Life Beyond the Hospital: Reducing Readmission for Patient's with COPD

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Introduction

- Chronic Obstructive Pulmonary Disease (COPD) affects about 16 million Americans.

- COPD is one of the top three reasons for readmission to the hospital.
  - Patients with COPD and comorbidities, number of exacerbations and hospitalizations, and prolonged hospital stay are at risk for readmission.

Introduction

- The Centers for Medicare and Medicaid Services financially penalize hospitals for excessive COPD readmission.
  - Care following hospital care is fragmented, increasing the patient's susceptibility to readmission.
  - A knowledge gap exists in efforts to improve outcomes in patients with COPD following hospitalization.

- Transitional care clinics (TCC) have demonstrated success in improving outcomes in vulnerable patients following hospitalization.
  - Patients are three times less likely to be readmitted to the hospital after completing transitional care visits.

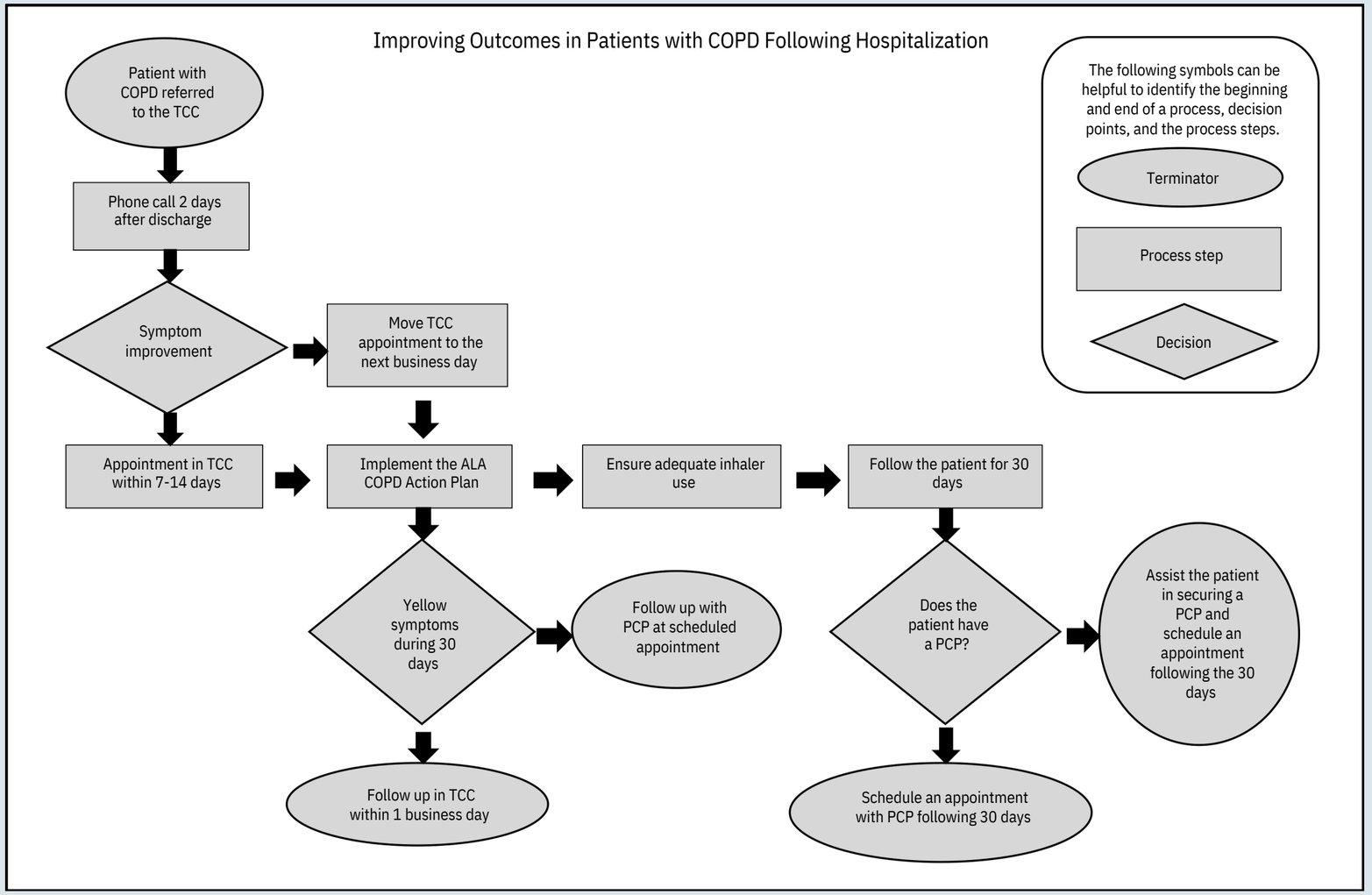
Purpose

The purpose of this article is to initiate a COPD bundle that improves outcomes for patients with Chronic Obstructive Pulmonary Disease (COPD) following hospitalization, specifically by reducing readmission rates.

Method

- Quality improvement project utilizing the Plan, Do, Study, Act (PDSA) model.
- 25 participants with COPD during hospitalization.
- COPD bundle:
  - Early follow-up
  - Action plan implementation with an educational component
  - Inhaler-use demonstration
- The case manager scheduled the transitional care clinic (TCC) appointment 7-14 days within anticipated discharge.
- The clinic receptionist called within 2 days after discharge explaining the purpose of the clinic visit, confirm planned attendance, and inquired about improving symptoms.
- During the TCC appointment, the patient and family nurse practitioner (FNP):
  - Completed COPD Assessment Test (CAT)
  - Participated in a thorough history and physical
  - Created a COPD Action Plan including patient education to call the clinical for any symptoms in the yellow zone in the next 30 days
  - Demonstrated inhaler use
- The clinic receptionist scheduled a follow up appointment with the primary care provider.
- The FNP followed the patient for 30 days after the TCC visit.
- Weekly meetings were held among quality, case management, and clinical staff to ensure adequate progression and outcome measures.

Process Map for the COPD Bundle



ALA = American Lung Association,
COPD = chronic obstructive pulmonary disease
PCP = primary care provider
TCC = transitional care clinic

(Isham et al., 2022, p. 176)

American Lung Association COPD Symptom Zones

Feeling Well (Green Zone)	Possible Exacerbation (Yellow Zone)	Requires Urgent Care (Red Zone)
• Usual symptoms • Usual activity level • No increase in sputum production or cough • Sleeping well	• Difficulty performing activities of daily living • Increased dyspnea • Increased cough • Increased sputum production • Inhalers/nebulizers not relieving symptoms • Symptoms keeping the patient awake	• Severe dyspnea • Dyspnea at rest • Fever • Hemoptysis • Unable to complete activities of daily living • Confusion • Chest pain

(Isham et al., 2022, p.177)

Results

- In 30 days after their initial visit, 22 patients answered the telephone to repeat the CAT questionnaire.
  - Of these, 17 (77%) experienced a decrease in the CAT score, indicating an improvement in symptoms.

- A clinically significant improvement was identified in all project outcomes.

- 24 (96%) completed the follow-up in 7-14 days.
- 25 (100%) verbalized symptoms from the action plan.
- 25 (100%) demonstrated proper inhaler use.
- 3 (12%) were readmitted to the hospital within 30 days.
- The hospital's COPD readmission rate decreased 11% during the implementation period (33% reduction from baseline).

Conclusion

- A COPD care bundle was implemented within a Transitional Care Clinic (TCC), incorporating early follow-up, an action plan with an educational component, and a demonstration of proper inhalers to assist in decreasing readmissions.

- Findings suggested that a follow-up phone call 2 days after discharge played a vital role in enhancing care delivery for COPD patients.

- Project outcomes showed a reduction in hospital readmissions and ER visits, along with an improvement in patient symptoms by implementing a care bundle.

Conclusion

Suggestions for Future Improvement

TCC attendance could be improved if clinical staff or case management discussed the significance of follow-up in person while the patient was in the hospital.

A handout for future use will be developed with the bundle highlights to encourage TCC attendance.

Provide a review of medications and in-depth symptom discussion with a nurse (instead of with a clinical receptionist) during the telephone call 2 days following discharge to ensure accuracy and increase treatment adherence.

Encourage a post discharge telephone calls from a nurse case manager to review medications for accuracy ahead of the visit and ensure the patient's symptoms were managed.

Reference

Isham, B., Elkins, C., & Hamid, S. (2022). Improving outcomes in patients with chronic obstructive pulmonary disease after hospitalization. Medsurg Nursing, 31(3), 174–179.