Evaluation of a Nurse-Led Telephonic Self-Management Program For Patients with COPD on Health Care Utilization

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INTRODUCTION

- The expected cost of chronic obstructive pulmonary disease (COPD) will be $50 million in 2020 COPD.[4]
- 15.7 million Americans reported having a diagnosis of COPD.[1]
- Centers for Medicare and Medicaid (CMS) classify COPD-related emergency department (ED) visits and hospitalizations as preventable.[2]
- A nurse-driven self-management program can reduce the cost of care and improve quality of care to help achieve value-based care.

Significance

The purpose of this project was to implement a nurse-driven telephonic self-management program for COPD patients to reduce preventable admissions and ED visits. Nursing interventions can stem the rising cost of COPD care and eventually reverse the current trend. Nurses have an opportunity to improve the health outcomes of COPD patient.

OBJECTIVES

Aim 1: Create a telephonic COPD self-management program based on review of the literature, creation of domains and subcategories for assessment and care plan, and an expert panel.
Aim 2: Implement a telephonic COPD self-management program with a 50-patient pilot
Aim 3: Evaluate the telephonic COPD self-management program.
•Develop a mechanism to evaluate the program on reduction of COPD and respiratory-related hospitalizations and ED visits for the 50 patients.
•Obtaining feedback from the nurses involved in the pilot on the successes and perceived barriers of the program.

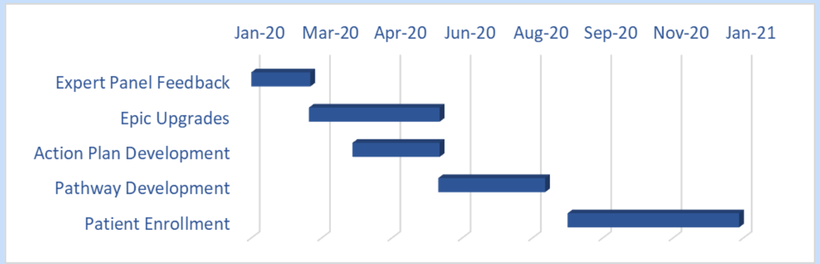
METHODS

The project was implemented in Mount Sinai Health System's Accountable Care Organization (ACO). The project targeted high risk COPD patients that are attributed to the ACO through value-based contracts.
Aim 1: Create a telephonic COPD self-management program based on review of the literature, creation of domains and subcategories for assessment and care plan, and an expert panel.
- A synthesis of the evidence identified three domains that the COPD self-management program needs to address: medical, behavioral, and psychosocial.
- Developed COPD specific action plan, assessments, interventions, and care plans based on the literature review and expert panel.
- A telephonic pathway was developed.

Aim 2: Implement a telephonic COPD self-management program with a 50-patient pilot
- An Epic-based patient list was used to identify patients.
- 50 patients were enrolled into the pilot using the new pathways, assessments, care plans, and action plans developed.

Aim 3: Evaluate the telephonic COPD self-management program.
3a) Develop a mechanism to evaluate the program on reduction of COPD and respiratory-related hospitalizations and ED visits for the 50 patients.
- Simple pre-post test
- Developed a dashboard to track 3, 6, and 12-month utilization post program graduation

3b) Obtaining feedback from the nurses involved in the pilot on the successes and perceived barriers of the program.
- Met weekly with the nurses



RESULTS

Baseline Information:
- 72% of patients were prescribed Bronchodilators.
- 44% of patients were missing spirometry.
- Only 56% of pharmacological treatments conformed to Global Initiative for Chronic Obstructive Lung Disease (GOLD) standards.[3]

Process Improvement:
- Created an Epic enhancement with automated tasks and targets based on the pathway developed.
- Created custom care plans that are patient centered, tailorable, and focused on behavioral change.
- Translated action plans to Spanish

Outcome Monitoring:
- Dashboard was developed to track 3, 6, and 12-month ED and hospitalization utilization post intervention.
- Simple pre-post test will be conducted.

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