# **Expert Recommendations Using Electronic Medical** Records to Care for Hospitalised Children in Pain



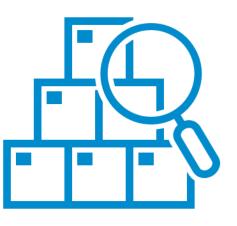
Nicole POPE<sup>1,2,3</sup>, Ligyana KORKI de CANDIDO <sup>4</sup>, Dianne CRELLIN<sup>1,2,3</sup>, Greta PALMER<sup>1,2,3</sup>, Mike SOUTH<sup>1,2,3</sup>, Denise HARRISON <sup>1,2,3,4</sup> 1. The Royal Children's Hospital, Melbourne 2. The University of Melbourne, 3. The Murdoch Children's Research Institute 4. The University of Ottawa











14 Paediatric Pain Experts

10 Hospitals, 5 Countries

**Audio Visual Interviews** 

Results: 5 Categories

**Qualitative Content Analysis** 

**5 Broad Categories** 

### Introduction

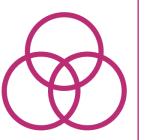
Best practice guidelines for children's pain management exists, yet hospitalised children suffer from undertreated pain. Electronic medical records (EMRs) have potential to improve pain care. No studies have examined how EMRs have influenced pain care or how we can capitalise on EMR functions to drive best practices.

#### Aim

To explore the experiences of international paediatric clinical pain experts about EMR capabilities used and required to support optimal pain care.

### Methods

14 online interviews were conducted with 5 medical & 9 nursing participants from 10 hospitals in: USA (n=5), Canada (n=4), Australia (n=2) & Qatar (n=1). Qualitative content analysis was used. Information power was assessed to guide sample size.



## Capturing the pain story

EMR workflows must support efficient practice & child & family engagement. EMRs need capabilities that guide broad, detailed, biopsychosocial assessments & pharmacological, physical & psychological interventions

### Patient & family engagement in shared decision marking

The future of pain care should focus on hospitalised children & families having access to an electronic system, such as an inpatient portal to enter and view pain related information. However, potential issues associated with shared access to EMR data, including information sensitivity & increased workloads needs consideration.



# Working with user friendly systems

EMRs have changed pain care practices. There is an ongoing work of interdisciplinary teams to build their EMR with functionality that supports optimal pain care. Decision support tools are important for high risk practice, but excessive alerts overwhelm, saturate & burden clinicians & are counterproductive

"I think there is so much going on, especially in EPIC and in the paediatric intensive care unit, and obviously, ward nurses are busy too. I mean, you have the child in front of you, don't you, so that is your prompt, hopefully." (Participant 13, nurse)

### Augmenting user knowledge & awareness about pain

EMRs present opportunities to increase clinician, child & family knowledge & awareness about pain care. EMR pain data spotlights knowledge deficits & informs education priorities.

### Leveraging pain data for evidence generation & quality improvement

EMR pain data is a rich data source to examine & improve pain practice. Yet extracting EMR data is resource & time intensive & often not possible



# **Key Points**

EMRs must facilitate standardised biopsychosocial pain assessments & multimodal treatments

Decision support tools must safeguard high risk practices without overwhelming clinicians.

Bedside interactive technology may optimise child & family engagement, promote shared decision making & enhance pain care

EMRs in children's pain care is an evolving practice

We must leverage the potential of EMRs to highlight pain as a priority

#### Conclusion

Core functionality should include tools that facilitate efficient workflows, comprehensive pain care & patient & family shared decision making. Our findings can be used to inform hospital EMR designs for paediatric pain care & future work on bedside interactive technology

References







