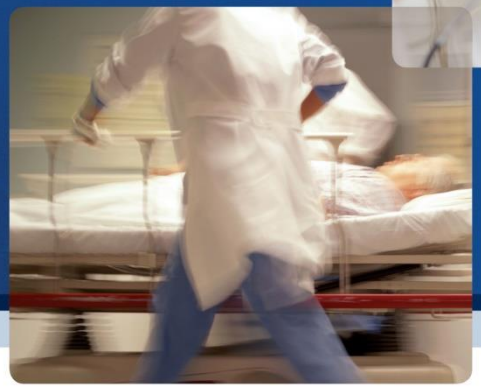


Washington State Hospital Association

Safe Deliveries Roadmap

Monthly Webcast

November 19, 2015

Washington State Hospital Association

Objectives

Washington State Hospital Association

- Get updates on the Safe Deliveries Roadmap
- Hear from Dr. Mark Tomlinson, Providence Regional Medical Director for Obstetrics in Portland, Oregon, how they are improving care by standardizing interpretation and response to fetal heart rate tracings.
- Take away strategies and tools to implement in your hospital

Washington State Hospital Association

UPDATES

Washington State Hospital Association

- ICD 10 codes for Roadmap measures
- Submitting Roadmap measure data

	WSHA-MDC	OB COAP	QBS
Outcome	X	TBD	TBD
Process	X	X	TBD

Washington State Hospital Association

Your Mission should you decide to accept it….

MISSION: POSSIBLE

Be Prepared to Answer the Following Questions:

1: For our hospital's NTSV C-sections, how do our Spontaneous Labor, Induced Labor and No Labor sub-groups compare?

2: What proportion of your NTSV Spontaneous Labor and Induced Labor sub-groups had C-sections for a) Failure to Progress? b) Fetal Distress?

3: At what Stage are the majority of your Primary TSV C-sections occurring: a) prior to 6cm-Induced; b) prior to 6cm-Spontaneous Labor; c) Active phase; d) Second stage?

4: Do you understand your Unexpected Newborn Complications (UNC) scores and know your Moderate and Severe UNC trends ?

5: Based on your analysis, what do you think are the top 2 or 3 areas where you would focus for improvement efforts?

Chat Box Question

Washington State Hospital Association

How far along are you on completing your mission?

1) Not on our radar
2) Contemplating
3) Making plans to submit
4) Submitting
5) Submitting and analyzing
6) Submitting, analyzing and sharing with others

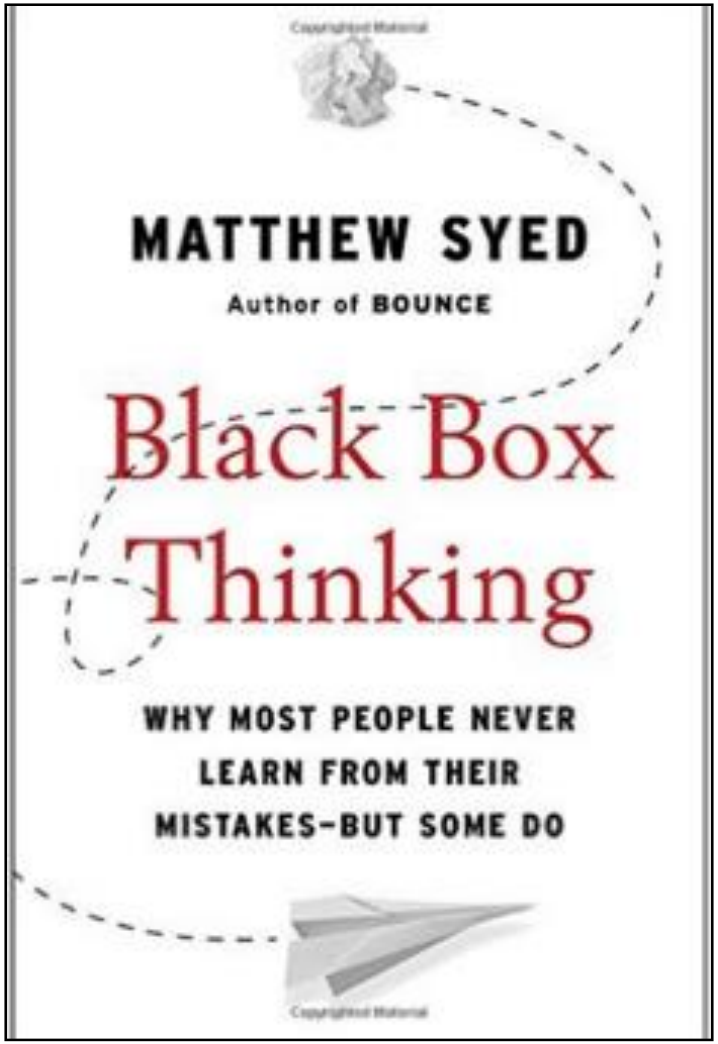
Washington State Hospital Association

Inspiration

Washington State Hospital Association

5 Ways to Fail Better

- **50 pounds for an "A"**
- Marginal gains
- Cognitive dissonance
- Beckham's magic formula
- Pre-mortems



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Chat Box Question

Washington State Hospital Association

How would you apply this idea to the Roadmap work you are doing?

Washington State Hospital Association

Upcoming Meetings

Washington State Hospital Association

2015

- Roadmap Monthly (webcast) 7:00am – 8:00 am

~~March 12~~	~~August 20~~
~~April 30~~	~~October 15~~
~~May 21~~	~~November 19~~
~~June 18~~	December 17
~~July 16~~	

- Coming Soon!!

2016 Webcast and Safe Tables dates

Washington State Hospital Association

Enhancing EFM Interpretation with Color
The Providence Journey

Mark Tomlinson

Providence Health Systems Oregon

Northwest Perinatal/
Women's Healthcare Associates

Presented at the Safe Deliveries Roadmap 2015 Perinatal Continuum Learning Collaborative Webcast, November 19, 2015

Disclosure

- Past consultant to Advanced Practice Strategies (APS) developing an EFM competency assessment tool
- Perinatal Quality Foundation (PQF) Board Member
  - Fetal Monitoring Credentialing Task Force Member

Objectives

- Show the importance of a common understanding and communication around Electronic Fetal Monitoring (EFM)
- Review the NICHD EFM Nomenclature and Classification System
- Highlight the limitations of the NICHD EFM Classification System
- Demonstrate a modification of the 3-Category System to address some of the limitations
- Introduce the concept of EFM certification

Preventing Infant Death & Injury During Delivery

Root Cause	Involved Cases (n=47*) (%)
Communication	72
Organizational Culture	55
Staff Competency	47
Orientation & Training	40
Inadequate FHR Monitoring	34

*From 2008-2014 TJC reviewed an average of 33 cases/year

The Joint Commission Sentinel Alert Issue 30, July 2004

The Joint Commission Recommendations

- Team Training to teach staff to work together and communicate more effectively
- Use ACOG, AAP, and AWHONN standards and guidelines to
  - Develop clear guidelines for fetal monitoring and interpretation
  - Educate nurses, residents, CNM's, and physicians to use standardized terminology to communicate abnormal FHR tracings

The Joint Commission Sentinel Alert Issue 30, July 2004

Demonstrating EFM Proficiency

- MCIC mandated in 2005 that insured hospitals require all physicians to pass National Certification Corporation (NCC) EFM certification exam
- The Doctors Company (TDC) offers discounts for EFM education
- Providence Health Systems partnered in 2010 with APS to develop competency assessment
- PQF developed EFM certification Exam in 2013
  - In 2015 accepted as option for ABOG Part IV MOC

EFM and Perinatal Mortality

- 2004 National Birth Cohort Data
- 1.95 MILLION births included
- Compared use of EFM vs no use
- Mortality
  - Decreased from 0.8 per 1000 births (3.8 to 3.0)
  - Decreased by approximately 1 per 10,000 births at term

Chen, 2011

Outcomes at Term in Relation to EFM Use from 1990-2004

Outcome Measure	Risk Ratio	Incremental benefit (%)
Neonatal Mortality	0.67	2
Cesarean Section for fetal distress	0.78	-4
5 min apgar < 4	0.78	4
Neonatal Seizures	1.53	1

Ananth, 2013

Interobserver Reliability

FHR Category	Kappa	Level of Agreement
Category I	0.53	Moderate
Category II	0.46	Moderate
Category III	0.01	Poor
Overall	0.47	Moderate

Kappa	Level of Agreement
0.0-0.20	Poor
0.21-0.40	Fair
0.41-0.60	Moderate
0.61-0.80	Substantial
0.81-1.00	Near Perfect

Blackwell, SMFM 2011

Limitations of EFM

- "Electronic fetal monitoring has failed as a public health screening program… screening tests have poor positive predictive value when searching for rare conditions such as fetal death in labor or cerebral palsy… [and] near zero.

Grimes, Obstetric & Gynecology 2010

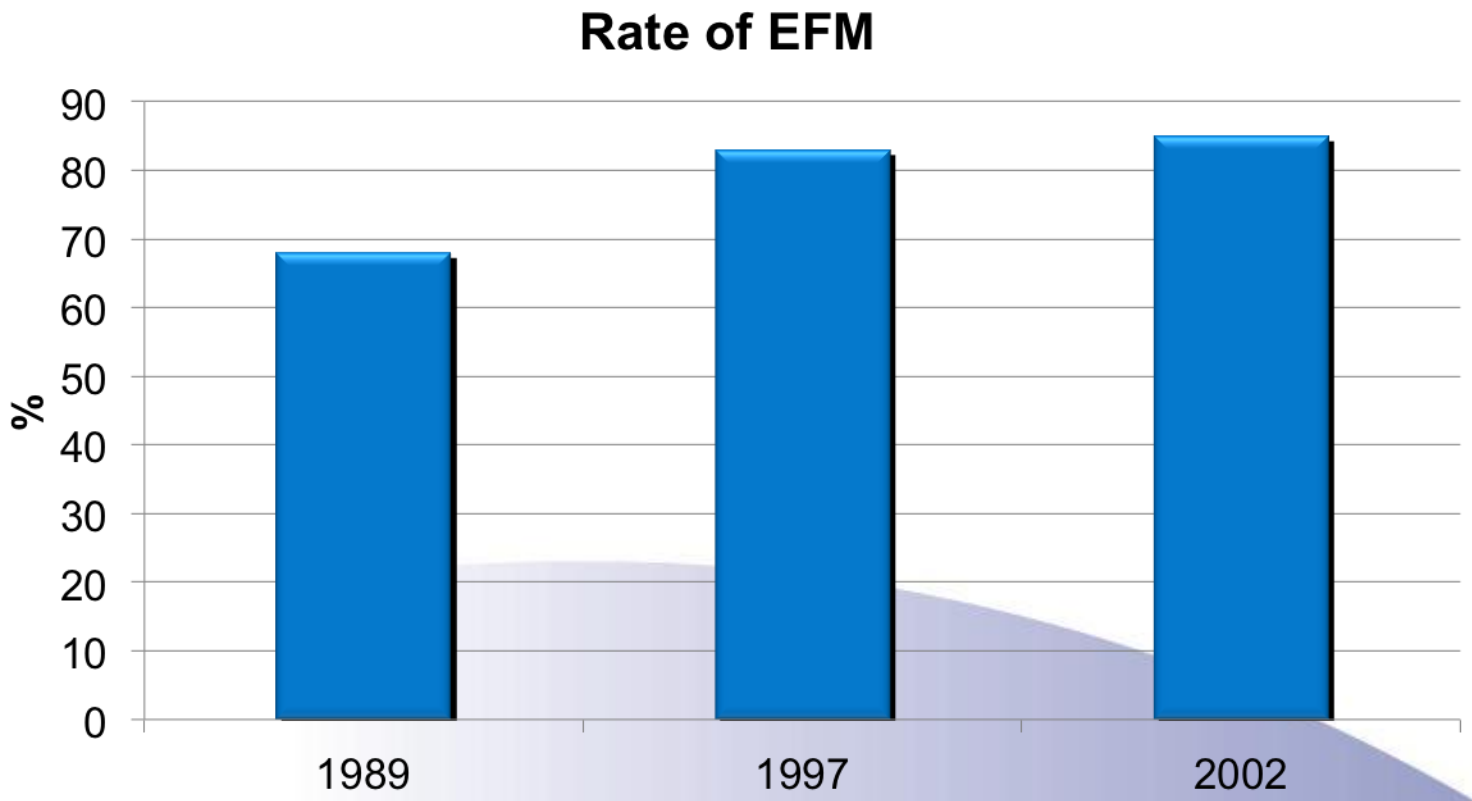
EFM is not a Complete Failure!

- Its introduction coincided with the virtual elimination of intrapartum fetal death

- At least as effective as intensive intermittent auscultation, the only alternative studied in prospective trials

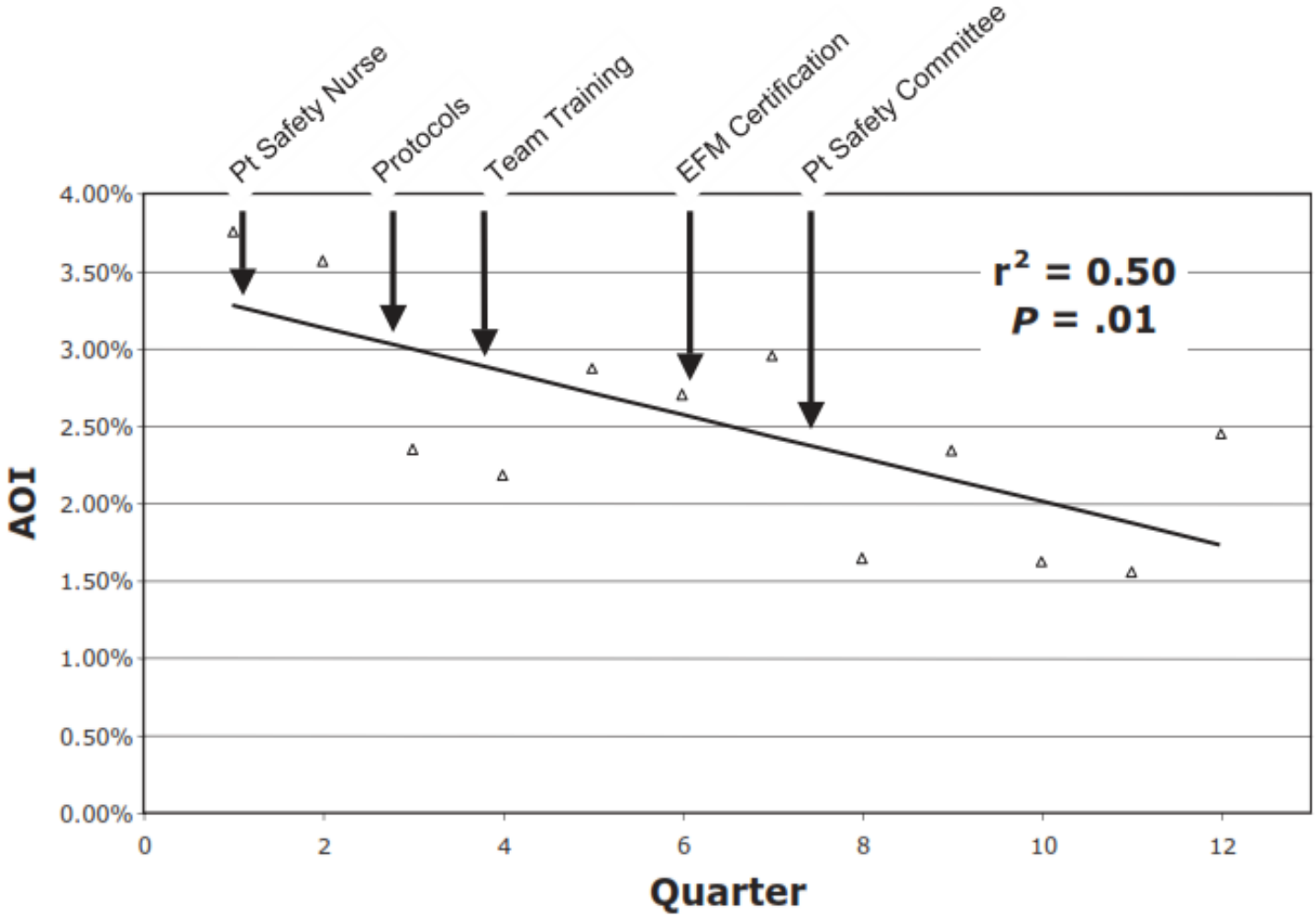
- While not a reliable **diagnostic** test, it is an exceptional **screening** test for absence of fetal acidemia

Electronic Fetal Monitoring



National Vital Statistics Reports, Curtin 1999, Martin 2003

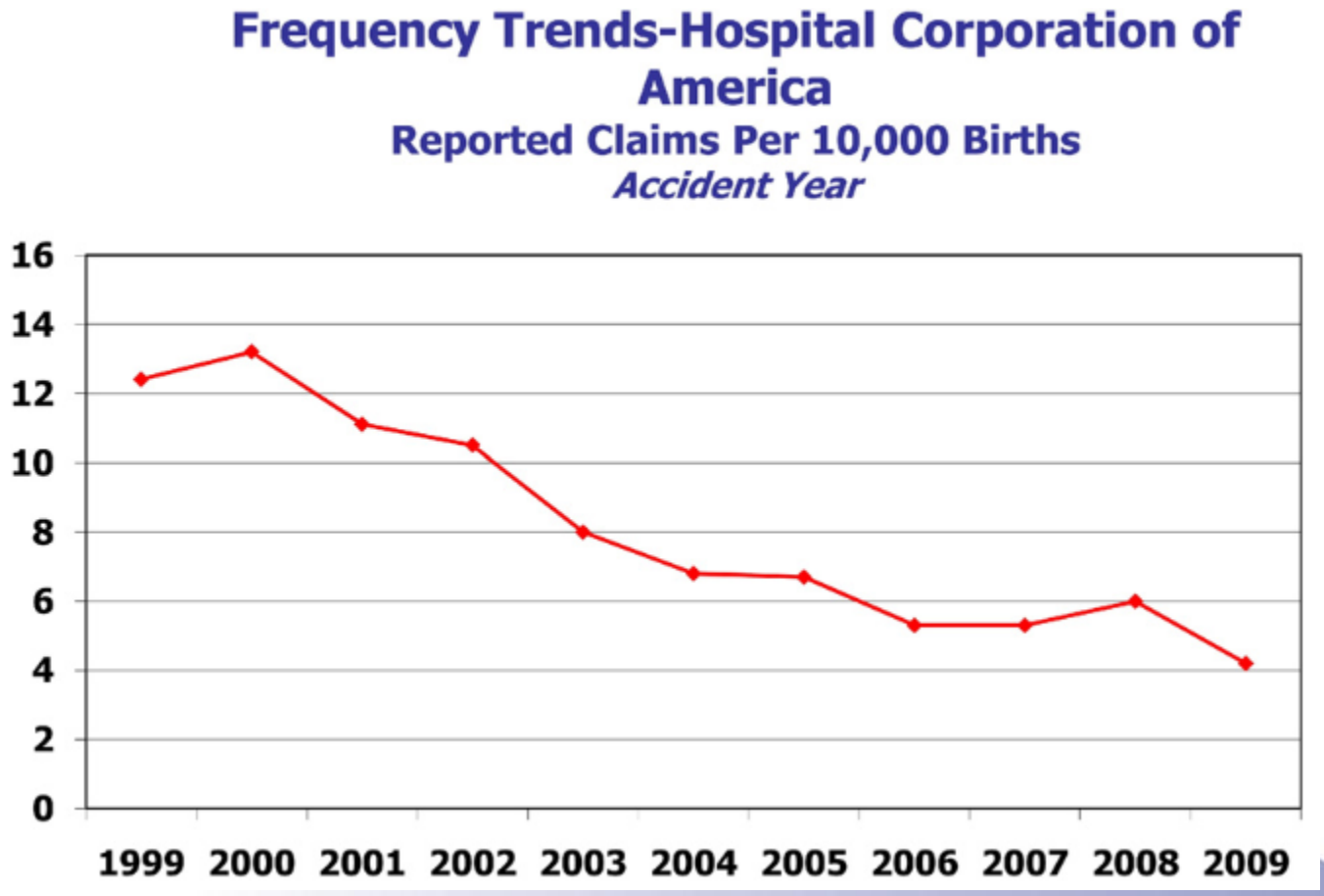
Safety Program Adverse Outcome Index



Yale–New Haven Hospital, New Haven, CT (YNHH) quarterly obstetric (OB) Adverse Outcome Index (AOI).

Pettker, Am J Obstet Gynecol 2009

Results of HCA Safety Program



Clark, Am J Obstet Gynecol 2011

Current Commentary

The 2008 National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring

Update on Definitions, Interpretation, and Research Guidelines

George A. Macones, MD, Gary D. V. Hankins, MD, Catherine Y. Spong, MD, John Hauth, MD, and Thomas Moore, MD

THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS
WOMEN'S HEALTH CARE PHYSICIANS

PRACTICE BULLETIN

CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN–GYNECOLOGISTS

NUMBER 116, NOVEMBER 2010

Management of Intrapartum Fetal Heart Rate Tracings

Intrapartum electronic fetal monitoring (EFM) is used for most women who give birth in the United States. As such, clinicians are faced daily with the management of fetal heart rate (FHR) tracings. The purpose of this document is to provide obstetric care providers with a framework for evaluation and management of intrapartum EFM patterns based on the new three-tiered categorization.

NICHD Key Assumptions

- FHR Tracings must be interpreted in context
  - Gestational age
  - Prior assessment results
  - Coexisting Maternal or Fetal Conditions
  - Maternal medications

- Components of tracings do not occur independently and generally evolve over time

Macones, Obstetrics and Gynecology 2008

2008 NICHD Nomenclature

1. Baseline variability
   - Absent
   - Minimal
   - Moderate
   - Marked
2. Baseline rate
   - Normal
   - Tachycardia
   - Bradycardia
3. Accelerations
4. Decelerations
   - Early
   - Late
   - Variable
   - Prolonged

Tachysystole

NICHD Three Tier System

- Category I
  - Normal, no specific action required
  - Strongly predictive of normal fetal acid-base status
- Category II
  - Indeterminant, require evaluation
  - Not predictive of abnormal fetal acid-base status,
- Category III
  - Abnormal, require **prompt** evaluation and action
  - Predictive of abnormal fetal acid-base status

Macones, Obstetrics and Gynecology 2008

Bottom Line

Is this fetus acidemic now?

And

Is acidemia likely to develop or worsen?

The Problem

Majority of FHR tracings (approx 85%) fall into Category II resulting in a very wide range of risk and thus appropriate management options are extensive

Frequency of EFM Categories

Category Measure	EFM Category (48,444 intrapartum Term Tracings)		
	I	II	III
At some time during tracing (%)	99.5	84.1	0.1
Exclusively (%)	15.9	0.5	0
Duration in Category (%)	77.9	22.1	0.004
Time in Category during last 2 hrs before delivery (%)	60.9	39.1	0.006
Mean time overall (min)	399.6	113.5	0.02
Mean time during last 2 hr before delivery (min)	73.1	46.9	0.01

Jackson, Obstetrics & Gynecology 2011

Conclusions

- 40 combinations of FHR characteristics found in Category II

- "Combining so many different FHR patterns into a single indeterminate category surely detracts from the use of FHR monitoring as an indicator of fetal condition."

- "Future research should focus on subcharacterization of Category II FHR tracings… to differentiate those at highest risk…"

Jackson, Obstetrics & Gynecology 2011

Acidemia Risk

Category	Definition	Risk of Acidemia at time of evaluation	Risk of Progression of Acidemia	Management
Green (Category I)	No acidemia	None	Very low	None
Blue (Category II)	No central acidemia	None	Low	Conservative interventions
Yellow (Category II)	Intermittant hypoxia that may lead to acidemia	None	Moderate	Conservative interventions with surveillance
Orange (Category II)	Potential for fetal decompensation	Low	High	Conservative interventions & preparation for delivery
Red (Category III)	Possible actual or impending fetal asphyxia	High	Present	Deliver unless FHR abnormality can be immediately resolved

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RISK CATEGORIES FOR FETAL ACIDEMIA RELATED TO FHR VARIABILITY, BASELINE RATE, AND PRESENCE OF RECURRENT DECELERATIONS

	Decelerations								
	None	Mild VD	Moderate VD	Severe VD	Mild LD	Moderate LD	Severe LD	Mild - Moderate PD	Severe PD
Baseline FHR	**MODERATE (NORMAL) VARIABILITY**								
Tachycardia	B	B	Y	O	Y	Y	O	Y	O
Normal	G	G	B	Y	B	Y	Y	Y	O
Mild bradycardia	Y	Y	Y	O	Y	Y	O	Y	O
Moderate to Severe Bradycardia	Y			O		O	O		O
	MINIMAL VARIABILITY								
Tachycardia	B	Y	O	O	O	O	R	O	O
Normal	B	Y	O	O	O	O	R	O	R
Mild bradycardia	O	R	R	R	R	R	R	R	R
Moderate to Severe Bradycardia	O			R		R	R		R
	ABSENT VARIABILITY								
Tachycardia	R	R	R	R	R	R	R	R	R
Normal	O	R	R	R	R	R	R	R	R
bradycardia	R	R	R	R	R	R	R	R	R

Marked Variability (Y)

Sinusoidal (R)

G = green; B = blue; Y = yellow; O = orange; R = red;
VD = variable decorations; LD = late decelerations PD = prolonged decelerations

Categories vs Colors

	Green (%)	Blue (%)	Yellow (%)	Orange (%)	Red (%)
Category I (n=132)	99.2	0.8	0	0	0
Category II (n=297)	19.1	21.8	26.2	27.6	5.3
Category III (n=8)	0	0	0	0	100

Conclusion – "… the 5-Tier system may provide better characterization of intermediate FHR tracings than NICHD Category II"

Gyamfi, SMFM 2011

Modified Fetal Monitoring Interpretation Tool

- Based on a review of 30,000 labors
- Potential for acidemia varies from low to high based on the characteristics of the FHR tracing
  - Decelerations are recurrent (occurring with ≥50% of contractions)
- Acidemia was defined as umbilical artery pH <7.10 **and** base excess <-12 mEq/l
- With progressive hypoxia and acidemia the tracing will change from moderate to reduced FHR variability
- Progression typically occurs relatively slowly, over a period of 1 hour.

Parer, AJOG 2007

FHR Characteristics Predicting Fetal Acidemia

- **Variability**
- Baseline rate
- Presence of **Recurrent** Decelerations

Systematic Assessment

- **Variability,**
- **Clinical situation,**
- Baseline,
- Uterine activity,

And finally,

- Decelerations

Variable Deceleration Quantification

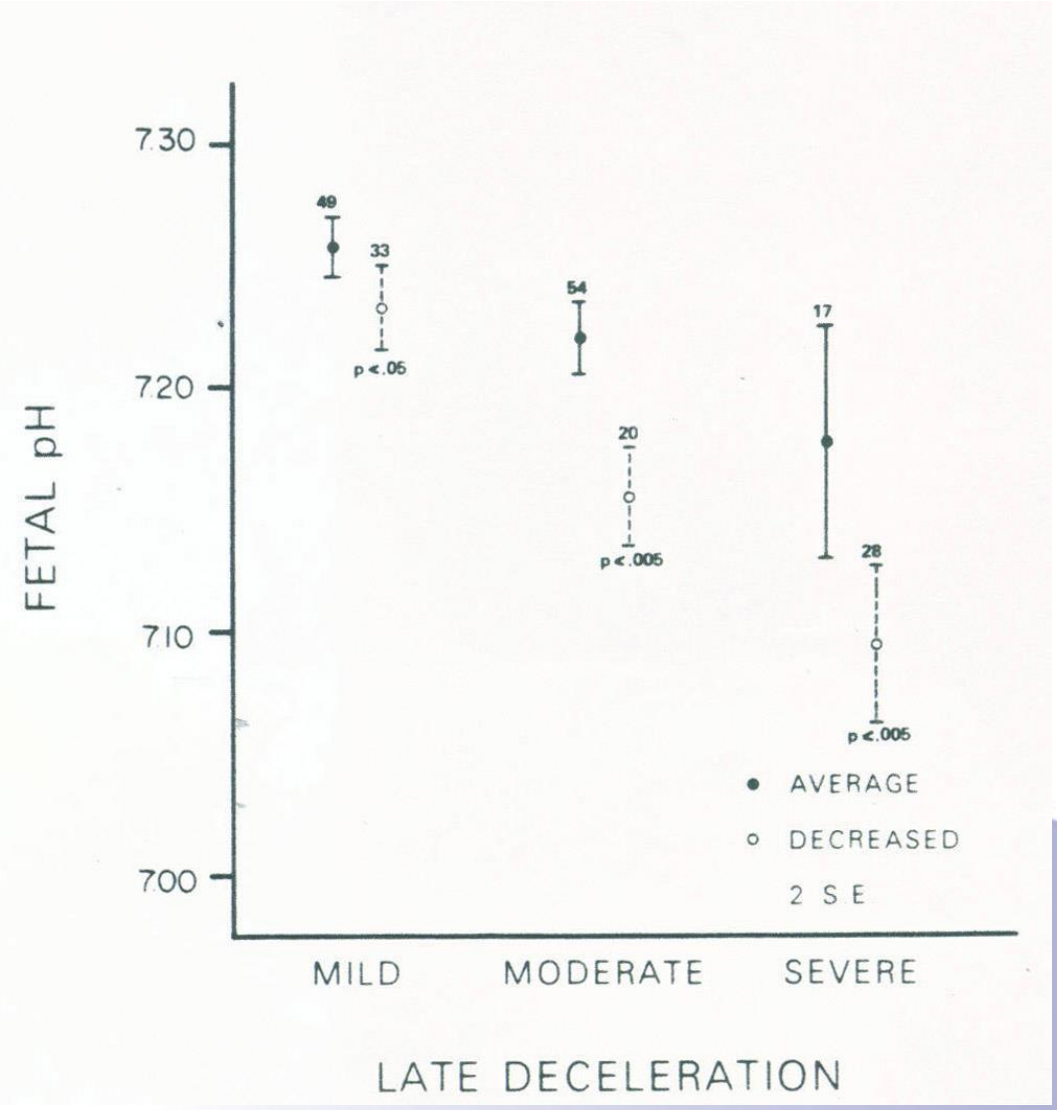
- Variable Decelerations
  - Mild
    - Nadir > 80 bpm or
    - Nadir duration < 30 seconds
  - Moderate
    - Nadir <70 bpm for 30-60 seconds or
    - Nadir <80 bpm for >60 seconds
  - Severe
    - Nadir <70 bpm for >60 seconds or
    - Nadir < 80 bpm for 2 min

Deceleration Quantification

- Late Decelerations
  - Mild - < 15 bpm below baseline
  - Moderate - 15-45 bpm below baseline
  - Severe - >45 bpm below baseline

- Prolonged Decelerations
  - Mild - >80 bpm
  - Moderate - 70-80 bpm
  - Severe - <70 bpm

Relationship between fetal pH, FHR variability, & depth of late decelerations



Paul , 1975

Relationship of Variable Severity and Base Excess

Variable Declarations	Base deficit Change (mEq/l/min)	Base deficit After 60 min (mEq/l)
Mild	0.21±0.03	1.5±0.8
Moderate	0.27±0.03	3.4±1.0
Severe	0.54±0.09	9.5±1.8
Recovery	-0.12	

Instrumented ovine fetuses
Controlled cord occlusion for 1 min every 2.5 min for 60 min

Ross, 2013

FHR Tracing Category During 30 Min before Delivery

FHR Pattern	pH ≤ 7.10 (n=57) (%)	pH > 7.10 (n= 5331) (%)	Adjusted OR (95% CI)
Moderate Variability	91.2	87.2	Reference
Minimal Variability	8.8	12.5	0.68 (0.27-1.71)
Recurrent Late	15.8	7.3	2.06 (0.99-4.27)
Recurrent Prolonged	14.0	5.2	2.56 (1.19-5.52)
Recurrent Variable	49.1	32.5	1.91 (0.27-1.71)
Baseline Tachycardia	12.3	4.5	2.15 (1.21-3.82)
Total Deceleration Area* > 95%ile	41.9	13.4	3.79 (2.04-7.04)

* (duration*depth*0.5) summed over 30 min)

Cahill, 2012

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RISK CATEGORIES FOR FETAL ACIDEMIA RELATED TO FHR VARIABILITY, BASELINE RATE, AND PRESENCE OF RECURRENT DECELERATIONS

	Decelerations								
	None	Mild VD	Moderate VD	Severe VD	Mild LD	Moderate LD	Severe LD	Mild - Moderate PD	Severe PD
Baseline FHR	**MODERATE (NORMAL) VARIABILITY**								
Tachycardia	B	B	Y	O	Y	Y	O	Y	O
Normal	G	G	B	Y	B	Y	Y	Y	O
Mild bradycardia	Y	Y	Y	O	Y	Y	O	Y	O
Moderate to Severe Bradycardia	Y			O		O	O		O
	MINIMAL VARIABILITY								
Tachycardia	B	Y	O	O	O	O	R	O	O
Normal	B	Y	O	O	O	O	R	O	R
Mild bradycardia	O	R	R	R	R	R	R	R	R
Moderate to Severe Bradycardia	O			R		R	R		R
	ABSENT VARIABILITY								
Tachycardia	R	R	R	R	R	R	R	R	R
Normal	O	R	R	R	R	R	R	R	R
bradycardia	R	R	R	R	R	R	R	R	R

Marked Variability (Y)

Sinusoidal (R)

G = green; B = blue; Y = yellow; O = orange; R = red;
VD = variable decorations; LD = late decelerations PD = prolonged decelerations

RISK CATEGORIES FOR FETAL ACIDEMIA RELATED TO FHR VARIABILITY, BASELINE RATE,

Using the Tool

1. Begin by determining the variability

Baseline FHR								PD	
	MODERATE (NORMAL) VARIABILITY								
Tachycardia	B	B	Y	O	Y	Y	O	Y	O
Normal	G	G	B	Y	B	Y	Y	Y	O
Mild bradycardia	Y	Y	Y	O	Y	Y	O	Y	O
Moderate to Severe Bradycardia	Y			O		O	O		O
	MINIMAL VARIABILITY								
Tachycardia	B	Y	O	O	O	O	R	O	O
Normal	B	Y	O	O	O	O	R	O	R
Mild bradycardia	O	R	R	R	R	R	R	R	R
Moderate to Severe Bradycardia	O			R		R	R		R
	ABSENT VARIABILITY								
Tachycardia	R	R	R	R	R	R	R	R	R
Normal	O	R	R	R	R	R	R	R	R
bradycardia	R	R	R	R	R	R	R	R	R

G = green; B = blue; Y = yellow; O = orange; R = red;
VD = variable decorations; LD = late decelerations PD = prolonged decelerations

RISK CATEGORIES FOR FETAL ACIDEMIA RELATED TO FHR VARIABILITY, BASELINE RATE, AND PRESENCE OF RECURRENT DECELATIONS

2. Then identify Baseline FHR on Left

Baseline FHR	None	Mild VD	Moderate VD	Severe VD	Mild LD	Moderate LD	Severe LD	Mild Moderate PD	Severe PD
	Decelerations								
	MODERATE (NORMAL) VARIABILITY								
Tachycardia						Y	O	Y	O
Normal						Y	Y	Y	O
Mild bradycardia						Y	O	Y	O
Moderate to Severe Bradycardia						O	O		O
	MINIMAL VARIABILITY								
Tachycardia						O	R	O	O
Normal						O	R	O	R
Mild bradycardia						R	R	R	R
Moderate to Severe Bradycardia						R	R		R
	ITY								
Tachycardia						R	R	R	R
Normal						R	R	R	R
bradycardia	R	R	R	R	R	R	R	R	R

Tachycardia > 160

Normal (110-160)

Mild bradycardia (> 80 – 110 bpm)

Moderate to severe bradycardia (< 70 – 80 bpm)

Tachycardia > 160

Normal (110-160)

Mild bradycardia (> 80 – 110 bpm)

Moderate to severe bradycardia (< 70 – 80 bpm)

Tachycardia > 160

Normal (110-160)

G = green; B = blue; Y = yellow; O = orange; R = red;
VD = variable decorations; LD = late decelerations PD = prolonged decelerations

3. Then Look for type of *Recurrent* Deceleration to determine the Risk Category

	Decelerations								
	None	Mild VD	Moderate VD	Severe VD	Mild LD	Moderate LD	Severe LD	Mild - Moderate PD	Severe PD
Baseline FHR	MODERATE (NORMAL) VARIABILITY								
Tachycardia	B	B	Y	O	Y	Y	O	Y	O
Normal	G	G	B	Y	B	Y	Y	Y	O
Mild bradycardia	Y	Y	Y	O	Y	Y	O	Y	O
Moderate to Severe Bradycardia	Y			O		O	O		O
	MINIMAL VARIABILITY								
Tachycardia	B	Y	O	O	O	O	R	O	O
Normal	B	Y	O	O	O	O	R	O	R
Mild bradycardia	O	R	R	R	R	R	R	R	R
Moderate to Severe Bradycardia	O			R		R	R		R
	ABSENT VARIABILITY								
Tachycardia	R	R	R	R	R	R	R	R	R
Normal	O	R	R	R	R	R	R	R	R
bradycardia	R	R	R	R	R	R	R	R	R

G = green; B = blue; Y = yellow; O = orange; R = red;
VD = variable decorations; LD = late decelerations, PD = prolonged decelerations

EFM App

PROVIDENCE Health & Services

Fetal Heart Rate Analysis Home About

Variability

Marked
> 25 bpm

Moderate
6-25 bpm

Minimal
1-5 bpm

Absent
Undetectable

Sinusoidal Pattern
Wave-like undulating pattern in baseline with cycle frequency of 3-5/min that persists minutes

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Fetal Heart Rate Analysis Home About

Baseline

Tachycardia
> 160 bpm

Normal
110-160 bpm

Mild Bradycardia
81-109 bpm

Moderate Bradycardia
70-80 bpm

Severe Bradycardia
< 70 bpm

FHR Tracing Characteristics:

- Variability Moderate

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EFM App

Fetal Heart Rate Analysis Home About

Deceleration

None

Early

Gradual decrease (onset to nadir ≥ 30 sec) and return to baseline; nadir coinciding with the peak of the contraction

Recurrent Variable

- Abrupt decrease (onset to nadir < 30 sec) of ≥ 15 bpm, duration is ≥ 15 sec and< 2 min
- Occurring with ≥ 50% of contractions in 20 minute window

Recurrent Late

- Gradual decrease (onset to nadir ≥ 30 sec) and return to baseline; nadir occurs after the peak of the contraction
- Occurring with ≥ 50% of contractions in 20 minute window

Prolonged

Decrease ≥ 15 bpm for ≥ 2 min and < 10 min

FHR Tracing Characteristics:

- **Variability** Moderate
- **Baseline** Tachycarida

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Fetal Heart Rate Analysis Home About

Recurrent Late Deceleration

Mild

≤ 15 bpm below baseline

Moderate

16-44 bpm below baseline

Severe

≥ 45 bpm below baseline

FHR Tracing Characteristics:

- **Variability** Moderate
- **Baseline** Tachycarida
- **Deceleration** RecurrentLate

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EFM App Result

Fetal Heart Rate Analysis Home About

Yellow - Category II

Risks

- **Definition:** Intermittant hypoxia that may lead to acidemia
- **Risk of current acidemia:** None
- **Risk of progression to acidemia:** Moderate
- **Management:** Conservative interventions with surveillance

Suggested Preparation

- **Operating Room:** Available
- **Obstetric Provider:** Evaluate FHR tracing and be immediately available
- **Anesthetist and Surgeon:** Informed
- **Newborn Infant Resuscitator:** Informed

FHR Tracing Characteristics:

- **Variability** Moderate
- **Baseline** Tachycarida
- **Deceleration** RecurrentLate (Mild)

Conservative Interventions:

- Position change
- Oxygen
- Fluid bolus
- Decrease excessive contractions (eliminate tachysystole ->5 UC's in 10 minutes averaged over 30 minutes) – decrease or stop oxytocin; tocolysis
- Avoid excessive pushing
- Correct hypotension
- Amnioinfusion

Start Over

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Management and Preparation

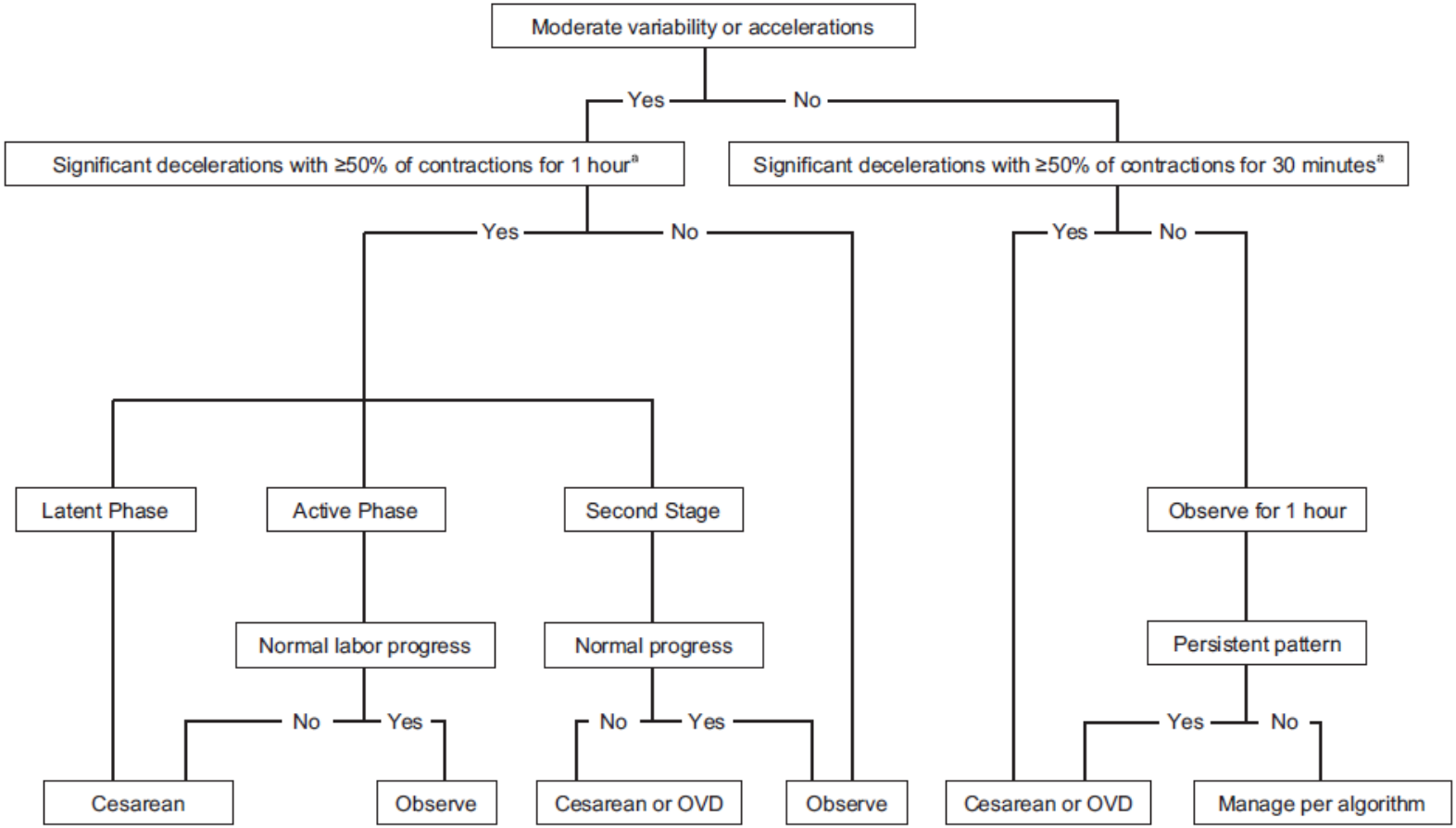
Suggested Preparation and Management based FHR Category

Category	Conservative Techniques	Operating Room	Obstetric Provider	Anesthetist and Surgeon*	Newborn Infant Resuscitator
Green (Category I)	No	--	--	--	--
Blue (Category II)	Yes	Available	Informed	--	--
Yellow (Category II)	Yes	Available	Evaluate FHR tracing and be immediately available	Informed	Informed
Orange (Category II)	Yes	Immediately Available	At bedside	Request Presence on L&D	Immediately Available
Red (Category III)	Yes	Open	At bedside	Present	Present

*Provider capable of doing a Cesarean Section (Back up for CNM or FP physicians)

FIGURE 1

Algorithm for management of category II fetal heart rate tracings



OVD, operative vaginal delivery.

Clark, 2013

Gathering info for your SBAR:

1. What is the **variability?**
2. Are there pertinent **clinical factors?**
   - Parity
   - Anticipated timeframe for delivery
   - Maternal or fetal comorbidities (preeclampsia or IUGR)
3. What is the FHR **baseline?**
4. Uterine activity
5. Are there **decelerations?**
   a) What kind?
   b) Mild, Moderate, or Severe?

Goal of Script Concordance Theory Questions

- To provide a direct approach for testing the organization of clinical knowledge
- To assess contextual reasoning and decision making in an evolving clinical setting
- Does not measure specific knowledge or memory
- The very nature of FHR monitoring in the laboring patient makes it ideally suited for evaluation by this type of assessment tool

SCT Question

- A clinical scenario is presented where an initial management decision has been made.
- A new piece of information is added.
- You must decide how this new information impacts their management decision.

Using SCT: An Everyday Example

Case:	**The morning weather report predicts a forty-percent chance of rain.**
Initial Decision:	Based on that, your initial decision is that you won't need an umbrella.
New information:	But then you open your front door and see heavy, dark clouds.
Question:	Does seeing the clouds impact your initial decision to leave your umbrella at home?
Scale for response:	Your initial decision is: •completely validated •possibly validated •not affected at all •possibly invalidated •completely invalidated

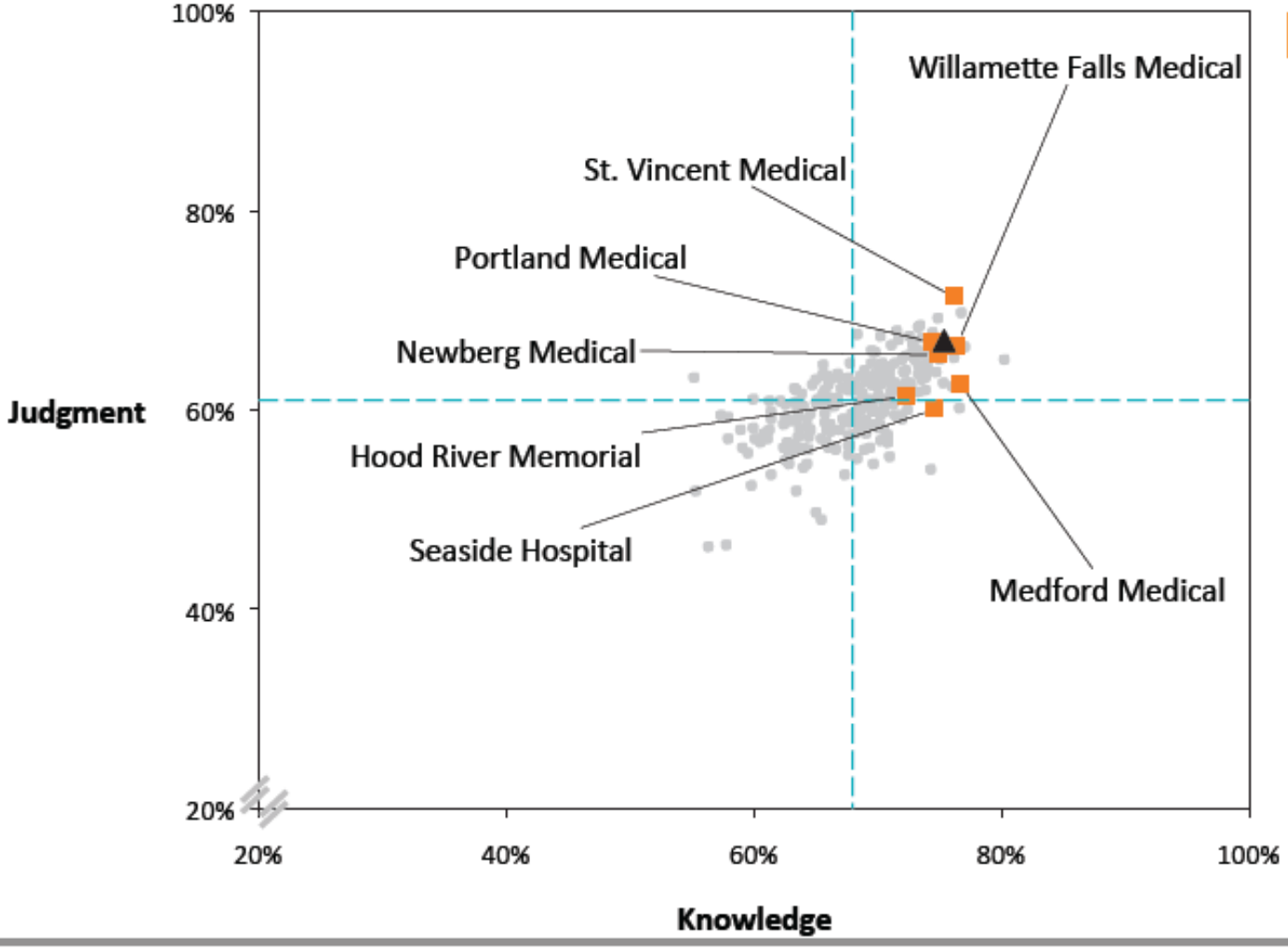
Using SCT: An Everyday Example

Case:	**The morning weather report predicts a forty-percent chance of rain.**
Initial Decision:	Based on that, your initial decision is that you won't need an umbrella.
New information:	But then you open your front door and see heavy, dark clouds.
Question:	Does seeing the clouds impact your initial decision to leave your umbrella at home?
Scale for response:	Your initial decision is: •completely validated •possibly validated •not affected at all **Full Credit** → •possibly invalidated **Partial Credit** → •completely invalidated

- In SCT questions, more than one answer could be acceptable.
- In this example, most meteorologists would answer "possibly invalidated,"
- Some may answer "completely invalidated."
- Your answers to judgment questions are given a weighted score, based on how an expert panel answered the same question.

Nurse Assessment Averages

Fetal Assessment and Monitoring



Hospitals

- APS facilities
- PH&S Oregon Hospitals
- PH&S Oregon average
- APS average

Average	K%	J%
APS	68.3	61.3
PH&S Oregon	75.4	67.0
Hood River Memorial	72.3	61.3
Medford Medical	76.6	62.6
Newberg Medical	75.0	65.5
Portland Medical	74.5	66.7
Seaside Hospital	74.7	60.0
St. Vincent Medical	76.2	71.4
Willamette Falls Medical	76.4	66.5

Fetal Assessment and Monitoring, Nurse, 1st time Assessment scores only

n=295 PH&S Oregon Region Nurses in 7 hospitals; n= 10,099 Nurses in 257 national hospitals;

Note: Only hospitals with 5 or more Assessment completions are included;

Source: APS GNOSIS database

Summary

- EFM has significant limitations
- It is here to stay! We must have a common understanding and effective communication
- Despite limitations there clearly are patterns that are associated with fetal acidemia or will lead to it if left unchecked
- The current Category Classification system has significant limitations
- Subdividing Category II offers an opportunity to manage the limitations
- There may be some value to competency assessment

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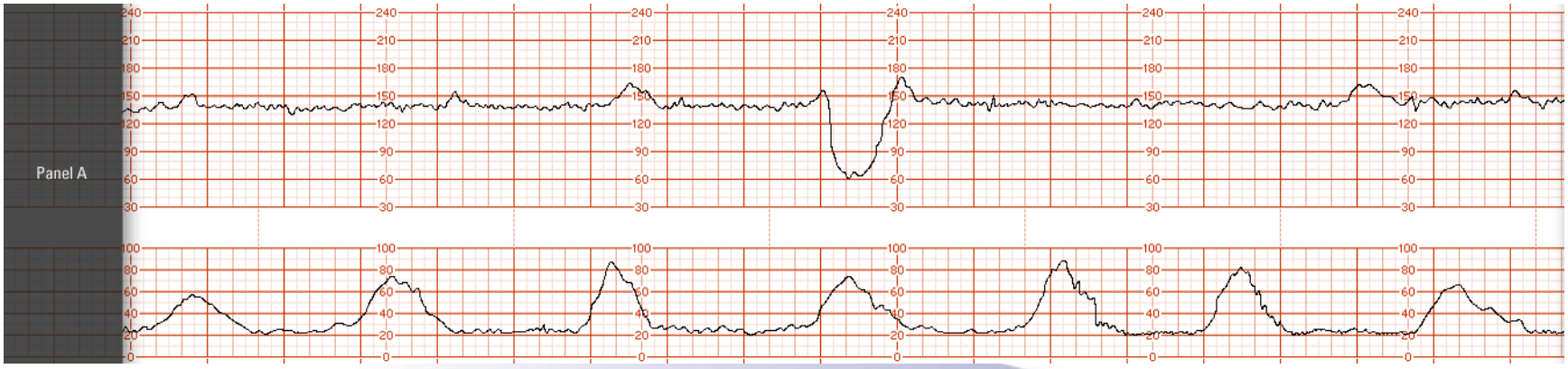
Questions?

Case Example 1

- A 25-year-old G1P0 patient presents at 41 weeks in spontaneous labor. Ruptured membranes are confirmed and the initial cervical exam is 3/+1/100%/vtx. The initial FHR tracing is shown below



Your management plan is …

Continue FHR monitoring and expectantly manage

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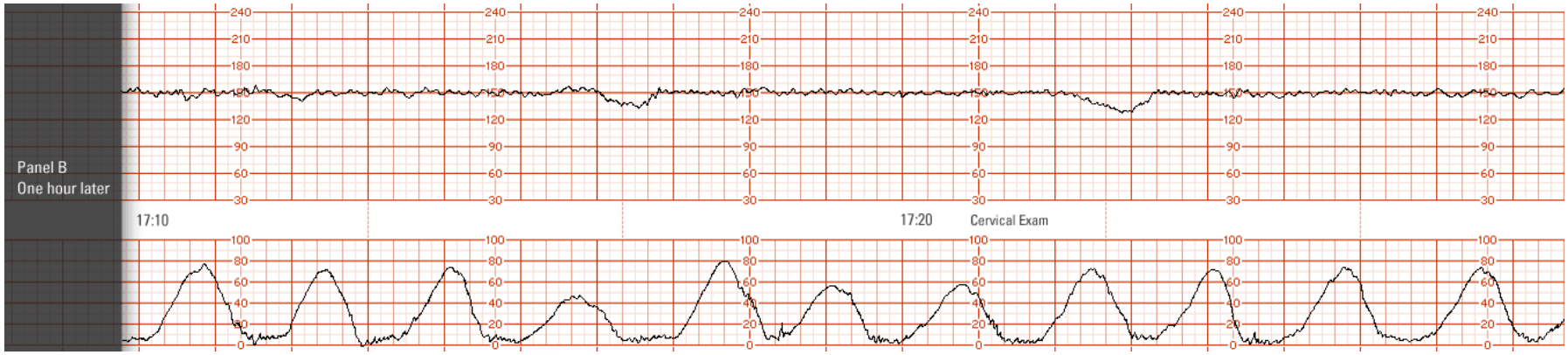
… and then you learn the following additional information:



How does this additional information affect your thinking about the management plan?

Answering the SCT Question

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Use your best judgment in selecting the answer most consistent with your clinical judgment of the presented information.

- Strongly invalidates
- Could invalidate
- No Impact
- Could support
- Strongly supports

Grading the SCT Question

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- Full credit is given to the answer most frequently chosen by the experts
- Partial credit proportional to the percentage of experts choosing the answer is given for other "correct" choices

1	● Strongly invalidates	80% credit
2	● Could invalidate	100% credit
3	● No Impact	40% credit
4	○ Could support	0% credit
5	○ Strongly supports	0% credit

Upcoming Meetings

Washington State Hospital Association

2015

- Roadmap Monthly (webcast) 7:00am – 8:00 am

~~March 12~~	~~August 20~~
~~April 30~~	~~October 15~~
~~May 21~~	November 19
~~June 18~~	December 17
~~July 16~~	

- Coming Soon!!

2016 Webcast and Safe Tables dates

Washington State Hospital Association

Thank You!

Safe Deliveries Roadmap Website
http://www.wsha.org/0513.cfm%20