Education-based Intervention’s Effects on 30-day Readmission Rates for Patients with COPD

Date: July 11, 2019  
Time: 1:00 p.m  
Place: Nursing Administration Building 106

Abstract

**Purpose:** This Quality Improvement (QI) project evaluated the impact of an existing education-based program for Chronic Obstructive Pulmonary Disease (COPD) and its effect on 30-day readmission rates in one hospital in rural Missouri.

**Method:** A retrospective chart review was completed on 493 patients with an inclusive diagnosis of COPD from June 1, 2018, to March 31, 2019, using a cohort study design and a two-sample t-test analysis. Additional variables were analyzed to determine if there were predictive factors of an elevated risk of readmission.

**Results:** The two-sample t-test reveals there is no statistically significant difference between the rates of readmission for patients who participated in the COPD education program (n=9, 12.33%) when compared to the rates of readmission of patients who did not participate in the program (n=59, 14.08%) ($t=-0.3996$, $df=490$, $p$-value=0.6896) (See Tables C2 & D3, Figure B1).

**Conclusion:** Although the primary outcome results indicated there was no statistical significance between the two populations, additional variables such as the timing of the study, the participants level of education and their motivation for participating or not participating in the study should be investigated. Additionally, the study protocol should have been expanded to be more focused on the completion of a pulmonary rehabilitation program. Examining this additional information may provide a more thorough analysis of the benefits of this type of program for patients with COPD.

**Keywords:** chronic obstructive pulmonary disease, COPD, decreasing 30-day readmission, intervention, education

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