomenon that the authors coded as “top-down” and “parallel” variations that did not align well with the Collaborative high engagement model that promotes two-way communication and problem-solving.

- **Top-Down Huddles** – **Exhibit 7** illustrates the first variation of a “top-down” huddle where the nurse reports to the rest of the team, but other staff members are not encouraged to share and participate. The result is one-way communication. Certified nursing assistants may learn more clinical details about residents to support care but are not able to share their intimate knowledge of residents’ routines, needs, and current condition (e.g., Mrs. Smith did...
not eat well today). This key information is then not communicated back to the clinical team, resulting in missed opportunities to prevent adverse events and maximize quality of life; and

• Parallel Huddles (Exhibit 8) – In this variation, certified nursing assistants share together and clinical staff share together, but certified nursing assistants and nurses do not speak with each other.

As with the top-down huddle, this parallel communication does not bring certified nursing assistants' knowledge of residents into clinical problem-solving. Certified nursing assistants are less informed regarding potential clinical issues, and clinical staff members do not have information that could prove critical for root cause analysis.

Conversely, homes with high levels of implementation and fidelity reported communication as improved and crucial to addressing resident concerns earlier on to prevent adverse events. The Communication Map highlights this communication flow as certified nursing assistants gather valuable information via consistent assignment, staff members communicate on resident changes and concerns within shifts, and then the information flows between and across shifts to maximize communication and problem-solving.

Site visit reports stated that this type of information flow helps identify and address issues earlier and saves valuable time for staff. As one nurse noted, “I remember not so long ago when the routine was for CNAs to huddle together, nurses to huddle together, then the nurse [resident care manager] didn’t huddle at all. How could we have known that this was not the most efficient way?”

High-implementation homes reported integrated processes associated with two-way huddles with such consistency that the authors noted strong commonalities in the following areas:
Exhibit 7. Top-Down Huddles.

Exhibit 8. Parallel Huddles.

1) Improved quality improvement and Quality Assurance Performance Improvement work through the use of huddles and quality improvement huddles for Performance Improvement Projects (PIP).
2) Increased documentation of individualized resident approaches and/or preferences in the care plan.
3) Enhanced documentation to support problem-solving, such as documentation resulting from brainstorming in quality improvement huddles and resulting solutions to support resident care.

One commonly reported example of these benefits was the effort to reduce the use of antipsychotics for residents with dementia. As consistently assigned certified nursing assistants began contributing to brainstorming through huddles, success stories of safe and successful reductions became a norm for the Collaborative. For example, “Mr. Potter’s story was about how the team discovered he loved to sing, and that by encouraging and offering him an opportunity to do what he loved, they were able to reduce antipsychotic meds.”
Evidence Strength and Quality

Another construct where strong patterns emerged was Evidence Strength and Quality. This construct is theoretically one that could be affected by the Executing of Practices construct since it represents interviewees’ perceptions of the quality and validity of evidence supporting the practices, as well as self-reports of the range and impact of qualitative and quantitative outcomes. Upon analysis, homes with higher levels of implementation reported both qualitative and quantitative evidence of positive impact. For example, improvements to resident choice and relationships were reported in tandem with clinical improvements, such as reductions in alarms, falls, and/or the use of antipsychotics. Improvements to resident and staff satisfaction and reductions in grievances were also often reported.

In addition, as displayed in the Communication Map (Exhibit 6), high-implementation homes reported that the relational coordination practices improved their overall efficacy with Quality Assurance Performance Improvement work and that the practices acted as a conduit to improve traction of quality improvement initiatives. In fact, when all four practices were in place, homes reported that impact was more evident in outcomes, including reductions in restraints, alarms, falls, and the use of antipsychotics. Nursing homes reported this phenomenon as moving from a constant reactive response of putting out fires to a proactive approach of preventing avoidable declines that may have occurred through a delay in communication.

Moving from a constant reactive response of putting out fires to a proactive approach of preventing avoidable declines that may have occurred through a delay in communication.

Relative Advantage

Consolidated Framework for Implementation Research ratings relating to the Relative Advantage construct were less distinct than the previous two constructs but still discernable. Homes with lower levels of implementation typically reported relative advantage as the general benefit of one practice (e.g., resident choice in bathing or dining); however, high-implementation homes would report relative advantage more broadly for the organization. In the authors’ qualitative analysis, the authors coded this as a “Communication Loop,” which referred to comments or observations that indicated an integrated communication delivery system, such as the following comment: “Increased face-to-face communication results in concerns and issues documented and observed more quickly. During the huddles—it’s almost a full circle—whatever is being shared during the huddle ultimately ends up on the 24-hour report and is looked at in our stand-up and clinical meetings. We also update the care plans based on what has been told in huddles. It’s then brought back to huddles to share interventions and to keep CNAs informed of the outcome and changes to care.”

Adaptability

The Adaptability construct also displayed some slight variations in rating patterns for high-implementation homes. Staff turnover, a commonly reported barrier to sustainability in the nursing home industry, did occur in some homes (including turnover in several directors of nursing and nursing home administrator positions); however, site visits confirmed that practices were adaptable enough to continue through leadership turnover (although turnover did appear to affect further development of systems beyond those implemented through the Collaborative). The size of a home was also reported as a factor in adaptability, with some barriers associated with small homes where communication was more informal in nature. Despite these reports, conveners described an adaptability and sustainability of practices at the ground level, illustrating the staying power of these practices once integrated into the fabric of a home. As one convener stated, “The practices are the foundations to true quality of life and quality of care.”

High-implementation nursing homes did not perceive as many barriers and valued interdisciplinary problem-solving, promoting certified nursing assistant buy-in and valuing knowledge of residents as essential to adaptability. Many also reported adaptability to documentation as in the following comment: “Realizing that it is not a realistic expectation that CNAs will read the entire care plan, we
High-implementation nursing homes did not perceive as many barriers and valued interdisciplinary problem-solving, promoting certified nursing assistant buy-in and valuing knowledge of residents as essential to adaptability.

importance of adaptability to residents and the importance of a “welcome” process that creates opportunities to get to know residents’ customary routines and preferences within the first 24-hours; this was a concept also covered through the B&F method and Collaborative training.

Networks and Communications

For this construct, high-implementation homes were more likely to report that the support of leadership and management was very important for certified nursing assistant buy-in. Certified nursing assistants reported appreciating when management attends meetings to inform them of changes and asks for their input. Interdisciplinary communication also flagged as a commonly used component of relational coordination through the use of quality improvement huddles. As displayed in the Communication Map, interdisciplinary staff members engage regularly through these huddles. This was a new practice for many homes that resulted in improved relationships: “The team process resulted in significantly improved relationships between dietary staff and nursing. They went from an ‘us and them’ to a ‘we’ team description”; and overall efficiency as described in the comment: “We brainstorm together for ideas on how to address a behavior based on knowledge of the resident’s background. It might take a couple of days to figure out what would work best, but someone might suddenly come up with a good idea.”

Trialability and Complexity

These constructs were not truly distinguishing between site visit homes. Most nursing homes pilot tested the practices with a smaller group of residents and staff before larger rollout. For example, many homes noted a “neighborhood-by-neighborhood” rollout approach and the use of additional training and orientation. Since trialability and complexity are more likely to be recognized early on in implementation, it is also possible that retrospective perceptions post-implementation may not fully or accurately represent these constructs.

DISCUSSION

In the skilled nursing realm, there is an increased focus on individualized care and quality improvement. Yet, practices such as consistent assignment may not be as effective as a singular practice without additional communication pathways to share with the clinical team. Previous research emphasized the importance of interprofessional relationships (Caspar, Cooke, O’Rourke, & MacDonald, 2013) and inclusive communication systems (Kolanowski et al., 2015) in the provision of individualized care. The authors’ findings support this previous research and indicate that homes with all four practices in place (high-implementation homes) experienced more rapid and substantial development of the communication infrastructure.

Homes with all four practices in place (high-implementation homes) experienced more rapid and substantial development of the communication infrastructure.
implementing these practices as a “bundle” was reported as improving overall quality of care and life and also as increasing organizational efficiency since less time was spent reinventing the wheel or engaging in new planning for each individual goal.

The analysis also revealed that top-down and parallel variations in huddles could suppress communication through inherent stoppages or barriers to communication in the delivery system. The majority of homes with these variations were the result of a “we already do this here” definition of communication (i.e., homes thought that their existing means of intershift report adhered to the Collaborative guidelines). As the authors identified and codified these variations, they increasingly realized that one-way communication is an institutionalized practice for nursing homes. Consequently, even with the Collaborative training, the innovative nature of a two-way, highly engaged system of communication is not always recognized as different from the norm (Exhibit 1). This finding also highlighted that certain elements of relational coordination are highly adaptable based on an individual nursing home’s resources (e.g., how to integrate certified nursing assistants in care planning, training methods, and timing). Yet, there are core components, such as the importance of two-way communication, that should adhere to a more defined implementation framework in order to realize optimum efficiency and outcomes.

The authors’ findings also informed the development of the Communication Map (Exhibit 6), which illustrates the commonalities of findings from the site visits regarding how these practices work in conjunction and the resulting process and reported outcomes. This Communication Map illustrates several potential benefits of a systems approach to communication.

Integration of multiple initiatives – Nursing home providers are often challenged to focus on multiple initiatives to meet regulatory expectations, corporate priorities (e.g., reducing hospitalizations), and meeting the goals and needs of residents and families. Often this involves tasks such as assembling PIP teams, developing action plans, creating SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) goals, and engaging in PDSA (Plan, Do, Study, Act) cycles for each goal. This process can be beneficial but incredibly resource draining, time constraining, and challenging, given the complex, uncertain environment of nursing homes. The authors’ findings support that nursing homes with fully integrated communication delivery systems as displayed in Exhibit 6 could more quickly integrate initiatives to communicate with staff, establish shared goals, and initiate the process without reinventing the wheel for each new initiative.

Care plan integration – A robust finding for homes with fully integrated communication delivery systems was that care plans had developed into “living documents” and were altered more frequently post-Collaborative through the shared knowledge and increased problem-solving of residents and staff.

Focus on bundled payment and outcomes – To survive a changing reimbursement landscape, nursing home providers have no choice but to concentrate on data metrics and outcomes to maximize reimbursement...
through bundled payments and value-based purchasing. Clearly, outcomes and benchmarks are relevant and carefully chosen to align resident quality outcomes with organizational efficiency. Despite this focus on metrics, organizational systems and practices are explanatory factors in any resulting outcomes. The findings of this study reinforce previous research (Havens, Vasey, Gittell, & Wei-Ting, 2010) by suggesting that communication delivery systems have benefits to improve metrics, such as reducing avoidable declines (those caused by care rather than disease progression) and avoiding adverse events. Frank and Brady term this as “the cycle time”: the time it takes for subtle indicators at the point of care to mandate clinical attention (Pioneer Network, 2015). High-implementation homes consistently reported reductions in cycle times through the implementation of a communication delivery system.

Limitations and Future Directions

Despite the compelling findings of this study, it is a qualitative process evaluation. Hence, the authors cannot attribute causality of the relational coordination practices to improved communication systems or clinical outcomes without further research. In addition, other factors could have contributed to the impact described in the authors’ study and confounded the results. For example, the authors employed a purposive (and not random) sampling method to identify homes for site visits. Although they chose this method to include homes with characteristics under-represented overall in Collaborative homes (e.g., independent ownership, lower Nursing Home Compare ratings), this could contribute to potential sampling bias. Also, the authors cannot fully isolate the effect of the learning collaborative model and the ability of nursing homes to collaborate and learn from peers.

In addition, Pioneer Network (the convener of the Collaborative) recruited homes that were likely engaged at varying levels of culture change. Person-centered care is theorized to be an outcome of culture change, and research has demonstrated positive outcomes for both nursing home residents and staff (Grabowski et al., 2014; Miller, LePore, Lima, Shield, & Tyler, 2014). Therefore, culture change implementation could have contributed to the authors’ findings. More rigorous, controlled analysis is needed to isolate the effects of the relational coordination practices on any resulting organizational or quality outcomes.

**CONCLUSION**

There is growing tension in long-term care based on an increasing focus on quality of life and resident experience juxtaposed with reimbursement models shifting to an emphasis on quality of care and measurable outcomes. Without functional guidance, providers are left to sort out the processes, resources, and tools to best achieve all levels of these shifting expectations. Although there seems to be a prevailing assumption that providers inherently know or can easily determine appropriate methods, many providers view these as competing priorities and struggle to allocate the time and resources to achieve desired results. This evaluation is innovative in advancing the concept of implementing and researching a bundle of person-centered care practices for an integrated face-to-face delivery system to accomplish goals.

Other industry stakeholders, such as regulators, policymakers, payors, accountable care organizations (ACOs), and investors, should also consider the benefits and detriments of evaluating a nursing home by outcome metrics alone. For example, a nursing home may be judged positively for inclusion in a preferred network and higher reimbursement based on outcome metrics, but those metrics do not necessarily convey that quality of life and resident experience are optimal in the home. Even if quality of life is not optimal for homes with good outcome metrics, it is not necessarily due to the fact that owners and operators do not value it; it just may be that nursing homes don’t have the systems in place to integrate quality of life and quality of care as shared, non-competing objectives.

“What’s in your bundle?” is a simple statement recognizing that organizational systems can positively or negatively

**Communication delivery systems have benefits to improve metrics, such as reducing avoidable declines (those caused by care rather than disease progression) and avoiding adverse events.**
affect reimbursement through resulting outcomes. This premise is readily accepted, discussed, and promoted for technological frameworks, such as the importance of electronic health records (EHR) as valuable tools for effective communication. Yet, efficient systems for people to communicate are not widely discussed and are often left to more institutional methods or to chance. This study highlights that communication delivery systems can be dynamic, valuable components in complex long-term care environments and should be strongly considered as a tool for improving quality and efficiency in tandem with regulatory and reimbursement initiatives. Perhaps, based on this and similar studies, “What's in your bundle?” will emerge as a principal evaluation component to shape the future of long-term care.

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