A World Without Codeine, the Alberta Pediatric Experience

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CSHP 2015: Goal 3

Increase the extent to which hospital and related healthcare setting pharmacists actively apply evidencebased methods to the improvement of medication therapy



Drugs & Therapeutics Committee of AHS approved restricting codeine in pediatrics in December 2012

The rationale for restricting codeine stemmed from several reported fatalities in children who are ultra-rapid metabolizers. As project lead I developed an implementation plan targetting all Alberta Health Services (AHS) physicians and staff. Various methods of communication were used to reach stakeholders within AHS. A webpage was created to house educational tools (one page summary, FAQ, posters for the nursing units, brochures for parents or caregivers and a webinar). Inservices were delivered to nursing staff by pharmacists and nurse practitioners for all shifts. Applicable order sets in computer order entry systems as well as paper based orders were changed to reflect alternative analgesic choices. Although the restriction applied to all facilities within the province, the two large pediatric hospitals, the Alberta Children's Hospital in Calgary and the Stollery Chidren's Hospital in Edmonton, were used as the 'pilot' sites. Realizing many patients are discharged on the analgesia used in hospital, we also informed external physicians and pharmacists through communications in their college newsletters. Full implementation of the codeine restriction in all patients 17 yrs of age and younger was planned for June 3rd, 2013 at these two hospitals.

Implementation of the restriction was very successful

There has been no utilization of codeine at the Alberta Children's Hospital since June 2013 and very little use at Stollery. I have regularly reviewed the AHS Reporting and Learning System for Patient Safety (RLS) for any adverse event or medication error attributed to this change and there has been none reported to date. An extensive chart review in post-op tonsillectomy adenoidectomy patients was completed in August 2014 to compare analgesic use in the two time periods and determine if the codeine restriction has caused any unintentional delays in discharge or inadequate pain control. Results show no change in lengths of stay, and significantly fewer narcotic (morphine) doses are given now with more reliance on ibuprofen.

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This project has improved patient safety and meets CSHP 2015 Objective 3.1

In 100% of hospitals and related healthcare settings, pharmacists will be actively involved in providing care to individual patients that is based on evidence, such as the use of quality drug information resources, published clinical studies or guidelines, and expert consensus advice.