

CHCA Improvement Topic

Heparin Low-dose Prefilled Syringes

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Presented by the CHCA Group Purchasing Services

Heparin Low-dose Prefilled Syringes Help Clinical Staff Prevent Harmful Overdoses in Neonates

THE CHALLENGES

Clinicians have long used heparin – a blood thinner – to keep critical intravenous lines open in neonates as blood clots around the line. Recent pediatric patient injuries and deaths due to heparin overdoses demonstrate the need for stronger medication administration processes related to look-alike, sound-alike drugs.

Despite ongoing work in the health care community to improve patient safety, each year thousands of patients still die from drug-related incidents. While no proven statistics exist regarding neonate heparin overdoses, harm can occur due to similarities in packaging, ineffective workflows and lack of double-check processes prior to medication administration. Traditional heparin vial labels are so similar in appearance that a clinical staff member may inadvertently administer the wrong dose, which impairs the infant's blood clotting ability.

THE SOLUTION

More than two years ago, a team of Owner Hospital Pharmacy Directors partnered with CHCA to address look-alike heparin packaging. As a result, CHCA now offers 1 unit/ml and 2 unit/ml prefilled single-use ZR Syringes made by Excelsior Medical and distributed by Hospira.

Owner Hospitals can purchase the bar-coded, needleless heparin syringes at a discount through the CHCA/Premier contract portfolio. Introduced in February 2008, the syringes are color-coded by dosage and allow the clinician a clear view of the solution, which is terminally sterilized for additional safety.

These prefilled syringes decrease supply waste with a shelf life of two years as compared to seven days if made in the hospital pharmacy.

The single dose syringes contain only enough medication volume to flush one child's line at a time, also preventing cross-contamination previously caused by multi-use heparin vials. The new packaging reduces the risk of human error in dosing as well as decreases staff time spent on medication preparation.

Four Owner Hospitals are using this product to improve patient safety:

- Children's Mercy Hospitals and Clinics
Kansas City, MO
- Children's Hospital
Omaha, NE
- Children's Memorial Hospital
Chicago, IL
- Cook Children's Health Care System
Ft. Worth, TX

Other Owner Hospitals are evaluating the benefits of using prefilled heparin syringes for neonates.

THE OPPORTUNITIES

CHCA continues working to ensure Owner Hospitals have affordable access to pharmaceutical products that promote safe, effective and efficient patient care.

Contract PP-PH9ABB01. Owner Hospitals can experience the advantages of group purchasing for prefilled low-dose heparin syringes by participating in the Premier contract.

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Excelsior Medical is one of the largest manufacturers of prefilled flush syringes in the country. Learn more at www.excelsiormedical.com.