

## NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 6409

### **Title**

*Educational intervention utilizing population health managers to reduce COPD-related healthcare utilization*

### **Priority 1 (Research Category)**

Population health and epidemiology

### **Presenters**

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### **Abstract**

Context: COPD patient self-management plans, including rescue packs (antibiotic and steroid combinations), are effective in reducing respiratory related emergency department (ED) visits and hospital readmissions. Utilization of action plans/rescue packs within our health system remains relatively limited. Objective: We hypothesized that an educational intervention led by population health managers would improve COPD exacerbation outcomes including ED visits and inpatient hospital admissions. Study Design and Analysis: A quality improvement focused educational intervention delivered over 6 months to primary care practices. Kirkpatrick framework used as educational evaluation model. Descriptive statistics used for knowledge and process outcome data. Segmented linear regression analysis of interrupted time series results data. Data was collected from mailed quizzes, EHR utilization of smartphrases, and orders and from insurance claims. Setting: Forty-two primary care practices in a regional health system in the Southeastern US. Population Studied: The study subjects were clinicians (MDs, NPs, and PAs) and their patients with COPD. Intervention: The study was a multimodal 2-part educational intervention delivered by PHMs in two waves to clinicians focused on the proper utilization of SMPs and rescue packs for COPD exacerbations. EHR-based practice supports (order panels and smartphrases) were created. PHMs delivered a short (~15 minute) presentation with PowerPoint slides and handouts, participants were sent a quiz in 1 month, and a refresher presentation was delivered 1 month later. Outcome Measures: Kirkpatrick level 2 (knowledge gain): participation of clinicians in quiz; Level 3 (process change): change in number of rescue packs written; Level 4 (results): change in ED visit and IP admit rates. Results: There was an increase (from zero) in utilization of the smartphrases (~170 prescriptions), 16% of quizzes were returned (used as content reminder rather than assessment of knowledge). There were promising changes in ED and hospitalization rates for COPD exacerbations, but none reached statistical significance. Conclusions: A PHM-led intervention showed

promising changes in ED visit and IP admission rates but there was no statistically significant difference in these outcomes. Rescue pack increased overall post-intervention. A more robust intervention may be needed to see statistically significant changes in ED visits and IP admissions.

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