

Improving management of renal colic

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 refreshing and sustaining its improvements to managing renal colic, a topic it addressed in 2012.

Why this project was important to our emergency department

- There was a reduction in evidence-based care following the initial improvement achieved in 2012.
- There was variation in the management of patients with renal colic.
- The approach to renal colic management was not standardised.
- The time to initial analgesia was too long.

What we did

- Reintroduced renal colic packs at triage.
- Developed and introduced a checklist into the packs.
- Raised staff awareness of the renal colic packs.
- Educated staff about the management of renal colic and short stay pathway.
- The clinical initiative nurse commenced analgesia at triage.

Our results

- The proportion of patients receiving non-steroidal anti-inflammatory drug (NSAID) therapy within 60 minutes **increased from 68% to 88%**.
- The proportion of patients with painful renal colic with a pain score ≤ 2 at 60 minutes **increased from 20% to 72%**.
- The proportion of patients with renal colic discharged on a course of NSAID (unless with reduced renal function) **increased from 60% to 68%**.
- The proportion of patients with new renal colic who have a documented pain score, temperature measurement, renal function test, white cell count and midstream specimen of urine (MSU) **increased from 24% to 88%**.

Impact on patients, staff and the health system

- The time to receiving effective pain management for patients has reduced.
- Patient care is now evidence-based.
- Renal colic is managed consistently.
- Having a standardised approach to care means staff are less likely to miss things.
- There is appropriate use of investigations and pathology.

What we learnt about improving quality of care

- Effective communication with the improvement team and the department is essential to project success.
- Practice change requires teamwork.
- Improving quality of care requires whole-of-department support.

