Overlooked Care Transitions: An Opportunity to Reduce Acute Care Use in ESRD

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A major goal of United States health care reform is to reduce hospital readmissions. In 2012, approximately 18% of Medicare patients discharged from the hospital were readmitted within 30 days (1). According to one estimate, readmissions cost the Medicare program >$17 billion in 2004 (2). In an effort to address this problem, the US Centers for Medicare and Medicaid Services (CMS) enacted a pay for performance (P4P) initiative in 2012 directed at hospitals called the Readmission Reduction Program. Under this program, hospitals will face up to a 3% reduction in payments in 2015 if their 30-day readmission rates are in excess of the national average for selected diagnoses (3).

Hospital readmissions are also a significant problem for patients with ESRD. Up to 34% of patients with ESRD are rehospitalized within 30 days of a hospital discharge, nearly twice the rate in the general Medicare population. When considering that, on average, patients with ESRD are hospitalized twice per year, the high frequency of readmissions places a substantial burden on patients’ quality of life and on the health care system (4).

The causes of hospital readmissions, as well as potential solutions to reducing readmissions in patients with complex medical conditions such as ESRD, remain only partly defined. One area that has received considerable attention is the potential to reduce avoidable readmissions is transitional care. Transitional care is defined as a set of actions designed to ensure coordination and continuity of care during transitions between different health care settings or levels of care (5). Although the implementation of transitional care varies across settings, many transitional care interventions include early postdischarge follow-up with an ambulatory care provider, medication reconciliation, and patient and caregiver support and education.

Most studies of transitional care interventions have occurred in the primary care setting or have involved chronic diseases other than ESRD (6). Nevertheless, recent observational studies suggest that some transitional care interventions may benefit patients with ESRD. For example, one analysis found that patients are less likely to be readmitted to the hospital when physicians or advanced practitioners see them at their hemodialysis facility soon after hospital discharge, and that assuming a causal relationship, reduced readmissions from more frequent provider visits could lead to substantial Medicare cost savings (7). A second study found that early postdischarge monitoring of outpatient dialysis laboratory parameters was associated with lower rates of readmission (8).

Some causes of readmission may be unique to ESRD care. Perhaps the most important unique feature is that discharges involve an extra care transition. Besides transitioning from the hospital to home, patients receiving dialysis also transition from the hospital to an outpatient dialysis facility, creating an additional dimension of needed care coordination. Recognizing that dialysis facilities play an important role in the transition from the hospital to home, the CMS has proposed to include standardized 30-day hospital readmissions as a new dialysis facility quality metric for its Quality Incentive Program P4P initiative (9).

Although hospital discharges are the most common care transition, they are not the only time when patient care changes hands. Recently, policy makers and researchers have focused on improving the quality of care during transition to and from skilled nursing facilities (SNFs). Hospitalization rates after discharge from SNFs vary geographically, suggesting that some providers may be able to improve care in this area (10). Since 2012, the Medicare Payment Advisory Commission (MedPAC) has tracked hospital admissions during SNF stays and after SNF discharge. According to a 2012 report from MedPAC, 12% of Medicare patients were admitted to the hospital during a SNF stay for a condition that may have been avoidable, whereas another 6% were admitted within 30 days after SNF discharge (11). MedPAC has commissioned efforts to monitor avoidable hospitalizations after SNF discharge as a quality measure that can be used to evaluate the performance of individual nursing facilities (12).

In this issue of CJASN, Hall et al. examine hospital admissions and emergency room (ER) visits among patients with ESRD after discharge from SNFs in 2010 and 2011 (13). They use data from Nursing Home Compare, a registry of Medicare and Medicaid certified nursing homes, along with Medicare claims to identify a cohort of patients with ESRD and Medicare, aged ≥65 years, living in North and South Carolina. The authors included in their study patients with ESRD who were transferred from a hospital to a SNF, and then from a SNF to home within 106 days of the SNF admission. Patients were excluded if they were...
discharged from a SNF to hospice, had incomplete Medicare Parts A and B coverage, or were enrolled in Medicare Advantage.

The authors find that the frequency of hospitalizations and ER visits after discharge from SNFs is similar in magnitude to the frequency of readmissions after hospital discharge. Among 1223 patients with ESRD discharged home from a SNF, 32% had a hospitalization and 43% had at least one hospitalization or ER visit within 30 days of discharge from the SNF. Black race, dual Medicare/Medicaid coverage, higher comorbidity score, and more frequent hospitalizations before the SNF stay were independently associated with ER visits or hospitalizations. Patients with index hospitalizations for cellulitis, abscess, or chronic skin ulcer were more likely to be admitted to the hospital or visit the ER than patients with other discharge diagnoses. Interestingly, patients who received home health care after SNF discharge were less likely to be hospitalized or visit the ER. SNF characteristics such as size and profit status were not associated with hospitalizations or ER visits.

There are several possible explanations for the observed high rate of hospital admission and ER use after SNF discharge among patients with ESRD. Patients in this population are often afflicted by a number of medical comorbidities in addition to frailty and disability. They likely represent the sickest members of the ESRD population, and therefore are at a very high risk for hospitalization (or ER visit) simply due to their chronic medical conditions. In addition, many of the obstacles faced when patients transition from the hospital to home may also complicate handoffs from a SNF to home. For instance, reconciling medications, addressing new comorbidities and infections, and adjusting dialysis-related parameters such as a patient’s dry weight, erythropoietin stimulating agent dose, and antihypertensive regimen may be equally important when patients leave a SNF. If care is not coordinated across health care settings, patients may suffer from avoidable hospitalizations.

Although it is tempting to interpret the finding that home health use was associated with reduced hospital admissions and ER visits as evidence that greater use of home health services could prevent certain hospitalizations, this finding may be due to misclassification of admissions occurring within 24 hours of SNF discharge. As the authors discuss, some hospitalizations classified as occurring within 24 hour of SNF discharge may have occurred in patients who were sent from their outpatient dialysis facility to the hospital while still residing in the SNF, as opposed to an admission occurring after SNF discharge. These patients could not have received home health services, because they were still residing at the SNF at the time of hospitalization. This could lead to the observed inverse association between home health use and hospitalizations (or ER visits) in the absence of any causal link between home health and hospitalizations or ER visits. More importantly, it highlights the difficulty of determining accountability for hospital admissions or readmissions when multiple physicians and health care facilities are involved in patient care, and no single provider has full control over all components of care.

This study raises a number of important questions about the transition from SNFs to home. It will be important to determine whether outcomes after discharge from a SNF depend on the number of “handoffs” occurring during this transition. For instance, medical errors and hospitalizations may be less frequent when patients receive hemodialysis at the same facility during their SNF stay as they do after SNF discharge, or when the same nephrologist or primary care physician is caring for them in both settings. It will also be important to understand the role that nephrologists, advanced practitioners, and primary care providers can have in facilitating the transition from SNFs to home. Finally, it will be important to study whether use of home health services can prevent hospitalizations in certain cases. In particular, the findings from the study by Hall et al. (13) suggest that efforts directed toward managing wounds may be fruitful.

Patients with ESRD experience a large number of health care transitions during the course of their disease, and many of these transitions are poorly managed. Increasing evidence from different health care settings and across chronic diseases suggests that care coordination during care transitions can improve both health outcomes and quality of life, and may reduce health care costs (6). The study by Hall et al. (13) identifies an important and overlooked health care transition in patients with ESRD—the one occurring after SNF discharge. Researchers and policymakers must now identify the essential ingredients of transitional care and determine how best to integrate transitional care with dialysis care.

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Disclosures

None.

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3. Centers for Medicare and Medicaid Services (CMS), HHS: Medicare program; hospital inpatient prospective payment systems for acute care hospitals and the long-term care hospital prospective payment system and fiscal year 2015 rates; quality reporting requirements for specific providers; reasonable compensation equivalents for physician services in excluded hospitals and certain teaching hospitals; provider administrative appeals and judicial review; enforcement provisions for organ transplant centers; and electronic health record (EHR) incentive program. Final rule. Fed Regist 79: 49853–50536, 2014


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See related article, “Utilization of Acute Care among Patients with ESRD Discharged Home from Skilled Nursing Facilities,” on pages 428–434.