



CONTINUING EDUCATION

NPIC Patient Safety Series: Preventing Newborn Falls and Drops

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EMPOWERED
by Data. **CONNECTED**
by Purpose.

NPIC.ORG

Purpose/Goal(s) of this Education Activity

The purpose/goal(s) of this activity is to for participants to be able to describe two (2) situations that increase the risk of newborn falls and drops in the immediate postpartum period; and explain two (2) newborn fall prevention programs and how to engage families in reduction strategies.

1.0 Contact Hour(s)

This nursing continuing professional development activity was approved by the Northeast Multistate Division Continuing Education Unit, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Disclosures & Successful Completion



- There is no commercial support being received for this activity.
- No individuals in a position to control content for this activity has any relevant financial relationships to declare.
- There will be no discussion of off-label usage of any products.
- To successfully complete this activity and receive 1.0 Contact Hour(s), you must attend/watch the program and submit the completed post-test/evaluation to NPIC.

Continuing Medical Education (CME)

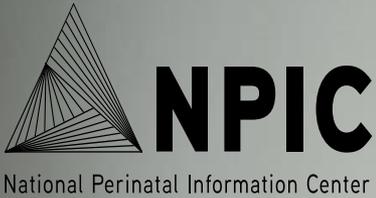


1.0 AMA PRA Category 1 Credit™

CME credit is provided for select programs through a partnership with Women & Infants Hospital of Rhode Island.

Please Note:

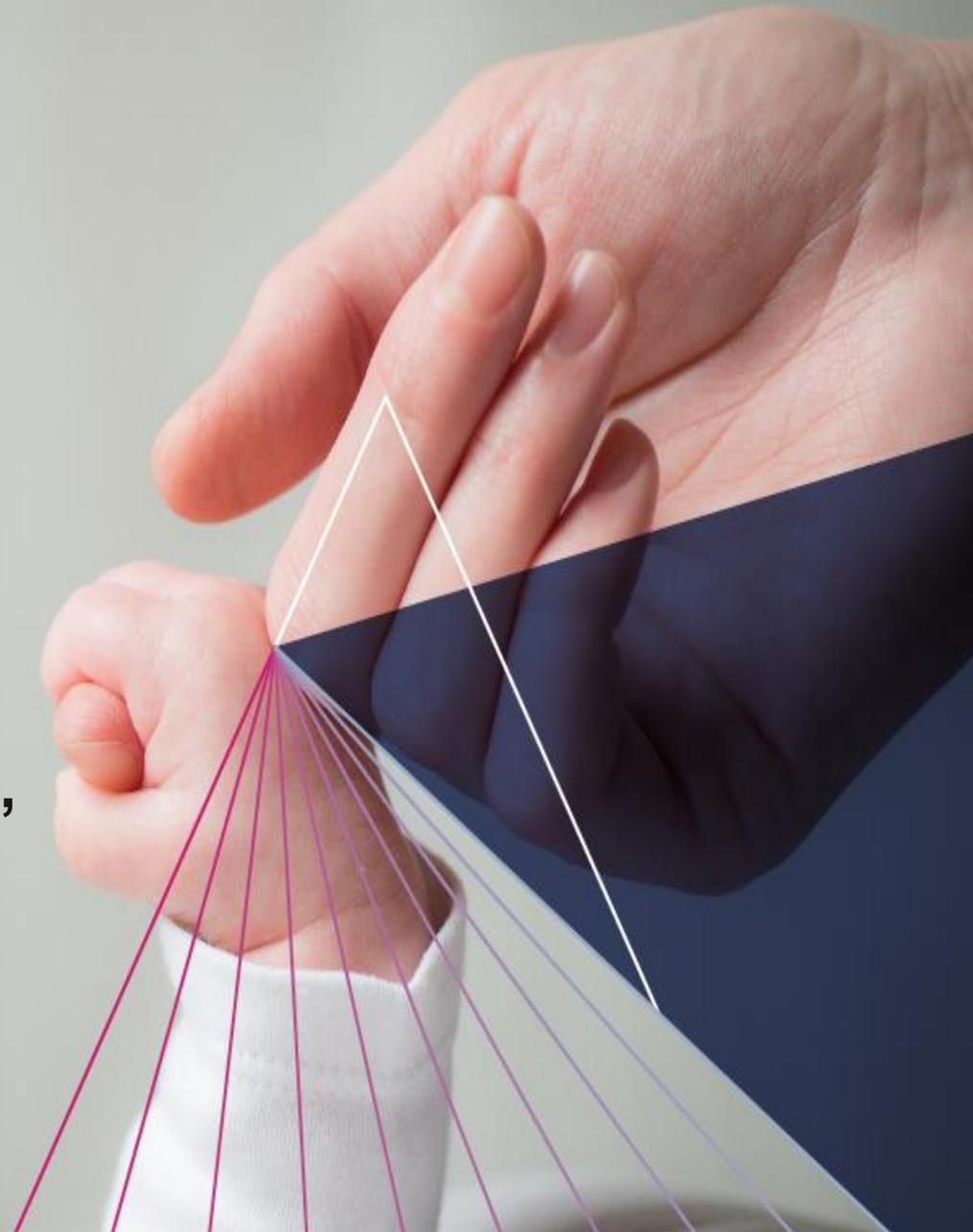
Due to recent changes regarding new requirements for CME approval, we are unable to offer CME credit for today's program at this time. NPIC is working through this new process and it is anticipated that CME credit will continue to be offered for future programs.



NPIC Patient Safety Series: Newborn Falls & Drops

Elizabeth Rochin, PhD,
RN, NE-BC
President, NPIC

February 3, 2021



Objectives

- 1) Knowledge: Participants will describe two (2) situations that increase the risk of newborn falls and drops in the immediate postpartum period
- 2) Skill: Participants will explain two (2) newborn fall prevention programs and how to engage families in reduction strategies

Disclosures

The speaker has no conflicts or received financial support for this presentation

We are going to use polling with this presentation, so if you are at your computer, or have logged in via smart phone/tablet, please feel free to contribute to our conversation today

So, Is the Number of Newborn Falls Accurate?



Polling Question #1: How many falls do you think occur in the United States on an annual basis?

- a. 50-100
- b. 100-250
- c. 251-600
- d. 600-1200
- e. 1200+

Polling Question #2: What do you think the #1 cause is of newborn falls/drops? (enter response in chat box)

Videos are Much More Impactful Than Words



According to The Joint Commission, there are 600 - 1,200 newborn falls and/or drops annually

Increased emphasis on newborn falls has become a discussion point during the past few years

PEDIATRICS[®]

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Case Report

In-hospital Neonatal Falls: An Unintended Consequence of Efforts to Improve Breastfeeding

Colleen A. Hughes Driscoll, Nicola Pereira and Richard Lichenstein

Pediatrics January 2019, 143 (1) e20182488; DOI: <https://doi.org/10.1542/peds.2018-2488>

Definitions of Newborn Fall and Drop



National Database for Nursing Quality Indicators (NDNQI):

A newborn **fall** is “a sudden, unintentional descent, with or without injury to the patient that results in the patient coming to rest on the floor, on or against another surface, on another person or object.”

A newborn **drop** is defined as “a fall in which a baby being held or carried by a healthcare professional, parent, family member, or visitor falls or slips from that person’s hands, arms, lap, etc.”

Fall is counted regardless of surface and regardless of injury

2021 Joint Commission National Patient Safety Goals (Hospital)



2021 Hospital National Patient Safety Goals

The purpose of the National Patient Safety Goals is to improve patient safety. The goals focus on problems in health care safety and how to solve them.

Identify patients correctly

NPSG.01.01.01

Use at least two ways to identify patients. For example, use the patient's name *and* date of birth. This is done to make sure that each patient gets the correct medicine and treatment.

Improve staff communication

NPSG.02.03.01

Get important test results to the right staff person on time.

Use medicines safely

NPSG.03.04.01

Before a procedure, label medicines that are not labeled. For example, medicines in syringes, cups and basins. Do this in the area where medicines and supplies are set up.

NPSG.03.05.01

Take extra care with patients who take medicines to thin their blood.

NPSG.03.06.01

Record and pass along correct information about a patient's medicines. Find out what medicines the patient is taking. Compare those medicines to new medicines given to the patient. Give the patient written information about the medicines they need to take. Tell the patient it is important to bring their up-to-date list of medicines every time they visit a doctor.

Use alarms safely

NPSG.06.01.01

Make improvements to ensure that alarms on medical equipment are heard and responded to on time.

Prevent infection

NPSG.07.01.01

Use the hand cleaning guidelines from the Centers for Disease Control and Prevention or the World Health Organization. Set goals for improving hand cleaning. Use the goals to improve hand cleaning.

Identify patient safety risks

NPSG.15.01.01

Reduce the risk for suicide.

Prevent mistakes in surgery

UP.01.01.01

Make sure that the correct surgery is done on the correct patient and at the correct place on the patient's body.

UP.01.02.01

Mark the correct place on the patient's body where the surgery is to be done.

UP.01.03.01

Pause before the surgery to make sure that a mistake is not being made.

Multiple locations for Newborn Fall and Drop events:

- Labor and Delivery
- Operating Rooms
- Post-Anesthesia Care Unit/PACU
- Postpartum/Mother & Baby
- Newborn Nursery
- Neonatal ICU
- Adult ICU (maternal admit)
- Emergency Room

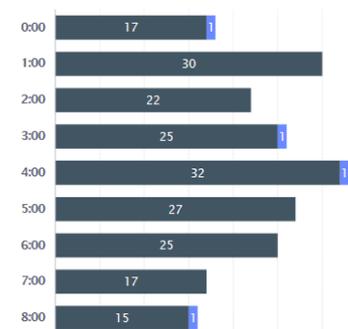
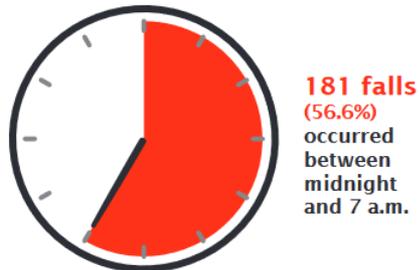
Characteristics of Mothers/Birthing People of Newborns Who Fell



Studies have shown the following characteristics of mothers/birthing people who have been involved in a newborn fall:

- Breastfeeding or breast/formula feeding
- Delivered by Cesarean Section
- Second or third postpartum night
- Receiving opioid pain relief, and had received last dose 2-3 hours previous to fall

PA study of newborn falls ($n = 320$) (2014 – 2018): Most newborn falls occurred during the following time frames:



Let's Look at a Couple of Areas of Interest



Labor and Delivery/Operating Room

- Immediately after birth, placing baby onto mother's chest
- Mother becomes drowsy while skin-to-skin and/or breastfeeding
- Transfer from warmer to scale and vice versa
- During maternal transfer from bed to wheelchair while holding newborn

Post Anesthesia Care Unit

- Mother becomes drowsy while skin-to-skin and/or breastfeeding
- Mother receives IV narcotics while holding baby

Let's Look at a Couple of Areas of Interest



Mother/Baby Units (MBU's)

- Highest risk of falls/drops
 - 2.3 days of life
 - Between 2am and 7am
- Falls out of mother's arms while breastfeeding after receiving pain medication
- Falls out of father's/significant other's arms while sleeping
- Visitors passing around baby during visiting periods
- Newborn dropped in hallway when cradled in arms and not in bassinette

Potential Causal Factors: Equipment



- ✓ Height of mother's bed with open side rails
- ✓ Hard floors
- ✓ Hospital equipment near the bed
- ✓ Incubator doors not being latched securely (for hospitals that have NICU and PP care together)

Potential Causal Factors: Training/Education



- ✓ Lack of awareness of the risk of newborn fall events by hospital staff
- ✓ Prevention strategies are inconsistent
- ✓ Follow-up after the fall is varied
- ✓ Families reluctant to report falls; nurses reluctant to discuss newborn falls
- ✓ No validated newborn fall risk assessment tool

LINE OF SIGHT

Single-family rooms versus open pods

Studies from NANN, ANN, and others show varied nurse experience with single-family rooms:

- Reported reduced line of sight
- Isolation

These same studies show positive nursing experiences, including

- Privacy
- Quiet environment

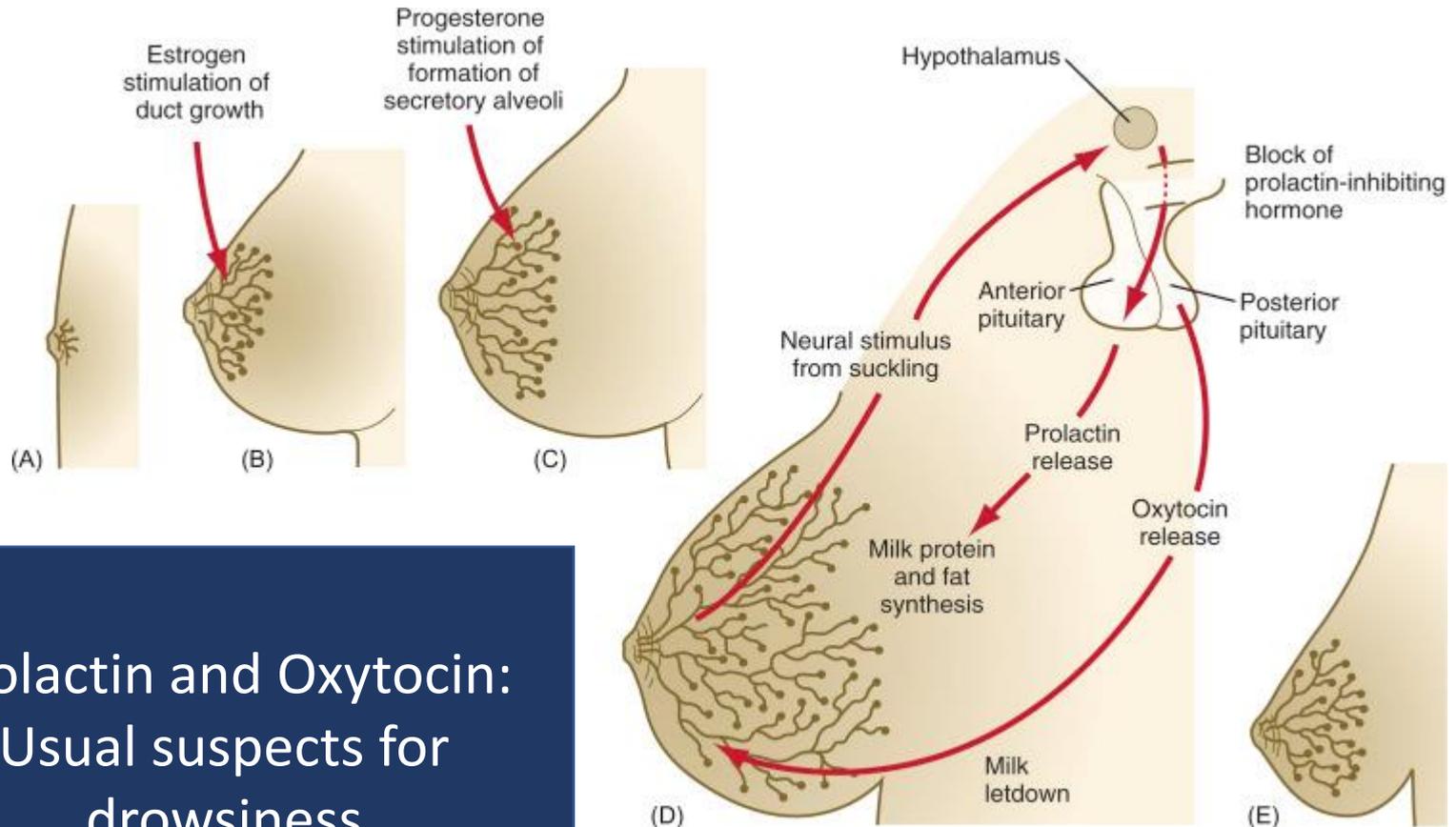
Maternal Casual Factors: Newborn Falls



****Highest risk: Maternal fatigue**

- Phenomenon of emotional and physiologic maternal exhaustion seen on the second or third night postpartum
- ✓ Interrupted sleep patterns
- ✓ Unstable ambulation
- ✓ Attempting to place the newborn in the bassinet without getting out of bed
- ✓ Use of sedating medications or opioid pain relief within the last 4 hours
- ✓ Cesarean birth
- ✓ Nighttime feeding
- ✓ Prior near-miss occurrence
- ✓ Families rooming-in together in an unfamiliar hospital environment
 - Increased risk of slips, trips and falls.

Anatomy of the Breast and Milk Production—Why This is Important



Prolactin and Oxytocin:
Usual suspects for
drowsiness

Physiology of Breastfeeding and Sleepiness



Pituitary Gland: Anterior and Posterior

Oxytocin (Posterior Lobe): Responsible for aiding in the muscular responses for breastfeeding (muscles around milk glands contract, sending milk into milk ducts)

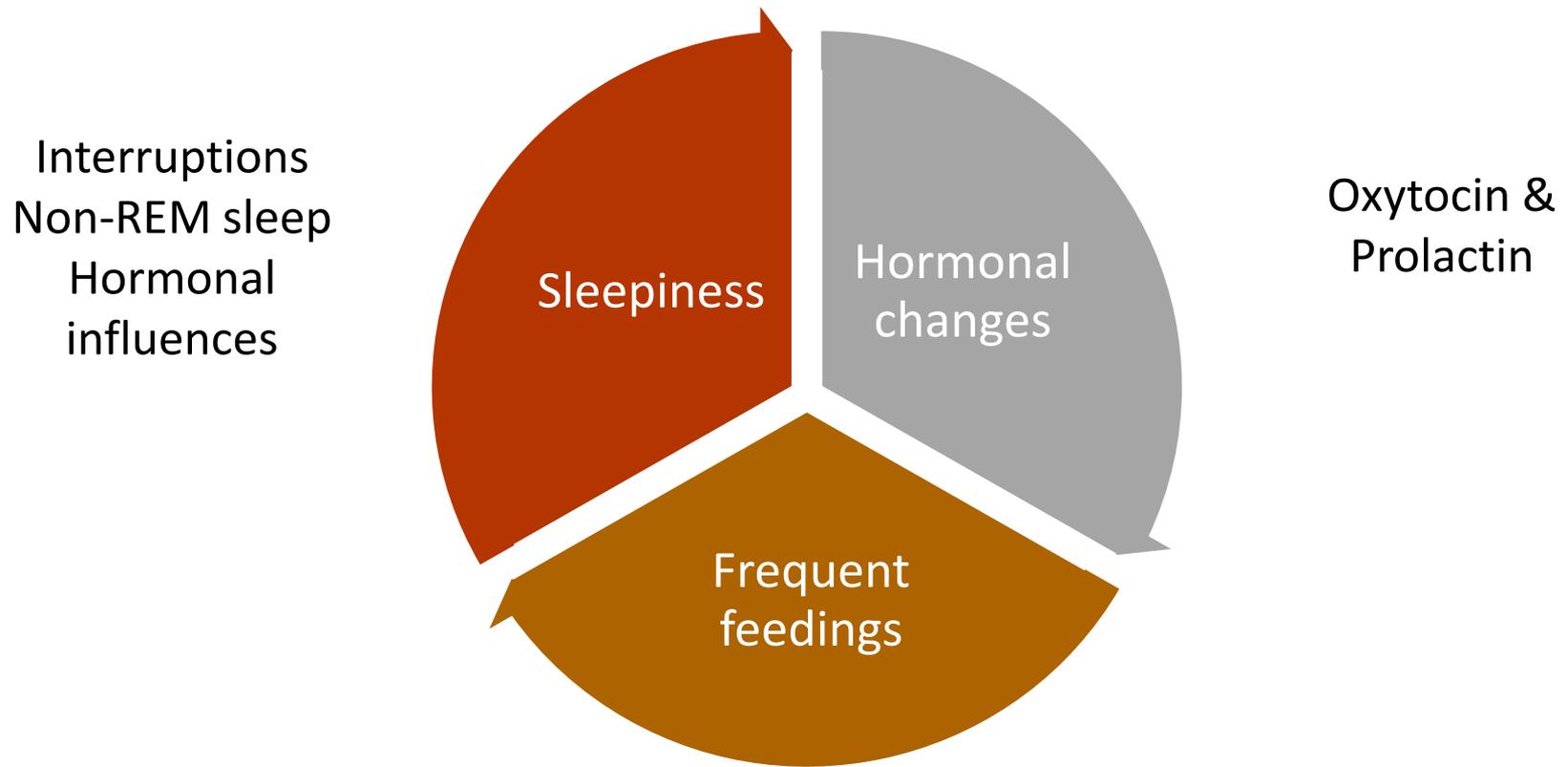
Creates a feeling of drowsiness and relaxation

Prolactin (Anterior Lobe) : Hormone that assists with release of milk by cells, and responsible for milk production

More Prolactin is produced at night, and therefore important to breastfeed/pump at night to encourage milk production

Creates a feeling of drowsiness and relaxation

What Does This Cycle Look Like?



Nighttime feedings important to encourage milk production (Prolactin)

Duthie (2020):

- Mothers slept on average of 3.7 hours per night while in hospital
- Sleepiness scores peaked at 4am, and trended downward by 7am
- Circadian rhythms create challenges for wakefulness at night
- Onset of sleep is a physiologic response and **not a decision**
- **Sleepiness peaks between 3am and 6am**



<https://www.33fw.af.mil/News/Article-Display/Article/261609/last-baby-born-at-wilford-hall-labor-and-delivery-moves-to-bamc/>

Nursing Resources for Newborn Fall/Drop Prevention



PRACTICE BRIEF



Prevention of Newborn Falls/Drops in the Hospital: AWHONN Practice Brief Number 9

Recommendations

- Consider all newborns at risk of experiencing in-hospital fall/drop events.
- Develop strategies to reduce variation in practice related to the prevention of in-hospital newborn fall/drop events.

Abington Hospital Jefferson Health
Abington, PA

Newborn Fall Prevention Program:

- 1) Staff awareness and education, including ancillary services, to notify nursing staff of unsafe sleep situations
- 2) Days since last fall noted during huddles

Martin, D.J., Chwal, C., & Ward, M. (2020). A newborn fall prevention program. *JOGNN*, 49, S71-S81.

St. Luke's Health System
Idaho

Newborn Fall-Drop Prevention
and Response

Newborn Fall Safety Bundle

- Staff and MD education
- Intentional rounding
- Safety posters
- Post-fall care algorithm

Pilot site reduced newborn fall/drop events from 21.95/10,000 births in FY16 to 0 in FY17

Miner, J. & Jensen, S. (2019). Newborn fall-drop prevention and response. *JOGNN*, 48, S1-S8.

Newborn Falls Risk Assessment



Date/Time: 6/8/2015 11:45

New Charting **COPY** If you copy, you need to verify and Confirm Charting when done.

Chart View **Normal Values** **ReCalculate**

Fall NB Assess Mom

- 0 Mom Awake, Alert or Easily Roused
- 5 Mom Drowsy with Alert/Awake Support Person
- 10 Mom Drowsy without an Alert/Awake Support Person
- 30 Mom Difficult to Arouse, Alert/Awake Support Person in Room
- 50 Mom Difficult to Arouse, No Alert/Awake Support Person in Room

Fall NB Assess Mom's Sedation

- 0 Mom NOT taking PCA Analgesia or Oral Medications that are sedating
- 30 Mom taking PCA Analgesia or Oral Medications that are sedating

Fall NB Assess Environment

- 0 Mom bed in low position; Environment hazards observed/eliminated; Head of Crib flat in holder during transport; Crib free of pillows and thick blankets.
- 50 Mom bed in high position to assist with breastfeeding/other care; Environment hazards observed; Head of Crib Not flat in holder during transport; Crib Not free of pillows and thick blankets.

Fall NB Language Barrier

- 0 No Language Barrier
- 5 Language Barrier with Mother

Interpreter Name:

Interpreter Title or Number:

Fall Risk Newborn Score

Newborn Fall Risk Explanation

- <30 = Infant Fall Management Protocol Not Indicated
- 30-45 = Infant may be left in Mother's Room with an Alert, Awake Support Person At the Bedside
- 50-135 = Nurse Will Remain at the Bedside or the Infant Will be Removed via Crib to the Nursery

Newborn Falls Prevention Nursing Actions

- Mother Alone and follows directions for Falls Prevention of Newborn
- Support Person Assisting Mother and Agreed not to leave mother alone with baby.
- Nursing staff remaining at bedside to assist mother with newborn feeding and care.
- Baby to Nursery in Crib

Teach Infant Falls Prevention Safety

- Mom needs to be aware and alert when holding baby without support person in room
- Mom's bed to be in a low position
- Safety Provisions Reviewed per ID/Safety Sheet
- Head of Crib to be flat when moving the cart
- Put baby in cart if walking.
- Educated about thick blankets/pillows, stuffed animals in crib.
- Mom's support person may raise/lower the side rails on the bed once they have been instructed on the operation of the bed by a staff member and feel comfortable taking the responsibility to perform this safety measure.
- Other

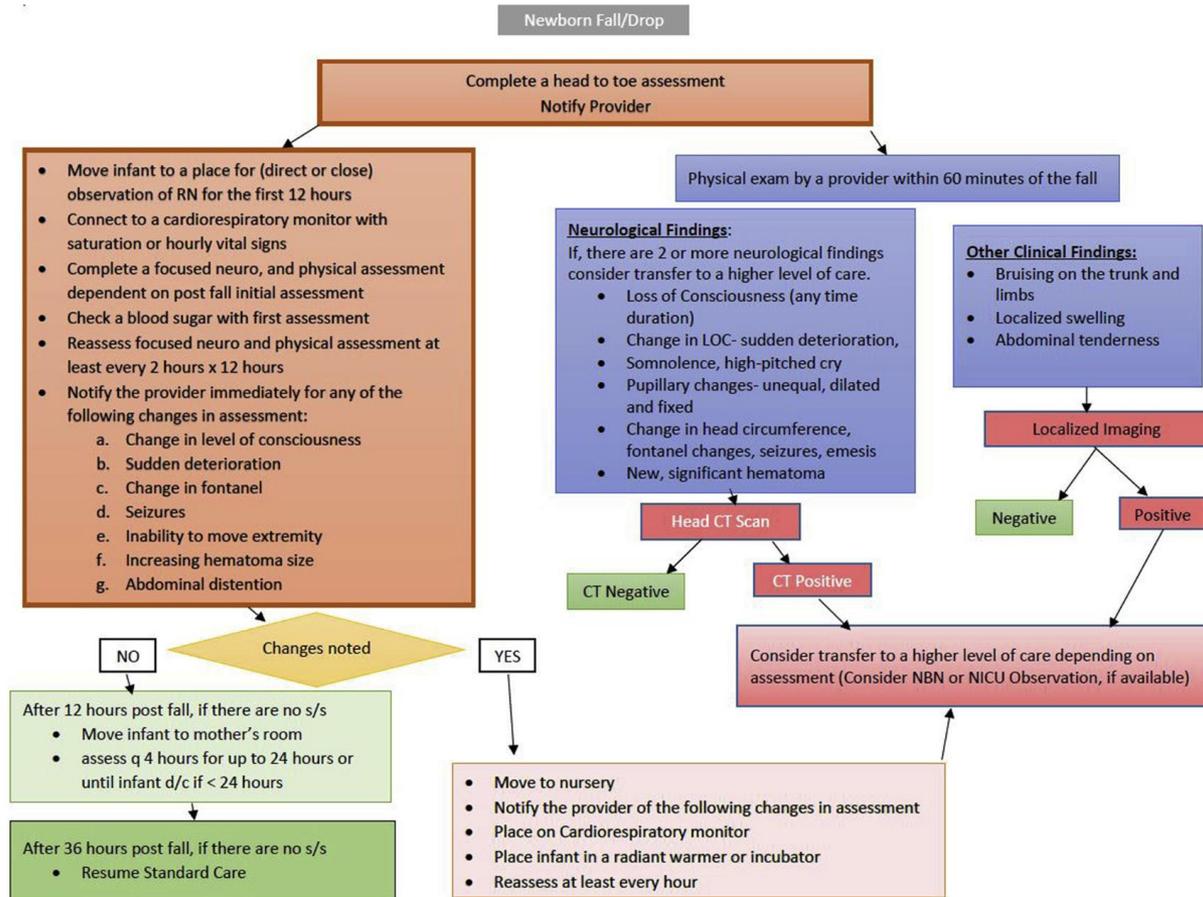
Who was taught & Evaluation of Teaching

- Taught to Mother
- Taught to Father
- Taught to Caretaker
- Taught to Other, comment
- Received Information and Verbalizes Understanding
- Return Demonstration
- Reinforcement Needed
- Needs Assistance
- Performs Alone
- Declined Instruction
- Other

Newborn Falls Prevention Comments:

CONFIRM **OK**

Having a Plan for a Newborn Fall/Drop Event



Note. CT = computed tomography; d/c = discontinue or discharged; LOC = level of consciousness; NBN = Newborn Nursery; q = every; s/s = signs and symptoms.

Polling Question #3



For those in clinical areas, do you have same/more/less nurses and staff at night:

- A. Same
- B. More
- C. Less

Elephant in the Room: Nurse Staffing at Night/Labor and Delivery



Studies of Missed Care in Labor and Delivery

Dr. Kathleen Rice Simpson and Colleagues

Adaptation of the MISSCARE Survey to Labor and Delivery (2019)

Frequently or always missed:

- Assess effectiveness of medications
- Assess pain status every hour
- **Patient teaching about tests, procedures and other diagnostic tests**

Elephant in the Room: Nurse Staffing at Night/NICU



Studies of Missed Care in the NICU

Dr. Heather Tubbs Cooley and colleagues at Ohio State University and University of Cincinnati

Association of Nurse Workload With Missed Nursing Care in the Neonatal Intensive Care Unit (2019)

In this study of 136 nurses caring for 418 infants during 332 shifts, increased infant-to-nurse ratio during a shift was associated with increased missed nursing care in about half of the measured missed care items. When a measure of subjective workload was considered, the associations of ratios were mostly attenuated; increased subjective workload was consistently associated with increased missed care.

Fortunately, the least missed care item in this study was safety checks...FWIW, the most missed care item was IV checks

Elephant in the Room: Nurse Staffing at Night/NICU



Studies of Missed Care in the NICU

Eileen Lake and Colleagues at the University of Pennsylvania

Association of Patient Acuity and Missed Nursing Care in U.S. Neonatal Intensive Care Units (2018)

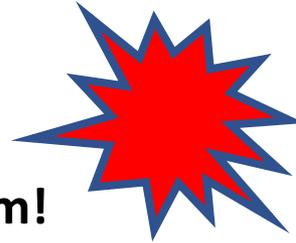
• *In a survey with NICU nurses (n = 5,861), nurses with higher workloads, higher acuity assignments, or in poor work environments were more likely to miss care. **The most common activities missed involved patient comfort and counseling and parent education.***

But Wait...You Forgot Mother/Baby and Postpartum!



No, unfortunately I didn't!!

Because Perinatal missed care studies are minimal and normally focus on Labor and Delivery/NICU



To the Perinatal Researchers in the Room!

We need you to replicate missed care studies in Postpartum and Mother/Baby units to effectively study the issues surrounding newborn falls and missed care

Intentional Rounding



- ✓ Every 1 to 2 hours assess bed rail position, clear walkways of hazards, assess parental fatigue, assist in moving the newborn to the bassinet, reinforce education about newborn fall prevention
- ✓ If anyone is sleeping and holding a newborn, transfer the newborn to the bassinet
 - Provide/reinforce education on newborn fall prevention
- ✓ American Academy of Pediatrics recommended monitoring new mothers according to their risk status (September 2016)
 - Higher risk mother-baby dyad should be observed every 30 minutes during nighttime and early morning hours
- ✓ Joint Commission issued an advisory on prevention of newborn falls in the hospital that included hourly rounding recommendations (March, 2018)

Skin-to-Skin Care (SSC)



American Academy of Pediatrics (2016), Committee on Fetus and Newborn & Task Force on Sudden Infant Death Syndrome

SSC: Provide physiologic stability for baby, and better success for breastfeeding

Risk Stratification for Skin-to-Skin Care

- ✓ Sudden unexpected postnatal collapse (SUPC)
- ✓ Falls
- ✓ Suffocation

Monitor mothers every 30 minutes during nighttime and early morning dyads, and particularly for higher risk newborns (Apgars < 7 at birth, near preterm)

3:1 nursing ratio for Mother/Baby Care units

Game Plan for Newborn Falls Prevention



JJ Watt—Houston Texans

Polling Question #4



4. Where are you currently in establishing a formal Newborn Falls/Drops Prevention Program?

- A. Fully implemented**
- B. Creating policies/procedures, partially implemented**
- C. Thinking of creating one in the next 3-6 months**
- D. Not on our radar at the moment**

Success for Newborn Falls Prevention



Education:

Patient/Family

Visitors

Staff, including Ancillary Teams

- Environmental Services
- Registrars
- Registration Team

****Patient Education cannot be a missed care item for newborn falls prevention**



Rails up

Every time you feed your baby

To help keep your baby safe, please ask your nurse to raise all four rails on your bed before you begin to feed your baby.
When you are finished feeding your baby, please call your nurse to lower the rails for you.

Success for Newborn Falls/Drops Prevention



Make a Newborn Fall/Drop a *Never Event*

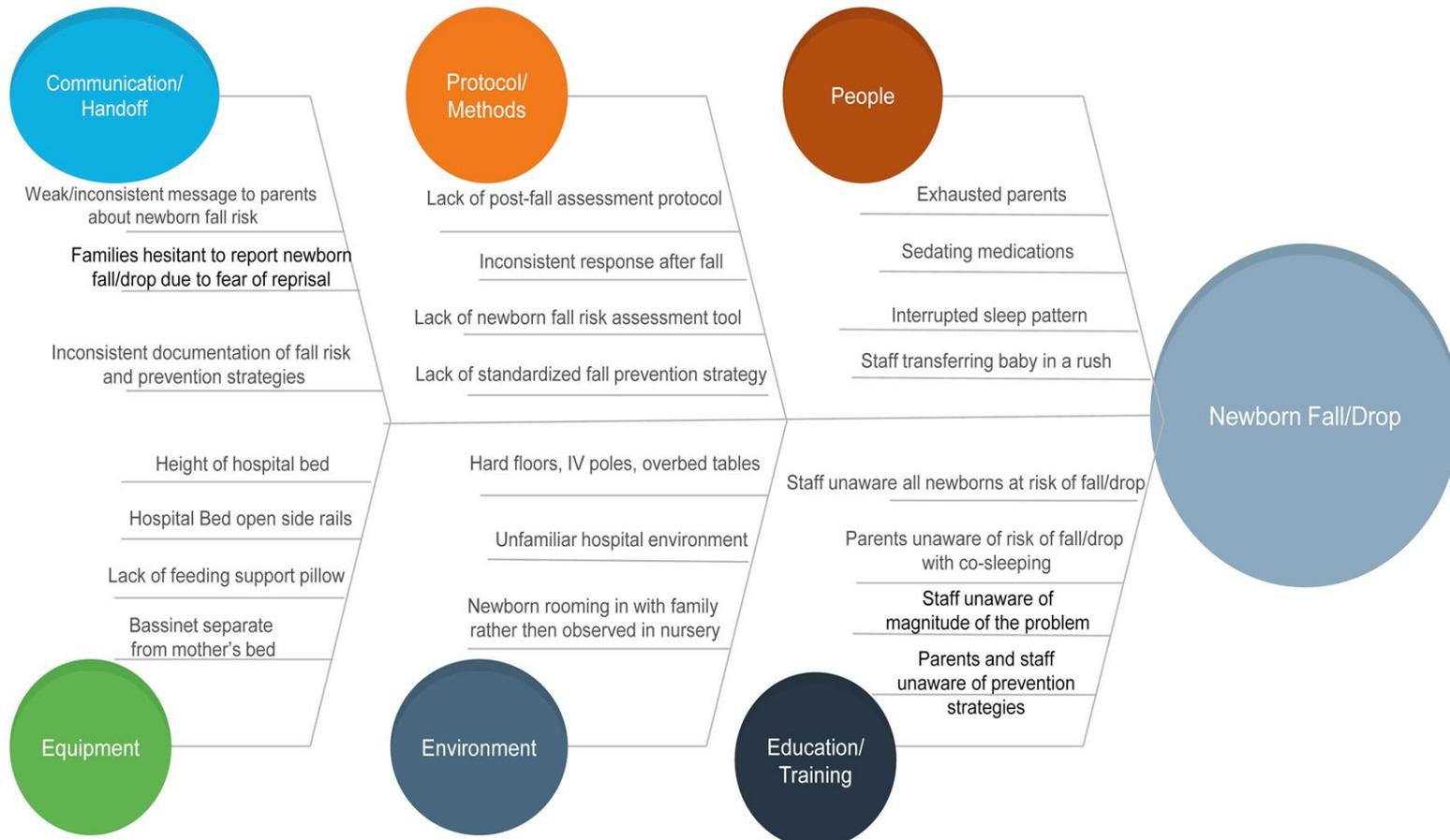
We focus on right side surgeries, time outs, adult falls, but can't get to calling a newborn fall a never event

- ✓ Understand your population, and “fishbone” your processes
- ✓ Days since last newborn fall/drop
- ✓ Shift huddles including newborn falls prevention
- ✓ Debrief after newborn fall
- ✓ Second victim support (Code Lavender if your hospital has this in place) for staff

If You Haven't "Fishboned," You Don't Know Your Causal Factors



Cause and Effect Diagram: Newborn Fall/Drop



Success for Newborn Falls/Drops Prevention



If a parent or visitor drops a newborn, it is critical to offer support and guidance

- ✓ Have a staff member stay with the family (doesn't have to be a nurse, but someone who can offer support and be available to listen)
- ✓ Frequent updates and information
- ✓ If transferred to NICU, ensure ability to visit baby ASAP
- ✓ Do not place blame or attack

A Parent's Response to a Newborn Fall



“When the nurse came in, I was explaining what had happened. Nobody said, ‘This was an accident.’ I was afraid that I was going to get a social worker call. Nobody was saying, ‘Accidents happen. It’s not uncommon.’ Nobody was consoling. My husband Brad was completely mute, and he was just crying in the corner. Absolutely horrible. No one, not a counselor or a nurse, was with us from the time that they took Connor* down to CT to the time that they came and told us his update. I paced the hallway. I called my aunt to come. I didn’t know what was going on. I think hospitals need to not only provide education to parents and caregivers, but also show some care and concern for the parents who experience a fall accident.”*

*Names have been changed

Questions



Thank You For Attending



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DO NOT CLOSE YOUR BROWSER WINDOW

- You will be redirected to the post-test/evaluation once the webinar has ended.
- Certificates of attendance and completion will be emailed within **14 business days** to participants who submit the post-test/evaluation to NPIC.
- Archives are posted on the NPIC website, www.npic.org/education within one following the live webinar.
- Any questions or concerns can be directed to the NPIC education team at education@npic.org.