Improving the management of chronic obstructive pulmonary disease

Ballarat Hospital Emergency Department

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In February 2015 the Emergency Care Clinical Network began its seventh round of nine-month evidence-based improvement projects in emergency departments. The aim of these projects is to use evidence-based care to reduce unwarranted variation in clinical practice and improve consistency of patient care within emergency departments. Ballarat Hospital focused on improving the management of chronic obstructive pulmonary disease (COPD).

Why this project was important to our emergency department
• There was variation in clinical practice in managing patients with COPD.
• We wanted to ensure care is based on the latest Australian and New Zealand guideline for managing chronic obstructive pulmonary disease (COPD X).

What we did
• Instituted a bundle of care approach for managing COPD.
• Provided flip cards to make sure key steps were followed.
• Established floor/shift champions.
• Engaged ward assistance and clerical staff in developing visual tools.
• Used a variety of approaches in engaging and educating staff in practice change.

Our results
• The proportion of patients having a chest x-ray was essentially unchanged from 97% to 100%.
• The proportion of patients having controlled oxygen therapy was essentially unchanged from 60% to 62%.
• The proportion of patients receiving bronchodilators increased from 70% to 86%.
• The proportion of patients receiving systemic steroids increased from 77% to 81%.
• The proportion of patients receiving antibiotics if signs of infection increased from 56% to 96%.
• The proportion of patients having a blood gas (for non-mild disease) increased from 54% to 67%.
• The proportion of patients with respiratory acidosis receiving non-invasive ventilation (NIV) increased from 33% to 67%.

Impact on patients, staff and the health system
• Patient care is now evidence-based.
• Consistency in treatment has improved. This includes appropriate use of oxygen and not giving antibiotics if not warranted.
• An easy-to-use flow chart has been implemented to guide care.
• Staff knowledge in managing patients with COPD has increased.

What we learnt about improving quality of care
• Having a motivated and enthusiastic team leader is vital.
• Using a variety of approaches (T-shirts, visual tools, COPD theme days and staff rewards) helps engage staff in practice change.
• Regularly changing displays helps maintain staff attention.
• All staff can contribute to practice change.
• Supportive management is essential.
• The time constraints of a busy emergency department make change more difficult.