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## Models of Discharge Care in Magnet® Hospitals

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## Abstract

**Objective:** The aim of this article is to describe how the discharge preparation process is operationalized in Magnet® hospitals.

**Background:** Nationally, there are intensive efforts toward improving discharge transitions and reducing readmissions. Discharge preparation is a core hospital function, yet there are few reports of operational models.

**Methods:** This was a descriptive, Web-based survey of 32 Magnet hospitals (64 units) participating in the Readiness Evaluation and Discharge Interventions study.

**Results:** Most hospitals have adopted 1 or more national readmission reduction initiatives. Most unit models include several discharge preparation roles; RN case managers, and discharging RNs lead the process. Nearly one-half of units actively screen for readmission risk. More than three-fourths report daily discharge rounds, but less than one-third include the patient and family. More than two-thirds report a follow-up phone call, mostly to assess patient satisfaction.

**Conclusions:** Magnet hospitals operationalize discharge preparation differently. Recommended practices from national discharge initiatives are inconsistently used. RNs play a central role in discharge planning, coordination, and teaching.

Improving the discharge process and reducing hospital readmissions are national priorities.<sup>1</sup> Hospitals are operationalizing discharge processes in various ways. There are a number of emerging discharge models including: Project RED (Project Reengineered Discharge),<sup>2</sup> the Transitional Care Model,<sup>3</sup> the Care Transitions Intervention,<sup>4</sup> BOOST (Better Outcomes for Older Adults through Safe Transitions),<sup>5</sup> and H2H.<sup>6</sup> Each of these models focuses on coordination and continuity of care by anticipating and educating patients about postdischarge needs, improving information transfer between hospital and community-based providers, and arranging postdischarge services. The process recommendations of each of these models are designed to improve patient and family ability to self-manage health needs at home after discharge, ensure follow-up for continuing medical needs, and prevent adverse events or health decline that results in readmission. One difference between the models is the roles that have been developed to support these goals. The Transitional Care Model<sup>3</sup> and the Care Transitions Intervention<sup>4</sup> use advanced practice nurses (APNs) as transitional care nurses or transitions coaches, who provide critical surveillance, coordination, and support to elderly patients and family caregivers in the weeks and months after discharge.

responsible for preparing the patient for discharge.<sup>2</sup> BOOST and H2H utilize an interdisciplinary team to improve identification of readmission risks and care coordination needs.<sup>5,6</sup> Other roles, such as a discharge facilitator<sup>7</sup> or navigator,<sup>8</sup> have emerged as models for specific units and patient types, such as the oncology population. Describing the roles and interventions designed to improve discharge care can be difficult because of heterogeneity in the interventions and target outcomes.<sup>9</sup>

The practices of exemplary hospitals can serve as a guide to opportunities for other hospitals to evaluate for implementation. Magnet<sup>®</sup> hospitals are known for excellence in nursing practice.<sup>10</sup> The purpose of this article is to describe the discharge care models present in Magnet hospitals.

## **Methods**

### *Design*

This descriptive study was conducted in preparation for the Readiness Evaluation and Discharge Interventions (READI) study, a multisite study of Magnet hospitals commissioned by the American Nurses Credentialing Center. The READI study will evaluate the implementation of discharge readiness assessment as a standard practice for hospital discharge. A Web-based survey was designed to assist in describing the current state of discharge practices, programs, and services on units participating in the READI study and to identify relevant context measures to be used as control variables in the multilevel (unit, nurse, and patient) analyses planned for the study.

### *Sample*

The sample consisted of 32 Magnet hospitals with acute medical-surgical services that expressed interest and subsequently contracted to participate in the READI study. Each hospital contributed 2 units to the study. The final sample consisted of 64 units.

### *Survey*

The READI Survey of Discharge Models consisted of 3 sections, including unit-specific questions for the each of the 2 units and questions about hospital-wide discharge initiatives. Questions were

developed by the READI research team based on reviews of the relevant literature on national discharge transitions models<sup>2-6</sup> and current practices in acute care settings<sup>7,8</sup> and on environmental scanning by the research team of current practices. The Conceptual Model for Discharge Preparation (CMDP),<sup>9</sup> an organizing framework for integrating the components needed for discharge preparation, was used as the architecture of the survey. Questions were designed to elicit details about how units operationalize roles and care processes for each of the key components of discharge preparation (planning, coordination, and teaching). According to the CMDP, discharge planning is the processes beginning prior to or at hospital admission or early in the course of hospital care involving assessment and planning for discharge needs. Discharge coordination is the processes for arrangements for support after discharge. Discharge teaching includes the educational interventions during the course of hospitalization to prepare patients and families for self-management of care after hospital discharge.<sup>9</sup>

### *Data Collection Procedure*

Following review by the primary institutional review board for the READI study, which resulted in a determination of “not human subjects” research, a link to the SurveyMonkey Web site used for the READI Survey of Discharge Models was sent via e-mail to the site principal investigators (PIs) at each hospital. Site PIs were asked to obtain the information from their 2 units. READI team members were available to assist with questions and clarifications. Data were collected between July 1 and November 1, 2014.

### *Data Analysis Measures*

Data were summarized and reported in aggregate form; no identifiable individual hospital data were reported. Characteristics of the sample and responses to each question were analyzed using frequency counts and percentages of the sample using SPSS 22.0 (Chicago, Illinois). Descriptive comparisons were calculated between self-reported academic medical centers and community hospitals for selected questions.

## Results

### *Hospital and Unit Characteristics*

The study sample included 14 academic medical centers (44%) and 18 community hospitals (56%). Bed sizes ranged from 180 to more than 1,000 (14 hospitals, >500 beds). Of the 64 units, unit types were described as medical (39.1%, n = 25), surgical (10.9%, n = 7), mixed medical-surgical (42.2%, n = 27), and other (7.8%, n = 5), which included "progressive care units, "adult blended acuity," and "step-down" units. Average lengths of stay (LOSs) ranged from 3.2 to 7.9 days (mean, 4.76 [SD, 2.25] days). In describing unit leadership, respondents indicated that 34.4% (n = 22) of unit managers also managed other units. Many units also had clinical leadership positions: 48.4% (n = 31) had a unit-based educator, and 21.0% (n=13) had a unit-based APN.

Hospitals reported their most recent readmission rates, which ranged from 8% to 20%. Of the 32 hospitals, 29 (90.6%) reported that they were engaged in readmission reduction efforts.

The questions posed to each specific unit in the READI Survey of Discharge Models of Care were divided into 3 categories: planning, coordination, and teaching. Results are reported in this format.

### **Discharge Planning**

Site PIs were asked to identify the roles involved in discharge planning and whether these roles were dedicated to the unit, shared with other units, or not on the unit at all. Results indicated that units used multiple roles for discharge planning. All, except 2, units (97%) reported having more than 1 discharge planning role available. Often, the discharge planning roles and functions were shared across units ([Table 1](#)). The most common role configuration was both an RN case manager and social worker assigned to the unit either exclusively or shared with other units (88%). Eight units (12.5%) had only 1 of these roles. The RN case manager was the role most frequently (45.3%) dedicated to a specific unit. The RN case manager (n = 37, 57.8%) was most frequently identified as having lead responsibility for discharge activities on the units, followed by the discharging staff nurse assigned to the patient (n = 17, 26.6%).

Nearly half of the units used a formal screening process to screen for postdischarge care needs (n = 29, 45.3%) and readmission risk (n = 31, 49.2%). One-fifth of the units (n = 14, 21.9%) had a discharge-related risk score calculated in the patients' electronic health record. When asked whether there was a specific discharge planning section in the health record, 85.9% (n = 55) responded affirmatively. A few units reported using established screening tools (LACE, 12.5%<sup>11</sup>; BOOST, 3.1%<sup>5</sup>; Transitional Care Model, 3.1%<sup>12</sup>; Early Screen for Discharge Planning, 4.7%<sup>13</sup>; and other, 9.4%), but 28.1% reported using screening tools that were described as homegrown or modified by the hospital. Community hospitals (44.4%) were more likely to locally develop a screening tool than academic medical centers (7.1%).

Among the several roles identified as routinely screening for discharge planning needs, staff nurses were identified by most units (n = 57, 89.1%); 87.5% (n = 56) also indicated a case manager; 82.8% (n = 53), a social worker; and 15.6% (n = 10), a discharge coordinator. On 26.6% (n = 17) of units, other roles performing discharge planning screening were identified: therapists, physicians, patient relations, APNs, bariatric staff, interdisciplinary team, orthopedic navigator, and transition coordinator. Timing of screening for discharge needs and services varied: one-third of units (n = 21, 32.8%) screened on admission, nearly 90% (n = 57, 89.1%) before the day of discharge, and more than one-third ongoing, during rounds, or daily (n = 24, 37.5%).

A case manager was assigned to all patients on 60.3% (n = 38) of units. The criteria used for assigning a case manager were wide ranging on the remaining units and included readmission risk assessment, screen for postdischarge needs, by unit/attending physician, by insurance type, discharge disposition, durable medical equipment needs, or medically complex. Conditions that were routinely assigned a case manager included specific diagnosis groups (ie, congestive heart failure, coronary artery bypass graft, diabetes, orthopedic, oncology, bariatric surgery), home treatment (including wound care and/or intravenous antibiotics), postdischarge level of care (ie, home health, skilled nursing facility, rehabilitation), renal dialysis, psychosocial issues, high utilizers of services, long LOS,

Medicare/Medicaid insurance, refusing to leave, and treatment noncompliance.

## **Discharge Coordination**

Daily discharge rounds were conducted on 82.8% (n = 53) of the units. Nursing (n = 54, 84.4%), medicine (n = 31, 48.4%), and pharmacy (n = 28, 43.8%) were the most frequent participants. Patients and family were the least frequent participants in discharge rounds, 29.7% (n = 19) and 25.0% (n = 16), respectively ([Table 2](#)). Hospitals reported many intermittent participants, which included therapists, case manager, social worker, pastoral care, dietician, respiratory therapy, APNs, rehabilitation, surgeon, ethicist, social worker, and utilization review manager. Differences between academic medical centers were noted with academic centers having higher participation in rounds by patients and family members, the medical team, and pharmacy than community hospitals.

Units varied widely in their selection of discharge transition programs, often choosing to overlap programs. Thirty-six percent (n = 23) used at least 1 of the national programs for discharge transition, whereas 14.1% (n = 9) used more than 1 ([Table 3](#)). Community hospitals were more active in local or regional collaboratives than academic medical centers. Almost half of the units (n = 28, 43.8%) reported that there were discharge programs in place for specific patient populations (ie, human immunodeficiency virus, multiple sclerosis, diabetes, congestive heart failure, stroke, bariatric, transplant, orthopedics, rapid recovery).

Units were asked about 8 specific discharge coordination activities selected primarily from components of Project RED<sup>2</sup> that were specifically relevant to pre-discharge care coordination ([Table 4](#)). Language translation for non-English-speaking patients was the most consistently implemented (92% of units). Ordering durable medical equipment, making follow-up appointments, filling medications prior to discharge, and sending a discharge summary within 24 hours were performed by more than 50% of units. Informing patients and families when pending laboratory results would be available and pre-discharge hospital visit by home health or home follow-up were performed on less than 50% of the units.

Many units (n = 43, 67.2%) make follow-up calls to patients after they go home; 29.7% (n = 19) responded that they called all their patients, and 37.5% (n = 24) called specific types of patients. The main reason for the follow-up call was to evaluate patient satisfaction (60.9%, n = 39), followed by reinforcing the plan of care (40.6%, n = 26). The majority reported placing follow-up calls within 3 days of discharge; specifically, 31% (n = 13) of units that routinely placed follow-up calls did so on postdischarge day 1, 26.2% (n = 11) on day 2, and 21.4% (n = 9) on day 3.

## Discharge Teaching

Ninety-five percent of units (n = 61) reported that staff nurses held the primary responsibility for teaching on the day of discharge. Other roles such as case manager (n = 29, 45.3%), physical therapy (n = 29, 45.3%), diabetic educator (n = 22, 34.4%), physicians (n = 23, 35.9%), and pharmacists (n = 19, 29.7%) also contribute to discharge teaching on day of discharge. Strategies for improving the quality of discharge teaching were regularly used; reported as "use teach-back to assess knowledge of medications" (n = 56, 87.5%),<sup>14</sup> "use teach-back to assess knowledge of discharge plan" (n = 50, 78.1%), and "adjust teaching to health literacy level" (n = 33, 51.6%).

## Discussion

This study explored the operational models of discharge preparation in 32 Magnet hospitals. While it was evident that there are substantial efforts being focused on readmission reduction initiatives at the hospital and unit levels, discharge preparation processes and roles varied widely even between units in the same hospital. There was no singular model for discharge preparation; however, common patterns in discharge planning, discharge coordination, and discharge teaching were evident.

Multiple roles contribute to screening for postdischarge needs, with the staff nurse assigned to the patient, the RN case manager, and the social worker all having responsibility. While multiple perspectives are important, there is potential duplication of efforts in this approach. Discharge planning is being undertaken most commonly by case managers and social workers who are assigned to multiple units. However, nearly one-half of units had unit-based case

managers, most of whom are RNs, and many of whom focus only on specific populations, such as heart failure, pneumonia, or the elderly. Some hospitals use a validated discharge planning screening instrument to assess for postdischarge needs or readmission risk, but this was also not consistent across organizations.

Many hospitals are participating in nationally disseminated discharge transition coordination initiatives such as the Care Transitions Model<sup>3</sup> and Project RED,<sup>2</sup> but many are customizing and combining aspects of these models into their unique discharge models of care.<sup>14</sup> While this approach facilitates integration into local operations, it makes comparisons of outcomes difficult. In terms of specific discharge coordination activities, 1 notable finding was the lack of patient and family involvement in discharge rounds, despite the current emphasis on patient engagement. A 2nd important finding is how postdischarge follow-up phone calls are utilized. In this study, they were less frequently used for reinforcement of discharge teaching, confirming follow-up appointments, or for postdischarge coping assessment than for patient satisfaction assessment.

Nurses hold the primary responsibility for discharge teaching, although other members of the healthcare team may also participate. Discharge teaching is often the focus for improving the discharge process. However, teaching improvements are most often directed at the materials given to patients and less often at the time spent on discharge teaching or in training RNs to be better at discharge teaching. Of note in this study, most units reported that they used teach-back strategies,<sup>15</sup> but only half considered adjusting teaching to health literacy in discharge teaching used on the unit. Weiss et al<sup>16</sup> have found that the way nurses deliver discharge teaching is more strongly associated with readiness for hospital discharge and postdischarge outcomes than the amount of content received by the patient. In addition, nurse staffing in hours per patient day has been associated with the quality of discharge teaching, readiness for discharge, and postdischarge utilization of readmission and emergency department (ED) visits.<sup>16</sup>

## Limitations

This was a cross-sectional, descriptive study, and data were reported by site PIs at each hospital. The results from this small

sample of Magnet hospitals cannot be generalized to all Magnet or non-Magnet hospitals. Hospital operational environments are dynamic and changing. With the current attention focused on discharge initiatives for readmission reduction, models of discharge care on the study units may have changed prior to publication. The survey tool was developed specifically to address specific components of the CMDP [9](#) and may have missed key questions that are not addressed by the model. For example, the survey did not query about adherence to teaching protocols or disease-specific discharge preparation activities.

### *Implications for Nurse Leaders*

The CMDP [9](#) is a useful framework for ensuring that the many components of discharge preparation are fully implemented. The study points to common practices implemented by Magnet hospitals. In discharge planning, common practices include using dual discharge planning roles for RN case managers, often unit-specific, paired with cross-unit social workers. Screening for discharge planning can be streamlined by assigning specific role responsibilities. Standardized screening tools for assessment of postdischarge needs and readmission risk are underutilized. In terms of discharge coordination, there are several national models for discharge transitions that have produced improvements in discharge care and readmission reduction, yet the implementation is sporadic, and components are deconstructed, with selected components from multiple models used simultaneously. This tailoring may be related to the specific populations served by the hospitals. Patient follow-up after discharge is a critical component of discharge coordination. The value of follow-up call programs, especially made by nurses, should be maximized to support discharge transition and readmission risk efforts by focusing on reinforcement of teaching and follow-up plan care and assessment of postdischarge continuing care needs, rather than evaluation of patient satisfaction.

The role of discharge teaching as the primary responsibility of the discharging nurse is highlighted by this study, yet the staff nurse's role in discharge is consistently undervalued in terms of time and expertise needed to perform this function.<sup>17</sup> Kalisch et al<sup>18</sup> have documented that RNs often report that they sometimes miss care

related to discharge teaching. Ensuring that nursing staff have time to teach, as well as teaching and content expertise, is critical to preparing patients to self-manage at home after discharge and prevent adverse outcomes requiring ED visits or readmissions.

### *Implications for Discharge Research*

This research has identified key structural aspects of unit operational approaches to discharge preparation that can be used in research on the effectiveness of interventions to improve discharge care and outcomes. Drawing on the 3 components of discharge preparation, unit variables such as (a) a unit-based RN case manager role, (b) standardized tools for formal assessment of postdischarge needs and/or readmission risk assessment, (c) daily discharge rounds, (d) follow-up calls for other than patient satisfaction, (e) number of roles performing discharge teaching functions, and (f) use of teach-back were identified. These variables can serve as context variables in translation and implementation research to better understand how the unit environment affects the efforts to improve patient outcomes.

### **Conclusions**

The study's purpose was to describe the discharge preparation practices of a group of "best hospitals" rather than to identify "best practices." Each unit operationalized their discharge model of care differently, often using components of the many models for discharge transitions in varying and unique combinations. Explicating how hospitals operationalize models of discharge care will allow for reporting of components of the discharge preparation process in a way that will allow for research on the effectiveness of each component. In customizing components of the discharge transition models, the CMDP may be useful in ensuring that the key aspects of discharge preparation are included in emerging and hybrid models.

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