

## Identifying Hospitalized Pediatric Patients for Early Discharge Planning: A Feasibility Study

Diane E. Holland PhD, RN\*, Patricia M. Conlon MS, RN, CNS, CNP, Gina M. Rohlik MS, RN, CNS, CNP, Kris L. Gillard MAN, RN, Penny K. Messner DNP, RN, CNS, Lisa M. Mundy MS, RN, CNS

Department of Nursing, Mayo Clinic, Rochester, MN

Received 17 June 2014; revised 17 December 2014; accepted 19 December 2014

## Key words:

Decision support; Discharge planning; Pediatrics A screening tool utilized by nurses at a critical point in the discharge planning process has the potential to improve caregiver decisions and enhance communication. The Early Screen for Discharge Planning–Child version (ESDP-C) identifies pediatric patients early in their hospital stay who will benefit from early engagement of a discharge planner. This study used a quasi-experimental, non-equivalent comparison group design to evaluate the impact of the ESDP-C on important outcomes related to discharge planning. Findings from the study provide preliminary evidence that the integration of the ESDP-C into the pediatric discharge planning process may be clinically useful. © 2015 Elsevier Inc. All rights reserved.

THE QUALITY OF the hospital discharge planning process (i.e. timely organization, patient and family engagement, and coordination of services) has implications for length of stay (LOS) and readmissions in hospitalized adults. This is illustrated in the studies supporting the Early Screen for Discharge Planning, which was developed as a decision support tool to enhance the deployment of discharge planning resources to the right patients in a timely manner (Bowles, Holland, Potashnik, Topaz, & Hanlon, 2012; Holland, Harris, Leibson, Pankratz, & Krichbaum, 2006; Holland & Hemann, 2011). The Early Screen for Discharge Planning identifies adults on admission who may have complex discharge plans. Adult patients who screen positive for a complex discharge plan receive a consult as early as possible during their hospital stay with a discharge planner to begin the discharge planning

\* Corresponding author: Diane E. Holland, PhD, RN. *E-mail address:* holland.diane@mayo.edu. process. This early engagement provides maximal time for developing an organized discharge plan, more time for discharge teaching by the staff nurses (RNs), greater patient and family engagement and efficient coordination of services (Cook et al., 2013; Holland, Knafl, & Bowles, 2012). Comprehensiveness of the discharge plan begun early during the hospital stay has been shown to reduce the overall LOS and positively impact continuity of care and patient outcomes after discharge (Holland & Bowles, 2012). Maximizing continuity of care in the transition process ultimately influences readmission rates for individuals with complex, post-acute care needs (Bowles, Hanlon, Holland, Potashnik, & Topaz, 2014; Bowles et al., 2012; Coleman, 2003; Coleman & Boult, 2003; Coller, Klitzner, Lerner, & Chung, 2013; Weiss, Yakusheva, & Bobay, 2010). Patients whose complex discharge plans are developed quickly near the end of the hospital stay are at risk of being discharged later than necessary. The plans may also be fragmented which places them at greater risk for readmission.

Pediatric discharge planning presents some unique challenges compared to adults. First, reimbursement



structures to date have not examined lengths of stay for pediatric patients to the extent that they have in adults, and pediatric discharge planning processes in place have been developed in this context of flexibility. If pediatric reimbursement is restructured to more closely scrutinize LOS, discharge planning processes may need to adjust. Secondly, children who are discharged from a hospital stay have fewer disposition options and are almost always sent home (HCUP, 2011). This second challenge will persist in the foreseeable future. Thirdly, discharge plans of pediatric patients may be complex for different reasons than those of adult patients, such as making provisions for a mixed or blended family environment or split custody, daycare and the school system. The child's cognitive developmental level and degree of complexity of the continuing care also are considerations for deciding who is taught (the child or teenager, parents, extended family members) (Kelo, Martikainen, & Eriksson, 2013). Challenges exist in getting pediatric-sized durable medical equipment (Flute, Allen, & Halberg, 2009). There are fewer home healthcare agencies with staff to service pediatric patients (Financing of Pediatric Home Health Care, 2006).

While these challenges inherent in pediatric discharge planning may be different from those of discharge planning for hospitalized adults, there is good reason to believe that each challenge could find substantial resolution by using the same evidence-based approach that has enhanced the quality of adult discharge planning. It is essential to use standardized decision support tools to identify patients on admission who may have complex discharge plans and to then target those patients for early engagement with discharge planning services (Nosbusch, Weiss, & Bobay, 2011). The resulting timely organization, patient and family engagement, and efficient coordination of services that early discharge planner engagement fosters could have implications for pediatric LOS and readmissions.

While there is limited literature regarding discharge planning decision support in children's hospitals (Berry et al., 2013; Lerret et al., 2014; Weiss et al., 2008), the ESDP-C (Early Screen for Discharge Planning–Child version) was recently developed and tested specifically to identify on admission which *pediatric* patients would benefit from early engagement of a discharge planner (Holland et al., 2014). The purpose of this feasibility study was to determine the ESDP-C's potential impact on pediatric discharge planning practice by looking at (1) the duration from admission to engagement of a discharge planner, (2) LOS, and (3) rate of 30 day readmissions in a population of pediatric patients hospitalized for either a medical or a surgical reason.

## Methods

This study used a prospective, quasi-experimental, nonequivalent comparison group design. The comparison group consisted of patients included in the ESDP-C development and testing study conducted in the same clinical setting prior to the ESDP-C implementation. The framework for the study was based on the Quality Health Outcomes model (Mitchell, Ferketich, & Jennings, 1998).

#### Sample

The population of interest was pediatric patients hospitalized in the acute care setting. Both groups were selected using a convenience sampling strategy from the General Care Unit, the Pediatric Intensive Care Units, and the Pediatric Cardiovascular Surgical Unit. Children hospitalized in the Neonatal Intensive Care Unit were excluded as they represent a different population with unique challenges. The medical records of children ages 1 month up to 18 years sequentially admitted for either medical or surgical reasons to the study units were eligible if they met the age inclusion criterion. In accordance with Minnesota Statute 144.335, "Patient Consent to Release of Records", only records of patients who permit the use of their medical records for purposes of research approved by the institutional review board were included in the intervention group (Melton, 1997).

The sample size was based on power calculated for the primary outcome (LOS). In the comparison group (preimplementation of ESDP-C), 26.9% (53/197) of the sample screened positive for potential substantial post-acute care needs. Among the 53 patients who screened positive in the screen development study, the mean LOS was 17.9 days [standard deviation (SD) 33.7; median 7; range 1–195; interquartile range (IQR) 4–16] (Holland et al., 2014). Since the distribution of LOS was highly skewed, the rankings of LOS were used in the power calculation to approximate the power of a Wilcoxon rank sum test.

The statistical power was estimated using a scenario based on the number of patients who screened positive in the comparison group. The scenario assumed that the same percentage (26.9%) of patients would screen positive after the ESDP-C was implemented, the sample size of 197 (53/ 0.269) was identified to obtain 53 patient events (screen positives). If at least 53 patients who screened positive were enrolled after implementation, the study would have 79% power to detect a 30% decrease in LOS.

## Setting

The setting was an 86 bed children's hospital within a large upper Midwest tertiary care hospital with Magnet<sup>®</sup> designation (http://www.nursecredentialing.org/magnet/programoverview/new-magnet-model). The region's population is predominantly Caucasian, although slightly higher minority population rates are observed in the county where the study hospital is located than in the region generally.

### Discharge Planning Model at the Study

The discharge planning model of care at the study site included a multidisciplinary approach. Staff RNs and clinical nurse specialist's discharge planning roles included Download English Version:

# https://daneshyari.com/en/article/2664357

Download Persian Version:

https://daneshyari.com/article/2664357

Daneshyari.com