The Connect-Home Collaborative: Scaling-up Transitional Care for Post-Acute Care Patients and their Families

Introduction

Connect-Home is an evidence-based transitional care process that empowers patients and their caregivers to manage patients' serious illness at home, improve function, and prevent avoidable re-hospitalizations.[i] Developed by Dr. Mark Toles at The University of North Carolina at Chapel Hill, Connect-Home is a set of protocols and tools that guide staff in post-acute care facilities to transfer vulnerable older adults from post-acute care to their homes. Dr. Toles conducted extensive formative work to test the Connect-Home model, with funding from The National Institutes of Health and The John A. Hartford Foundation.[ii] A successful two-year implementation of Connect-Home was conducted in three post-acute care facilities at Lutheran Services Carolinas, a Lutheran Services in America network member organization. Using a collaborative learning approach and with a grant support from The Harry and Jeanette Weinberg Foundation, a second successful implementation was conducted with four Lutheran Services in America organizations in 2018. The purpose of this white paper is to provide an overview of the 18-month learning collaborative that implemented the Connect-Home intervention, share the learnings from the project and discuss the current transitional care policy and practice environment in the U.S.

Background on Transitional Care

Put most simply, transitional care encompasses efforts taken by patients, caregivers and health care providers to support a patient's journey from one setting or provider of health care to another.[iii] It is a time-limited service aimed at ensuring coordination and continuity of care. Unfortunately, this timeframe – while often brief – represents one of the greatest danger periods in any patient's treatment and recovery process. As a patient moves from site to site, there are multiple opportunities for disruptions in treatment and patient management that can, if left unaddressed, lead to a negative outcome. These challenges have been recognized and studied for many years, but given the absence of a payment system to specifically address care transitions, few providers were historically incented or inclined to tackle the issue directly.

The advent of the Affordable Care Act in 2010, however, created compelling reasons for many organizations – hospitals in particular – to invest in strategies to improve their transitional care practices. The ACA specifically called for better adoption, use and evaluation of care transition efforts, largely to address the challenge associated with acute hospital readmissions. Nearly one in five Medicare beneficiaries in the U.S. is readmitted to a hospital within 30 days of discharge, and inadequate care transition planning efforts, communication failures, and delays in scheduling post-hospital care represent leading causes of preventable readmissions.

CMS implemented the Hospital Readmissions Reduction Program (HRRP) in 2012 and motivated many acute care organizations to evaluate their practices around transitions of care to reduce their risk

exposure. The HRRP specifically reduces Medicare payments to hospitals that demonstrate excess readmission performance.

In addition to the HRRP, the ACA mandated specific testing around improving care transitions via Section 3026 of the act, which created the Community-Based Care Transitions Program (CCTP). The program's goals were relatively straightforward:

- Improve transitions of beneficiaries from inpatient hospital setting to other care settings
- Improve quality of care
- Reduce readmissions for high-risk beneficiaries
- Document measurable savings to the Medicare program

18 sites across the country participated in the program from 2012 to 2017 and involved partnerships between nearly 450 acute hospitals and more than 100 community-based organizations to test approaches and evolving models of transitional care. The results of the program did lead to some measurable reduction in readmissions and related Medicare savings, and the net impact of heightened visibility around transitions of care led to increased awareness in the hospital industry of the essential nature of better transition planning. Patients who can transition more safely to home or a next level of care are likely to recover more quickly and have a more positive care experience overall.

Fundamentals of Transitional Care

While the ACA did heighten opportunity and awareness around the importance of care transitions, clinicians had considered the topic for many years. While independent practitioners and organizations across the country have deployed various efforts, a handful of specific models have seen far-reaching evaluation and study over the last 20 years, including:

- Care Transitions Intervention (Coleman et al., 2006)
- Transitional Care Model (Naylor et al., 2004)
- Project RED (Re-Engineered Discharge) (Project RED, 2012)
- The Enhanced Discharge Planning Program, also known as Bridge (Altfeld et al., 2012)
- Better Outcomes for Older Adults through Supported Transitions, or Project BOOST (Williams and Coleman, 2009)

There are subtle differences in the way these programs are deployed, what staffing roles are utilized, and when they are initiated in the patient care process. But they commonly focus on improving patient understanding of their condition/treatment plan, engaging the patient or caregiver in specific responses to changes in condition (that require an action), and ensuring appropriate follow-up in the next step in the care process – often a primary care physician. Communication is central to all of these efforts and written discharge information that is easily understood and followed is critical.

The idea of a care transitions as a "bridge" from one healthcare setting to the next has emerged as an excellent visual representation of the concept and was summarized in 2014 by the Vanderbilt Center for Research and Innovation in Systems Safety:

The "Transition Bridge" as illustrated encompasses four key domains: planning, communication, engagement and continuity – reflecting many of the common elements of other models described above – and put in place to span the common challenges and safety issues inherent in transitions of care. Within each domain are several key tactical foci for both patients and healthcare providers to address.

As many acute hospital and health system organizations have sought to address their care transition issues, few have adopted any one program as a sole solution. These providers have instead leveraged learnings from the common themes and created specific solutions that align with their respective populations or clinical models. To that end, four dominant themes around care transitions have taken root in actual practice across the acute hospital industry:

- **Proactive Discharge Planning:** organizing follow-up services that address patients' medical, financial and psychosocial barriers to receiving needed care; engaging or utilizing community resources as needed and ensuring that placement in post-hospital services are clinically indicated; following up with patients accordingly after discharge to address questions, assess symptoms and medications; and accomplishing patient education and next steps by utilizing relevant materials and protocols
- **Medication Reconciliation:** reviewing medications at the point of transition with patient and caregiver to ensure patients understand medications and importance of adherence; evaluating accuracy of medication lists and dosages; identifying any financial or social barriers to filling prescriptions and addressing them if possible; and communicating medication lists to the subsequent site of care
- **Warm Handoffs and Communication:** developing and deploying standardized transfer protocols and documentation requirements; outlining defined expectations of communication among

discharging and admitting providers – MD to MD, Nurse to Nurse; and establishing stratified hand-off protocols by assessed patient risk or acuity

- **Primary Care Follow-Up:** prompting follow-up visits with primary care providers following acute discharge; implementing protocol and practice for follow-up timeframes; and ensuring appropriate hand-offs to ambulatory care managers (when possible or relevant)

Evolving Focus on Care Transitions in Post-Acute Care

Given inherent emphasis on the hospital as the leading site of care in American healthcare, it is not surprising that care transition thinking has been most active around the transition from hospital to home-based care. As both learning and practice in hospitals around care transitions have grown, interest in extending these practices into post-acute care facilities has grown as well. Between 1.6 and 1.8 million older adults receive post-acute care each year in nursing homes – this is generally a frail population with multiple health conditions who often depend on caregivers at home. The average older adult transitioning to care at home relies on caregivers for three to six activities of daily living. Caregivers may not be fully aware of patient needs and often face a limited understanding of how to effectively continue treatments at home. This is an especially vulnerable time for seniors and frequently results in poor outcomes such as re-hospitalization, emergency room visits and a lower quality of life. Among patients discharged from post-acute care, 22% have negative outcomes within 30 days and 38% within 90 days after returning home.[iv]

Post-acute care in skilled nursing facilities represents a common waypoint for many patients on their journey to recovery, and presents the same opportunities to address transitions of care. A typical Medicare patient will spend five to seven days in a hospital, followed by 10 to 30 days in a skilled nursing facility for post-acute care. While patients are often in recovery by the time they leave post-acute care, they still require extensive support and medical care at home to minimize the risk for recurring acute medical problems. The issue becomes even more paramount as valued-based healthcare initiatives (e.g., accountable care organizations, bundled payment and Medicare managed care programs) frequently reduce the lengths of time patients are cared for in skilled nursing facilities. As a result, more patients are discharging home sooner and much of their recovery is still before them at home.

In addition, post-acute care facilities – like their hospital cousins – are coming under increased scrutiny around both the cost and quality of the care they provide. CMS' recently-deployed Value-Based Purchasing program currently measures performance quality on a single quality measure: avoidable hospital readmissions. Failing to meet certain quality thresholds around readmission management will lead to a reduction in the Medicare payment.

Thus, effective models of post-acute care transitions to home must evolve to address both growing patient complexity and regulatory requirements. Given the considerable differences between hospital and post-acute care clinical and operational models, outright adoption of a hospital-based approach is not practical.

Connect-Home Offers a Unique Option for Post-Acute Care

The growing evidence around Connect-Home model represents a groundbreaking foray into the current void for post-acute transitional care. Designed to work specifically within the staffing model inherent in the post-acute setting and to address increasing expectations around person-centered care, Connect-Home emphasizes many of the key elements of successful care transitions models: written discharge

documentation, caregiver and patient engagement, scheduling of follow-up appointments and ongoing communication following discharge.

While early deployment and evaluation of Connect-Home has already met with success, the forward-looking opportunity for such a program is far greater. There are more than 15,000 post-acute care settings in the U.S. and the majority of them could benefit from improvements to their care transition protocols. Industry-wide dissemination of a model like Connect-Home would be welcomed not only by the provider community, but also by payers and aligned healthcare systems, who remain focused on both controlling the cost of care and improving patient outcomes.

Connect-Home: A Transitional Care Intervention

The goal of Connect-Home is to prepare older adults and their caregivers for the transition from nursing home to home-based care and, thereby, improve the outcomes and quality of life for vulnerable older adults at home. It empowers healthcare teams to provide excellent transitional care, improving patient and caregiver experiences and preparedness for discharge. Connect-Home provides tools, training and technical assistance for existing staff in nursing homes to provide transitional care services designed for the unique needs of older adults in post-acute settings of care. The aims of this care are to honor patient preference in discharge planning and to educate and empower older adults and their caregivers to manage follow-up care at home. Connect-Home provides patients with an understanding of discharge medications, symptoms to monitor, daily care instructions to ensure safety at home and follow-up appointments for medical care. It ensures follow-up appointments are pre-scheduled and medical records are sent to doctors and community-based organizations responsible for providing follow-up care, ensuring that the elements of post-discharge care are completed.

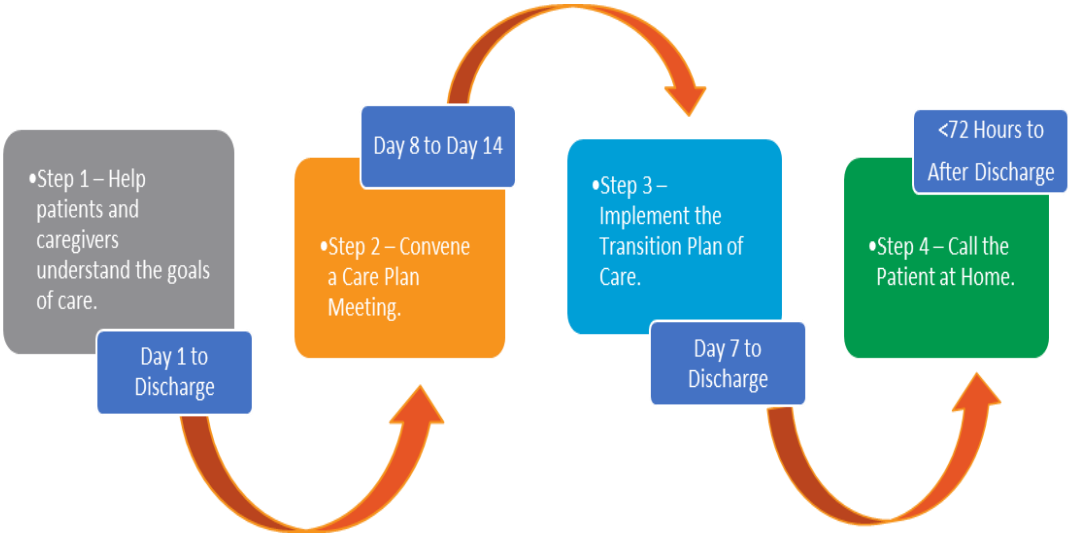
Connect-Home benefits include:

- Person-centered transition plan of care. Goals and priorities are set with older adults and their caregivers.
- Empowered staff. Connect-Home clearly defines roles for nurses, rehabilitation therapists and social workers in the older adult's transition from post-acute care to the home, promoting a culture that empowers staff to address barriers to successful transition.
- Schedule of care. A detailed care path describing the sequence and timing of care provided by members of the multidisciplinary team.
- Auditing and quality improvement. Data is collected to monitor the successful implementation of the model and identify any necessary adjustments.

Connect-Home's key attributes are:

- The quality of the post-hospital care transition experience from the patient's perspective.
- The sense of well-being from the patient's perspective, including physical symptoms, psychological symptoms, outlook on life, and meaningful existence.
- Mobility - where a person is able to go, how often, and what equipment is used.
- Days at home, defined as the number of days a person is at home without using acute medical care such as the emergency department or hospital.

Connect-Home is delivered in four steps. It starts the day the patient is admitted to post-acute care and ends 1-3 days after the return home. In an illustration of care for a patient with a 20-day nursing home stay, the four steps are illustrated below:



Lutheran Services in America Connect-Home Implementation

With the team at The University of North Carolina at Chapel Hill, Lutheran Services in America developed the Connect-Home Learning Collaborative to implement the program in four senior services organizations in 2018. The learning collaborative was designed to pilot test strategies for taking the Connect-Home intervention to scale, and to improve patient outcomes in a national set of nursing homes. Dr. Toles provided project leadership, training, and technical assistance to participating sites. During this project, 325 older adults and their caregivers received the Connect-Home service model, and the model continues to support older adults in the participating organizations. Of those receiving the intervention, 90% also received some type of government assistance. The older adults were 83 years old on average, with an average length of stay of 28 days prior to discharge. The Harry and Jeanette Weinberg Foundation's partnership and support made the learning collaborative possible, expediting the delivery of services to low-income vulnerable older adults and maximizing the impact of Connect-Home. Participating organizations gained support from their executive teams and established on-site care teams for Connect-Home implementation. Modifications were made to electronic medical records, a crucial element to successfully delivering the Transitional Plan of Care. Dr. Toles and his team facilitated the quality improvement collaborative and supported teams in four nursing homes as they worked-through a series of quality improvement cycles. As a part of the Collaborative's work, outcomes of the program were assessed with data collected in three quality improvement cycles. A key finding was evidence that fidelity to the Connect-Home protocol was strong and sustained across the three reporting periods. Overall, site compliance was 85.5% through December 2018 for the steps defined as essential to ensuring improved post-discharge outcomes and quality of life for low-income vulnerable older adult patients. This finding was significant because it confirmed the feasibility of the intervention and indicated that the collaborative model was an effective approach to implementing Connect-Home in participating nursing homes.

The collaborative learning design proved effective as site teams shared ideas and innovations with each other including:

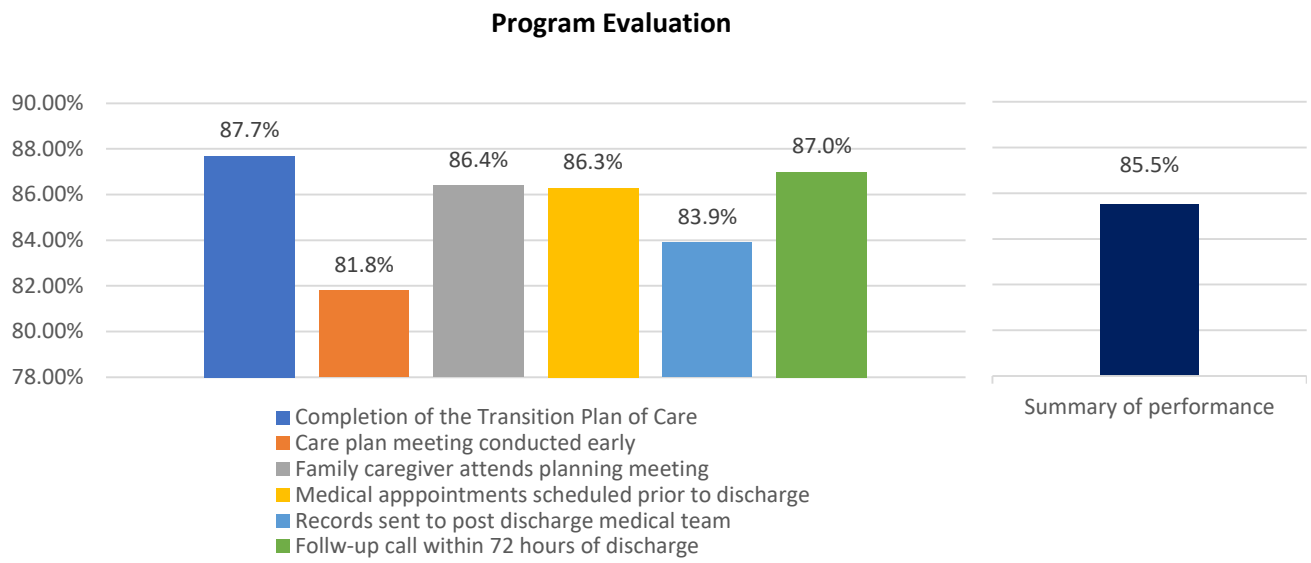
- EMR changes and enhancements
- Action plans for improving the care meeting with patients
- Tools that strengthen post-discharge care follow-up procedures

The members reported that the Learning Collaborative's interaction and validation were extremely beneficial. Over the course of the project, the teams identified several challenges and key learnings related to improved delivery of transitional care:

- A standardized training toolkit was crucial to scaling the model, including additional training modules and videos to prepare staff and reinforce lessons learned.
- There are logistical difficulties in transferring patient treatment plans to community physicians. This problem will require special focus in the next phase of Connect-Home.
- Connect-Home's team based approach is sustainable because it does not require sites to hire new personnel. However, the collaborative will need to develop strategies to train new hires when sites experience staff turnover.
- This intervention brings together all the patient's care team members – nurses, social workers, rehab therapists. A successful transition home is due in great measure to the entire team's contribution.
- In the future, secure pre-implementation baseline data on Connect-Home's four key fidelity measures and benchmark them from the start of the intervention.

The Connect-Home intervention was assessed in terms of fidelity in these four key evaluation measures:

- Care plan meetings were conducted early for 81.7% of patient discharges, with family caregivers attending 86.4% of the time. The care plan meeting is scheduled when an older adult is admitted to the facility and the plan may be refined over the duration of the stay as circumstances, preferences and family support changes. The care plan meetings and ongoing plan revisions are crucial to the success of the Connect-Home Transitional Care model and to actively engaging older adults and their caregivers in managing medical conditions post-discharge.
- Post-discharge medical visits were scheduled prior to discharge 86.3% of the time by the on-site care team. Attending post-discharge medical visits is crucial to successfully returning and remaining at home without complication. Connect-Home schedules these appointments prior to discharge and the care plan meeting includes discussion of factors critical to compliance such as transportation.
- Records were sent to the post-discharge team 83.9% of the time. This number is lower than the number of visits scheduled and reflects the challenges of sharing medical records with health care and community providers. The Learning Collaborative will continue to share best practices to address this challenge.
- Patient or family caregivers received follow-up calls within 72 hours of discharge 87.0% of the time. Follow-up calls are an important touch point and provide guidance to family caregivers when there is confusion. Social workers from the on-site care teams indicate that follow-up contact engages family caregivers, who are encouraged to call the site as needed with any questions they have.



Connect-Home sample data were collected over a 60-day period in three cycles. Throughout project implementation, the sites demonstrated continuous improvement in supporting the core tenets of the model. Most notable is the significant increase in scheduling of medical appointments, reflecting a 24% improvement in performance. As part of the project evaluation, site staff were interviewed during quality improvement calls and in-person site visits to assess the acceptability and relative advantage of Connect-Home.

Across the acute care sites, staff reported that Connect-Home improved the quality of patient care. Several staff commented on the advantages of care plan meetings, a Connect-Home procedure for the patient, family and staff to connect and make plans for the patient's care at home. For example, one social worker explained how the care plan meeting prevented last minute planning:

> *"The care plan meetings I think are helping kind of bring up all of the-- all the things that could be issues when discharge comes, bringing them…to the forefront when they first get here…This has been good because it really takes the discharge process off of my shoulders alone. It's bringing therapy into that meeting and nursing into that meeting. And they're starting to think more about discharge. And we're talking about stuff that might not have come up until the very last minute, that I would have to catch and fix right at discharge, which is stressful. So, this has really helped us smooth things out, actually."*

Nurses described how participating in Connect-Home helped them improve the way they taught patients and caregivers about continuing care at home. For example, a nursing leader emphasized how Connect-Home increased collaboration among staff:

> *"Connect-Home touches on the fundamentals of nursing care. It helps us pull all the disciplines together and teach our residents how to manage their care at home. That's why I am a big champion of this."*

Staff members described how Connect-Home tools and procedures helped them plan for teaching patients and families about care at home. For example, a licensed practical nurse described that she learned a more patient-centered way of communicating:

> *"We've actually started explaining things a lot better…I think that Connect-Home has helped that way. So, talking to a patient 'down to earth' and not using nursing lingo is how I feel that we've changed things with Connect-Home. It is more about what they need to look for, not what we're looking for. So, I think that has helped the patient when discharged home - to have a better understanding of why they're on like a blood thinner, or why they're taking aspirin, or why they're on diabetic medications, because we're not using big words for things for them to monitor."*

Clinical leaders in the nursing homes were excited about data from internal reports on patient outcomes, and they attributed improved outcomes to participating in Connect-Home. A nursing leader reported that Connect-Home was helping her work to decrease the rate of patient rehospitalization:

> *"I just saw the new data about our rehospitalizations, you can really see how our Connect-Home work is helping us improve."*

A nursing coordinator in another facility also attributed participating in Connect-Home to a decreasing rate of patient rehospitalization:

> *"Our staff have learned to think about our residents' care at home with as much detail as they think of care here in the building. This quarter, we had the lowest rehospitalization rate in our reporting area, so I know it is making a difference."*

In summary, these findings suggest the relative advantage of the Connect-Home model. The empirical data are consistent with the Connect-Home logic model and indicate the intervention was acceptable to staff and associated with improvement in processes and outcomes of patient care. Evaluating these findings from the Connect-Home Collaborative indicate the feasibility and preliminary estimate of the effectiveness of using a quality improvement collaborative to scale-up transitional care in nursing homes. Next steps will be to transfer lessons learned from this initial test of the Connect-Home Collaborative to structured evaluation of the model, in which the reach, effectiveness, adoption, implementation, and maintenance of transitional care services are evaluated longitudinally.

Key lessons for future work will include the use of baseline assessment of discharge planning and transitional care services, expanded use of quality improvement cycles within individual nursing homes, closer linkages of executive champions and nursing home-based quality improvement teams, and using information technology to disseminate collaborative findings and activities.

Lutheran Services in America is mission-driven to improve care and support for low-income, vulnerable and underserved older adults. By bringing together partners and resources – as demonstrated in the Connect-Home Learning Collaborative – Lutheran Services in America advances strategic efforts that improve health outcomes and quality of life for older adults. As health systems search for better strategies to reduce unnecessary rehospitalizations, Connect-Home demonstrates that it prepares post-acute older adults and their caregivers to transition home successfully and live there independently.

Acknowledgements

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