# Supporting Older Veterans After Hospital Discharge: The TransitionaL Care Partners Program

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The **T**ransitiona**L** **C**are Partners Program, staffed by nurse practitioners, a physician, social worker, and occupational therapist, closely follows hospital-discharged older veterans for about 30 days. The goal of the program is to reduce the rates of rehospitalization and Emergency Department visits.

*Mr. Y, an 85-year-old veteran with diabetes, was hospitalized for shortness of breath secondary to congestive heart failure. While in the hospital, his physician prescribed diuretics twice a day and a sliding scale of insulin. His nurse inserted an indwelling urinary catheter. On his fourth hospital day, he was ready for discharge, but he could not void without the urinary catheter. Mr. Y went home with the urinary catheter in place. He was told to continue the sliding scale of insulin and his previous home medications until he saw his primary care provider (PCP). After discharge, he continued to take his home medications, which included oral hypolgycemic medications in addition to insulin. He was readmitted 2 days after discharge because of hypoglycemia and a possible urinary tract infection (UTI).*

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Although only about 13% of the U.S. population is aged ≥ 65 years, people in this age group account for about 37% of all hospital discharges and 43% of hospital days.[1] Similarly, veterans who are aged ≥ 65 years are more than twice as likely to be hospitalized than those aged < 65 years.[2] The transition from hospital to home is challenging for older adults, as many have multiple comorbidities, are prescribed several medications, and are medically complex. Consequently, rehospitalizations after discharge are prevalent. For example, in 2010, 1 in 5 older adults was rehospitalized within 30 days of discharge.[3]

The readmission rates of older veterans discharged from a U.S. Department of Veterans Affairs (VA) hospital was higher compared with those discharged from a non-VA hospital (21% vs 16.4%).[4] Because more than 46% of veterans will be aged ≥ 65 years by 2015, a priority for the Veterans Health Administration (VHA) is to develop alternative services to prevent institutional extended care, including postacute care readmissions.[5]

## TRANSITIONAL CARE (TLC) PARTNERS: A CLINICAL DEMONSTRATION PROGRAM

In December 2009, the Durham Veterans Affairs Medical Center (VAMC)

The VHA's Geriatric Research, Education and Clinical Centers (GRECCs) are designed for the advancement and integration of research, education, and clinical achievements in geriatrics and gerontology throughout the VA health care system. Each GRECC focuses on particular aspects of the care of aging veterans and is at the forefront of geriatric research and clinical care. For more information on the GRECC program, visit the website (http://www1.va.gov/grecc/). This column, which is contributed by GRECC staff members, is coordinated and edited by Kenneth Shay, DDS, MS, director of geriatric programs for the VA Office of Geriatrics and Extended Care, VA Central Office, Washington, DC. Please send suggestions for future columns to Kenneth.Shay@va.gov.

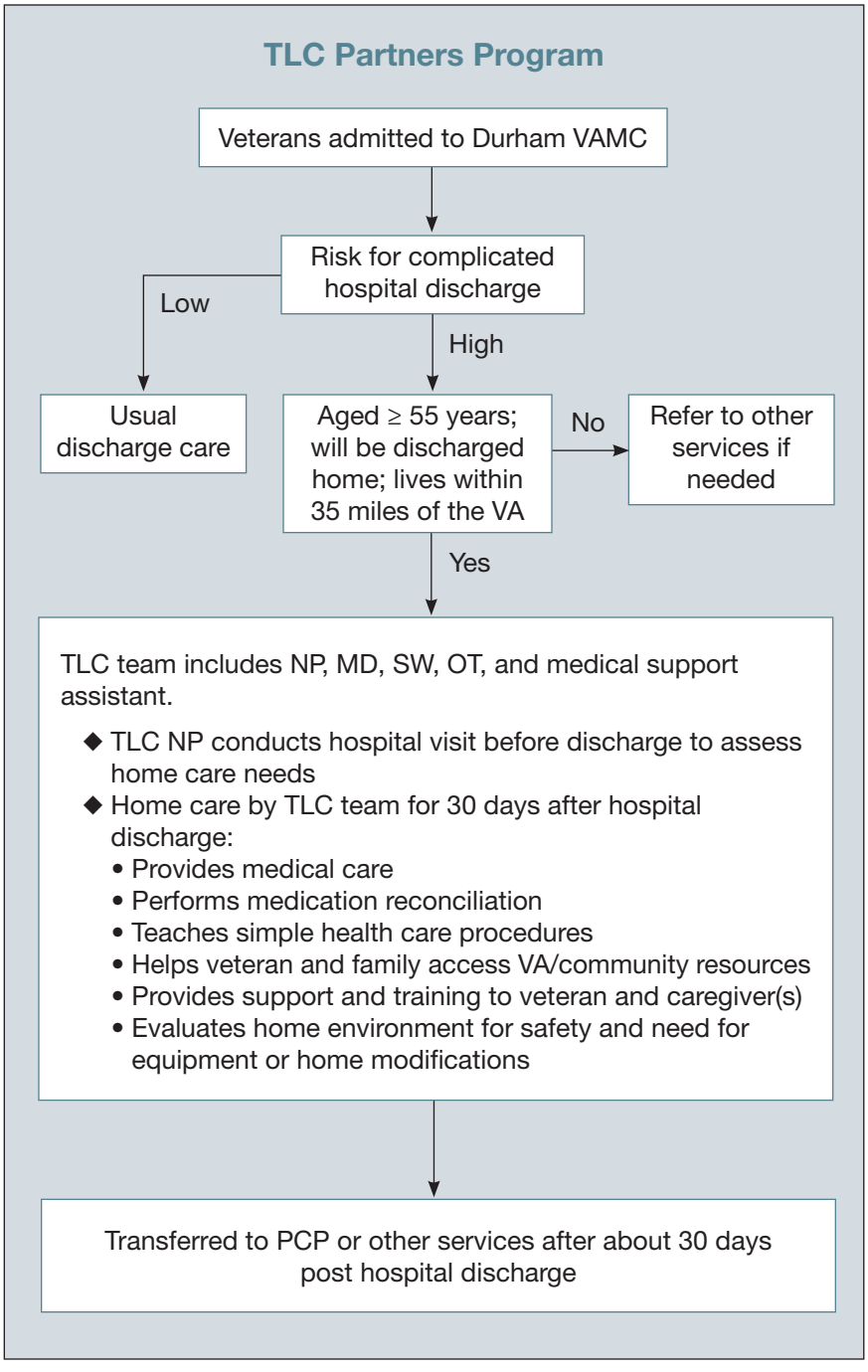


Figure 1. The TLC Program.

Geriatrics Research, Education, and Clinical Center (GRECC) in Durham, North Carolina, submitted a proposal to develop the TLC Program[6] in response to a request by the VHA Office of Geriatrics and Extended Care to field-test veteran-centric care innovations in the least-restrictive setting—the veteran's home. The TLC Partners Program was structured and funded as a clinical demonstration program, and as such, Institutional Review Board approval was not obtained. The Durham VAMC is a tertiary hospital facility that serves about 53,000 unique veterans, living in a 26-county area of central and eastern North Carolina. In 2008, the Durham VAMC had a total of 6,841 inpatient admissions, and about 37% of these veterans were aged ≥ 65 years. The Durham VAMC has a well-established home-based primary care (HBPC) program that provides health care services to veterans who have complex health care needs, for whom routine, clinic-based care may not be adequate. Many veterans referred to the Durham VAMC HBPC have to wait for about a month before they are enrolled because of its high volume of referrals. For veterans referred to a PCP for a follow-up visit, most see their PCP about a week after their hospital discharge. This time lapse is consistent with the national trend within the VHA—most older veterans received postdischarge care within 10 days of discharge.[7] Therefore, opportunities to see veterans are missed during the first few days after hospitalization, a critical hospital-to-home transitional period when continuity of care is essential. This gap in services provided the impetus for establishing the TLC Partners Program.

The TLC Partners Program is based on Naylor's Transitional Care Model.[8] Consistent with this model, the program is led by nurse practitioners (NP). Joining the NPs are an occupational therapist (OT) and a social worker (SW) for expanded access to additional services. The primary goal of the program is to reduce the rate of rehospitalization and Emergency Department (ED) visits of older veterans after their hospital discharge. Reducing rehospitalizations means less risk for hospital-acquired complications for veterans, less distress for them and for their families, reduced health care cost to veterans and the

VA, and increased hospital bed availability at the Durham VAMC for other veterans. When possible, the TLC Program team involves informal caregivers in veteran's care through health teaching and caregiving support. Therefore, as secondary outcomes, the program aims to reduce caregiver burden and improve preparedness in caregiving.

## TLC ELIGIBILITY AND PROGRAM DESCRIPTION

Figure 1 provides a snapshot of the TLC Program. Eligibility criteria for the program include veterans who are hospitalized at the Durham VAMC, aged ≥ 55 years, live within 35 miles of the Durham VAMC, will be discharged home, are not enrolled in hospice, and will benefit from having close medical surveillance after hospital discharge, determined by the clinical evaluation of inpatient providers responsible for discharge planning. The 35-mile radius was adapted based on the recommendation and experience of HBPC at the Durham VAMC in delivering home-based services. Program referrals are made using the consult tab embedded within the VHA Computerized Patient Record System. Referrals come from nurse case managers, SWs, and inpatient physicians. These referrals are first screened by the program support assistant for age, distance eligibility, and program capacity of no more than 17 patients at one time. If a veteran does not meet the screening eligibility criteria, referring providers are notified, and the veteran receives routine discharge care implemented at the Durham VAMC. Health education materials and information about community-based resources are also given to these veterans by a program staff member. For a veteran who meets the initial screening criteria, the program NP reviews the patient's records, conducts a hospital visit to assess the patient, and then decides whether to enroll the veteran. A decision not to enroll is often based on a mismatch between the patient's needs and TLC Program services.

Figure 2. TLC Program team in action. Left to right: Sabrina Forest (TLC NP), veteran, his caregiver, and Valerie Fox (TLC OT).

When enrolled in the program, the veteran is followed closely by the team for about 30 days. The program NP visits the veteran in the hospital and then visits the veteran in his or her home within 3 days of discharge. Services provided by the NP include medical care, medication reconciliation, medication management education, simple health care education, and a key communication link with the veteran's VA PCP and outpatient team. The program NP includes the veteran's PCP as a cosigner on encounter notes made for the veteran.

The NP determines whether the veteran needs OT or SW services. The program OT evaluates the home environment for safety and need for equipment or modifications, provides training to the veteran and caregiver on proper use of equipment, and along with the program NP, can provide training to the caregiver on safe home-care techniques. The program SW assists the veteran and caregiver to access VA and community resources, provides education and referrals to VA and community services, and helps the caregiver and veteran learn to navigate the VA and other complex care systems (see Figure 2 for a picture of the TLC Program providers in action and the sidebar (on the next page) for a case demonstrating benefits of these services). On discharge from the program, a discharge summary, consisting of a progress report, veteran's list of medications, and recommendations for care, is provided to the veteran's PCP. Additionally, veterans are referred to other services within the VA when indicated, such as the HBPC, community-based adult day health care programs, and other VA community programs.

## TLC PROGRAM PRELIMINARY OUTCOMES

From September 2010 to December 2011 of program implementation, a total of 156 unique veterans were enrolled and followed postdischarge in

### TLC Program teamwork focuses on veteran-centric care

Mr. V, a 97-year-old U.S Army veteran, presented to the ED for increasing shortness of breath. He was eventually admitted with pneumonia and chronic obstructive pulmonary disease (COPD) exacerbation. He was referred to the TLC Program before sending him home with oxygen. Mr. V is legally blind, bed bound, and experiences urinary incontinence. The following is a summary of TLC Program care provided to Mr. V.

The NP reconciled home medications and educated Mr. V and his family on the use of home oxygen. The NP also monitored resolution of COPD and pneumonia. She worked with Mr. V and his family on nutrition and supplementation due to weight loss and poor eating habits. Mr. V had contractures in his left hand. The NP trained Mr. V's sons to trim his nails regularly to prevent skin breakdown or cuts.

The SW submitted a revised VA Means Test, applied for food stamps, and found other community resources to assist with the high medical bills.

The OT identified adaptive equipment and home modifications. A hospital bed, manual wheelchair, wheelchair cushion, oxygen tank holder, overbed table for meals, and car transfer devices were ordered. A ramp was ordered, which allowed Mr. V to go outside and into his yard. The OT also taught Mr. V and his family the skills for car transfers.

their homes. For program outcomes, only Durham VAMC data were captured for analysis. The mean bed days of care for index hospitalization for the TLC group was 7.98; whereas for the non-TLC group, it was 9.87. The non-TLC group (n = 65) was composed of veterans referred to the program and discharged home, but not enrolled to the program due to one of the following: (a) lived outside the 35-mile radius; (b) refused services; (c) TLC team not able to contact veterans by telephone to schedule home visits; or (d) the program was at capacity. Of the 156 veterans enrolled in the program, data on 30-day rehospitalization were available on 151 veterans (5 veterans were discharged from Durham VAMC < 30 days at the time of this writing). Preliminary analyses revealed a trend on lowered 30-day rehospitalization rate: The TLC group had a 17.88% rehospitalization rate within 30 days; whereas the non-TLC group (n = 65) had a 20% rate of rehospitalization [$\chi 2(1) = 0.135$; $P > .75$]. However, the 30-day ED visit rate for the TLC group was higher than the non-TLC group (18.54% vs 15.38%) but statistically not significant as well [$\chi 2(1) = 0.313$; $P > .25$].

Despite that the mean baseline satisfaction score was high at 7.83 (N = 87), there was still a significant increase in veterans' satisfaction with VA care after the program. Satisfaction was measured using a single-item question: "On a scale of 1 to 10, how satisfied are you with the care you are receiving from the VA?" (t test = –8.72; $P < .001$). Using Short-Form Zarit Burden scale, caregiver burden decreased by 15% (N = 50; t = -2.37; $P = .2$), and preparedness in caregiving increased by 9% after TLC care (N = 50; t = 1.54; $P = .12$).[9,10] Scores on satisfaction, burden, and preparedness were obtained by either a TLC SW or program support assistant by phone at the beginning and end of TLC services.

## DISCUSSION

Through the TLC Partners Program, support is available to older veterans at the Durham VAMC after their hospital discharge. Preliminary results revealed that the program is associated with benefits such as reduced rate of 30-day rehospitalization, increased veteran satisfaction with VA care, and improved caregiver outcomes. However, the TLC group also had a higher rate of ED visits compared with the non-TLC group. A review of reasons for ED visits by TLC patients may need to be conducted to determine whether these are preventable and, if so, determine how the program can intervene to reduce these visits.

Although preliminary outcomes of the TLC Program look promising, they should be interpreted with caution. The TLC Program is designed to be a clinical demonstration program, thus, the non-TLC group (comparison group) is not an equal match for the TLC group, and variables that may potentially confound outcomes were not statistically controlled. TLC enrollment is by convenience. Therefore, veterans and caregivers who participated in the program were probably the most receptive to additional services. This may explain the higher scores in satisfaction and caregiver preparation and lower burden scores after care ended. Additionally, scores in satisfaction, caregiver preparation, and burden were not obtained from the non-TLC group; thus it is unknown whether these changes in scores were unique to the TLC group. Since the program has been implemented only at the Durham VAMC, knowing whether the program would be useful at other facilities can only be speculated. Last, the TLC Program relies on Durham

VAMC records alone to monitor hospitalizations and ED visits. This approach does not capture the use of acute-care services in other settings, which may minimize programmatic outcomes. However, because all enrolled patients lived within a close radius of the hospital, use of services outside the Durham VAMC facility is not likely to have a major impact.

Funding from the Office of Geriatrics and Extended Care for the TLC Program is to cease beginning October 1, 2012. Discussions have begun on how the program may eventually be sustained by the Durham VAMC after funding is over. Therefore, in addition to the outcomes described earlier, other programmatic measures of success are being identified to support the program's sustainability. Specifically, the program's contribution toward access and quality of care, safety to veterans, as well as its alignment to the VHA's mission and strategic plan should be articulated. Formal economic analyses need to be completed to establish the cost-effectiveness of the program in its effort to reduce rehospitalization and ED use among recently discharged older veterans.

### *Author disclosures*

*The authors report no actual or potential conflicts of interest with regard to this article.*

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