CARING NURSE PRACTICE IN SECOND STAGE OF LABOR

Lori A. Glenn MS CNM RN University of Detroit Mercy

OUTLINE

- Birth in the United States
- Complex Adaptive Systems
- The Keystone Project
- Second Stage of Labor
- & Caring Nurse Practice
- **Managerialism**
- & Capstone Proposal



BIRTH CARE IN THE UNITED STATES

OVERVIEW

- Increased interventions: Inductions, epidurals, c/sections
- Elective deliveries before 39 weeks increased
- Maternal morbidity& mortality
- Neonatal morbidity & mortality
- Looming outcomes expectations with ACA
- Need for developing highly reliable health care organizations

C/S RATES

United States
21.8% in 1996
33% in 2009
51% increase

Michigan
20.2% in 1996
30.4% in 2007
50% increase

Menacker, F. & Hamilton, B. (2010). Recent Trends in Cesarean Delivery in the United States. (2010) National Center for Health Statistics Data Brief No. 35. Centers for Disease Control

INDUCTIONS & EPIDURALS

- In 2008 61% of women with a vaginal birth had an epidural during labor
 - 63.4% with physicians
 - 50% with CNMs
- *Induction of labor
 - 9.5% in 1990
 - 22.1% in 2004
 - Does not match the increased number of high risk women, therefore reflects an increase in elective inductions
 - More likely to have a C/Section

OUTCOME: MATERNAL MORTALITY

1990: 12 per 100,00 births

2003: 13 per100,000 births

2008: 17 per 100,00 births





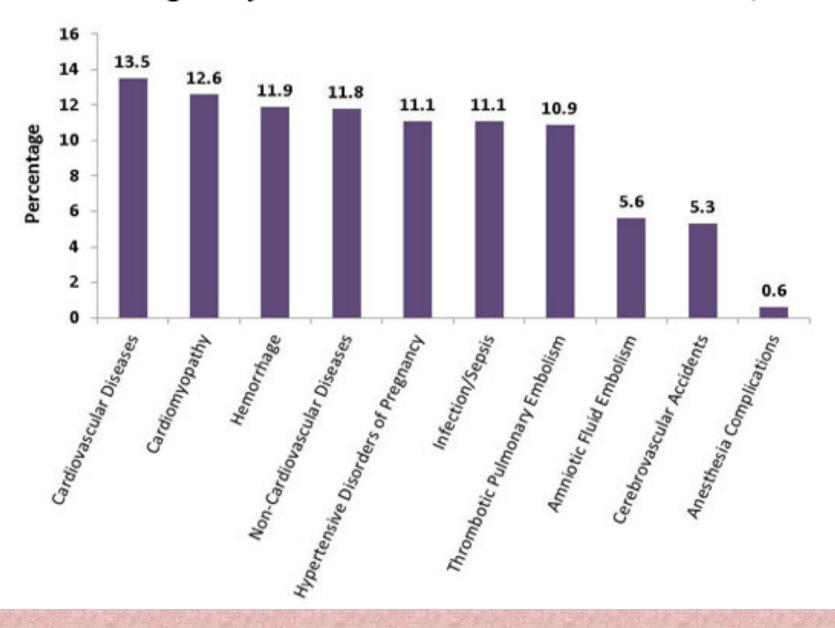
Joint Commission. (2010). Sentinel Event Alert: Preventing maternal death. January 26, 2010. Issue 44, available at http://www.jointcommission.org/assets/1/18/SEA_44.PDF Berg et al. (2005). "Pregnancy- Related Mortality in the United States, 1998 to 2005" (2010) 116(6)

Obstetrics & Gynecology 1302-1309

PREVENTABLE CAUSES OF MATERNAL DEATH

- Failure to pay attention to vital signs following Cesarean section
- Hemorrhage following Cesarean section
- Pulmonary Embolism
- Infection/sepsis

Causes of Pregnancy-related Death in the United States, 2006-2007



OUTCOMES: NEONATAL MORTALITY

Of late term neonates

- Admissions to special or intensive care nurseries has risen.
 - Respiratory distress syndrome
 - Transient tachypnea
 - Sepsis
 - Hyperbilirubinemia
- The rate of neonatal deaths has increased.



CAUSES OF NEONATAL DEATH DURING DELIVERY

Maternal risk factors:

- Age 13%
- Previous C-section 11%
- Diabetes 4%
- Lack of prenatal care 4%
- Substance abuse 4%

The Joint Commission: "Preventing infant death and injury during delivery," Sentinel Event Alert, Issue 30, July 21, 2004, http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_30.htm

CAUSES OF NEONATAL DEATH DURING DELIVERY

Birth Complications

- Non-reassuring fetal status 77%
- Placental abruption 8%
- Ruptured uterus 8%
- Breech presentation 6%

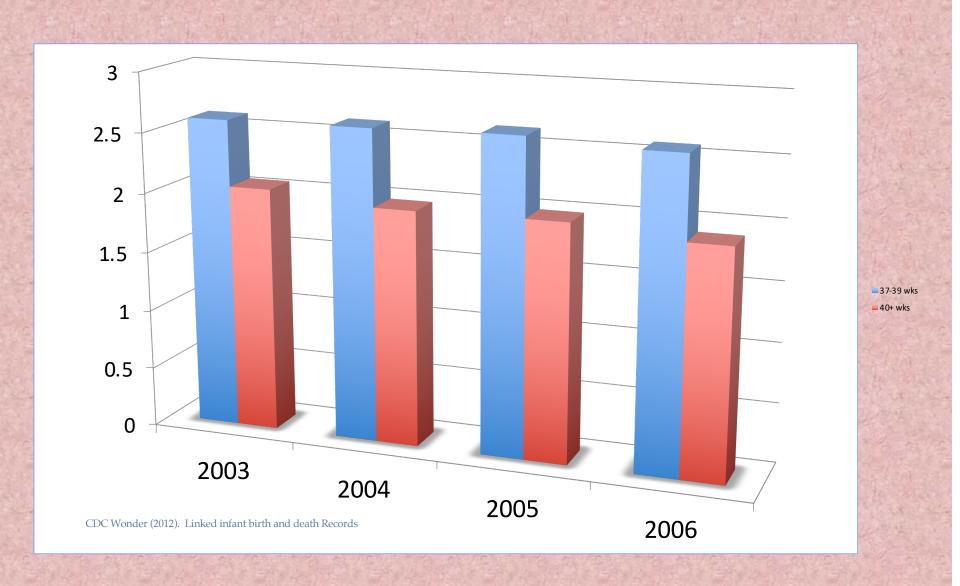
The Joint Commission: "Preventing infant death and injury during delivery," Sentinel Event Alert, Issue 30, July 21, 2004, http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_30.htm

ROOT CAUSES OF NEONATAL DEATH

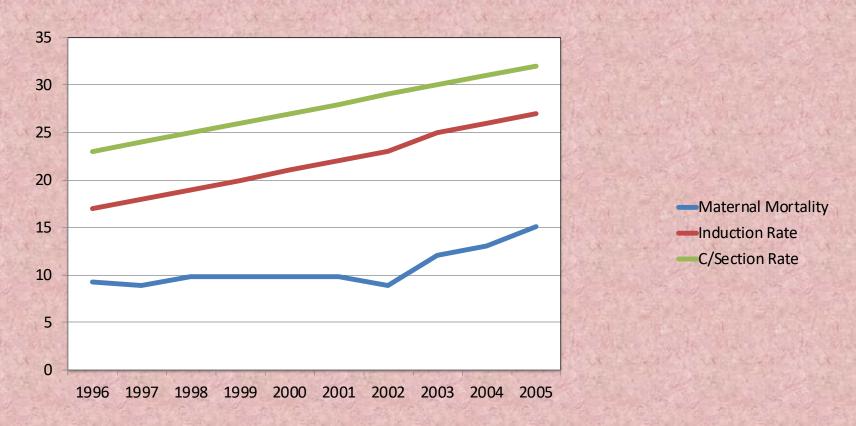
Organization culture as a barrier 55%

- ineffective communication and teamwork
- hierarchy and intimidation
- failure to function as a team
- failure to follow the chain-of-communication
- Inadequate fetal monitoring 34%
- Staffing issues 25%

LATE GESTATION INFANT MORTALITY 2003-2006



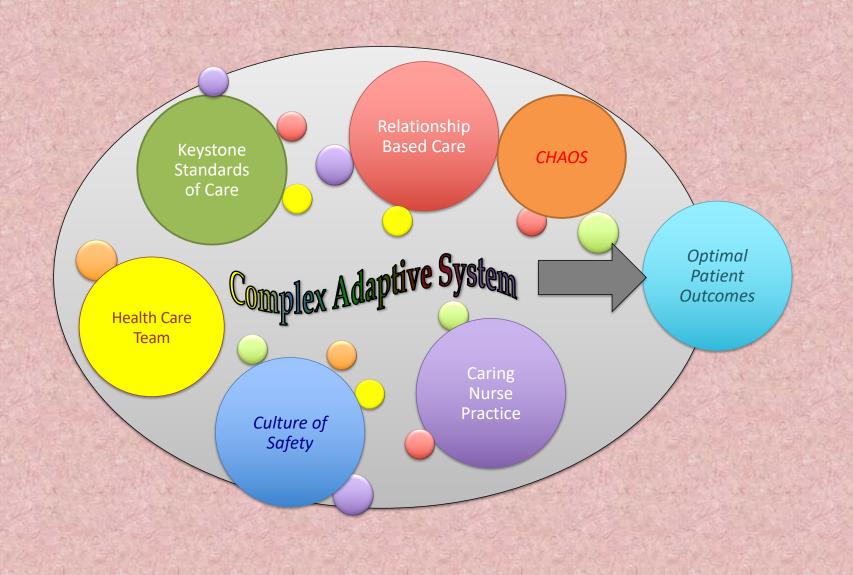
COMPARISON OF C/SECTION, INDUCTION AND MATERNAL MORTALITY IN THE UNITED STATES



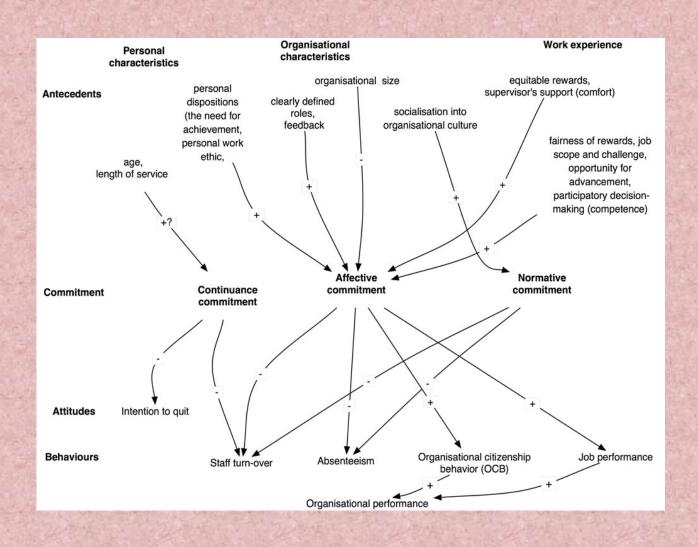
C/section and Induction Rate are % of all births (Martin et al., 2009) Maternal Mortality is number of death per 100,000 Live Births (CDC, 2008)

RESPONSES

- & JCAHO Sentinel Events
 - Preventing Infant Death and Injury During Delivery (2004)
 - Preventing Maternal Death (2010)
- *ACOG recommendations for elective deliveries
- National Institutes of Health VBAC Consensus
 Statement
- National Institute of Child Health and Human Development Fetal Monitoring Interpretation
- Quality and Safety Initiatives (Keystone)



COMPLEXITY





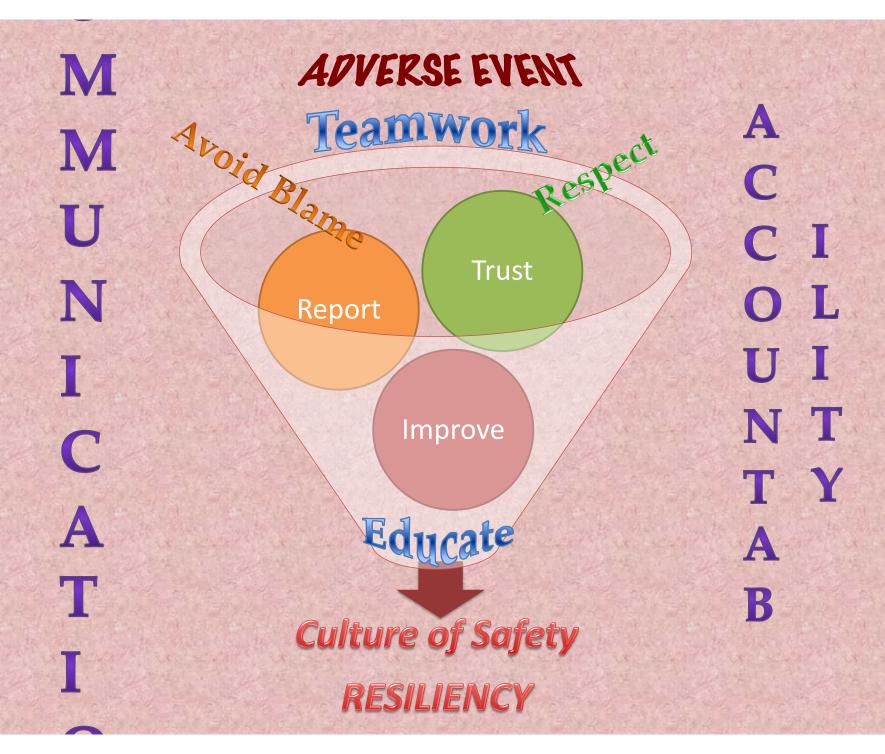
HEALTH CARE AS A COMPLEX ADAPTIVE SYSTEM

- Complex Adaptive Systems are about behaviors
 - Leading
 - Incentivizing & inhibiting
 - Agility
 - Personal commitment
 - Heterarcheal network
 - Self-organized organized design
 - Outcomes are measured

COMPLEX ADAPTIVE SYSTEMS HAVE RESILIENCE

- Organizations with high levels of safety despite high risks, difficult tasks, and constantly increasing pressures.
 - Proactive
 - Adaptive
 - Cope well with the unexpected



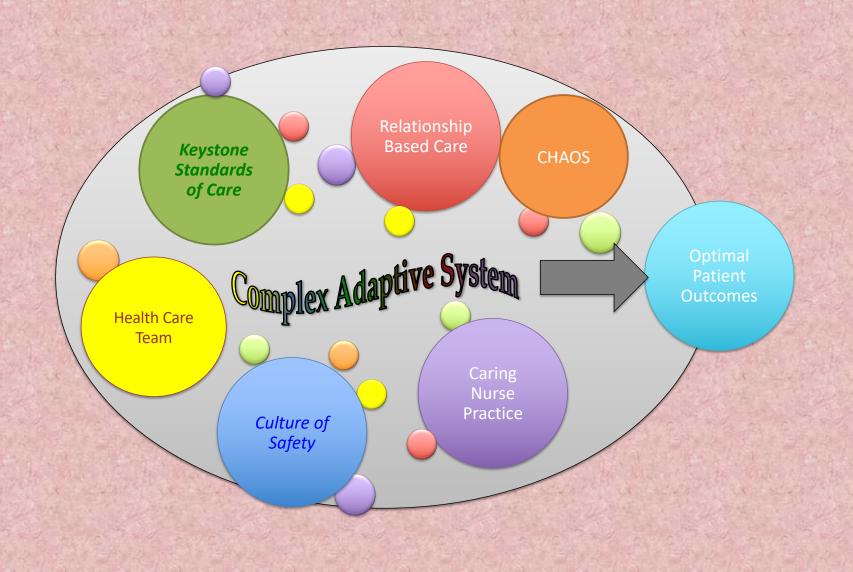


PERINATAL HIGH RELIABILITY

- Trust, transparency, and teamwork
- Elimination of *bierarchy* in traditional physician/nurse roles and licensing.
- Teams create *safety* at the bedside (not individuals).
- & Resilience
- All professionals conduct themselves in a *professional* and *respectful* manner
- Adequate numbers of registered nurses & ancillary personnel
- & Educational infrastructure

CHECKLISTS

- ✓ Basic to-do list
- √ Concise
- ✓ Easy to use
- √ Standardized
- ✓ Evidence Based
- Decision, control, and safety is relegated to one individual...the doctor."
- Pronovost, P. & Vohr, E. (2010). Safe Patients, Smart Hospitals. London, England: Hudson Street Press, Penguin Books.





EXPEDITING THE TRANSLATION OF PATIENT SAFETY AND QUALITY IMPROVEMENT EVIDENCE INTO PRACTICE

KEYSTONE PROJECT IN OBSTETRICS

MICHIGAN HOSPITAL ASSOCIATION

Funding:

- MHA-member hospitals
- Agency for Healthcare Research and Quality
- Blue Cross Blue Shield of Michigan
- Centers for Disease Control and Prevention
- Michigan Department of Community Health
 Health & Human Services (12-15-2011)
 - CMS Innovation Center
 - \$ 5.8 million to continue its quality and safety initiatives
 - Partnership for Patients
 - Hospital Engagement Network

MHA: KEYSTONE

- **Voluntary**
- **Coordinated**
- & Process
- **Outcomes**

The goal is a highly reliable organization that has a culture of safety.

MHA: OBSTETRICS KEYSTONE

- Started in 2008 with 7 hospitals
- In 2012 66 or 83 hospitals in Michigan with birthing units use all or part of the Keystone Practice Guidelines

KEYSTONE EVIDENCE

Elective birth before 39 weeks

Directed pushing methods

☆ Adverse outcomes mother and baby

Increased C/sections

Pitocin practices

Failure to rescue FHT's

MHA: OBSTETRICS KEYSTONE

Processes

- Elective labor induction before 39 weeks
- Elective C/Section before 39 weeks
- Compliance with aspects of care during labor induction
- Compliance with aspects of care during labor augmentation
- Indeterminate or abnormal fetal heart rate patterns identified and treated in a timely manner
- Second stage of labor

Outcomes

- Term babies admitted to a higher level of care (SCN, NICU)
 - Electively born Any diagnosis
- Term babies with Apgars < 7
- Term babies with umbilical artery cord gases < 7.10

PILOT STUDY: 15 HOSPITALS 2009

Processes

- Elective labor inductions before 39 weeks decreased by 62%
- Elective cesarean births before 39 weeks decreased by 68%

Outcomes

- Improved five-minute Apgar scores by more than 51 percent
- Increased compliance with all aspects of induction and augmentation care by 114 %
- Increased perfect scores on identifying and treating indeterminate or abnormal fetal heart rate patterns in a timely and appropriate manner by 81%
- Increased compliance with all aspects of care during the second-stage of labor by 98%

Simpson, et al., (2011)

IMPACT OF SAFETY PROGRAM ON COMPENSATION PAYMENTS & SENTINEL EVENTS

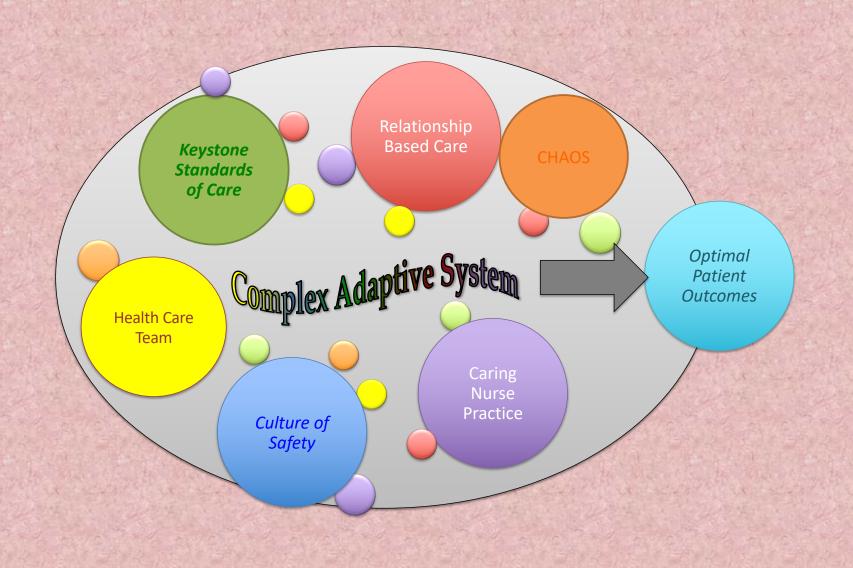
- Obstetrics Patient Safety Program
- Started 2003
- Compensation
 2003-2006 compared to 2006-2009
 \$27,591,610→\$2,550,136
- Sentinel Events

2000 = 5

2009 = 0

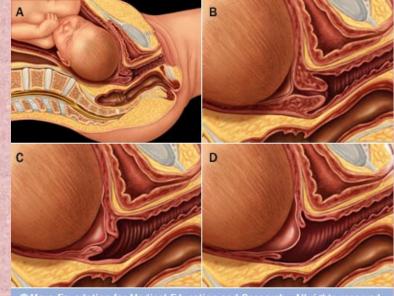


SECOND STAGE OF LABOR



SECOND STAGE OF LABOR

- Traditionally defined as beginning with complete dilation of the cervix
- Evidence supports this is not the best time to begin pushing efforts
- Women generally do not feel a strong urge to bear down until the Ferguson reflex is initiated



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KEYSTONE ASPECTS SECOND STAGE OF LABOR CARE

Delay pushing until the urge to push with epidural (passive descent)

2 hours nulliparous

1 hour multiparous

Pushing method

Let woman choose open or closed glottis

Limit push to 6-8 seconds

No more than 3 pushes per contraction

Brancato, R. M., Church, S. and Stone, P. W. (2008). A meta-analysis of passive descent versus immediate pushing in nulliparous women with epidural analysis in the second stage of labor. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 37*(1), 4–12.

SECOND STAGE OUTCOMES

Table 4. Pre-Post Comparisons: Second Stage Outcomes, by Site, for Nulliparas at Term With Epidural Analgesia

Outcome	Site 1		Site 2		Significance	
	Pre (n = 90)	Post (n = 127)	Pre (n = 118)	Post (n = 121)	Site 1	Site 2
Median length of 2nd stage (min)	148	151	145	121	p = .94	p = .20
Median pushing time (min)	90.5	78	94	72	p = .05*	p = .20
Median waiting time (min)	22.5	56	35	37.5	p = .04*	p = .99
Waiting time ≥ 120 min	12 (13.3%)	34 (26.8%)	20 (16.8%)	18 (14.9%)	p = .02*	p = .82
Total 2nd stage > 4 hours	23 (25.5%)	28 (22.0%)	20 (16.9%)	18 (14.9%)	p = .66	p = .82
Total 2nd stage> 5 hours	11 (12.2%)	14 (11.0%)	12 (10.1%)	6 (4.9%)	p = .96	p = .21
Type of birth						
Spontaneous vaginal birth	56 (62.2%)	91 (71.7%)	64 (54.2%)	74 (61.2%)	p = .18	p = .37
Operative vaginal birth	29 (32.2%)	28 (22.0%)	43 (36.1%)	34 (28.1%)	p = .13	p = .23
Cesarean in 2nd stage	7 (7.8%)	10 (7.9%)	11 (9.3%)	13 (10.7%)	p = .98	p = .69
Assessment of position and station at tir	ne of full dilatatio	1				
Position—not assessed	24 (26.7%)	19 (14.9%)	24 (20.2%)	7 (5.8%)	p = .05*	p = .001*
Station—not assessed	1 (1.1%)	1 (0.8%)	1(0.8%)	1 (0.8%)	p = .63	p = .48

Note. Pre = August-September 2003; Post = October-November 2004.

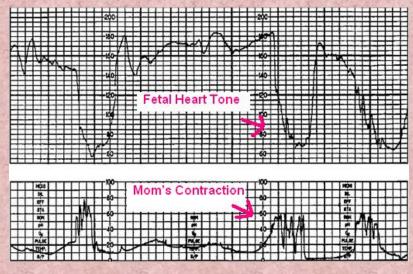
^{*}Significant difference.

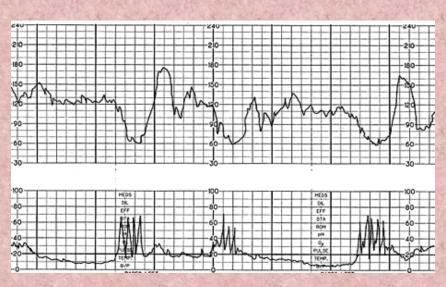
KEYSTONE ASPECTS SECOND STAGE OF LABOR CARE

- Fetal heart rate nonreassuring or indeterminate
- Push every other contraction, avoid repeated variables



Intrauterine resuscitation





KEYSTONE ASPECTS SECOND STAGE OF LABOR CARE

- & Pitocin
- Titrate to the tolerance of baby and mother
- Avoid hyperstimulation



CHECKLIST FRAMEWORK SECOND STAGE

Passive Descent

- Initiation of Ferguson reflex
- Delay with epidural
 - 2 hours nullipara
 - 1 hour multipara

Pushing technique

- Open or closed glottis
- No more than 3 pushes per contraction
- Sustain push 6-8 seconds

Response to FHTs

- Recognize abnormal or indeterminate pattern
- Intrauterine resuscitation measures
- Pushing to tolerance, resting as needed

Management of pitocin

- Titrate to fetal heart rate tolerance
- Avoid hyperstimulation



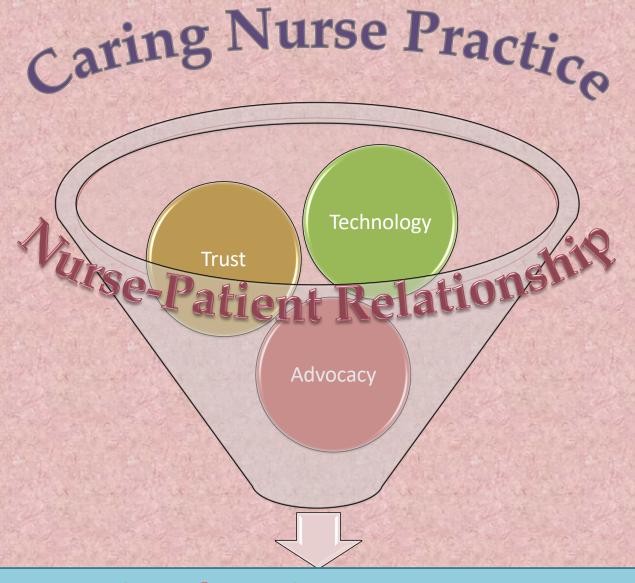
CARING NURSE PRACTICE

CARING NURSE PRACTICE

Caring Nurse Practice...

- Begins with developing the nurse-patient relationship so trust can facilitate the provision of care.
- Encompasses the nurse-patient relationship relying on nurse presence to facilitate care provision.
- Is patient focused and relies on nurse presence for patient advocacy.
- Relies in part on technology to improve safety, efficiency and effectiveness
- Results in optimal health care outcomes.

(Glenn, 2010)



Optimal Patient Outcomes

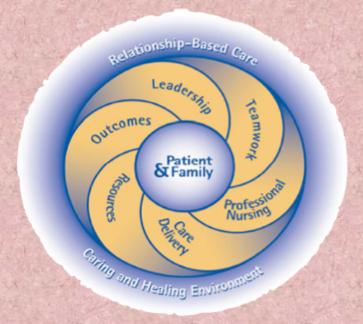
THEORETICAL FOUNDATIONS

- Jean Watson
- Kristen Swanson
- Joanne Duffy
- Mary Kolouroutis









RELATIONSHIP BASED CARE: CULTURE OF CARING

- Reigniting the Spirit of Caring"
- & Creative Care Consultants
 - Increases caring behaviors
 - Improves nurse and patient satisfaction
 - Cost effective
 - Improves care environment

Glembocki, M.M., Dunn, K.S. (2010). Building an organizational culture of caring: Caring perceptions enhanced with education. *Journal of Continuing Education in Nursing*, 41 (12), 565-570.

MANAGERIALISM



MANAGERIALISM

- Concerns in countries with national health care (Great Britian, Autralia, Singapore)
- **Budget** focused
- Emphasizes accountability and productivity
- Speedy recovery + early discharge
- Resources constrained
- Holistic care is lost
- Wong, W.H. (2004). Caring holistically within new managerialism.

 Nursing Inquiry. 11(1), 2-13

MANAGERIALISM

"This approach is linking caring practices, e.g. attentiveness, attunement, recognition..., and compassion, attending to birth as a human passage with evidence based practice guidelines. The caring practices probably rescue the evidence based practice guidelines from deteriorating into managerialism."

Dr. Patricia Benner, Personal Communication, March 30, 2012

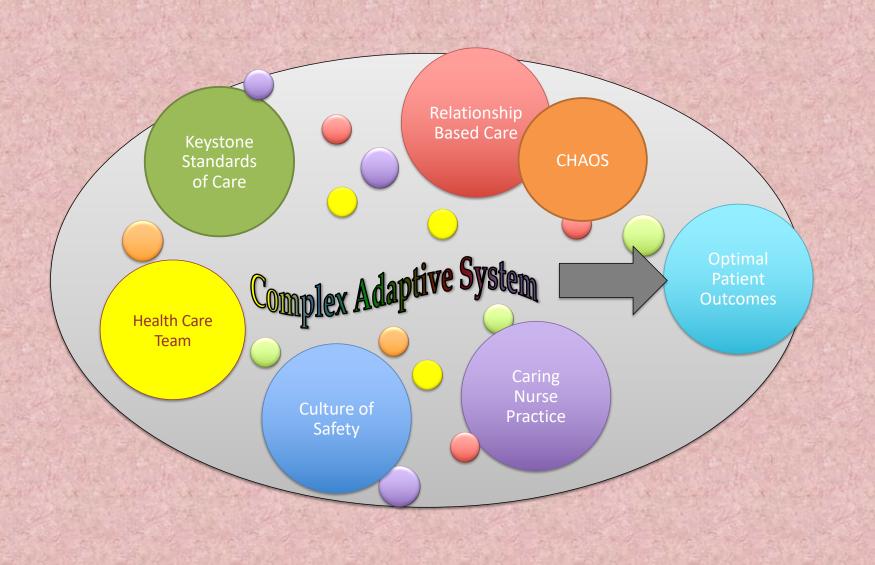
TCAB

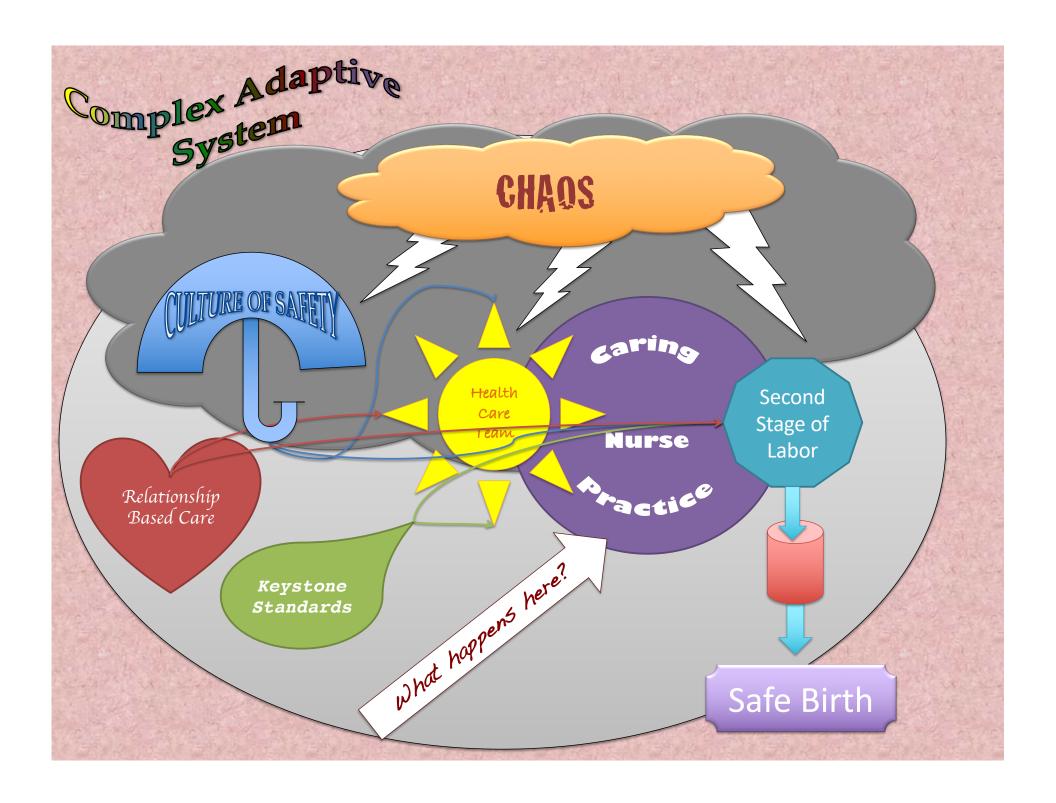
- Transforming Care at the Bedside
 - Institute for Healthcare Improvement
 - Robert Wood Johnson
 - American Organization of Nurse Executives
- Improved Quality in Nursing Care
 - Less falls
- Improved Nurse job satisfaction
- Less Turnover
- Major cost savings= \$625,603

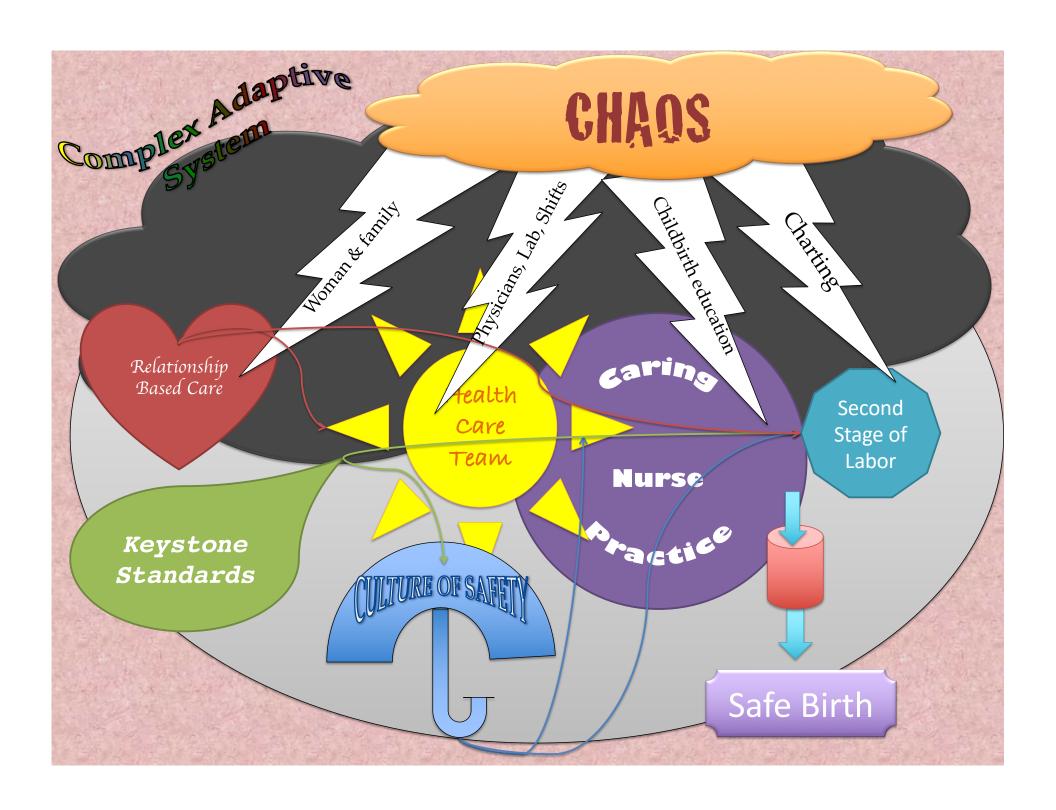
CAPSTONE PROPOSAL

THE PHENOMENA

- Relationship Based Care
- **Obstetrics** Keystone Project
- Second Stage Labor
- Complex Adaptive System
 - Health care environment
 - Heath team members
 - Care episode







THE SETTING



CRITTENTON

Complex Adaptive System

Obstetrics Keystone

Relationship Based Care

COMMITTEE

- Chair: Julia Stocker Schneider PhD RN
- Methods: Molly McClelland PhD RN
- Reader: Renee McCune PhD RN
- Clinical expert: Debbie King BSN RN

PURPOSE OF THE STUDY

The purpose of the study is to explore the perspectives of nurses on their caring nurse practice of the woman in the second stage of labor within the complex health care system.

THE RESEARCH QUESTIONS

For the woman and her family in the second stage of labor:

- How do nurses describe their nursing care?
- How do nurses perceive the complexity of health care?
- How do nurses perceive the impact of health care environment, system, or personnel in their provision of nursing care?
- How do nurses perceive the impact of hospital initiatives including the Obstetric Keystone Project and Relationship Based Care in their provision of nursing care?
- What other factors do nurses identify as impacting their caring practices?

THE PARTICIPANTS

- A purposive sample of Registered Nurses who care for women in the second stage of labor at Crittendon Hospital's Labor and Delivery Unit.
- Follow up focus groups will be conducted if the data reveals the need for additional information.
- A key informant may be identified to further inform key concepts discovered within the analysis.

METHOD

A qualitative research approach is selected to explore the perspectives of nurses in a high acuity, chaotic care episode in the complexity of the health care system utilizing two distinct initiatives may have had on the caring nurse practice. In addition to the known initiatives, this approach may address unanticipated factors on caring nurse practice.

METHOD

- Using a phenomenological approach, the participants' perceptions will be evaluated for themes.
- Analyzing data will involve interobserver agreement to ensure dependability of the data.
- The grounded theory research approach will be employed for inductive analysis.
- Transcribed interviews will be coded to discover relationships and concepts relevant to the participants and their caring nurse practice.

THE DESIGN

- Focus Groups (3)
- **Volunteers**
- Semi structured interview
 - Tape recorded using a digital recorder
 - Transcribed
 - Phenomenological: Examination of themes to discover nurses' perceptions of their caring practice

BACKGROUND DATA TO BE COLLECTED

These questions gather information regarding the characteristics of study participants. Your information will remain confidential.

1.	What is your age?
2.	□Female □Male
3.	Year first licensed as a registered nurse
4.	Highest nursing degree attained: Diploma DADN DBSN DMSN
5.	How long have you been actively practicing as a nurse?
6.	How long have you worked at Crittendon Hospital?
7.	How long have you worked in the Labor & Delivery unit at Crittendon Hospital?
8.	Have you worked in other labor & delivery settings? □Yes □No If yes, for how long?
9.	What shift do you work? □Days □Nights □Rotate
10.	Are you: DFull time DPart time DContingent
	This will be on a form for participants to fill out prior to the interview.

STRUCTURED INTERVIEW QUESTIONS: HEALTH CARE SYSTEM FACTORS

- 1. Describe your nursing care for women and families in the second stage of labor.
- 2. What comes to your mind when you think about the complexity of providing nursing care in the second stage of labor? Tell me about your experiences dealing with this complexity.
- 3. Tell me how the organization has influenced your care of women and families in the second stage of labor.
- 4. Tell me how other members of the health care team have impacted your care of women and families in the second stage of labor.
- 5. Tell me how the Obstetrics Keystone Project has impacted your care of women and families in the second stage of labor.
- 6. Tell me how adoption of the Relationship Based Care Model has impacted your care of women and families in the second stage of labor.
- 7. Is there anything else you'd like to tell me about your experiences in caring for women during the second stage of labor and their families at Crittenton Hospital?

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