Maternal Early Warning Systems: Providing equitable care at the bedside

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Disclaimer

This presentation includes information from sources designated on the slides. The following studies were not conducted by PeriGen.

About PeriGen

Comprehensive labor and delivery patient safety platform incorporating PeriGen's ***NICHD-validated Artificial Intelligence decision support tools.***

Leveraging evidence-based medicine with 50 peer-reviewed publications: *American Journal of Obstetrics and Gynecology, Becker's, Journal of Healthcare Information Management.*

PeriWatch Vigilance® is an early warning system that works with an existing EFM to ***quickly & consistently*** identify patients who may be developing a potentially worsening condition.

330 clients nationally

PeriGen
Advanced Perinatal Systems

Our Presenter

Dr. Alana McGolrick

DNP, RNC-OB, C-EFM

PeriGen Chief Nursing Officer

With significant perinatal experience, Dr. McGolrick leads PeriGen's efforts to expand and enhance clinical education, customer outcomes and publishing.

Clinical Engagement Executive

Karen Kolega (“KK”)

MSN-CNL, RNC-OB, C-EFM

PeriGen Clinical Engagement Executive

Karen is a clinical subject matter expert for PeriGen’s obstetrical software. Her expertise in Obstetric practices, regulations and hospital operations improves prospective client engagement, adoption, and implementation.

Agenda

Maternal Morbidity and Mortality

Patient Safety

Objectivity

Early Warning Systems

PeriWatch Vigilance® Demonstration

Summary

At the conclusion of this program, the participant will be able to:

1. Demonstrate knowledge and understanding of the current maternal morbidity and mortality trends in the United States.
2. Verbalize the definition of normalizing deviance.
3. Describe the difference between subjectivity and objectivity during patient assessment.
4. Describe the benefits of an automated maternal-fetal early warning system in the obstetric setting.

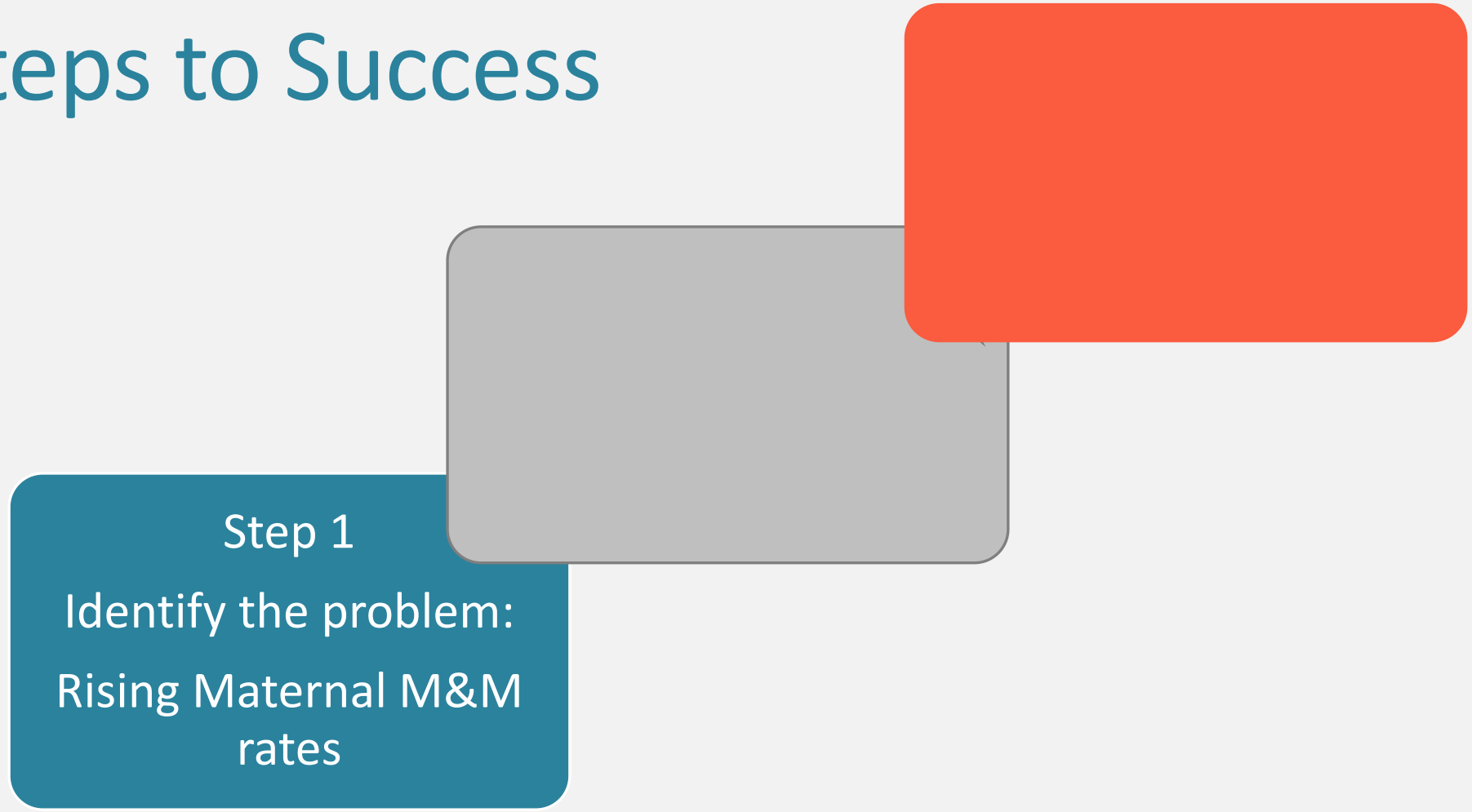
Objectives

eq·ui·ta·ble

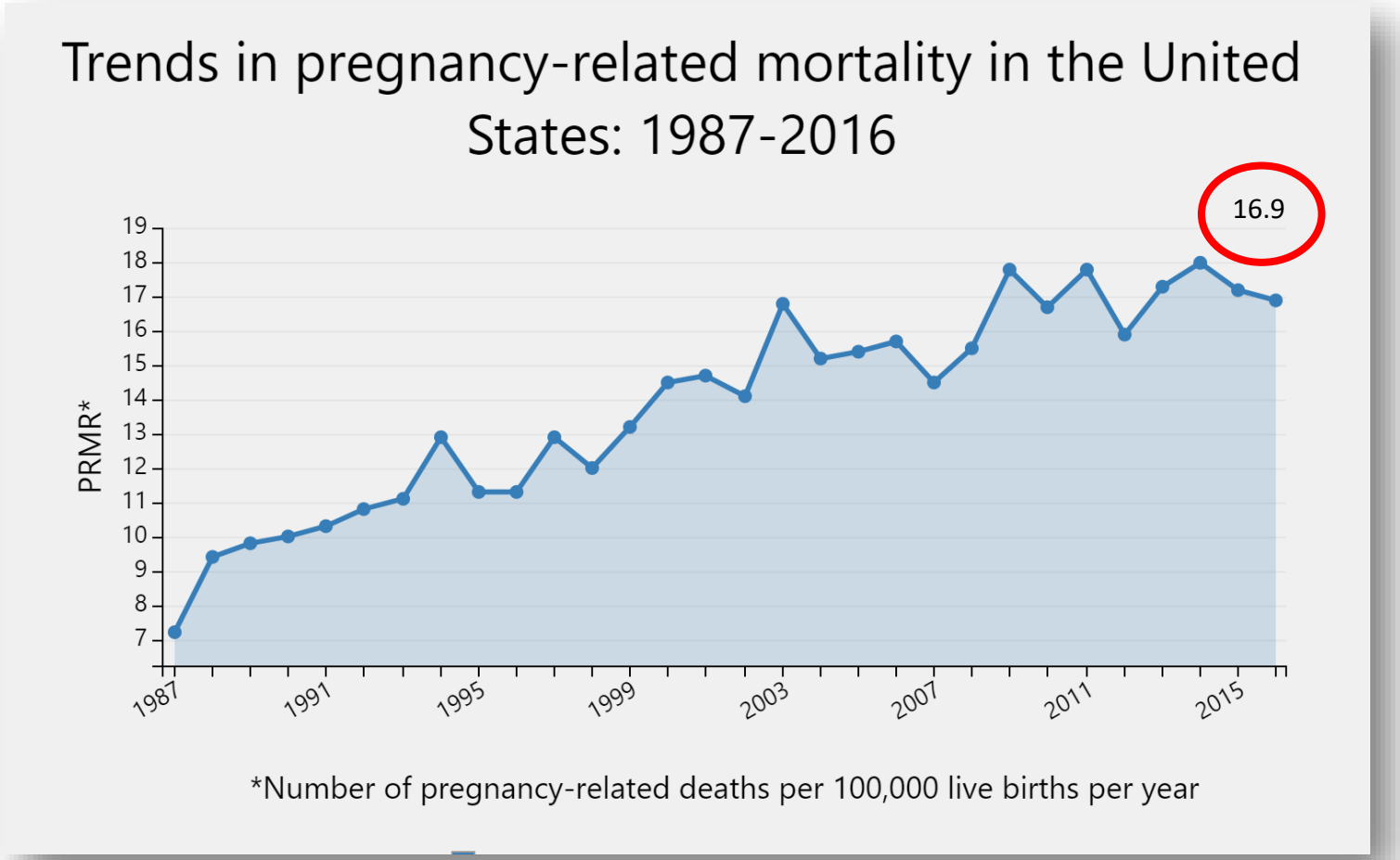
FAIR AND IMPARTIAL

(https://languages.oup.com/google-dictionary-en/)

Steps to Success

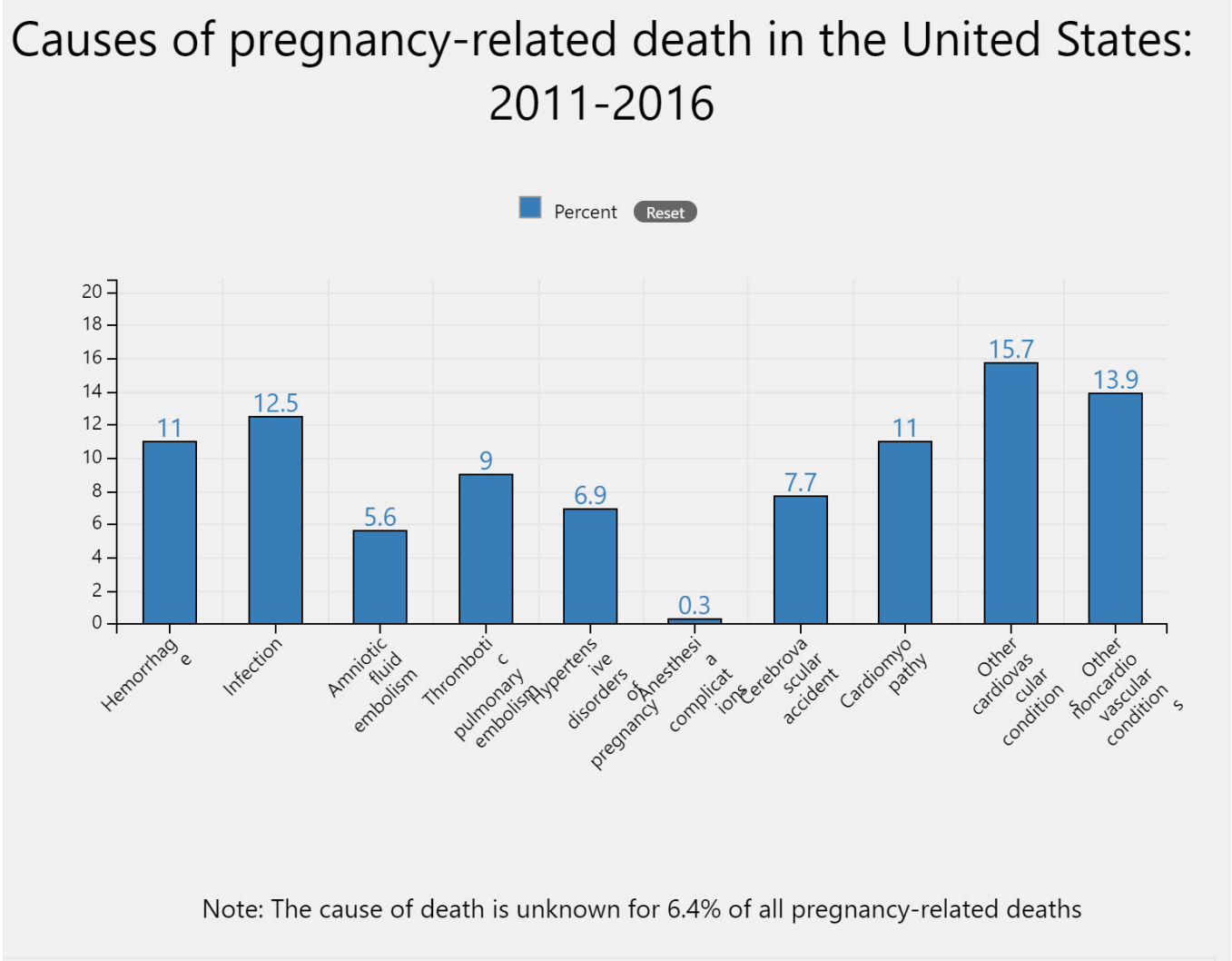


Maternal Mortality Trends in the United States



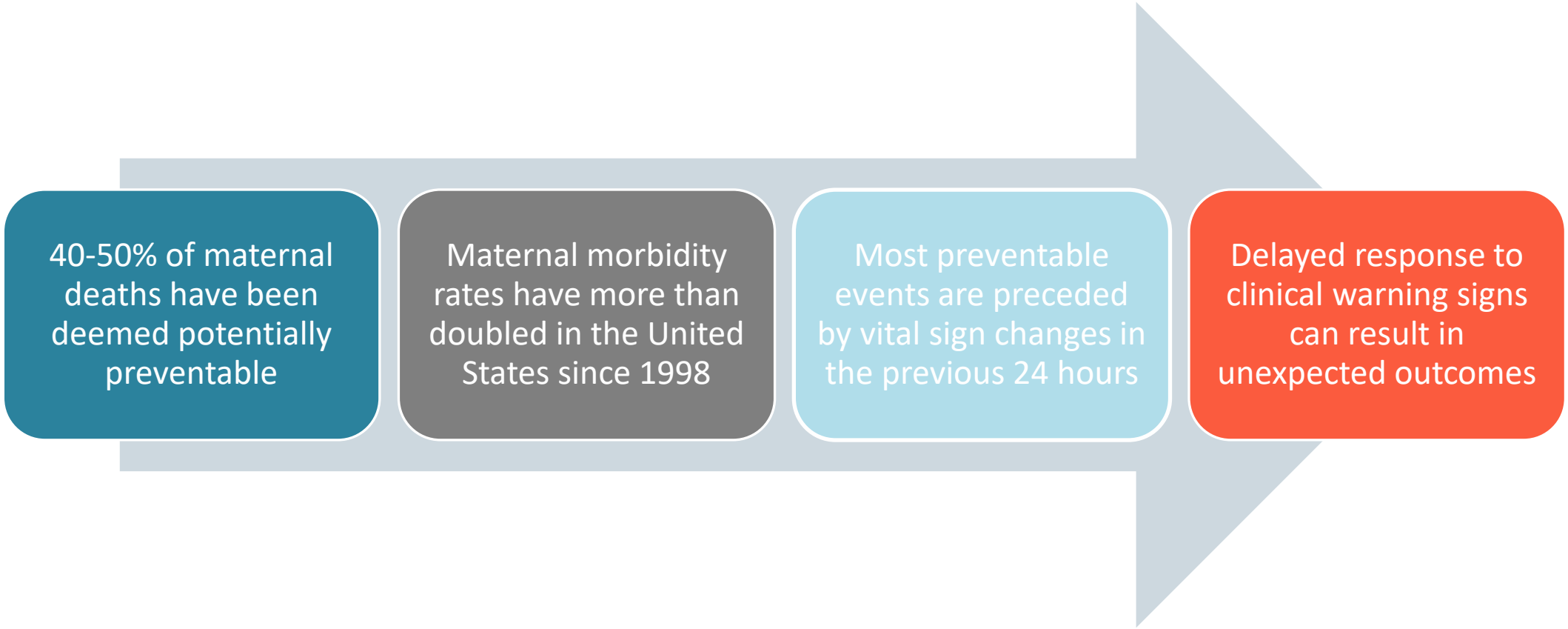
(https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm)

(https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/reduce-maternal-deaths-mich-04)



(https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm)

Background



(MacDorman et. al., 2016; Mhyre et al., 2014; Morton et al., 2019; Shields et al., 2016)

Medical complexity of the pregnant patient

Failure to appreciate the patient's worsening condition in a timely manner

Need for standardized national obstetric patient safety standards

Limited research exists on maternal early warning systems

Resource and guidance during implementation

(Arora et al., 2016; Carle et al., 2013; Cole, 2014; Mhyre et al., 2014; Shields et al., 2016)

Significance

Steps to Success

Step 1

Identify the problem:

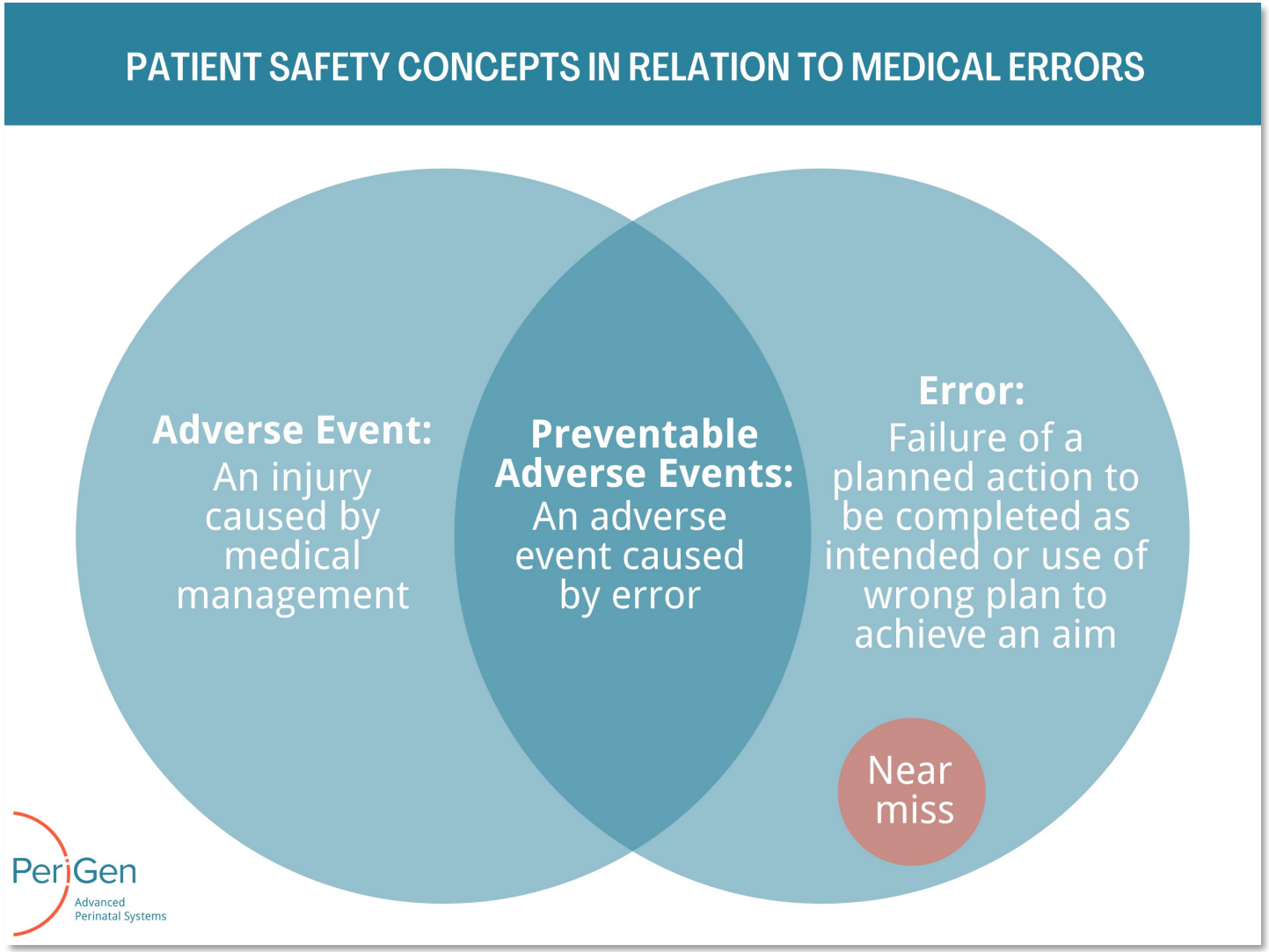
Rising Maternal M&M rates

Step 2

Identify the harm:

Normalizing Deviance

To Err is Human



To learn more about PeriGen, please visit PeriGen.com

(Gluck, P., 2012)

Normalization of Deviance

Diane Vaughn (1996) The Challenger Disaster

Variation in policies and procedures

Shortcuts are learned behaviors

Failure to appreciate skipping steps

Persistent cultural norm

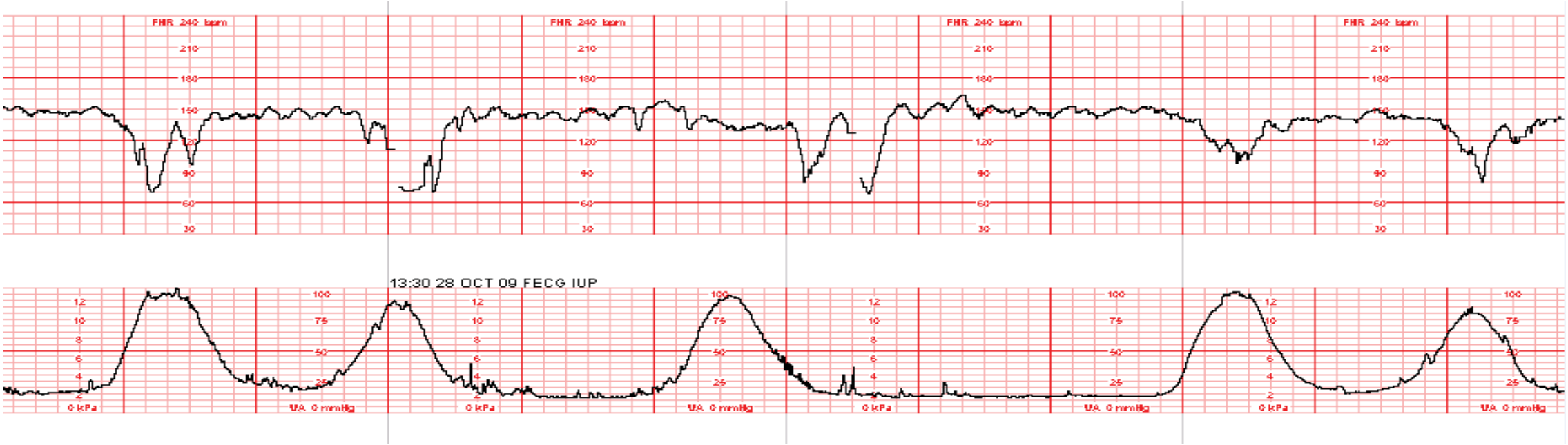
Poll Question

Let's talk about normalizing deviation around Oxytocin administration. In your practice, **have you been exposed to the concept of "Pit to distress", or "Pit till you dip", or "Make the baby prove themselves":**

a) Yes, in the past year
b) Yes, in the past five years
c) Yes, but it was a long time ago
d) No, I have never heard that

Case Example

Category II



Maternal Patient Safety

- Communication
- Organization culture
- Staff Competency
- Environment

(Obstetrics & Gynecology120(5):1149-1159, November 2012.)

https://www.jointcommission.org/-/media/deprecated-unorganized/imported-assets/tjc/system-folders/joint-commission-online/quick_safety_issue_nine_jan_2015_finalpdf.pdf?db=web&hash=D5C49298D4FCB08F66F710FDFFD8CFC3

Subjectivity vs Objectivity

Subjectivity

- Based on or influenced by personal feelings, tastes, or opinions

Objectivity

- Lack of favoritism from one side or another, free from bias

(https://www.merriam-webster.com/dictionary/objectivity)(https://www.merriam-webster.com/dictionary/subjective#h1)

Poll Question

In your personal clinical experience, **do you feel that labor and delivery is effected by subjectivity bias through personal preconceptions or data discrepancy?**

A. Yes

B. No

Self-Reflection

How do we provide equitable care if we naturally have personal, feelings, tastes and opinions?

How can we address subjectivity bias at the bedside?

Can personal preconceptions about others effect our decision-making?

Supporting Personal Objectivity

Control assumptions

Reliance on clinical judgement of the entire picture

Avoid behavior that supports normalizing deviance

Manage personal cognitive dissonance

Boost empathy

Healthcare technology

"Objectivity is seeing all the issues and feelings and contributing without bias....Objectivity is the absence of bias not the absence of empathy."

(https://medium.com/datadriveninvestor/objectivity-and-empathy-forge-unlikely-partnership-4621a305e55a)

Steps to Success

Step 1

Identify the problem:

Rising Maternal M&M rates

Step 2

Identify the harm:

Normalizing Deviance

Step 3

Identify a solution:

Early Warning Systems

Early Warning Systems

Combination of objective patient data elements

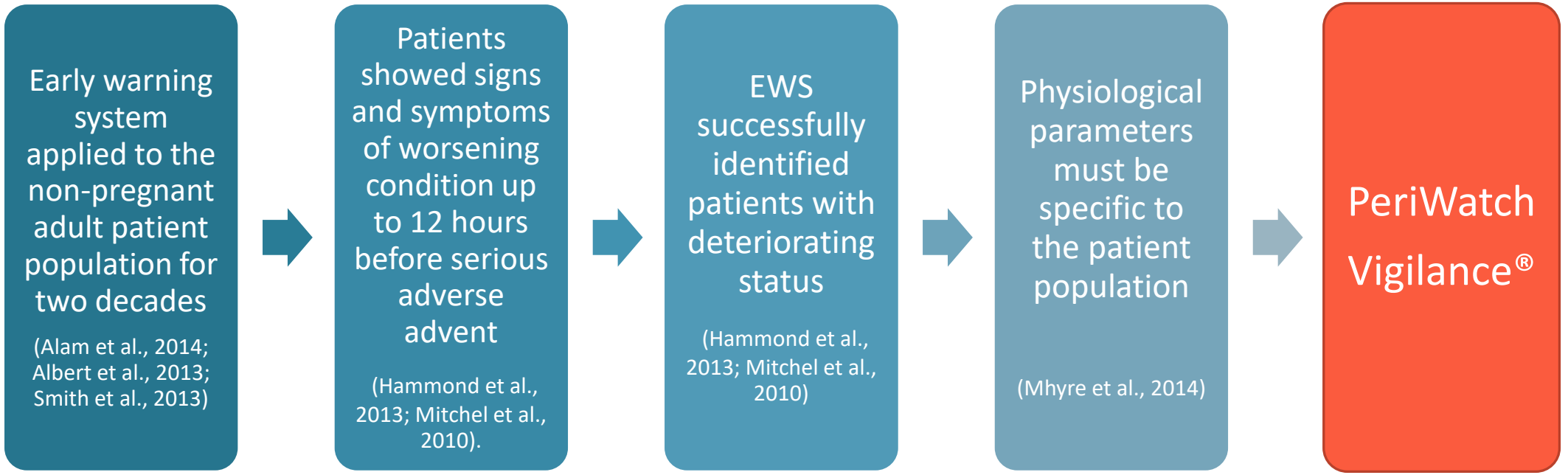
Aggregate scoring system

Parameters determine normal or abnormal trend

Promotes recognition and interventions be timely

Eliminates subjective assessment

Maternal Early Warning Systems



Early Warning System Examples

To learn more about PeriGen, please visit PeriGen.com

Poll Question

Do you currently utilize a maternal early warning system?

1. Yes, paper tool
2. Yes, electronic maternal only system
3. Yes, Vigilance (the only automated maternal-fetal EWS)
4. No

Benefits of EWS Automation

- Automated Early Warning Systems are calculators
- Prioritizes clinically relevant patient information
- Objective identification of at-risk patients
- Addresses equitable delivery of care

(Paternina-Caicedo et. al, 2017)

PeriWatch Vigilance® Demonstration

PeriWatch Vigilance®

- PeriWatch Vigilance is an OB Early Warning System, not a documentation system
- Aggregates data from your fetal monitor and EMR, it analyzes that data and gives it back to you with actionable notifications and information
- Quality improvement tool; does not send information back to the permanent medical record.
- **Goal:** Provide the caregivers with timely notifications of potentially worsening conditions so you can assess the patient, intervene as appropriate *and potentially avoid a delay in care.*

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Improve quality of care

Address maternal and fetal safety

Objectivity in nursing practice

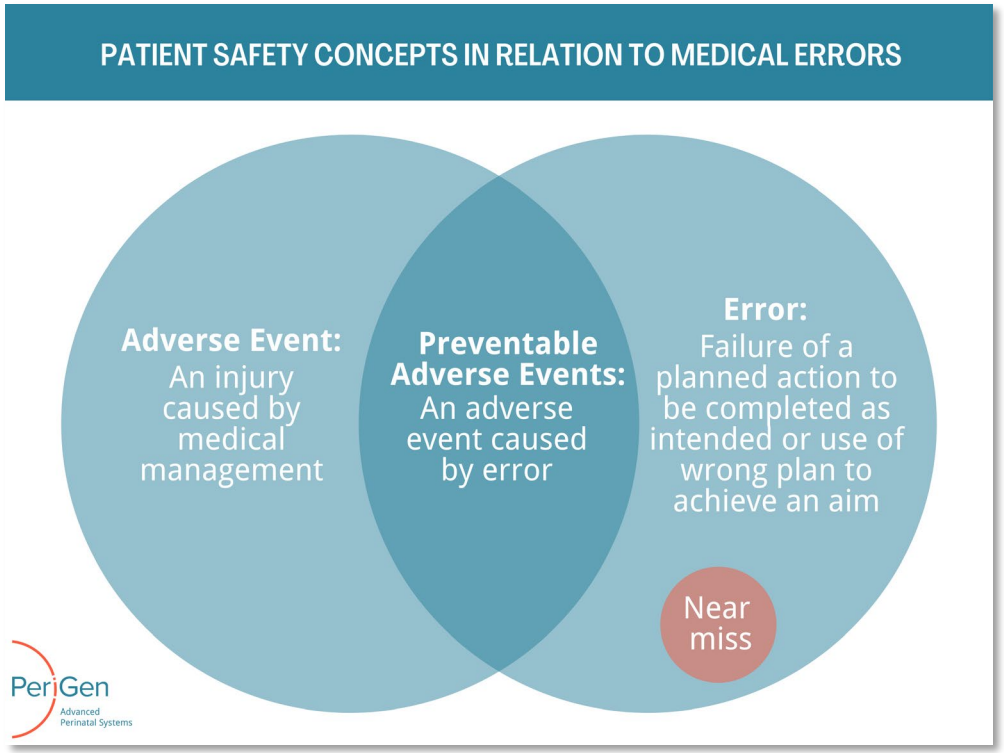
Automated early warning systems benefits

Equitable care tool

Summary

Resources

Graphics available for download following the presentation



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Thank You

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References

Available upon request