Supplementary Material S1

Resources and Guidance to Implement Connect-Home: Transitional Care in Skilled Nursing Facilities

Acknowledgements

Connect-Home: Transitional Care in Skilled Nursing Facilities combines three evidence-based models of care for older adults: (a) Project Re-Engineered Discharge[1], (b) the Transitional Care Model[2] and (c) the CONNECT Intervention;[3] special thanks to Brian Jack, MD, Mary Naylor, PhD, RN, FAAN, Ruth Anderson, PhD, RN, FAAN, and Cathleen Colón-Emeric, MD, MACP, MHS.

Connect-Home: Transitional Care in SNFs

Connect-Home consists of tools and training to increase capacity to deliver transitional care for SNF patients and their caregivers. When using Connect-Home to deliver transitional care, the goal is to **prepare** short stay nursing home patients for returning home safely and remaining there without complications. What are characteristics of a prepared patient and caregiver? A prepared patient and caregiver have:

(a) awareness of the plan to successfully continue care at home,

(b) knowledge and understanding of the skills they need to continue care at home and anticipate changes in health,

(c) confidence in their ability to use the transition plan for care at home,

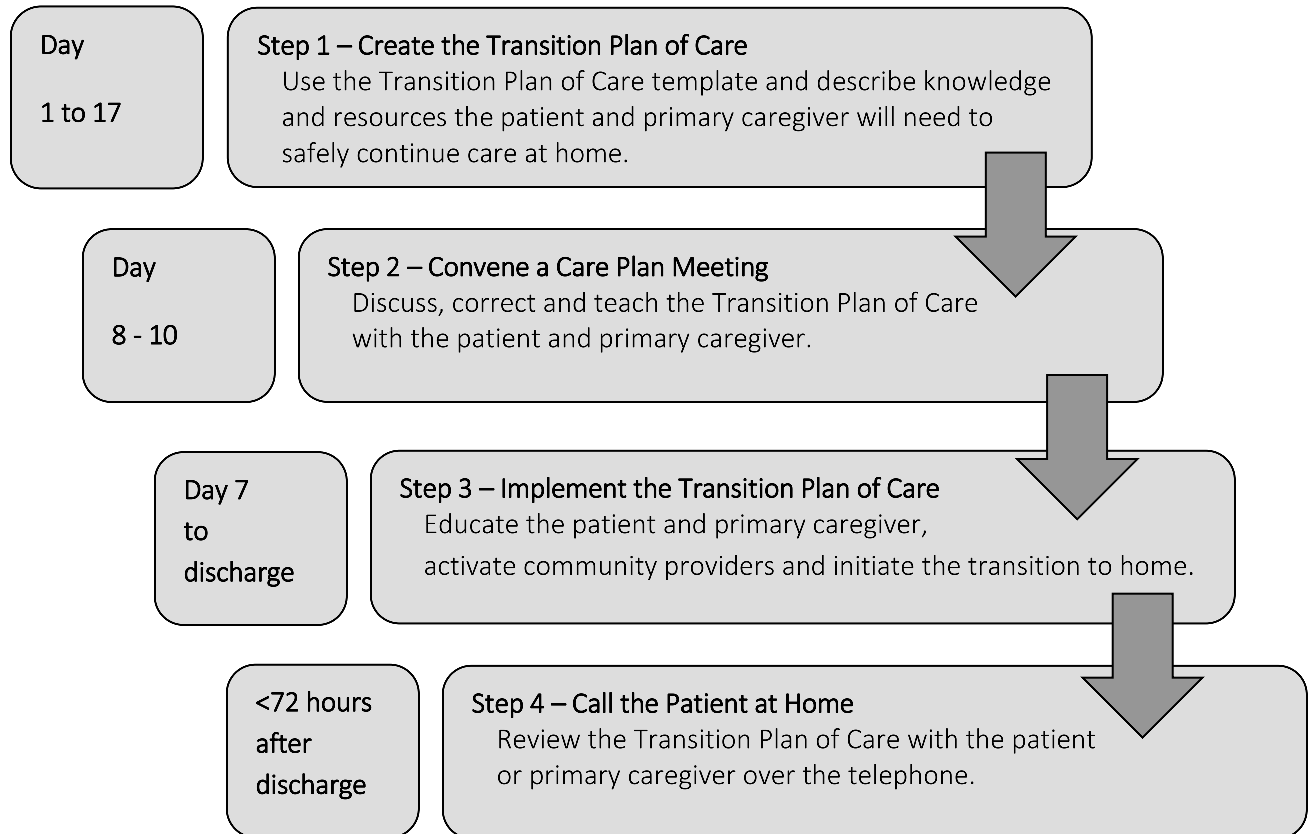
(d) and accurate and detailed written plan that tells the next steps in care, medication administration instructions, and plans for rehabilitation at home, and

(e) activated primary care providers, who know the patient was in the nursing home, receive a fax about the patient's condition, and know when the patient will visit for a follow-up appointment. [1,2,7]

Connect-Home: Selected Tools, Training Approaches and Technical Assistance

A. Tools

Schedule: Transitional Care in 4 Steps (based on 20 day admission)



Procedures for delivering transitional care

Evidence-based transitional care procedures are used to prepare patients and primary caregivers for transitions to home, including procedures to:

1. Create a transition plan of care
2. Create an accurate and legible medication list for the patient and caregiver to use at home and to send to the follow-up medical clinician
3. Engage the patient and primary caregiver in transition planning during the care plan meeting
4. Help the patient and caregiver learn strategies for care at home
5. Activate community providers, such as home health nurses
6. Call the patient or primary caregiver at home and reinforce the transition plan of care

Resources for delivering transitional care

The "Transition Plan of Care," a tool in the EMR, is used to generate a transition plan and written instructions for patients and caregivers to use at home. The Transition Plan of Care and Medication List are also sent to the follow-up clinician after discharge.

B. Schedule of Staff Training to Deliver Connect-Home

Before Connect-Home services are provided in the SNF, staff members are trained to use the resources and deliver transitional care. As indicated in the Schedule of Training Activities, Connect-Home training engages executive sponsors, administrators and clinical staff in a program to improve transitional are in the SNF.

Table 1. Schedule of Training Activities

Research Team Roles	Rationale and Outcome	Who	Time
Executive sponsor and nursing home chain administrator training Trainer explains: the goals, attributes, staff involvement, and procedures for evaluating Connect-Home.	Activate leaders to champion study goals and post discharge outcomes.	Executive Sponsors	45 min
SNF site champion and department head training Trainer reviews: Connect-Home protocol, tools, training, EMR resources, SNF procedures to be replaced with the Connect-Home protocol, staff who will participate in training.	Activate SNF leaders and create a detailed schedule of transitional care services in the SNF.	SNF formal leadership	90 min
Inter-disciplinary SNF Staff Training Trainer reviews: post-SNF risks for patients and caregivers, the concept of "preparedness for discharge," the Connect-Home protocol, SNF staff roles, and program evaluation.	Develop staff competence to use protocols and work as a team to deliver transitional care.	IDT	3 hrs
Intra-disciplinary SNF Staff Training Session Trainer reviews: the Connect-Home protocol and tools in separate groups of nurses, social workers, and rehabilitation staff. Answer operational questions.	Develop staff confidence to use Connect-Home protocols in daily practice.	IDT	1 hr

C. Technical Assistance

Using Quality Assurance/Performance Improvement procedures, medical charts are reviewed and staff are informed of the teams' implementation of Connect-Home. Feedback is presented individually and in small groups. The goal of the technical assistance is to help staff members learn to use the tools, and to identify barriers that impede their delivery of the new services. Then, using this information, to work with the full IDT and SNF leadership to address barriers and improve performance.

Transitional Care in 4 Steps: Goals and Summary of procedures

Use Connect-Home to deliver "transitional care in 4 steps." The goal and procedures for each step are summarized in the following 4 sections.

Step 1 - Create the Transition Plan of Care

The first step is to gather data to create a transition plan of care. The primary task is to describe needs and resources for the patient's safe transition home. Step 1 begins on the day of admission.

The "Transition Plan of Care" (TPOC) is the tool that staff use to describe the skills, resources and information that the patient and caregiver will need at home. At the time of discharge, staff will give a print-out of the completed TPOC to the patient and primary caregiver to use at home. Thus, when writing a TPOC, it is important to *write in simple language and to avoid technical jargon*! Remember, the TPOC is the backbone of Connect-Home.

- In **Step 1**, staff members describe elements of the plan in the TPOC.
- In **Step 2**, staff members engage the patient and primary caregiver in a conversation about the goals in the TPOC.
- In **Step 3**, staff members educate the patient and caregiver about details in the transition plan, and give them a copy of the TPOC to use at home. Staff fax the TPOC and medical records to the follow-up medical clinician.
- In **Step 4**, a staff member calls the patient or caregiver at home to reinforce the written TPOC.

The template for the TPOC is built into the nursing home electronic medical record. Staff record elements of the transition plan in this template. An illustration of the template is included on the next page. The TPOC is ultimately a guide for continuing care at home; thus, avoiding jargon and selecting key teaching messages is essential for success.

Transition Plan of Care (template)

Resident Name: ________________________________

Family/Caregiver: ________________________________

Date of Discharge: ________________________________ MRN: ____________

1	Main Problem Addressed in the SNF:

2	Potential Health Problems to Watch For:

3	Emergency Contact:

4	Medications:
See attached Medications and Treatment Orders	

5	Medical Treatments:

6	Discharge Destination:

7	Mobility and Transfers
See attached Discharge Summaries from Rehabilitation Therapists	

8	Self-care

9	Speech and Diet

10	Advanced Care Planning

11	Caregiver Understanding of Plans and Patient Needs

12	Home Health Services

13	Appointments

14	Labs/Studies:

15	Community Services (e.g., Meals on Wheels, Pharmacy, Transportation):

16	Prescriptions

17	Miscellaneous

Who is responsible for creating the Transition Plan of Care?

Learning to work as a team to develop a complete TPOC is an important task. Staff in many disciplines work together in Step 1 to identify needs and resources for a safe transition to home. For example, in the template, look at section 7, "Mobility and Transfers." The physical therapist or physical therapy assistant is the ideal person to complete this part of the TPOC. How has mobility changed from baseline? What is the most important physical therapy message? What is needed for transfers? What is needed to prevent a fall at home? These are details a physical therapist would include in section 7. As indicated below, staff in each discipline contribute to the TPOC.

Role	Educational Background	Sections of the Transition Plan of Care to Complete
Administrative and other nurses in leadership roles	Usually registered nurses or nurses with advanced degrees	1, 2, 4 & 5
Social Workers	Social workers	3, 6, 10-13 & 15
Rehabilitation therapists	Physical therapists, physical therapy assistants, occupational therapists, certified occupational therapist assistants, and speech therapists	7 to 9, including equipment needs
Staff Nurses	Usually licensed practical nurses, less commonly registered nurses	14 & 16
All staff members	Any clinical staff involved with discharge planning	Item 17

As part of the task to create a transition plan of care, it is necessary to develop an accurate medication list for the patient and caregiver to use at home. Thus, after the SNF physician or nurse practitioner completes the discharge orders, confirm that the SNF medication administration record (MAR) is accurate.

A. Review the MAR and determine whether there are standing orders that should be discontinued (and removed from the MAR) before discharge.
B. Compare the SNF clinician's discharge orders with the orders documented on the MAR. Identify discrepancies in the orders.
C. Discuss discrepancies (between the MAR and the discharge orders) with the SNF clinician. Resolve discrepancies and revise the MAR.
D. Discuss medication changes with the patient or caregiver. Remember, one of the most difficult lessons for families is a change in medications, so emphasize this point in teaching. Watch for medications for pain, sleep, and for Coumadin. Discuss all medications and review dosages and administration.

Step 2 – Convene a Care Plan Meeting

A care plan meeting is a formal visit with the patient, primary caregiver and SNF staff members to review progress in the SNF and (a) to engage the patient and caregiver in a conversation about the Transition Plan of Care, and (b) to plan the next steps in care. More than one care plan meeting may be needed for some patients. The care plan meeting should be convened at the end of the patient's first week in the SNF, and at the very latest by the end of week 2. ***Note**: the meeting is convened earlier if the patient's stay is expected to be less than 20 days*.

Effective care plan meetings hinge on 4 factors:

- **Participants** – Invite the patient, primary caregiver, social worker, treating therapists, and Minimum Data Set Nurse.
- **Timing** – Convene the meeting by day 8 and at the latest by day 14 of a 20 day admission and near day 3 of a 10-12 day admission. Care plan meetings are usually about 30 minutes long.
- **Setting** – Host the meeting in a quiet place that allows for privacy, comfortable seating for up to 6 people, and a telephone with a conference line for caregivers or community providers that are unable to attend in person.
- **Resources** – Allocate staff time for attendance and refer to the Transition Plan of Care and other parts of the medical record during the meeting.

How to Plan the Transition in a Care Plan Meeting

Engage the patient and caregiver and discuss the transition. The KEY TO SUCCESS is to encourage the patient and caregiver to <u>participate</u> in the meeting. Help them identify learning needs and resources for a safe transition home. If the patient and family are not talking, ask them questions. It is critical for the patient and family to discuss the care at home. Topics for the meeting are listed below. Topics mirror items in the TPOC.

A. Review the Transition Plan of Care (TPOC)

- Main problem associated with SNF stay
- Emergency contact
- Medications (e.g., the plan for obtaining and administering medication at home) and medical treatments
- Discharge destination – also consider a back-up discharge destination
- Mobility and transfers
- Self-care
- Speech and diet
- Caregiver understanding – identify the primary caregiver and their role
- Advanced directives
- Home health, follow-up appointments, community services

B. Discuss the expected discharge date

C. Ask, "Do we have this right?" and "How can we help?"

Document findings from the care plan meeting in two areas.

- In the existing care plan documentation (usually a social worker note entered on the day of the care plan meeting), describe next steps in the Transition Plan of Care and the proposed discharge date.

- In the TPOC, document Item #11 "Caregiver Understanding of Patient Plans and Needs," record the name of primary caregiver after discharge and the role(s) of the primary caregiver in care at home.

Step 3 - Implement a Transition Plan of Care

This step involves 1) teaching, 2) activating community providers, and 3) day of discharge procedures for the "hand-off" in patient care.

Teach the patient and the caregiver.

Therapists, nurses and social workers may need to take special effort to reach the caregivers, but it is essential to reach them, and teach them skills for care at home. Use the "Teach Back" to make sure that the patient and primary caregiver understand the Transition Plan of Care

A. "Teach Back"

When patients and caregivers have knowledge, understanding, skills and confidence regarding medical treatments, they are more likely to be able to manage the patient's health care needs and plans at home. The Teach Back is method of educating patients and caregivers to make sure that patients and primary caregivers understand new skills, resources or information.

B. Who Teaches?

It is important to have a clear plan for teaching all items in the Transition Plan of Care. Findings from our pilot study of Connect-Home suggest a starting point for assigning teaching roles on your team.

1. Nurses teach:
    - *Item 1. Main Problem Associated with SNF Stay*
    - *Item 2. Potential health problems to watch for*
    - *Item 4. Medications*
    - *Item 5. Medical Treatments*
    - On the day of discharge, a nurse reviews ALL items.
2. Physical Therapists teach Item 7*. Transfers and mobility, include DME*
3. Occupational Therapists teach *Item 8. Self-care, include DME*
4. Speech Therapists teach *Item 9. Speech*
5. Social Workers teach:

- *Item 3. Emergency Contact*
- *Item 6. Discharge Destination*
- *Item 12. Home Health Services*
- *Items 13 and 14. Follow-up Appointments and Labs/Studies*
- *Item 15. Community Services*

Activate community providers and services

A. Visit the patient and caregiver, ask about their preferences, such as what doctor they prefer to see and how and when they would like to visit the doctor after they return home. Our goal is to schedule a follow-up visit with community clinicians within 7 days of the day of SNF discharge.

B. Schedule follow-up care with:

- Community physicians
- Outpatient treatment settings, such as rehabilitation and dialysis
- Labs and other studies
- Church groups, meals on wheels and transportation
- Home care, including therapists, nurses, social workers and home health aids
- Providers of durable medical equipment
- Caregiver respite providers or supports

To "activate" community providers, make detailed referrals, including the name of the patient, details about the patient's and caregiver's needs, the nature of services that are needed, payment for services, the start date for services, and who to contact if there are barriers to implementing the plan.

Remember: Write a brief description about community providers and services in the Transition Plan of Care. Avoid jargon and abbreviations; include specific names and contact information.

Initiate the transition home

A. Use the TPOC as a tool to teach the patient and caregiver

On the day before discharge or the day of discharge, the discharge nurse reviews the entire TPOC with the patient and the primary caregiver; the nurse:

- Reviews each item in the TPOC
- Reviews the name, dose, rationale, and potential side effects for medications
- Gives the patient and caregiver a copy of the TPOC to take home
- Uses Teach-Back to confirm patient and primary caregiver understanding
- Notifies the patient and caregiver that someone from the SNF will call in 2- 3 days to check-in and see how things are going at home.

B. Transfer Information to Community Providers

Relay treatment information from the SNF to follow-up medical providers and home care agencies within 24 hours of patient discharge, including the:

1. Discharge summary from the SNF physician
2. Transition Plan of Care
3. Medication and treatment orders

These materials should be faxed with a coversheet that includes contact information for an individual in the SNF who can answer questions should they arise. It is extremely important to be careful when faxing medical information. Take special caution to confirm the correct phone number and that the correct phone number is entered in the fax machine before faxing.

Step 4 - Call the Patient at Home

Within 72 hours after discharge, call patients or primary caregivers at home to make sure they understand the transition plan.

Reinforce the Transition Plan

The procedure for the call-back was adopted from the Project RED transitional care model.[1] Before calling the patient or family caregiver, locate the Transition Plan of Care and discharge medication list. If you do not reach the patient or caregiver, call one-two additional times over the next 1-2 days. The purpose of the post-discharge call is help the patient or caregiver identify needs and take action related to care at home and emerging problems in care at home. If changes in health or medical needs are discovered, ask patients or caregivers to call or visit their emergency contacts, primary care physicians or emergency services.

When the patient or caregiver is reached, discuss the following 4 topics during the call.

A. Ask about needs and services
B. Assess medications
C. Confirm that home care has visited the home; if not, call home care to confirm the start date and arrange for their visit.
D. Confirm the date, time and clinician for the follow-up appointments with their physicians.

Then, document main points from the call in the EMR.

Summary

Connect-Home is a transitional care program that is used to prepare SNF patients and caregivers to return home safely and remain there without complications. Using the four steps in the program, patients and caregivers will develop the skills, knowledge and supports needed to self-manage care at home, recover from acute medical events, and avoid preventable rehospitalization.

References

1. Jack BW. Project RED (Re-Engineered Discharge) 2013; http://www.bu.edu/fammed/projectred/. Accessed November 1, 2013.

2. Naylor MD. Transitional Care Model. 2013; http://www.transitionalcare.info/. Accessed November 1, 2013.

3. Anderson RA, Corazzini K, Porter K, Daily K, McDaniel RR, Jr., Colon-Emeric C. (2012). CONNECT for quality: protocol of a cluster randomized controlled trial to improve fall prevention in nursing homes. *Implementation Science, 7*:11.

4. Medicare Payment Advisory Commission. Report to the Congress. Medicare Payment Policy. 2013.

5. Popejoy LL, Dorman Marek K, Scott-Cawiezell J. (2013). Patterns and problems associated with transitions after hip fracture in older adults. *Journal of Gerontological Nursing*, 39, 9, p. 43-52.

6. Toles, M., Anderson, R. A., Massing, M., Naylor, M. D., Jackson, E., Peacock-Hinton, S., & Colon-Emeric, C. (2014). Restarting the Cycle: Incidence and Predictors of First Acute Care Use after Nursing Home Discharge. *Journal of the American Geriatrics Society, 62, 1, p. 79-85.*

7. Coleman EA and Boult C. (2003). Improving the quality of transitional care for persons with complex care needs. *Journal of the American Geriatrics Society,* 51, 4, p. 556-557.

8. Toles M, Young M, Ouslander JG. (2012). Improving Care Transitions in Nursing Homes. *Generations,* 36, 4, p. 7-22.

9. Toles M, Barroso J, Colon-Emeric C, Corazzini K, McConnell E, Anderson RA. (2012). Staff interaction strategies that optimize delivery of transitional care in a skilled nursing facility: a multiple case study. *Family and Community Health,* 35, 4, p. 334-344.

10. Agency for Healthcare Research and Quality. Re-Engineered Discharge (RED) Toolkit. 2015; http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html. Accessed August 3, 2015, 2015.

11. Anderson RA, Toles MP, Corazzini K, McDaniel RR, Colon-Emeric C. (2014). Local interaction strategies and capacity for better care in nursing homes: a multiple case study. *BMC Health Services Research,* 14:244.