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Practice Summary & Implementation Guidance

Michigan Infant Safe Sleep Statewide Hospital Training Program

Michigan's Infant Safe Sleep Program wanted to ensure that nurses in birth hospitals were knowledgeable of the 2016 American Academy of Pediatric safe sleep recommendations and how to have effective conversations with families about safe sleep. The program began providing in-person infant safe sleep training and resources specifically to nurses caring for infants within hospitals (such as mother/baby and labor and delivery units). This practice has transitioned to virtual trainings during the COVID-19 Pandemic.

Location	**Topic Area**	**Setting**
Michigan	Primary/Preventative Care	Clinical
Population Focus	**NPM**	**Date Added**
Perinatal/Infant Health	NPM 5: Safe Sleep	Select Date Here

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Section 1: Practice Summary

PRACTICE DESCRIPTION

Research shows when interventions are put in place in the hospital setting, it can lead to sustained improvements in safe sleep education and practices in the hospital setting.[1,2,3] These improvements are critical because: [4,5,6,7]

- Parents model the advice and actions of the nursing staff.
- Parents are more likely to intend to sleep safely and follow through with that intention, when educated by a health care provider.
- New parents tend to have trust in the nurses who care for their infants.
- Practices by nurses in the nursery are one of the most important factors in parents' determination of and adherence to safe sleep practices.

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CORE COMPONENTS & PRACTICE ACTIVITES

The goal of our program was to ensure that nurses in birth hospitals were knowledgeable of the 2016 American Academy of Pediatric safe sleep recommendations and how to have effective conversations with families about safe sleep. We did this by providing in-person infant safe sleep training and resources specifically to nurses caring for infants within hospitals (such as mother/baby and labor and delivery units). The core components of this program included developing the training and resource materials, marketing and promoting the training, conducting the trainings, and evaluating it.

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[1] Killams, A, Parker, MG, Geller, N L, et al. Today's Baby Quality Improvement: Safe Sleep Teaching and Role Modeling in 8 US Maternity Units. Pediatrics, 2017; 140(5): e20171816

[2] Goodstein, MH, Bell, T & Krugman, SD. Improving Infant Sleep Safety Through a Comprehensive Hospital-Based Program. Clinical Pediatrics. 2015; 54(3): 212-221

[3] Hwang, SS, Melvin, P, Diop, H, Settle, M, Mourad, J & Gupta, M. Implementation of safe sleep practices in Massachusetts NICUS: a state-wide QI collaborative. Journal of Perinatology, 2018;38:593- 599

[4] Carrier, CT. Back to sleep: a culture change to improve practice (Abstract). Newborn Infant Nurs. 2009;9(3):163-168.

[5] Shaefer, SJM, Herman, SE, Frank, SJ, Adkins, M & Terhaar, M. Translating infant safe sleep evidence into nursing practice. J. Obstet. Gynecol. Neonatal. Nurs. 2010; 39(2):618-626.

[6] Fowler, AJ, Evans, PW, Etchegaray, JM, Ottenbacher, A & Arnold, C. Safe sleep practices and sudden infant death syndrome risk reduction: NICU and well-baby nursery graduates. Clin. Pediatri. 2013;52 (11):1044-1053

[7] Colson ER, Geller NL, Heeren T & Corwin MJ. Factors associated with choice of infant sleep position. Pediatrics. 2017;140(3)

Core Components & Practice Activities		
Core Component	**Activities**	**Operational Details**
Development	Reviewed research in this area, developed the training, had stakeholders review the training, and implemented their feedback.	The hospital training was developed based on the 2016 American of Academy of Pediatrics (AAP) Recommendations for Infant Safe Sleep and on what program staff learned from a review of published studies of other efforts in this area. Twelve nurses who work in birth hospitals across the state and numerous department staff reviewed the training and provided feedback.
Marketing and Promotion	Created a promotional flyer and distributed to partners	A detailed training flyer was shared with numerous organizations including the Nurse Administrator's Forum (NAF), the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), Regional Perinatal Quality Collaboratives and the Michigan Infant Safe Sleep State Advisory Committee. The flyer was widely distributed at conferences, meetings, webinars and Infant Safe Sleep for Professionals email list.
Training	Conducted the training at hospitals as they requested it.	Hospitals submitted a request for the training. After the training was scheduled, they completed a presurvey to provide baseline information on current infant safe sleep practices and policies. The training was conducted with consists of a one-hour PowerPoint presentation. Each unit at the hospital that services infants received a variety of resources.
Evaluation	Evaluation forms are completed by all participants.	Evaluation forms were completed by all participants and sent to the Montana Nurses Association per their nursing contact hour protocol. Participants assess their confidence levels in three areas before the training and then reassess after the training. The evaluation

		responses are collected after each training session. The results are entered into a spreadsheet and analyzed to determine the change in confidence levels for each item.

HEALTH EQUITY

Significant racial disparities exist among sleep-related infant deaths in Michigan. Black infants are 3.5 times more likely to die of sleep-related causes than White infants (2.8 sleep-related infant deaths per 1,000 live births for black infants compared to 0.8 per 1,000 live births for White infants (Centers for Disease Control and Prevention Sudden Unexpected Infant Death Case Registry – 2010-2018, Michigan Public Health Institute, 2020). Compared to White infants, infants whose race was categorized as other (other includes American Indian, Asian, Pacific Islander, and multi-racial infants) are almost 2.4 times more likely to die of sleep-related causes (1.9 sleep-related infant deaths per 1,000 live births when "Other" is listed as the race compared to 0.8 per 1,000 live births for White infants).

There has been a focus on conducting the training at birthing hospitals in southeast Michigan in order to reach the most concentrated number of births in the state and hospitals in areas of the state that experience health disparities. In addition, hospitals with special care nurseries and neonatal intensive care units (NICUs) have been targeted because babies born with a low birth weight and/or premature are at higher risk of sleep-related infant death. Black infants are at higher risk of being born premature or with a low birth weight.

Nurses are encouraged to have open and non-judgmental conversations with families about their infant sleep practices. Creating a dialogue helps to establish a safe space for families to talk openly about their situation. Nurses are taught to be supportive, including learning about family and cultural beliefs. They are encouraged to use "both/and" thinking which **both** respects the family's culture **and** keeps the baby safe. For example, a family may want to place religious or cultural items (such as a decorative pillow or religious medals) in baby's sleep space. Instead of removing the items from the sleep area and telling the family they aren't safe, the nurse can approach the situation with a "both/and" framework. In this example, by acknowledging the cultural or family importance of the items, the nurse can work with the family so that they can **both** still use the items which are important to their cultural tradition **and** keep the baby safe (such as by removing the pillow and/or medals from the sleep space and hanging the pillow on the side of the crib or putting the medals under the mattress).

In addition, the importance of connecting families with supportive services at discharge, such as home visiting, is stressed along with the knowledge that these services can help provide families with much needed emotional support and connections to basic resources such as transportation, food, shelter, etc.

EVIDENCE OF EFFECTIVENESS

Of participants who completed pre-/post-training evaluations:

- The percentage of staff that felt confident or very confident they could describe the scope of the problem related to sleep-related infant deaths increased from 57 percent prior to the training to 98 percent following the training.
- The percentage of staff that felt confident or very confident they could educate families on AAP recommendations increased from 67 percent prior to the training to 99 percent following the training.
- After the hospital training, 99 percent of staff were able to state at least one way that they could help patients practice safe sleep.

Section 2: Implementation Guidance

STAKEHOLDER EMPOWERMENT & COLLABORATION

Twelve nurses who work in various capacities at birth hospitals across the state and numerous nurses at MDHHS assisted in the development of the training. Feedback from nurses who complete the training is collected and shared, as well as their ideas on innovative practices to spread the safe sleep message in the hospital.

We also utilized our relationships with partners in a variety of settings and programs across the state to market and promote the training. Some of those partners also had connections with staff at the birthing hospitals and that enabled us to schedule a training with that hospital. In addition, once we connected with a hospital, we were able to get referrals to other hospitals within that health system.

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REPLICATION

This practice has not yet been replicated.

INTERNAL CAPACITY

The Infant Safe Sleep Program Coordinator and Consultant worked on this project. Time allocated to the project varied based on the number of trainings scheduled and location of the training. We had

great flexibility in scheduling the trainings, included early morning or evening sessions, to accommodate hospital staff schedules. We also utilized funds to pay for travel – mileage and meal reimbursement, use of department vehicles, and occasional reimbursement for overnight stays. We also provided support to provide resource materials for each hospital unit, including:

- A binder containing resource material and ordering information for Infant Safe Sleep, WIC, Tobacco, Maternal Infant Health Program, and Immunizations are provided for each unit at the hospital that serves infants.
- Sample crib audit forms and Neonatal Intensive Care Unit (NICU) crib cards.
- Copy of the Power Point and the AAP Infant Safe Sleep Recommendations and Technical Report.
- Copies of the laminated Infant Safe Sleep Resource Guide.

We also utilized support from our partners who helped market the training and helped connect with birthing hospitals. In addition, support of the nurses at birthing hospitals across the state that reviewed the training was needed. This allowed the training to have credibility to nurses taking the training, which was developed by staff with backgrounds in social work and public health, not nursing.

PRACTICE TIMELINE

Phase: Planning/Pre-Implementation		
Activity Description	**Time Needed**	**Responsible Party**
Research review and training development and stakeholder review	July 2018 35 hours	Patti Kelly
Obtained nursing continuing education credits	November 2018 5 hours	Patti Kelly

Phase: Implementation		
Activity Description	**Time Needed**	**Responsible Party**
Market and schedule trainings	January 2019 – September 2019 20 hours	Patti Kelly and Colleen Nelson
Assembling resources for trainings	January 2019 – September 2019 25 hours	Colleen Nelson
Conduct trainings	January 2019 – September 2019 120 hours	Patti Kelly and Colleen Nelson
Travel to and from trainings	January 2019 – September 2019 70 hours	Patti Kelly and Colleen Nelson
Reviewing evaluations	January 2019 – September 2019 40 hours	Colleen Nelson

Phase: Sustainability		
Activity Description	**Time Needed**	**Responsible Party**
Exploring options to move the course online	March 2020 – Ongoing 40 hours	Colleen Nelson and Patti Kelly
Exploring other ways to support hospital infant safe sleep work	April 2020 – Ongoing 20 hours	Colleen Nelson and Patti Kelly

PRACTICE COST

The following budget reflects the cost of two staff conducting trainings throughout the state. The budget amounts are estimates. Staff conducted 80 training sessions at 19 hospitals.

Budget			
Activity/Item	**Brief Description**	**Quantity**	**Total**
Personnel	Program Coordinator and Consultant	N/A.	$11,970
Staff Travel	Travel to training locations –includes mileage and meals	N/A.	$1,685
Resource Materials	Cost of Infant Safe Sleep	N/A.	$1,750
		Total Amount:	**$15,405**

LESSONS LEARNED

Lessons learned have been identified by staff reviewing the results of the pre/post-test evaluation results as well as reflection on successes and challenges experienced throughout the course of implementation. Staff have kept a running log of reflections on what has worked, what could be tweaked, and hospital feedback not captured on the evaluation form. This has been used to improve this activity as well as future practice. In addition, the COVID-19 pandemic challenged us to look at how we can continue to implement this training program virtually. We are in the process of moving the training to an online platform and surveying hospitals on how we can continue to support their safe sleep work, such as by having a quarterly support call.

NEXT STEPS

We are in the process of moving the training to an online platform and surveying hospitals on how we can continue to support their safe sleep work, such as by having a quarterly support call.

RESOURCES PROVIDED

- A summary document of the Infant Safe Sleep Statewide Hospital Training Program is available on the Infant Safe Sleep website.
- Electronic copies of the following materials are available:
  - Promotion flyer
  - Pre-Survey
  - Evaluation form
  - For a copy of the Resource Binder, please contact nelsonc7@michigan.gov.

APPENDIX

- N/A.