

RESEARCH LETTER

Care Coordination for Dialysis Patients During and After Hospitalization: A Pilot Study

To the Editor:

In the United States, 34% of hospital discharges among patients receiving dialysis are followed by a 30-day readmission,¹ and both dialysis clinics² and hospitals³ are held accountable for readmissions (through potential payment reductions). Although improved care coordination between hospitals and dialysis clinics may play an important role in reducing hospital readmissions and improving other patient outcomes, the fragmented US health care system does not facilitate this coordination. Particularly the lack of interoperability of electronic health records remains a key barrier for most dialysis clinic–hospital dyads.⁴ In an ongoing pilot study, we are testing the feasibility and effectiveness of a web-based communications platform for hospital and dialysis clinic providers (DialysisConnect⁵) to circumvent these issues and improve care coordination between patients hospitalized at Emory University Hospital Midtown and treated at 4 independently managed Emory Dialysis clinics. The purpose of this study was to examine the perspectives of recently hospitalized patients regarding their perceptions of usual (pre-intervention) care coordination between hospital and dialysis clinic providers during and after hospitalization.

Our study targeted 113 hemodialysis patients who were being treated at 4 Emory Dialysis clinics and had been hospitalized at Emory University Hospital Midtown in the 6 months before approach. We administered a 1-time survey (Item S1) about their care coordination during their hospitalization episode, online or by telephone (11/27/20–1/04/21). Data were collected and managed through REDCap,⁶ and descriptive statistics were calculated using Stata (StataCorp), version 16.1. The survey was approved by the Emory University Institutional Review Board (IRB00102971). Detailed methods are provided in Item S1.

Respondents (n=24; 21% response rate) had an average age of 62 years and had been receiving dialysis for a median of 4 (interquartile range, 1.4–6.2) years; 24 (100%) were Black and 11 (46%) were men (Table S1). Nonrespondents were generally similar to respondents (Table S2). For 21 respondents (91%), the time between onset of presenting symptom(s) (including shortness of breath, fever, syncope, pain, cough, and weakness; Table S1) and hospital admission was less than 1 week. The percentages of patients who reported that their hospital and dialysis providers knew key information or performed care coordination tasks during and after hospitalization, as listed in Fig 1A and B, respectively, were generally high. Most patients additionally reported that hospital providers asked them about their reason for the hospital stay (n = 19 [79%]), dialysis schedule (n = 18 [75%]), symptoms (n = 18 [75%]), current medications (n = 17 [71%]), vascular access (n = 16 [67%]), nephrologist name (n = 16

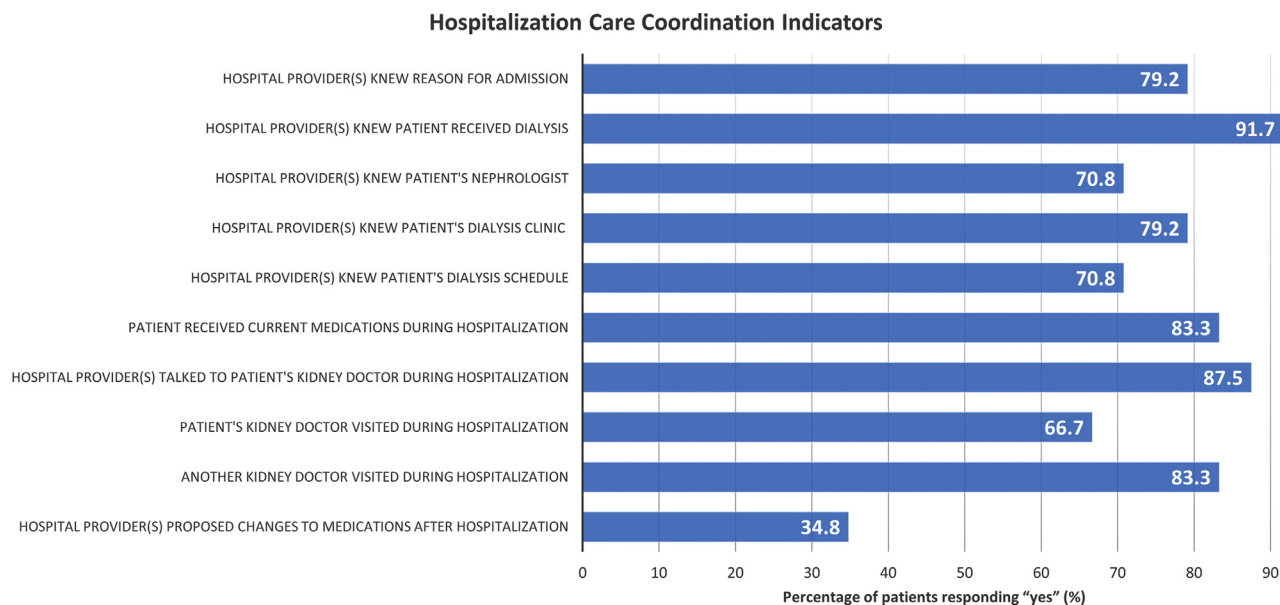
[67%]), dialysis facility name (n = 13 [54%]), and/or dry weight (n = 12 [50%]) (Table S3). Eleven patients (47%) reported bringing their discharge instructions to their next dialysis session. Only 16 (67%) reported that they were likely to log into a hypothetical patient version of our web-based platform for hospital care coordination, although 21 (88%) reported they would like a health care surrogate to see this information (Table S3).

We found that patients' perceptions of care coordination between the hospital and dialysis clinic were high: most reported that both hospital and dialysis providers were aware of the patient's clinical situation and had exchanged necessary information despite also reporting that providers had asked the patient for much of the same information. Fewer reported that care coordination tasks, such as dry weight reassessment and medication reconciliation, occurred soon after discharge. Although most care coordination programs⁷ target the patient as an active and primary partner in care coordination, fewer than half noted that they brought hospital discharge instructions to the dialysis clinic after discharge, and one-third were not interested in a portal to view the communication between hospital and dialysis providers about their care. This suggests that patients had identified the providers and not themselves as primary coordinators of care. Efforts to understand, measure, and increase patient/surrogate engagement during and after hospitalization, including making hospitalization information directly available to patients/surrogates, should be considered in future studies.

It is important to note that our patients may have higher perceptions of care coordination than patients in more typical dialysis clinics due to the academic setting (in which the nephrologists at the dialysis clinic and hospital often overlap) and university affiliation of the dialysis clinics (despite their independent management and separate electronic health record and care teams). However, patients in other settings may also have misconceptions about the ease and frequency of communication between the hospital and dialysis clinic settings, despite this communication being suboptimal.^{5,8} Additionally, small sample size limits our power to compare perceptions across subgroups; our response rate was low, although responders and nonresponders were similar; and patients may misremember events, particularly dry weight reassessment or medication reconciliation, or confuse multiple hospitalizations. Future studies could further explore objective measures of care coordination using validated instruments and reasons for patient perceptions of high levels of hospital care coordination in larger more representative populations of patients and surrogates. Such studies will be key to targeting interventions to improve coordination of care between hospitals and dialysis clinics.

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A



B

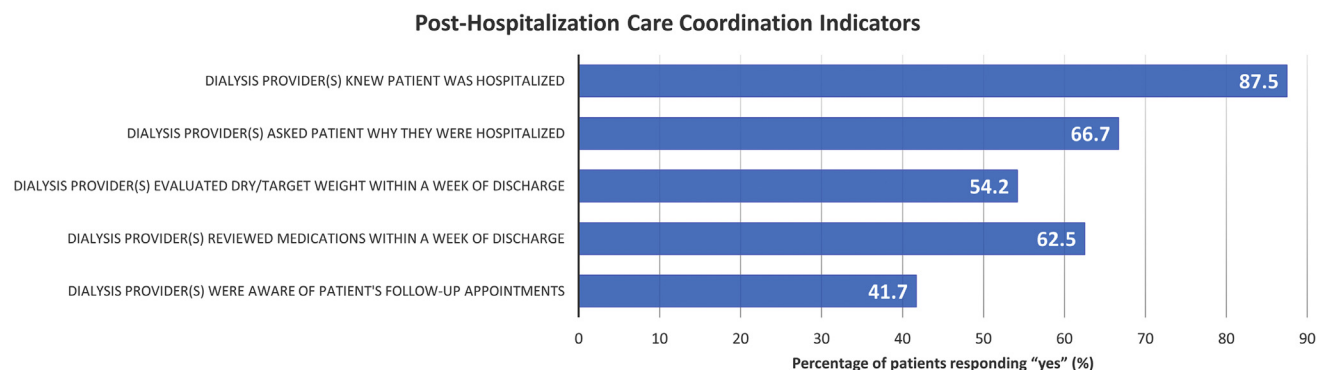


Figure 1. Perceptions of hospital care coordination among patients receiving hemodialysis (A) during and (B) after a recent hospitalization.

SUPPLEMENTARY MATERIAL

Supplementary File (PDF)

Item S1: Supplementary methods, administered survey, and additional data for Park et al, "Care Coordination for Dialysis Patients During and After Hospitalization."

Table S1: Patient and hospitalization characteristics of survey participants, 11/27/20-1/04/21.

Table S2: Characteristics of nonresponders versus responders.

Table S3: Other patient perceptions of care coordination before and after hospitalization.

ARTICLE INFORMATION

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