Developing an Evidence-Based Protocol for Managing Outpatient Pediatric Asthma Abstract

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Introduction

The outcomes of this project were presented through an oral presentation at the DNP power point presentation on m May 12th, 2018 in the presence of the DNP faculty committee and the 2018 DNP cohort. The outcomes of this project and future recommendations to maintain the sustainability of in-office evidence-based asthma protocol to drive asthma care were briefly disseminated with the staff of the pediatric primary care office at an all-staff and providers meeting on June 1st, 2018.

Project Abstract

Objective: Is to develop and implement a process to help pediatric healthcare providers and staff implement an evidence-based asthma protocol to assist in the care of patients in a pediatric outpatient clinic. The aim is to improve asthma care as an effect of implementing this protocol.

Design/Methodology: This project design is a pre- post-comparison of outcome measures of asthma classification and treatment. Prior to the implementation of the project, the project leaders and the office manager conducted a retrospective Electronic Medical Records (EMR) chart review of 50 patients between the ages of 5 and 8 years with a diagnosis of reactive airway disease, nonspecific asthma or asthma diagnosis. These patients were randomly selected for this review. Once the chart reviews were completed the project leader provided chart finding to all healthcare providers and staff in the clinic. During the series of healthcare provider/staff meetings the project leader also reviewed several tools for the classification and treatment of asthma. These included: (1) the NAEPP EPR 3 recommendations, (2) the Childhood Asthma Control Test (C-ACT), (3) web-based CDC factsheets: asthma fast facts for kids and know how to use your asthma inhaler in both English and Spanish. After the series of meetings were completed the 50 patients who had their charts reviewed were rescheduled for a return clinic

visit. A post-protocol implementation chart review of the 50 patients who returned to the clinic was conducted. Pre-protocol implementation chart reviews served as a baseline to assess changes in asthma classification/treatment as indicated in the post-protocol implementation chart review. Data collection includes: classification of asthma, control of asthma, and asthma education. Additional, demographic data such as sex and age were also collected. Data analysis will be completed using descriptive statistics (i.e., mean, standard deviation, frequencies, percentages and paired t-test). Statistical Package for the Social Sciences (SPSS) version 24 was used do conduct these analyses.

Results: The project involved 50 children ages 5 through 8 years of age. Sixty-four percent were males, 36% females, with 30% comprising the youngest age group of children in this project. The post-protocol implementation chart audit demonstrated a significant increase in the number of children who had a recorded asthma severity diagnosis, a 94% increase in the number of patients who had the C-ACT tool administered, and there were 100% increase in the correct medications/spacers prescribed to the asthmatic children in this project. A side benefit of the post-protocol implementation chart review provided C-ACT data that indicated only 32% of participants had asthma that was well controlled. Because there was an increase of the entries of asthma severity, it was noted that among the 50 participants 70% suffered mild asthma while the remaining 30% were classified as having moderate asthma.

Conclusion: This project demonstrated that the presentation of evidence-based asthma guidelines and information about measurement tools can result in behavior changes in provider/staff.

Implications for Nursing: Periodic review of asthma guidelines increases healthcare provider/staff awareness of treatment protocols. This increased awareness can lead to

improvement in the quality of the organizational practice and ultimately to improved patient outcomes. Pediatric asthma burden continues to be a significant problem due to the challenges faced by primary care providers to implement asthma guidelines.