

HEPARIN SAFETY IN THE NICU

The Problem

Heparin was stocked in two different concentrations in the NICU Automated Dispensing Machine (ADM). There was a potential risk of the wrong concentration being removed and administered to a baby. We saw an opportunity to improve the safety of heparin use in our NICU even though there had been no adverse events recorded.

Aim/Goal

Have one concentration of heparin in the ADM in the NICU.

The Team

- Greg Dumas, RPh, NICU Clinical Pharmacist
- Susan Young, RN, NICU Clinical Nurse Specialist
- Denise Arena, RPh, Clinical Pharmacist Supervisor
- Peggy Stephan, RPh, Clinical Pharmacist Supervisor
- Andy Dousa, RPh, Clinical Pharmacist Supervisor
- Holly Creveling, Pharm D., Sterile Products Pharmacist
- Steve Maynard, CPhT, Pharmacy Supervisor
- Karen Smethers, Pharm D., BCOP, Clinical Pharmacy Coordinator, Medication Safety

The Interventions

- Heparin 10,000 unit/10 mL vials removed from the ADM and left the heparin 10 unit/mL flush syringe.
- Developed procedures for batching 4 standard heparin-containing IV solutions that the RN previously mixed using the heparin 10,000 unit/10mL vial.
- Program packages for neonatal IV solutions in the pharmacy system and the ADM.
- Enable the bar code reader for scanning heparin containing IV fluids when refilled by pharmacy technician and removed by RN

The Results..

Reducing Opportunities for Errors with Heparin in the NICU



Lessons Learned

We learned from the heparin overdoses in 2006 at the Methodist Hospital in Indianapolis and in 2007 at Cedar Sinai in LA involving the twins of Dennis Quaid that there will always be opportunity to improve a system.

Next Steps/What Should Happen Next:

Continue to monitor usage of heparin containing IV fluids for the NICU and make adjustments as needed.



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