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Case Study

IMPROVING COPD OUTCOMES:

Partnerships, Quality Improvement & Virtual Care

Overview

Chronic obstructive pulmonary disease (COPD) affects over 250 million people globally, approximately 10% of Ontarians, and accounts for 6% of deaths globally. Acute exacerbations of COPD are a leading cause of hospitalizations, ER visits, ambulatory care visits, and readmission rates especially high during colder months. Annual direct costs per patient for COPD-related visits are $2000(CDN) per patient. Additionally, the average cost of an admitted COPD patient is 10 times the cost of treating COPD patients in the ED or community. The use of self-management programs has been shown to decrease costs and enhance patient quality of life.

Quinte Sub Region (QSR) showed the highest hospital utilization in the Southeast (SE) Region in 2017 at 35% (15.5 visits per 1000) COPD attributed ER visits, and 34% (10.5 visits per 1000) COPD attributed hospitalizations. Presently, the readmission rate for Quinte Healthcare Corporation (QHC) for COPD is 20%-25% within 30 days. An evident need existed for a new comprehensive model of care for COPD patients. A collaboration between the SE region and Ontario Health (OH) East brought together partners from primary care, hospital, and service providers; to develop and implement a coordinated care model using remote care monitoring (RCM) and best practice principles.

Approach

In response to COVID-19, QHC added RCM to in-person patient support and programming. The team developed a virtual care program to support COPD patients post-discharge. The goal: To ensure the care of patients virtually, to avoid a return to hospital amid a pandemic. The program focused on enhancing self-management to decrease the likelihood of an exacerbation. The hospital referred patients at discharge to the COPD Virtual Program allowing community clinicians/Registered Respiratory Therapists (RRT) to engage with patients virtually. Patients were contacted following a post-discharge referral from QHC to introduce the program and obtain their consent to participate. Patients (27 men; 51 women) were provided with equipment (pulse oximetry, tablet) set up by RRTs in each patient's home.

For this program, patients were provided with a tablet loaded with the aTouchAway® app, rather than using their own device. The care team involved with the COPD Virtual Program was a ProResp RRT, who interacted with the MD and care team as required. The RRT made the initial patient contact, launched the QHC COPD Post Discharge pathway, provided initial education (app and equipment), and managed the patient remotely. Patients interacted via the aTouchAway® app through daily check-ins and were prompted to engage in patient educational material to reinforce care plan goals and positive behaviors. Reminders encouraged patients to complete their prescribed medications and interventions. The RRT followed up as needed through patient-triggered changes in condition, and for scheduled patient-focused education. Patient interactions with the care team included text and virtual calls.

Results

From March 2021 to August 2021, **158** referrals were received for the program and **78** COPD patients consented to participate. These pts were supported (virtually) using remote patient management care pathways.

The QHC customized COPD pathway guides patients through their care by increasing their engagement to participate, enhancing their knowledge about COPD, and supporting them and their caregivers virtually, securely.

Over six months, a total of nine patients were readmitted with only one readmission occurring within 30 days. The result was a 12% readmission rate and a 1% readmission rate within 30 days. QHC's documented readmission rate for COPD patients before the implementation of the Virtual Program was 20-25% within 30 days.

Conclusion

The COPD Virtual Program provided a coordinated approach to care, bringing nine community organizations together to create a solution using best practices. This ultimately improved hospital readmission rates and enhanced patient outcomes. The next phase of the program is to sustain the hospital discharge service and expand to include primary care patients having moderate COPD exacerbation (not admitted to the hospital), thereby avoiding unnecessary ER visits.

> *I feel comfortable knowing that someone from the program is watching over me and checking in. If I am not feeling well, my RRT will see that and help me.*
>
> Martin, Patient

aTouchAway™ by Aetonix

At Aetonix, we know that choosing the right digital tool to empower your chronic and complex care patients to self-manage their health at home can improve outcomes and reduce the strain on you and your team -- as well as the overall system. The right technology can prevent costly emergency room visits, hospital admissions and other clinical interventions.

aTouchAway™ is an innovative software platform built to manage the care of chronic and complex patients at home by connecting the entire circle of care to ensure effective, accountable and coordinated care. aTouchAway is the only home health platform that offers secure video and text communications, a robust Workflow Engine, integrated Care Plan management, and comprehensive reporting dashboards – all in one secure digital platform.

Contact us today to learn more about how **Aetonix** can help you and your organization deliver the best care.

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