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# Are Our Babies Cold? Using Unit-Based Research to Promote Adoption of an Evidence-Based Practice Change Session D 06

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# Faculty Disclosure Session Objectives



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Name	Employer	Conflict of Interest	Sponsorship/ Commercial Support
Rhonda Maneval	Michigan State University	None	None
Deborah Schafer	Pinnacle Health System	None	None
Erin Anderson	Pinnacle Health System	None	None

## Objectives

The learner will be able to explain the process undertaken to explore reports of newborn hypothermia as a result of an evidence-based practice change.

The learner will be able to state the 3 outcomes achieved as a result of the unit based research study and dissemination strategies.

# Skin-to-skin care Neonatal transition



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- Skin- to- skin care (S2S)
- Vaginal deliveries
  - Decreased incidence of hypothermia and hypoglycemia
  - Increased patient satisfaction
- Post Anesthesia Recovery Unit
- Phase 2: Operating Room

# Impact on practice implementation



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- Challenges
  - Physicians
  - Environment
  - Processes
- Nursing concerns
- Nursing leadership team
  - Valued concerns
  - Plan: unit-based research study



# Research Study



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- Descriptive exploratory
- Purpose
  - Determine maternal and neonatal temperatures postoperatively while S2S is being performed in the operating room and the recovery room
- Sample: 201
- Data collection
  - Interrater reliability established

# Results



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- Neonatal hypothermia (less than 36.5°)
  - 7.4% within first 90 minutes of life
- Newborns with normal temperature (36.5° - 37.4°):
  - 80.1% at 30 minutes of age
  - 87.1% at 60 minutes of age
  - 92.6% at 90 minutes of age
- Mean newborn temp at all three measurement points: 36.7°

# Demographics



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	Babies within Normal Temperature Range		Babies NOT within Normal Temperature Range		p-Value
	no.	%	no.	%	
Total number of babies	186		15		
Mother's age $\geq 35$ - no., %	26	13.98%	2	13.33%	1.0000
Race – no., %					
Caucasian	116	62.37%	8	53.33%	0.4888
Black	29	15.59%	5	33.33%	0.1418
Hispanics	22	11.83%	2	13.33%	0.6957
Gestational Age $\geq 39$ – no., %	151	82.07%	12	80.00%	0.7377

# Mother's and Baby's First Temperature Comparison



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	Number of Subjects	Mean	Std Dev	Minimum	Maximum
Mother's First Temperature	198	36.5	0.5	35.2	38.3
Baby's First Temperature	198	36.8	0.4	35.3	37.6

# Babies within Normal Temperature Range by BMI



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	Babies within Normal Temperature Range		Babies NOT within Normal Temperature Range		p-Value
	Number	Percent	Number	Percent	
Total number of babies	186		15		
Mother's Weight	Number	Percent	Number	Percent	
Normal (BMI<25)	10	5.38%	1	6.67%	0.5836
Overweight (BMI>= 25 to <30)	52	27.96%	1	6.67%	0.1230
Obese (BMI>=30 to <40)	94	50.54%	10	66.67%	0.2291
Morbid obese (BMI>=40)	30	16.13%	3	20.00%	0.7171

# Intake; Estimated Blood Loss; Case Duration



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	Babies within Normal Temperature Range		Babies NOT within Normal Temperature Range		p-Value
	Number	Percent	Number	Percent	
Total number of babies	186		15		
IV fluid intake > 1,000 ml	140	75.27%	10	66.67%	0.3652
Estimated blood loss >=1,000ml	8	4.30%	0	0.00%	1.0000
Case Duration					
< 30 min	60	32.26%	3	20.00%	
31 - 45 min	84	45.16%	9	60.00%	
46 - 60 min	31	16.67%	2	13.33%	
>60 min	11	5.91%	1	6.67%	0.7056

# Evidence-Based Practice



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- Goal
  - Translate research into practice
- Dissemination
- Action plan
  - Bed side nurse ownership
- Evaluation/Outcomes measurement
  - Essential to determine effectiveness of practice change

# Integration into Practice



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- Informal leaders/Champions
  - Identified barriers
  - Developed approaches to decrease resistance/increase buy-in
  - Goal: S2S within 15 minutes of delivery
- Monthly audits
  - Shared with staff
  - Ongoing mentoring

# Outcome Measures



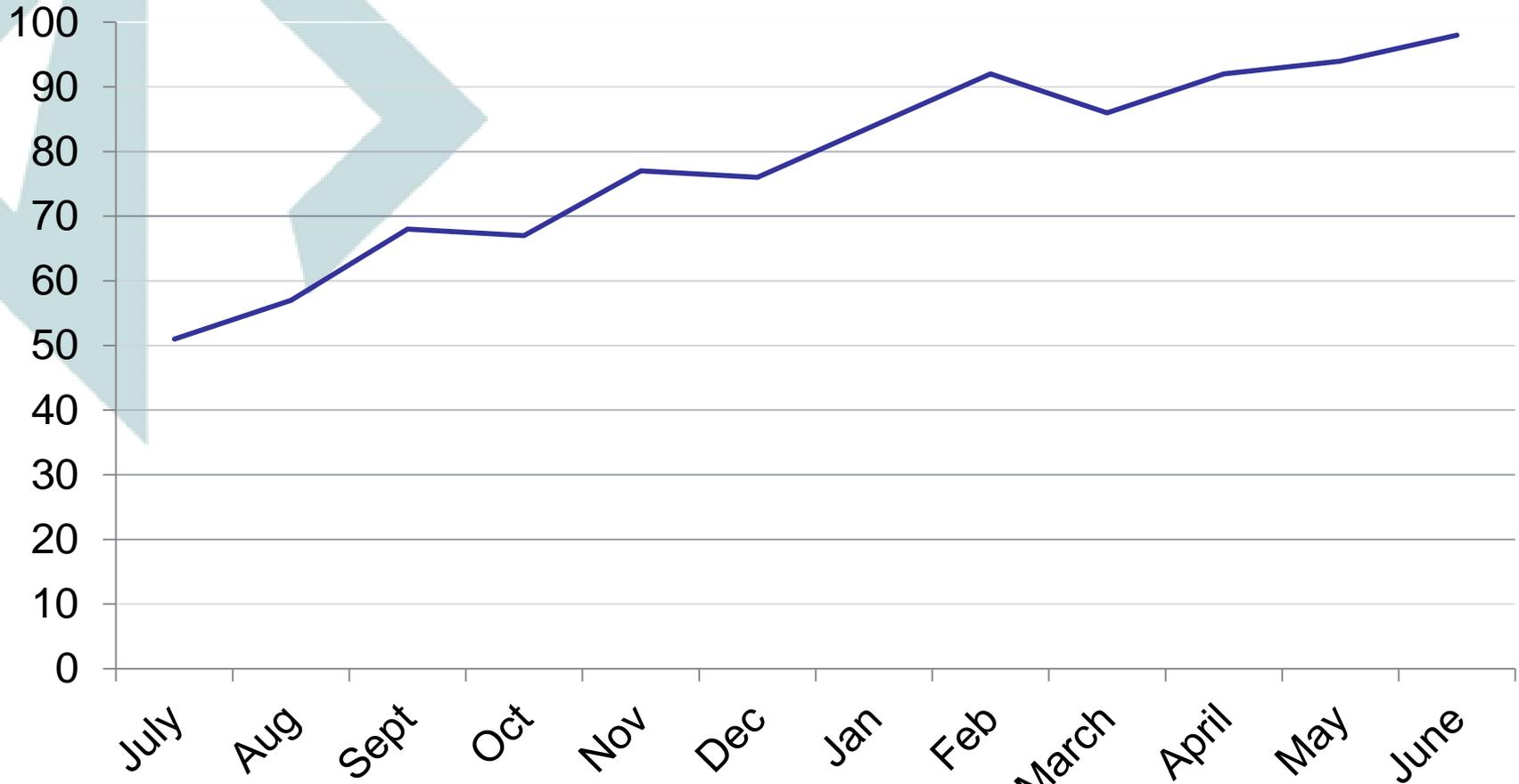
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- S2S
  - Performed
  - Initiated within 15 minute
- Breastfeeding within 60 minutes of birth
- Bonding
- Patient satisfaction

# Skin to skin within 15 minutes



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# Bonding and Patient Satisfaction



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- “S2S in the OR was wonderful. I got time to see her, know her, keep her warm and know that she was OK right away.”
- “Both my baby and I enjoyed S2S. It was calming and soothing and helped with breastfeeding.”
- “This experience (with S2S) was so much better than five years ago. I am so happy and I would be happy to talk to anyone who might be a little leery about doing S2S in the operating room. It was the best!”

# Additional outcomes



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- Empowered the bed side nurse to take ownership of practice change
- Communicated the value and respect the organization holds for the expertise of nursing
- Create a renewed/ongoing/heightened spirit of clinical inquiry