# Skin -To-Skin Contact After Cesarean Delivery.

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# SKIN-TO-SKIN CONTACT AFTER CESAREAN DELIVERY

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# Purpose

Develop a pilot study intended to decrease the time to skin-to-skin contact after cesarean deliveries on the Labor and Delivery Unit at Lehigh Valley Hospital-Cedar Crest.

Today: Review and compare data regarding the implementation of immediate skin to skin in OR.

# Background & Significance

- Current cesarean section rate in the United States is approximately 33% (Brady, Bulpitt & Chiarelli, 2014)
- LVHN current cesarean section rate is 34%  (2014)
- Average time between cesarean section delivery and first skin-to-skin contact at LVHN in September, 2014 through January, 2015 is approximately 82 minutes (according to a review of 10 charts)
- Implementation of Baby Friendly Health Initiative at LVHN which includes immediate skin-to-skin contact

# TRIGGER
# According to the IOWA Model

- Problem and Knowledge focused triggers

| Identification of clinical problem (problem trigger) | National agencies or organizational standards & guidelines (knowledge trigger) | Philosophies of care (knowledge trigger) |
|---|---|---|
| Delay in 1st skin-to-skin contact between infant and mom/support person after cesarean delivery | AWOHNN recommends that stable babies remain in the surgical suite with the mother | Baby Friendly Initiative encourages skin-to-skin<br>Improved newborn outcomes<br>Increased rates of breastfeeding |

# Significance of trigger and problem

- After delivery, newborn is briefly introduced to the mother. Newborn and support person go to newborn nursery while mother remains in OR for remainder of surgery.
- Mother is transferred to PACU at conclusion of surgery. Newborn and support person, accompanied by MBU nurse, return to PACU
- Currently, time between delivery and first skin-to-skin contact averages more than 60 minutes.(2014)

# EVIDENCE

- Babies are most responsive to skin-to-skin contact in the first few hours after birth (VanDevanter, Gennaro, Budin, Calalang-Javiera, & Nguyen, 2014).
- Despite the numerous benefits to immediate skin-to-skin contact, women giving birth via cesarean section have less opportunity to have this contact in the immediate postpartum timeframe (Moran-Peters, Zauderer, Goldman, Baierlein, & Smith, 2014).
- Immediate skin-to-skin contact helps with newborn adaptation to the extrauterine environment (Moran-Peters et al., 2014).
- Part of the Baby Friendly Health Initiative includes skin-to-skin contact immediately following birth (Brady, Bulpitt, & Chiarelli, 2014).

# EVIDENCE

- Spatial, visual and auditory separation of mother and infant often occurs after cesarean delivery, which is inconsistent with family centered care (Nolan & Lawrence, 2009).
- Infants separated from mothers immediately following delivery cry more (therefore increasing respiratory and heart rates) than infants not separated (Nolan & Lawrence, 2009).
- Early skin-to-skin contact decreases risk of jaundice, reduces the stress of birth, and encourages bonding between mother and infant (Stevens, Schmied, Burns & Dahlen, 2014).

# BARRIERS & STRATEGIES

| Barriers | Strategies |
|---|---|
| RN staffing | Dedicated baby nurse (as recommended by AAP, ACOG, & AWHONN) for all cesarean deliveries who remains with newborn and support person in the OR and Recovery Room |
| RN education on early skin-to-skin contact | RN education hours |
| Parent education about early skin-to-skin contact | Antepartum education as part of doctor visits and/or hospital tour |
| Infant safety in Operating Room (pain and sedation medications used for mothers) and Recovery Room | Reduction of sedation of mothers immediately following surgery, dedicated baby nurse, education |
| Accommodating newborn needs in the Recovery Room | Adding radiant warmer beds to the Recovery Room, creation of dedicated couplet care space |

# PROJECT PLANS

- Evaluate current practice at LVHN on the Labor and Delivery unit for maternal/infant separation following cesarean delivery
- Assess current patient satisfaction with time to skin-to-skin contact after cesarean delivery
- Determine current time interval between delivery time and skin-to-skin contact in cesarean deliveries.
- Develop strategies with nursing staff (MBU, NICU and L&D), physicians, & anesthesia personnel to minimize time interval to skin-to-skin after cesarean deliveries.
- Develop and implement pilot study for decreasing time to skin-to-skin in cesarean deliveries

# IMPLEMENTATION

## 1. Process Indicators

- Documentation of skin-to-skin after cesarean delivery
- Presence of baby nurse
- Infant remains in OR with mother/support person

## 2. Outcomes

- Time to skin-to-skin interval decreased
- Patient satisfaction – survey on MBU*
- Newborn assessment data, including blood glucose levels, temperature, crying*

## 3. Baseline Data

- Average time skin-to-skin after cesarean delivery is approximately 82 minutes (2014)

*was not implemented

# IMPLEMENTATION

## 4. Design (EBP) Guideline(s)/Process

- **Phase I**
  - Document time to skin-to-skin after cesarean delivery
  - Survey current patients for baseline data including type of delivery, time to skin-to-skin, pt satisfaction*
  - Gather data on infant assessment post cesarean section*
- **Phase II**
  - Educate all staff of the benefits of immediate skin-to-skin after cesarean section
  - Preparation and education of parents during the antepartum period about benefits of skin-to-skin and what to expect during a cesarean section
  - Address staffing needs to accommodate Baby RN
  - Redesign OR to accommodate infant and support person remaining in OR*
  - Redesign PACU to accommodate infant and support person*
- **Phase III**
  - Stable infant remains in OR with assigned baby RN and support person. Baby RN aids in implementation of skin-to-skin contact with mother or support person
  - Mother and infant transferred to PACU/recovery room together
  - Documentation of time of initial skin-to-skin
  - Follow up survey of patient satisfaction, newborn assessment data, breastfeeding rates for cesarean deliveries*

# IMPLEMENTATION

5. Implemented EBP on Pilot Units
   - Implementation of pilot on L&D unit for all scheduled, non-complicated, full-term cesarean deliveries
6. Evaluation (Post data) of Process & Outcomes
   - Evaluate documented skin-to-skin time for a reduction in overall time
   - Survey postpartum cesarean delivery patients*
7. Modifications to the Practice Guideline
   - Stable infants remain in OR with support person and mother during a cesarean section
8. Network Implementation
   - Only pertains to L&D, MBU and NICU

# Expected Outcomes

- Decreased time intervals for skin-to-skin contact with cesarean deliveries
- Increase length of skin-to-skin contact
  - Earlier initiation of breastfeeding
  - Regulation of infant temperature*
  - Regulation of infant blood glucose*
  - Decrease maternal stress and pain*
- Higher breastfeeding rates*
- Increased patient satisfaction
  - Anecdotal evidence

*Data not evaluated

# Implications for LVHN

- Increased patient satisfaction with cesarean deliveries
- Increased optimal outcomes for infants after delivery
- Increased staffing needs on the L&D/MBU units

# Practice Change

- Addition of an RN for infant in OR during cesarean sections. (staffing previously increased due to AWHONN recommendations—position given more structure/purpose)
- Infant to remain with mother and support person in the OR after delivery
- Infant and mother transferred together to the PACU/RR at the end of the surgery

# Strategic Dissemination of Results

- TLC learning
- Antepartum education for parents
  - Initiation of prenatal care pathway (9-14-16)
  - Education in baby bundle book
- Baby Nurse Role: Vitals, STS, assist with nursing, measurements, bracelets, footprints

# Background and Significance Comparision

- Cesarean section rate in United States
  - 2014 ~ 33% (Brady, Bulpitt & Chiarelli, 2014)
  - 2016~ 31.9% (Hamilton BE, Martin JA, Osterman MJK, et al)
- LVHN Cesarean section rate
  - 2014~34%
  - 2017- 30%
- Average time to first skin to skin contact
  - 2014 ~82 minutes
  - 2017~ 27 minutes

# Significance of trigger and problem

- LVHN previous practice (2014/2015)
  - Infant brought to MBU
  - Remained there until the mother is in the PACU/Recovery Room.
  - Time between delivery and first skin-to-skin contact and first feed averages more than 60 minutes.
- LVHN current practice (2016/2017)
  - Infant placed skin to skin if both mom and baby are stable
  - Mother and newborn are not separated unless medically necessary
  - Newborn can breastfeed immediately

# FY17 Stats

- Time from Cesarean birth to Skin to Skin
  - Quarter 1= 26 min
  - Quarter 2= 30 min
  - Quarter 3= 28 min
  - Quarter 4= 25 min
- Overall time from C-section birth to S2S
  - 27 min

# Family Time

- Mother and Father response to S2S
- Baby response

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# Questions/Comments?

- Thank you!