



Sleep Safety for Pediatric Inpatients: A Quality Improvement Success Story

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and the University of Iowa Children's Hospital (UICH) Safe Sleep Work Group

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Background Issue

- Sudden Infant Death Syndrome (SIDS) is the leading cause of death for infants 1-12 months of age in the United States.
- Infants are cared for and discharged from many inpatient environments, often with inconsistent sleep safety practices.
- A multidisciplinary work group at the UICH was organized to evaluate and improve the safety of the sleep environment for infants across all our inpatient settings.

Goal

- To evaluate and improve safe sleep practices among inpatient infants at UI Children's Hospital.



UICH Safe Sleep Work Group Members

- **Nursing:** Deb Bruene, Laura Corbett, Carol Dick, Heather Eastman, Jennifer Erdahl, Jeana Forman, Janet Geyer, Julie Landsteiner, Angela Martens, Ann Mason, Ann Miller, Katie Roben, Penny Smith, Emily Spellman, and Stephanie Stewart
- **Physical Therapy:** Kathi Anderson, Marissa Keene
- **Occupational Therapy:** Melissa Smith
- **Child Life Specialist:** Robin Ostedgaard
- **Social Work:** Ruth Truhlar
- **Community Outreach:** Pamela Hoogerwerf
- **Physicians and Nurse Practitioners:** John Dagle, Laura Kair, Jessie Marks, and Gail Reynolds

Methods

- **Data Collection:** Our workgroup created a before-and-after observational survey administered by bedside nurses.
 - August 2013: Baseline data collection
 - August 2014: Follow-up data collection after focused education and product implementation
 - August 2015: Two year follow-up data collection
- **Population:** All infants < 12 months of age asleep in cribs
- **Setting:** UI Children's Hospital inpatient units
 - Mother Baby Unit
 - NICU and PICU
 - Pediatric units (2JCP and 3JCP)
- **IRB:** Reviewed by the University of Iowa institutional review board and determined not to constitute human subject research.

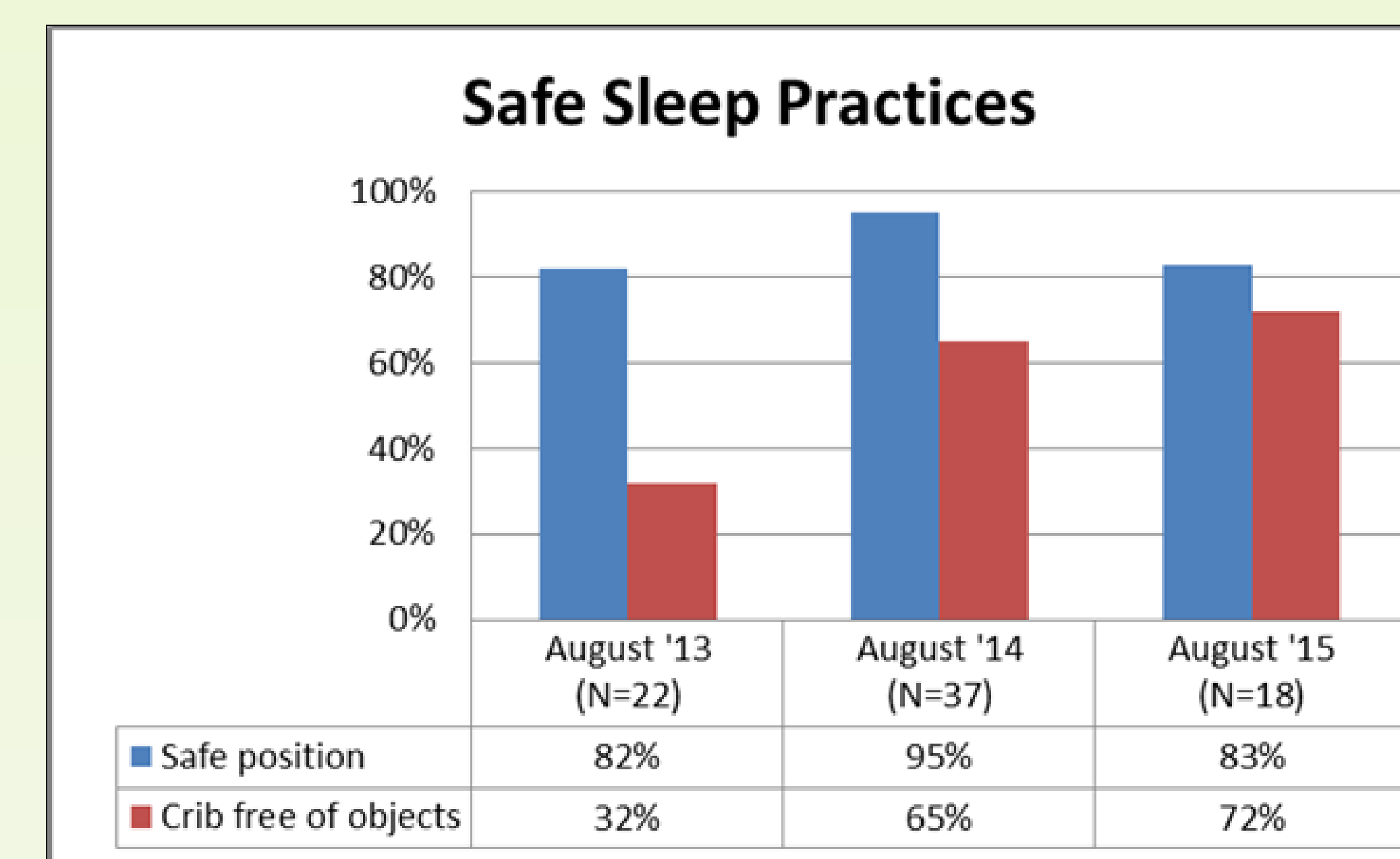
Interventions

- **Staff and Parent Education**
 - Education module and live safe sleep training in September 2013, August 2014 and March 2015
 - Discussed project at pediatric faculty lunch and distributed by email to residents
 - Laminated crib cards at bedside for parents and staff
 - Safe sleep screen saver on bedside computers
 - Computer module and handouts for parents
- **Community Outreach Events**
 - March 2014 - UI Children's Hospital
 - April 2014 - Iowa Children's Museum
 - May 2014 – Poster presentation at Pediatric Academy Society
 - July 2014 – Kid's Day at Johnson County Fair
 - November 2014 - UI Staff Health Fair
 - April 2015 - UI Children's Hospital
 - May 2015 - Poster presentation at Iowa Organization for Nursing Leaders Conference
 - July 2015 – Kid's Day at Johnson County Fair
 - September 2015 – Nurse Recognition Day
 - October 2015 – Poster presentation at UHC Annual Conference

Interventions Continued

- **Products**
 - Sleep sacks for infants on all units
 - Bedside storage containers
 - Fitted crib sheets on all units

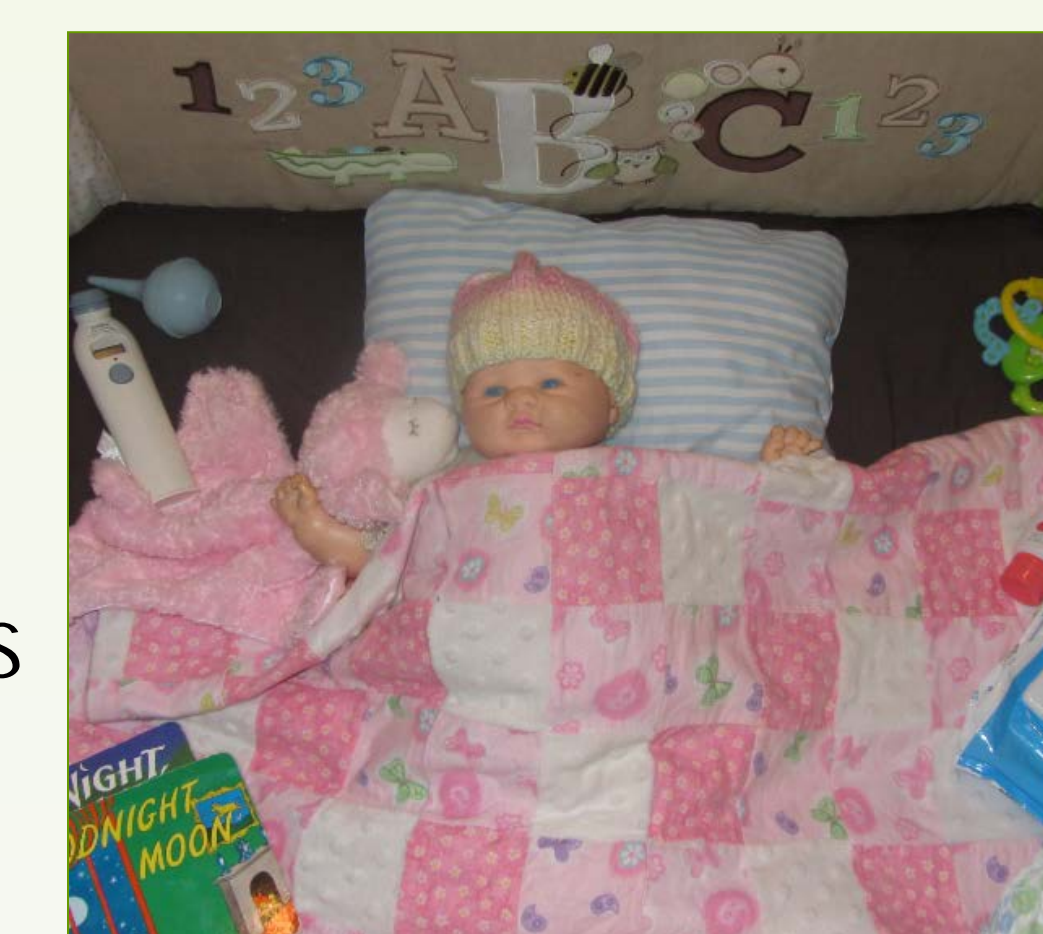
Results



- **Significant reduction in number of infant cribs with unsafe objects (p=0.029)**

- **Objects found in sleeping infants' cribs**

- Loose blankets
- Sleep positioners
- Thermometers
- Bulb syringes
- Washcloths
- Diapers and Wipes
- Clothing
- Boppy pillow



- **Unsafe sleep positions**

- Prone
- Side-lying

Conclusions

- Unnecessary objects were often found in sleeping infants' cribs in our inpatient setting
- Unsafe sleep positioning was common among inpatient infants
- Our quality data shows a significant decrease in the percentage of in-hospital infant cribs with unsafe objects. We continue to work towards improvement.

Future Work

- **Staff Education and Dissemination**
 - Continue annual module and live education
 - Article development for pediatric journal
- **Community Outreach Events**
 - November 2015 - UI Staff Health Fair
 - Safe sleep crib display outside the nurseries
 - 2016 - Iowa Children's Museum
 - March 2016 – Poster presentation at ANA Conference
- **Products**
 - Sleep Sacks for each new family at discharge
 - Explore complimentary crib for discharged families
- **Certification**
 - Beginning stages to acquire National Safe Sleep Hospital Certification

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