

## Pain management in children's emergency department: utilizing the MDT to transform patient care and experience

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### **Introduction:**

Pain management in children can be challenging in the emergency department and therefore focusing efforts on optimizing care and ensuring a positive experience is essential.

### **Aim:**

This quality improvement project aimed to improve pain score assessment and re-evaluation of pain, against the Royal College of Emergency Medicine national guidance, for patients under the age of 18 years, who presented to two children's emergency departments.

### **Methodology:**

Prospective PDSA cycles were planned over an 8-month time period (September 2023-April 2024) and mapped the following sequence of interventions: 1) application of a standardized pain assessment tool at triage and 2) Introduction of an allocated team member to coordinate dedicated pain rounds for all patients.

### **Results:**

Patients included were aged 2-17 years (52% male and 48% female). Initial pain score assessment at triage increased from 36% (18/50) to 94% (47/50) across summative sequenced interventions. The subsequent addition of an allocated team member improved analgesia administration from 33% (6/18) to 87% (41/47). Of note, the mean time to reassess pain saw a reduction of almost 2 hours, from 231 minutes (range 15-360 minutes) to 114 minutes (range 30-300 minutes).

Qualitative patient feedback showed 85% (23/27) of patients who had their pain assessed, and analgesia administered, were happy with how their pain was managed. They referenced themes of increased analgesia compliance at home, improved feeding, and enhanced sleep.

### **Conclusion:**

A standardized approach to the initial assessment of pain and subsequent re-evaluation, alongside utilizing allocated team members to roles, improves pain assessment, administration of analgesia, and patient experience in both children's emergency departments.