Impact of Transitional Care Interventions

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Structured Abstract

LOCAL PROBLEM

Heart failure is a public health problem that continues to increase health care costs in the United States and is the leading cause of readmissions among Medicare beneficiaries. In the U. S., approximately 25% of patients hospitalized with heart failure (HF) return within 30 days of initial discharge, despite the advances in the quality of acute and chronic HF disease management. As is true among many healthcare organizations, in southeast Mississippi, one of its most prominent healthcare entities has and is also experiencing the burden of increased health care costs associated with the 30-day readmission rate of persons diagnosed with heart failure. In 2017–2018, the organization's readmission rate for persons diagnosed with HF was 39.5%, approximately 17.8% higher than the national and regional readmission rates reported by Centers for Medicare and Medicaid Services.

PROJECT PURPOSE

The purpose of this project is to assess the effectiveness of transitional care interventions on the readmission rate of persons diagnosed with heart failure compared to the efficacy of standard discharge instructions, improve quality of life in persons diagnosed with heart failure, and reduce the cost to healthcare organizations related to the 30-day readmission rates of persons diagnosed with heart failure.

METHODOLOGY

The Iowa Model for Evidence-Based Practice (EBP) to Promote Quality Care was used by the author as a guide in the conduction of a systematic search of the type of interventions ordered and implemented upon discharge of person(s) diagnosed with heart failure (HF). The author reviewed 111 electronic health records (EHR) of persons with a discharged diagnosis of HF. The electronic health records were assessed for probable readmission and type of discharge interventions (standard discharge instructions or transitional care interventions). The Iowa Model for EBP was valuable in the conduction of the systematic chart reviews, performance of a gap analysis compared to the recommendation of the American College of Cardiology (ACC) and American Heart Association (AHA), the weighing of the quality of interventions, quantity, and the consistency of care provided to a person(s) diagnosed with heart failure.

RESULTS

The total admits of persons diagnosed with heart failure between July through November 2019 were 474. Of the 474 persons admitted with heart failure (HF), the total
number of persons who were readmitted were 111 (23%). Of the 111 electronic health records (EHR) reviewed, 60 were selected for inclusion in the statistical analysis (n=60). If a person was discharged with a diagnosis of HF, readmitted with a diagnosis of HF, and received standard discharge instructions or transitional care interventions at discharge, an EHR review was performed and included in the study. The EHRs were excluded if they did not meet the criteria. The number of persons readmitted in < 30 days of initial discharge with a diagnosis of HF was 18 (30%), with the reception of SDIs or TCIs. The number of persons diagnosed with HF that received TCIs at discharge was 43 (72%), and 100% (n=60) of the population received SDIs. Based on data obtained, a chi-square ($X^2$) test of independence was performed to examine the relation between 30-day readmission rate of persons diagnosed with HF that received TCIs compared to the relationship between 30-day readmission rate of persons diagnosed with HF that received SDIs. The chi-square test results were $X^2$ (1, N = 60) = 0.10388 with p-value 0.065 which is higher than alpha ($\alpha = 0.05$) and yielded a Yule’s Q of 0.1736; thus, indicative of a statistically significant difference in 30-day readmission rates of persons diagnosed with HF that received TCIs compared to 30-day readmission rates of persons diagnosed with HF that received SDIs. The null hypothesis ($H_0$) is rejected due to a greater than 5% change in the 30-day readmission rate in persons diagnosed with heart failure that received TCIs compared to persons diagnosed with HF that received SDIs.

**IMPLICATIONS FOR PRACTICE**

In June 2019, transitional care interventions were implemented in both inpatient and outpatient settings at a local healthcare organization in Mississippi. The healthcare care teams worked diligently in the derivation of a plan of action that would decrease the 30-day readmission rates of persons diagnosed with heart failure. Implementation of transitional care interventions, in addition to standard discharge instructions, have resulted in a nine percent decrease in 30-day readmission rates of persons diagnosed with HF, increased collaboration among the providers, and improved the quality of life in persons being served.

The results of the project shall be shared with the executives, directors, and the Shared Nurse Governance teams, along with a recommendation for inclusion of patient or caregiver in decision-making relevant to his or her care, early conversations about palliative care services, implementation of guideline-directed medical therapy (GDMT), and interventions that enhance transition planning.

*Keywords:* readmission, standard discharge instructions, transition, transitional care, transitional care interventions

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