Charleston Area Medical Center

CAMC Improves Quality and Performance in COPD Readmissions and Patient Engagement: Tigr Interactive Patient Engagement Solution Supports Initiatives

Client:
Charleston Area Medical Center
www.camc.org

Location:
Charleston, WV

Size:
- 956 Licensed beds
- 900 Physicians
- 7,500 Employees

Customer since:
2015

TeleHealth Solutions:
- Tigr Interactive Patient Education System
- TeleHealth 360° Service

The Client:
Charleston Area Medical Center (CAMC) is a nonprofit, 908-bed, regional referral and academic medical center with more than 7,500 employees. CAMC is home to one of the largest heart programs in the United States; the only kidney transplant center in West Virginia; the highest level trauma center; the state's only freestanding children's hospital and is a 2015 recipient of the Malcolm Baldrige National Quality Award.

From left to right: Education Division Director Beverly Thornton, Nurse Navigators Natalie Osborne and Angelia Fugate, and Dr. Don Lilly, Associate CMO.

The Challenge

West Virginia ranks fourth in the nation for prevalence of Chronic Obstructive Pulmonary Disease (COPD).[1] While COPD has been the fourth leading cause of death in the U.S. since 1991, it has been the third leading cause of death in West Virginia since 2000. West Virginia's rates of hospitalizations for COPD have consistently been higher than comparable U.S. rates -- in some years twice the national rate.[2] Charleston Area Medical Center (CAMC), a non-profit four-hospital system in central West Virginia, sees the faces behind those numbers every day within their patient population. In the first quarter of 2015, CAMC's Multidisciplinary Patient and Family Education Council began implementing a solution to support the reversal of this trend, with the aim of improving patient education and engagement to impact outcomes.

The Solution

CAMC had already launched an aggressive approach for improving system-wide performance in achieving readmissions reductions for COPD and other chronic diseases, for which a number of initiatives were either in place or were being incorporated. To date, some of the key strategies have included:

- A detailed clinical assessment at admission and an assignment of a severity score
- Nurse navigators who coordinate care, provide education and referrals, and ensure smooth transitions after discharge
- Referrals to Pulmonary Rehab, Cardiac Rehab, and psychological support as appropriate
- The *Meds to Beds* program, which provides bedside delivery of a 30-day supply of prescription medications filled in the CAMC pharmacy and counseling by a pharmacist prior to discharge
- Escalation to a skilled nursing facility for patients who are too sick to be discharged to home
- For patients who are discharged to home, a follow up appointment is made with their primary care physician within 7 days and home health services referrals are made as appropriate

Adding Tigr to the Equation

In March of 2015, CAMC rolled out TeleHealth's Tigr interactive patient education solution across their four hospital campuses to help standardize patient education and increase patient engagement. Beverly Thornton, Education Division Director at the Health Education and Research Institute, describes a culture of ownership as being key to a successful adoption of the system. "We had a strong implementation throughout the entire organization," says Ms. Thornton. "When our system went live, we had everyone from our hospital administration to our maintenance crew arriving for Tigr training to learn how to use the technology and to ask 'how can I make this a success?' Our entire health system was on board with Tigr from the very beginning."

Dr. Don Lilly, Associate Chief Medical Officer at CAMC, was one of those early champions who took an active role in reviewing video content and building curricula for chronic disease patients. "As a physician I've seen the importance of education in helping people take better care of themselves after a hospitalization. A lot of our patients have literacy issues, so reading is not the best way for them to learn," explains Dr. Lilly.

The National Assessment of Adult Literacy reports that across the nation, only 12 percent of adults have Proficient health literacy and are able to self-manage their health. An estimated 14 percent of adults (30 million people) have Below Basic health literacy.[3] "Video is an effective way for patients to learn about their disease process and how they can manage it," explains Dr. Lilly. "It works very well for our patients."

> *"When interactivity follows learning, patients retain more information."*
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> Beverly Thornton, RN
> Education Division Director

Nurse Navigators Natalie Osborne, LPN, and Angelia Fugate, LPN, see the impact of video education every day at CAMC. They disseminate disease-specific 'video prescriptions' to front-line nurses which provide Tigr access instructions and the list of required videos that patients must watch prior to discharge. A video list is shared for a diagnosis of COPD and/or pneumonia, as people with compromised lung function are at an increased risk for developing pneumonia during the flu season.[4]

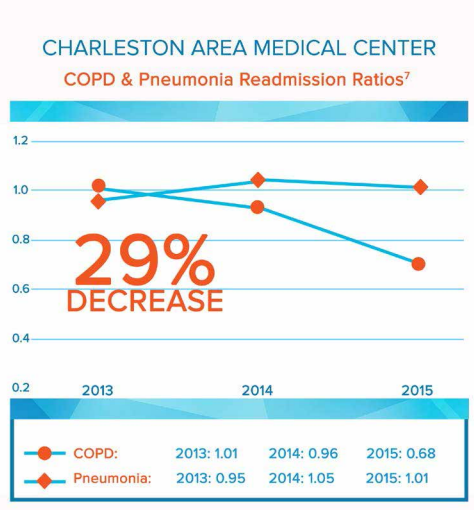
The prescriptions also prompt the nurses to give the patient additional resources, such as zone teaching tools for self-management, a COPD handbook, a spacer, and teach back. They are signed by both patient and provider to validate that all prescribed educational requirements are completed. The video prescriptions are then submitted to the unit manager.

"The prescription for education isn't optional. It's an expectation for the nurse and patient alike," states Ms. Fugate. "That holds everyone accountable for making education part of the patient's care while they're here."

Compliance with the prescriptions is also tracked with reports, which are sent by the Tigr system to the navigators' email addresses. Patients are also asked to complete quizzes on their TVs following select videos. "When interactivity follows learning, patients retain more information," says Ms. Thornton. "Our navigators watched the videos and developed the quizzes themselves. They know their patients; they know what they will respond to. The customization makes it meaningful."

The Results

Throughout the first year of the Tigr system's rollout at CAMC, video views have steadily increased each month. The hospital system now approximates 2,000 views monthly. Nearly one third of all video viewing activity (28%[5]) in the inaugural year of Tigr is attributed to titles on the COPD and Pneumonia video prescription. CAMC observed a parallel drop in readmission rates for both disease states, suggesting that CAMC's adoption of video education delivered through the Tigr system helped to make an impact.



The nurse navigators have no shortage of stories which speak to the impact that video education has had for CAMC's patients.

"Just recently, we had a patient learn to use her inhaler correctly from watching a video about pulmonary medications," Ms. Osborne shares, touching on one of the likely culprits for COPD readmissions in that 90% of adults who use prescription inhalers use them incorrectly.[6] "When she saw the nurse and patient actors in the video using the inhalers correctly, it helped her recognize that she'd been using her inhaler the wrong way all along. We reinforced with bedside teaching and had the patient return a demonstration."

Dr. Lilly agrees that video education is making a positive impact for CAMC's patients. "Many of our patients are visual learners and can better retain information from videos than from reading patient handouts," he explains. "They spend much more time watching television than reading written material in their daily lives so it seems more natural for them. Videos stimulate conversation and facilitate learning for the whole family. When patients involve their own family members while they're still here in the hospital, it means they have more support and a greater chance of compliance once they go home. That, in turn, helps to keep them from coming back to the hospital."

Sources:
1: Centers for Disease Control and Prevention, Atlanta, GA
2: Chronic Obstructive Pulmonary Disease: An Overview of the Problem in West Virginia. West Virginia Department of Health & Human Resources, Bureau for Public Health Statistic Center, 2011. http://www.wvdhhr.org/bph/hsc/pubs/other/copd_an_overview_in_wv/copd2010.pdf
3: Kirsch IS, Jungeblut A, Jenkins L, Kolstad A. 1993. Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey (NALS). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
4: Source: http://www.cdc.gov/flu/about/season/flu-season-2016-2017.htm
5: Source: Tigr system utilization reports for CAMC General Hospital and CAMC Memorial Hospital.
6:Ganguly A, Das AK, Roy A, Adhikari A, Banerjee J, Sen S. Study of Proper use of Inhalational Devices by Bronchial Asthma or COPD Patients Attending a Tertiary Care Hospital. Journal of Clinical and Diagnostic Research : JCDR. 2014;8(10):HC04-HC07. doi:10.7860/JCDR/2014/9457.4976.
7: Source: CAMC Scorecards, 2015-2016, Premier Inc.