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. Wodonga 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**
- Identified the evidence practice gap by mapping the COPD patient journey.
- Used Plan, Do, Study, Act (PDSA) cycles to develop and test changes.
- Consulted with community experts in the change process.
- Developed and implemented clinical tools based on the COPD-X guidelines.
- Consulted with patients about their experience.
- Educated staff in clinical practice change.
- Created T-shirts to highlight the practice change to staff and patients.

**Our results**
- The proportion of patients having a chest x-ray was essentially unchanged from 95% to 100%.
- The proportion of patients having controlled oxygen therapy increased from 57% to 100%.
- The proportion of patients receiving bronchodilators was essentially unchanged from 95% to 100%.
- The proportion of patients receiving systemic steroids increased from 76% to 90%.
- The proportion of patients receiving antibiotics if signs of infection increased from 85% to 100%.
- The proportion of patients having a blood gas (for non-mild disease) increased from 80% to 94%.
- The proportion of patients with respiratory acidosis receiving non-invasive ventilation (NIV) increased from 33% to 100%.

**Impact on patients, staff and the health system**
- Patient care is now based on evidence.
- The consistency of patient care has improved.
- Quote from a staff member: ‘The T-shirts were a great tool for educating patients’.
- Teamwork has improved.
- There is increased staff satisfaction in knowing that they have improved patient care.

**What we learnt about improving quality of care**
- Applying a structured approach to improving care is important.
- Staff are keen to participate if they are engaged.
- Making change in a busy environment is always a challenge.