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. Casey Hospital focused on improving intranasal fentanyl use for pain relief in children with a limb fracture.

Why this project was important to our emergency department
• We wanted to improve children’s pain management and their experience in the department.
• There was inadequate assessment and documentation of children’s pain when they presented with limb fractures.
• Intranasal fentanyl was underutilised in managing children’s acute pain.

What we did
• Used Plan, Do, Study, Act (PDSA) cycles throughout the project.
• Developed and placed pain assessment tools and prompts throughout the department.
• Engaged children and parents in using fentanyl as an effective first-line analgesic.
• Combined staff engagement and education in implementing changes in practice.

Our results
• The proportion of children with a pain score recorded increased from 25% to 40%.
• The proportion of children with a limb fracture given intranasal fentanyl as an analgesic increased from 10% to 20%.

Impact on patients, staff and the health system
• Patient care is now evidence-based.
• Children received quicker pain relief and hence they have a more positive experience in the department.
• Fewer resources are used as children are now managed in fast track.
• There is lower clinical risk through using a non-invasive analgesic.
• Children receive more consistent pain assessment and there is increased use of intranasal fentanyl as an analgesic.
• Staff knowledge, skill and confidence in paediatric pain management has increased.

What we learnt about improving quality of care
• Having the right people on the project team is essential for success.
• If something is not working, be prepared to change your plan.
• Engaging staff to change practice is hard.
• Time is required to drive improvement.