Patient-Centered Care

Sub-Domain: Practice-Focused

Impact of a Pharmacist-driven Transitions of Care Program on Hospitalized Patients with COPD

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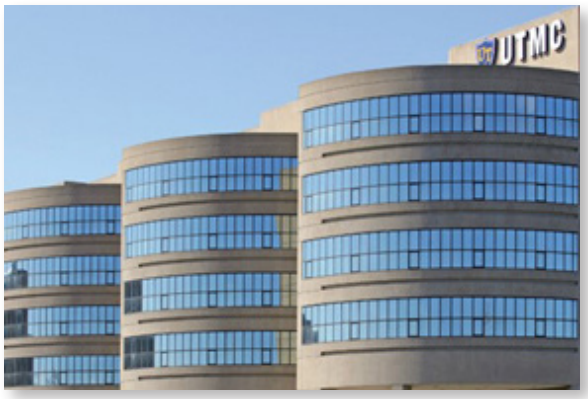
CASE OVERVIEW

The University of Toledo Medical Center implemented a transitions of care (TOC) program aimed at reducing hospital readmissions in patients with chronic obstructive pulmonary disease (COPD).



The TOC program consisted of:

- General disease state and COPD medication counseling prior to hospital discharge
- A phone call at 15 days post-discharge to assess overall disease state and medication issues
- A phone call at 30 days post-discharge to administer a COPD assessment test to assess symptoms and quality of life

The results of the COPD assessment were used to assess medication appropriateness per guideline recommendations. Recommendations on medication changes were made to the patient's primary care physician or pulmonologist via fax.

This program was initiated because of opportunities for improvement identified during a retrospective cohort study of this patient population from January 2014 to December 2015.

KEY ELEMENTS OF SUCCESS

The key elements of the TOC program are described in the Best Practice Initiative Overview. The program was developed in 2016 and early 2017. Development of medication education forms were conducted during this time by the team pharmacists and approved by a pulmonologist at the institution.

The previous retrospective study was analyzed during this time and the proposal for this initiative was created. Application for grant funding was also done during this time to provide resources for the project.

IMPACT ON PATIENT OUTCOMES

The primary study outcome was time to 180-day hospital readmissions. This was not significantly different between the pre-TOC group and post-TOC group (76.8+/-50.5 vs 74.3 +/-56.7 days; P=0.83).

Secondary outcomes also did not significantly differ between groups: 30-day all-cause readmissions (35 [15.9%] vs. 12 [10.5%]; P=0.18), 30-day COPD-related readmissions (16 [7.3%] vs. 12 [10.5%]; P=0.7), 180-day all-cause readmission (85 [38.6%] vs 39 [34.2%]; P=0.43), 180-day COPD-related readmissions (70 [31.8%] vs. 27 (23.7%]; P=0.12).

PHARMACY AND PHARMACIST ROLES

The study team consisted of two pharmacy faculty members who developed the project. P2 and P3 pharmacy students assisted with enrolling and counseling patients and calling patients after hospital discharge. All participating students completed standardized training by the two pharmacy faculty members.

LESSONS LEARNED

Winning elements of the project included helping patients with TOC issues during the post-discharge phone calls. This included assisting them with obtaining medications if they had identified insurance issues or had questions about medications or their disease state after discharge.

The biggest challenge was contacting physicians. A standard process of fax was chosen because admitted patients had primary care physicians that may not be within our health-system.

If this project was done again, using a different method to contact physicians may have been utilized, such as calling all physician offices or using electronic medical record communication systems.

BUDGET & RESOURCE ALLOCATION

This was a pilot study. This study was support by the ASHP Foundation New Investigator Grant. This study was implemented from August 2017 to December 2018.

FUTURE GOALS

Future steps include possibly expanding the project to another hospital in the metropolitan area. This project was presented at the 2019 ASHP Midyear and is current undergoing review in a peer-reviewed journal.