

Transition Coaches® Reduce Readmissions for Medicare Patients With Complex Postdischarge Needs

Originally published on June 12, 2020

Last updated on January 11, 2021

<https://psnet.ahrq.gov/innovation/transition-coachesr-reduce-readmissions-medicare-patients-complex-postdischarge-needs>

Summary

Under a program known as the Care Transitions Intervention®, a Transitions Coach® encourages patients who are transferring from either a hospital or a short-term skilled nursing facility stay to home to assert a more active role in their self-care. The program has consistently reduced 30-day hospital readmissions and costs as well as 180-day hospital readmissions, even in heavily penetrated Medicare Advantage markets in which the reduction of hospital use has been an explicit focus for many years. The program has also demonstrated success and produced cost savings for Medicare fee-for-service beneficiaries, at approximately \$3,752 per patient enrolled.

Disclaimer

This innovation was identified by the AHRQ PSNet Editorial Team from the AHRQ Health Care Innovations Exchange. That resource, established by AHRQ in 2008, was retired in March 2021; AHRQ now offers select content from the Innovations Exchange, including its [downloadable databases](#), through a [microsite](#). This particular innovation was identified by the Editorial Team as one of continued interest and importance to AHRQ PSNet users and therefore was selected to be updated and included in this new section of the AHRQ PSNet website. To prepare this updated summary, the Editorial Team worked closely with representatives associated with the innovation. Updates include expanded adoption both nationally and internationally, additional results that include utilization and cost data, additional publications, and ensuring the correct contact information.

Contact the Innovator

Please visit <https://caretransitions.health/contact> to receive more information about the Care Transitions Intervention.

Date First Implemented

2002-01-01

Problem Addressed

Recently discharged Medicare patients often suffer complications that lead to hospital readmissions. Many of these problems are the result of a failure to understand and manage postdischarge care needs, such as understanding medication regimens.

- **Frequent readmissions:** The national Medicare 30-day readmission rate at the time of innovation design was approximately 20 percent. While this number has decreased over time, it is still at approximately 17 percent.
- **Often avoidable:** Many hospital readmissions can likely be avoided. Readmissions often occur because hospitalized patients and their family members are not adequately prepared to execute the postdischarge self-care plan and participate in their own care coordination activities, including adhering to complicated medication regimens and arranging for periodic followup care from different providers. Patients and family members may also have difficulty in accessing providers for their followup needs because of transportation issues and other problems. This lack of preparation and inadequate followup care make patients vulnerable to medication errors, exacerbations of symptoms, and other problems that commonly result in readmission.

Description of the Innovative Activity

Under a program known as the Care Transitions Intervention, a Transitions Coach works directly with participants for 30 days after discharge to help them understand and manage their complex postdischarge needs and ensure continuity of care across settings. The coach does not provide skilled care or fix problems. Key elements of the program include the following:

- **Target population:** There are multiple approaches for risk targeting the population that should receive the Care Transitions Intervention. Program adopters report more than 20 different approaches; these range from picking three diagnoses currently reported on the Centers for Medicare & Medicaid Services Web site Hospital Compare, to using either public domain or proprietary risk algorithms, to using the Patient Activation Measure (www.insigniahealth.com), to simply going to the bedside and asking the patient to describe in his or her own words the factors that contributed to the need to come to/back to the hospital.
- **Four pillars:** The intervention is based on four conceptual domains or “pillars”:
 - **Medication self-management:** Patient is knowledgeable about his or her medications and has a medication management system.

- **Use of a patient-centered Personal Health Record:** Patient understands and utilizes the Personal Health Record (PHR) to facilitate communication and ensure continuity of care plan across providers and settings. The PHR is managed by the patient or by the informal caregiver.
 - **Primary care and specialist followup:** Patient schedules and completes a followup visit with the primary care physician or specialist physician and is prepared to be an active participant in these interactions.
 - **Knowledge of “red flags”:** The patient is knowledgeable of indicators that his or her condition is worsening and demonstrates knowledge of how to respond.
- **Initial meeting in hospital:** The Transitions Coach, who can be a registered nurse or social worker, first meets with the patient in the hospital to establish an initial rapport, introduce the PHR (see below), and arrange a home visit.
 - **Postdischarge home visit and telephone contact:** Patients and families work with the Transitions Coach for the first 30 days after discharge. During this time, the Transitions Coach focuses on providing continuity of care across settings, including helping the patient and family members understand when and how to obtain timely followup primary and specialty care; coaching patients to ask the right questions of their providers; and assisting patients and families in playing a more active role in managing their condition and developing self-care skills. Self-care skills include medication self-management and increased awareness of symptoms, and recognizing “red flags” and warning signs that trigger the need for care, along with instructions on how to respond to them. Contact with the patient and family comes through an initial home visit and followup telephone calls, as described below:
- **Home visit:** The home visit ideally takes place within 48 to 72 hours of discharge. The Transitions Coach will use the Family Caregiver Activation assessment (FCAA) tool to track progress. Key activities during this visit include the following:
 - **Medication reconciliation:** The Transitions Coach actively engages patients in reconciliation of all medications taken before and after the hospitalization (including over-the-counter products and medications prescribed to someone else that are being taken by the patient) and in developing a clear, easily understood medication regimen. The Transitions Coach models the behavior for how to address common medication discrepancies that occur during transitions, such as duplicative or missing medications. A Medication Discrepancy Tool is used to identify medication problems and errors and facilitate appropriate action.
 - **Education on how to communicate:** The Transitions Coach uses role playing and other tools to educate patients and family members on how to communicate care needs effectively during subsequent encounters with health care professionals.
 - **Review of warning signs:** The Transitions Coach reviews a list of red flags that indicate a worsening condition and educates patients and family members on how to respond to these

red flags, should they manifest.

- **Periodic telephone calls:** The Transitions Coach calls the patient three times during the first 30 days after discharge to reinforce the coaching offered during the home visit. Calls focus on reviewing the patient's progress toward established goals, discussing any encounters with health care professionals, reinforcing the importance of maintaining and sharing the PHR (see below), and supporting the patient's self-management role.
- **Personal health record:** Maintained by the patient and brought to each appointment, the PHR is a paper tool (although some organizations make it electronic) that consists of the following information needed to facilitate continuity of care across settings:
 - Patient's health conditions in his or her own words
 - Medications and allergies
 - Advanced care directives
 - Warning symptoms or signs that correspond to the patient's chronic illness(es)
 - Space to record the patient's and caregiver's questions and concerns in preparation for the next encounter
 - Patient's goal

Context of the Innovation

The Care Transitions Intervention was developed by the Care Transitions Program of the University of Colorado at Denver. The program was implemented at a large, nonprofit, capitated delivery system that cares for more than 60,000 patients age 65 years and older in Colorado. The delivery system contracts with one hospital, eight skilled nursing facilities, and a home health care agency. Patients receive care from hospital-based physicians (i.e., hospitalists) during their inpatient stays and, in general, from a different team of health professionals in each postdischarge care setting. Before implementation of the program, approximately 15 percent of the system's Medicare patients were readmitted to the hospital within 30 days of discharge.

Results

The program reduced hospital readmissions and costs, even in a heavily penetrated Medicare Advantage market in which the reduction of hospital use has been an explicit focus for many years. Additionally, patients who participate in this model of care have been found more likely to achieve self-identified goals regarding symptom management and functional recover. Findings are sustained for at least six months following working with a Transitions Coach.

- **Reduced readmission rates:** Program participants had 20 to 40 percent lower overall hospital readmission rates (i.e., readmissions for any reason) than did members of a control group of similar patients at 30, 90, and 180 days postdischarge. These differences, adjusted for age, sex, education,

race/ethnicity, chronic disease score, and other factors, were statistically significant at 30 and 90 days. Participants were approximately 50 percent less likely to be rehospitalized at 30, 90, and 180 days for the same condition that caused the initial hospitalization (statistically significant finding).¹

- **Cost savings:** Initial hospital cost data suggested an annual savings of just under \$300,000; savings represent the difference in hospital costs at 180 days postdischarge between program participants and the control group, after subtracting out the cost of the intervention (statistically significant finding). (See the section “Resources Used and Skills Needed” for more information on program costs.) These estimates may be conservative because the health delivery system that participated in this trial had already made great progress in reducing hospital readmissions (its readmission rate was 15 percent, below the 20 percent national average mentioned earlier). Thus, there may be greater potential for reductions in hospital utilization and costs for the average delivery system. A quasi-experimental cohort study reviewing data from Medicare fee-for-service beneficiaries hospitalized from January 1, 2009 to May 31, 2011 in six Rhode Island hospitals found that those patients who participated in CTI had lower healthcare utilization and statistically significant lower total healthcare costs than the control. This equated to an average of \$3,752 in costs avoided per patient.³ This was primarily driven by reduced rates of hospital admissions and fewer emergency department visits.

Innovation Patient Safety Focus

CTI focuses on patient empowerment during the care transition process to ensure patients are well equipped to manage their post discharge care needs and be active participants in a safe care transition. As a result, the program has successfully reduced hospital readmissions.

Evidence Rating

Strong: The evidence consists of a 750-subject randomized controlled trial that evaluated the program's impact on hospital readmissions, along with estimates of cost savings.¹ It also includes a quasi-experimental study comparing utilization and cost data across an intervention group (n=321), an internal control group consisting of patients who declined to participate or were lost to follow-up (n=919), and an external control group of Medicare fee-for-service patients that were not approached for participation (n=11,357).³

Planning and Development Process

Key steps in the planning and development process include the following:

- **Conducting patient and caregiver survey:** Program developers surveyed patients and caregivers on factors that are necessary and important to them during a care transition. This information helped to establish the four conceptual domains that form the basis of the program (see next bullet).

- **Developing conceptual domains:** Program developers identified four conceptual domains or pillars that underlie the program, as outlined below:
 - **Medication self-management:** Patients need to be knowledgeable about their medications and have a system for managing them.
 - **Use of patient-centered record:** Patients need to understand, manage, and use a personal health record to facilitate communication and ensure continuity of care across providers and settings.
 - **Followup primary and specialist care:** Patients need to schedule and complete followup visits with primary care physicians and specialists and be prepared to be an active participant in these interactions.
 - **Knowledge of red flags:** Patients need to understand signs that their condition is worsening and know how to respond in these situations.

Training: Transitions Coaches undergo highly experiential training that lasts 2 days. Training includes an interactive discussion of the model designed to help health care professionals differentiate between patient education and coaching, along with simulated cases that allow individuals to distinguish between coaching and the provision of care. Training is supplemented by use of a Web-based modules. Interested organizations may contact the Care Transitions Intervention team via the web site <https://caretransitions.health/>.

Resources Used and Skills Needed

- **Staffing:** The program relies on registered nurses, social workers, or other health professionals who have experience and competence in helping patients advocate and care for themselves, including how to communicate their needs to different health care professionals. As a conservative estimate, each Transitions Coach can provide care for 24 to 28 recently discharged patients at a time, or approximately 300 per year. The caseload depends primarily on the geographic spread of patients' residences rather than the skills of the Transitions Coach.
- **Costs:** In 2014, the annual costs to support one advanced practice nurse during the research study totaled \$74,310, consisting of salary and benefits (\$70,980), cell phone (\$650), mileage reimbursement (\$2,500), photocopying (e.g., of the health record), and other supplies (\$180). As noted earlier, the potential savings appear to exceed these costs by a significant amount.

How They Did It Tools and Resources

More information about upcoming training for the Care Transitions Intervention can be found at <https://caretransitions.health/training>.

Getting Started with This Innovation

- **Define desired outcomes and target population:** Program leaders need to define what success looks like in their organizations and determine early what population will be targeted. When considering the eligible population, program leaders may wish to determine whether the patient will have a family caregiver supporting them as that may increase the likelihood the patient completes CTI participation.
- **Determine documentation needs:** Decide early in the planning process how the intervention will be documented. In general, less is more. The patient's progress toward a personal health goal and activation along the four pillars are all that is recommended.
- **Engage administrative and clinical leaders:** Find a champion for this program—someone willing to make an investment in patient care. This person should think beyond the immediate quarter and instead focus on the achievement of long-term goals.
- **Coaching is a dedicated position:** Transitions Coaches are a dedicated role, to allow coaches time to work with patients and family members to learn new skills.
- **Build partnerships:** Enlist support from participating and funding organizations. Create value based contracts.
- **Develop workflows:** In collaboration with stakeholders, develop workflows for implementation of the model.
- **Plan for training:** The Care Transitions Program has the exclusive authority to provide training on the Care Transitions Intervention. Please do not accept training offers from other entities. For information on adoption and training, please contact the program at <https://caretransitions.health/contact>.

Sustaining This Innovation

- **Monitor progress versus established goals and benchmarks:** Set and monitor progress against established goals for the coaches. This step not only helps in evaluating program effectiveness but also in guiding the training of future Transitions Coaches.
- **Continue to engage leadership:** Periodically meet with clinical and administrative champions of the program to share data on program success and address any issues or concerns they might have. This step helps in securing their continued support of the program.
- **Maintain positive relationships with community-based organizations:** Ensure smooth transitions for patients through ongoing interaction with various health care organizations in the community. This open communication helps to break down silos and overcome barriers facing patients.
- **Maintain staff support:** To make sure that staff remain dedicated to the provision of patient-centered care, monitor staff workload to ensure they have adequate time to support and sustain the program.
- **Value based contracts:** In a time of limited government and grant support, to sustain the model coach employment costs need to be supported by organizations that benefit from the success of the model.

Adoption Considerations Use by Others (Use By Other Organizations)

The Care Transitions Intervention has been adopted by more than 1200 organizations in 47 states and 4 other countries (Singapore, Sweden, Canada, and Australia). Publications from organizations who have adopted this model can be found at <https://caretransitions.health/publications>.

References/Related Articles

Coleman EA, Ground KL, Maul A. The Family Caregiver Activation in Transitions (FCAT) Tool: A New Measure of Family Caregiver Self-Efficacy. *Jt Comm J Qual Patient Saf.* 2015 Nov;41(11):502-7. doi: 10.1016/s1553-7250(15)41066-9. PMID: 26484682. Available at: <https://pubmed.ncbi.nlm.nih.gov/26484682/>.

Coleman EA, Sung-Joon M. Patients' and family caregivers' goals for care during transitions out of the hospital. *Home Health Care Services Quarterly.* 34(3-4):173-184. Available at: https://assets.ctfassets.net/ld0m6d2hhals/6vcDEsCUMiE20HKalgEmYK/c973069aa82f3e5096760814848ae6c3/Patients-and-Family-Caregivers___-Goals-for-Care-During-Transitions-Out-of-the-Hospital.pdf.

Coller RJ, Klitzner TS, Lerner CF, et al. Complex care hospital use and postdischarge coaching: A randomized controlled trial (for pediatric patients). *Pediatrics* 142 (2): 1-9. Available at: <https://assets.ctfassets.net/ld0m6d2hhals/2RzFlwytpqHmOoT49EjpKd/393eab1a260bca4328da6603df2d527c/Ryan-Coller-Pediatric-Care-Transitions-Article.pdf>.

Gardner R, Li Q, Baier RR, et al. Is implementation of the Care Transitions Intervention associated with cost avoidance after hospital discharge? *J Gen Intern Med* 29(6):878–84. DOI: 10.1007/s11606-014-2814-0. Available at: <https://assets.ctfassets.net/ld0m6d2hhals/3HFVYUjOIQqnhcyZ3qYprg/74e4ddc856bba7f764f6afb944fbe88/71.-Is-Implementation-of-the-Care-Transitions-Intervention-Associated-with-Cost-Avoidance-after-Hospital-Discharge.pdf>

Coleman EA, Roman SP. Family caregivers' experiences during transitions out of the hospital. *Journal for Healthcare Quality.* 2015;37(1):2-11. Available at: <https://assets.ctfassets.net/ld0m6d2hhals/4Jp3289CtwjbPWS4o0qhXo/573862f35725c3880a51975b241afc59/Family-caregiversu2019-experiences-during-transitions-out-of-the-hospital.pdf>.

Coleman EA, Roman SP, Hall KA, et al. Enhancing the Care Transitions Intervention protocol to better address the needs of family caregivers. *Journal for Healthcare Quality.* 2015;37(1):12-21. Available at: <https://assets.ctfassets.net/ld0m6d2hhals/7H9j6W9Wzxo1iBF25GgOKu/8d7ec719c0c957459c2081cb8b439e47/80.-Enhancing-the-Care-Transitions-Intervention-protocol-to-better-address-the-needs-of-family-caregivers-.pdf>

Shiou-Liang Wee, Chok-Kang Loke, Chun Liang, et al. Effectiveness of a national transitional care program in reduce acute care use. JAGS 62:747–753, 2014. Available at:
<https://assets.ctfassets.net/ld0m6d2hhals/2W7hXhhXb506fBwXYS6OqI/4a747256ee62551c425bd42ef1455e16/Effectiveness-of-a-National-Transitional-Care-Program-in-Reducing-Acute-Care-Use.pdf>.

Epstein-Lubow G, Gardner R, Baier R, et al. Caregiver presence and patient completion of a transitional care intervention. Am J Manag Care. 2014;20(10):e439-e444. Available at:
<https://assets.ctfassets.net/ld0m6d2hhals/3LbCs6mpaaJMXKI6JSQpX2/40f7e9c4210438cfb3d7d740339a81df/73.-Caregiver-Presence-and-Patient-Completion-of-a-Transitional-Care-Intervention.pdf>.

Avalere Consultants. Achieving positive ROI via targeted care coordination programs. The SCAN Foundation September 2014. Available at:
<https://assets.ctfassets.net/ld0m6d2hhals/5mXWh6AH2mszwU8w88f1Ae/af90b6345ecaa2d1142dfaf0498360a4/achieving-positive-roi-via-targeted-care-coordination-programs.pdf>.

Coleman EA, Rosenbek S, Roman SP. Disseminating evidence-based care into practice. Popul Health Manag. 2013 Aug;16(4):227-34. PMID: 23537156. doi: 10.1089/pop.2012.0069. Available at:
https://assets.ctfassets.net/ld0m6d2hhals/5eHv5FzZ2wdFaDecdmeTMK/81028c49aa8d6745f5f5bebe528ee883a/65_Disseminating-evidence-based-care-into-practice.pdf.

Brock J, et al. Association between quality improvement for care transition in communities and rehospitalizations among Medicare beneficiaries. JAMA. January 23/30, 2013 – Vol 309, No 4. Available at:
<https://assets.ctfassets.net/ld0m6d2hhals/0mFeNi4VsJ4uRZ4ayDVVw/f784d626646a32dc8df2cd4d1a00d04d/Association-between-quality-improvement-for-care-transitions-in-communities-and-rehospitalizations-among-Medicare-Beneficiaries.pdf>.

Voss R, Gardner R, Baier R, et al. The Care Transitions Intervention, translating from efficacy to effectiveness. Archives of Internal Medicine 2011;171(14):1232-1237. Available at:
<https://assets.ctfassets.net/ld0m6d2hhals/NiCga4fi8e09BIGubH68A/26e504be05798534ab43d2aa66798950/The-Care-Transitions-Intervention-Translating-From-Efficacy-to-Effectiveness.pdf>.

Parry C, Coleman EA. Active Roles for older adults in navigating care transitions. Lessons learned from the Care Transitions Intervention. Open Longevity Science 2010;(4):43-50. Available at:
https://assets.ctfassets.net/ld0m6d2hhals/61IkYIWqabpfeaE0ibm3iu/f5ba6c6aab6894fc69735458d29fc491/56_Active-Roles-for-Older-Adults-in-Navigating-Care-Transitions.pdf.

Parrish MM, O'Malley K, Adams RI, et al. Implementation of the Care Transitions Intervention: Sustainability and lessons learned. Professional Case Management. 2009;14(6):282-295. PMID: 19935345. doi: 10.1097/NCM.0b013e3181c3d380. Available at:
https://assets.ctfassets.net/ld0m6d2hhals/4pCijUmuM56t2IAYwHFwEM/a2d4c12d120088066df4638da356cf65/51_Implementation-of-the-Care-Transitions-Intervention-Sustainability-and-Lessons-Learned.pdf.

Parry C, Min, SJ, Chugh, A, et al. Further application of The Care Transitions Intervention: results of randomized controlled trial conducted in a fee-for-service setting. *Home Health Care Services Quarterly*. 2009;28(2-3):84-99. PMID: 20182958. doi:10.1080/01621420903155924. Available at: https://assets.ctfassets.net/ld0m6d2hhals/5ngtJVb6smdAj0oRGrw7g5/be7568ffd16a7a44bd4d5a8c3d8fd39a/52_Further-Application-of-the-Care-Transitions-Intervention.pdf.

Coleman EA, Parry C, Chalmers S, et al. The Care Transitions Intervention: Results of a randomized controlled trial. *Arch Intern Med*. 2006;166:1822-8. [PubMed] Available at: https://assets.ctfassets.net/ld0m6d2hhals/4Uiki1pyAT1g88ZXsDB3J1/84e543fcee60fc605721cb12d1574c36/39_The-Care-Transitions-Intervention-Results-of-a-Randomized-Controlled-Trial.pdf.

Parry C, Kramer HM, Coleman EA. A qualitative exploration of patient-centered coaching intervention to improve care transitions in chronically ill older adults. *Home Health Care Services Quarterly*. 2006;25(3-4):39-53. PMID: 17062510. Available at: https://assets.ctfassets.net/ld0m6d2hhals/2rjFIH7NvOyl6ObwRTpKw/26098ae530baa4f9f9c21fb31df3a59e/40_A-Qualitative-Exploration-of-a-Patient-Centered-Coaching-Intervention-to-Improve-Care-Transitions-in-Chronically-Ill-Older.pdf.

Coleman EA, Smith JD, Frank JC, Preparing patients and caregivers to participate in care delivered across settings: the Care Transitions Intervention. *Journal of the American Geriatrics Society*. 2004;52(11):1817-1825. PMID: 15507057 Available at: https://assets.ctfassets.net/ld0m6d2hhals/4Dfcx6CzcfUUdFWISkmd1/f98d9442ca392611aa1105c12a5c0601/33_Preparing-Patients-and-Caregivers-to-Participate-in-Care-Delivered-Across-Settings.pdf.

Footnotes

1. Coleman EA, Parry C, Chalmers S, et al. The Care Transitions Intervention: Results of a randomized controlled trial. *Arch Intern Med*. 2006;166(17):1822-8. [PubMed] Available at: https://assets.ctfassets.net/ld0m6d2hhals/4Uiki1pyAT1g88ZXsDB3J1/84e543fcee60fc605721cb12d1574c36/39_Care-Transitions-Intervention-Results-of-a-Randomized-Controlled-Trial.pdf
2. Epstein-Lubow G, Gardner R, Baier R, et al. Caregiver presence and patient completion of a transitional care intervention. *Am J Manag Care*. 2014;20(10):e439-e444. Available at: <https://assets.ctfassets.net/ld0m6d2hhals/3LbCs6mpaaJMXKI6JSQpX2/40f7e9c4210438cfb3d7d740339a81df/Caregiver-Presence-and-Patient-Completion-of-a-Transitional-Care-Intervention.pdf>.
3. Gardner R, Li Q, Baier RR, et al. Is implementation of the Care Transitions Intervention Associated with cost avoidance after hospital discharge? *J Gen Intern Med* 29(6):878–84. DOI: 10.1007/s11606-014-2814-0. Available at: https://assets.ctfassets.net/ld0m6d2hhals/3HFVYUjOIQqnhcyZ3qYprg/74e4ddc856bba7f764f6afb944fbe88/71_Is-Implementation-of-the-Care-Transitions-Intervention-Associated-with-Cost-Avoidance-after-Hospital-Discharge.pdf.