



# *Avera Health Maternity*

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# Avera Health

Avera's roots stretch back to the frontier of medicine of the Benedictine and Presentation Sisters; who began providing health care in Dakota Territory in 1897.

Avera is still sponsored by these same Sisters today, which helps lead to our mission:

*"Avera is a health ministry rooted in the Gospel. Our mission is to make a positive impact in the lives and health of persons and communities by providing quality services guided by Christian Values."*

North Dakota

Avera Health:  
72,000 sq Miles

South Dakota

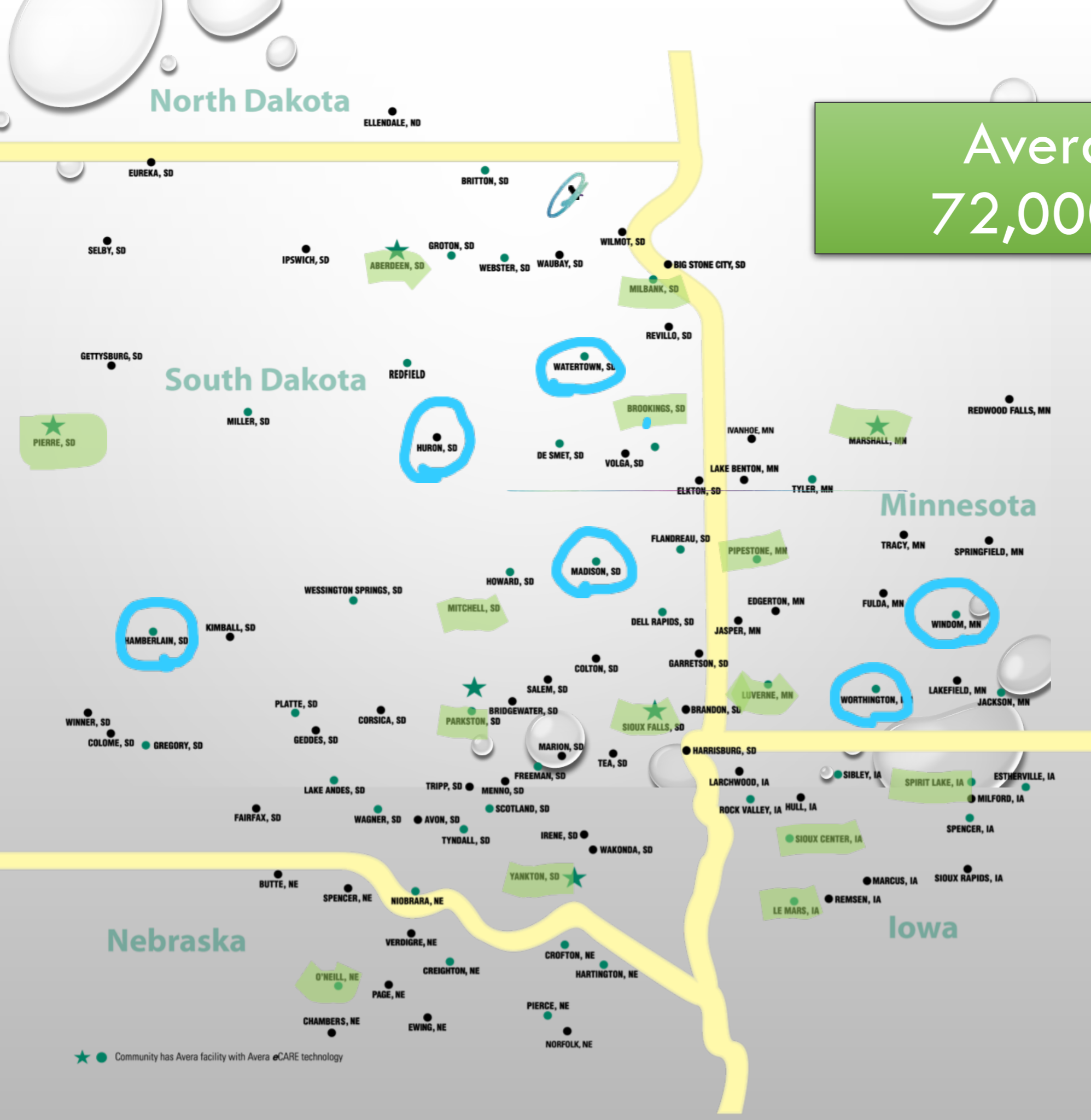
Minnesota

Nebraska

Iowa

Maternal Levels of Care:  
Level 3: 1  
Level 2: 5  
Level 1: 10  
Referring CAHs: 7

★ ● Community has Avera facility with Avera eCARE technology

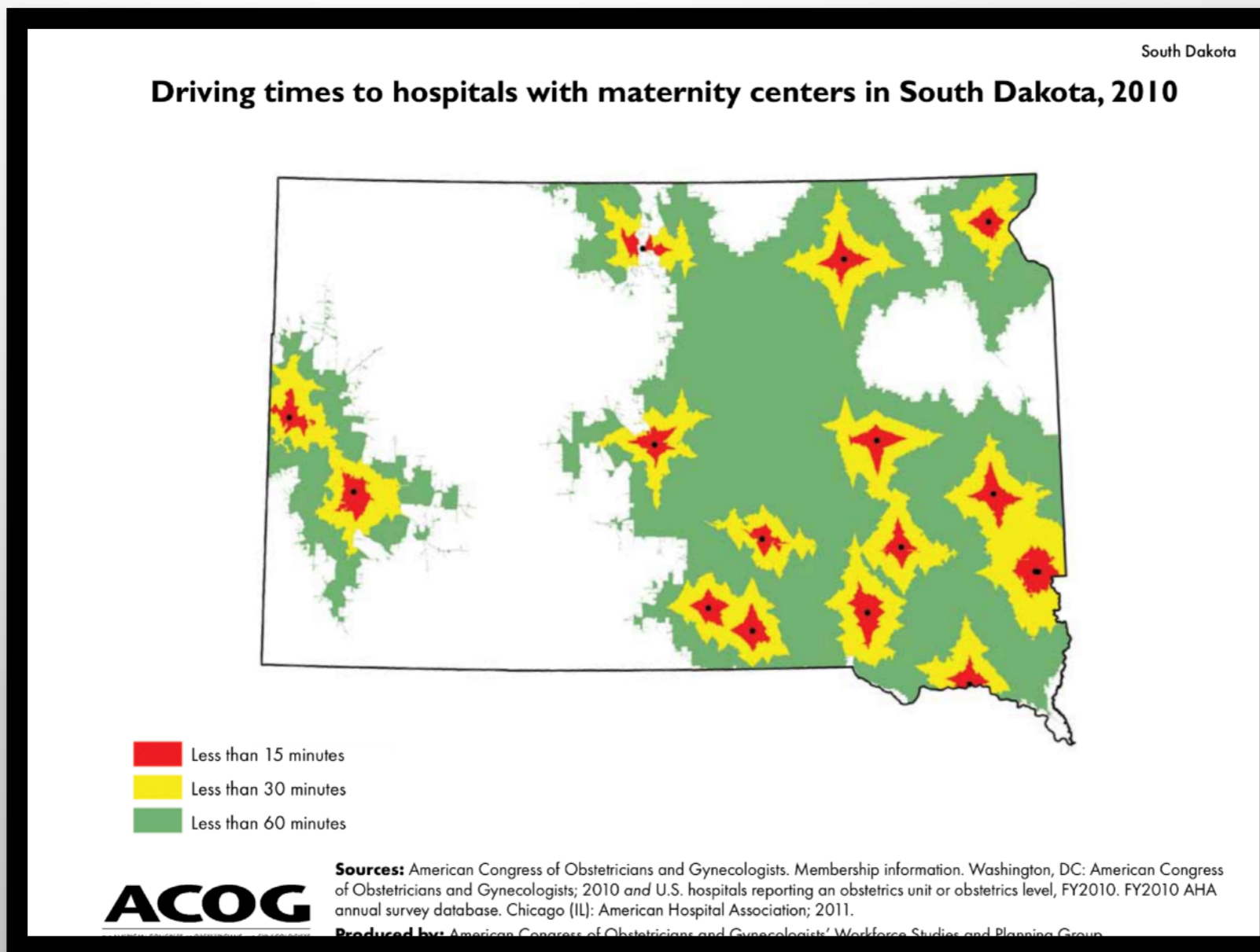




# AVERA HEALTH

- 6,700 BIRTHS/YEAR
- MEDITECH EMR
- PERIWATCH FETAL MONITORING
- 80 DELIVERING PHYSICIANS
  - OB/GYN
  - MFM
  - FAMILY PRACTICE OBSTETRICS
  - CERTIFIED NURSE MIDWIVES
- OB/GYN SERVICE LINE X 5 YEARS
- MFM ASYNCHRONOUS TELEMEDICINE
- ECARE TRANSFER CENTER
- HIGHLY INTEGRATED HEALTH SYSTEM

# What does it mean to be “Rural?”



## AVERA HEALTH EXPERIENCE

- **MOTHERSHIP- TERTIARY CARE HOSPITAL-  
AVERA MCKENNAN-DID TEAM TRAINING  
2008**
- **5 REGIONAL SITES 400-600 DELIVERIES-  
ABERDEEN, PIERRE, YANKTON, MITCHELL-  
SOUTH DAKOTA, MARSHALL ,MN**
- **11 CRITICAL ACCESS HOSPITALS OR  
RURAL HOSPITALS 50-250 DELIVERIES**

## NEEDS ASSESSMENT: LESSONS LEARNED

- CASE REVIEWS SMM, MAT DEATH OR INTRA-PARTUM DEATH >2500 GRAMS >35 WEEKS OR FAILURE TO TRANSFER <34 WEEKS ACROSS SYSTEM
- NEED STANDARDIZATION OF RECOVERY FROM C/S SO BABIES ARE WITH MOMS
- NEED COOLER AVAILABLE WITH MTP IN HOSPITALS IN WHICH NOT CONSISTENT
- NEED UTILIZE CHAIN OF COMMAND
- ANESTHESIA GUIDELINES CONSISTENT BMI, AVAILABLE TO COME IN FOR DOUBLE SET UP
- ALL ORS NEED FETAL MONITORS
- VARIABILITY IN MAT TRANSFERS RE READINESS OF PT, RECORDS, MEDS ETC
- CONSIDER DEBRIEF OF ALL TRANSFERS
- DEFINE GESTATIONAL AGE FOR TRANSFER
- PIERRE- NO TELEMEDICINE
- MITCHELL KEYS FOR ELEVATOR
- YANKTON COOLER

*Critical  
Access /  
Rural  
Hospitals*

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HARDER FOR STAFF TO TAKE TIME OFF

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OFTEN HAVE TO HIRE LOCUMS

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FAMILY MEDICINE

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FOCUSED ON SHOULDER DYSTOCIA AND  
HEMORRHAGE

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FACILITATED CREATION OF PP PROTOCOL AND  
HEMORRHAGE CART, AND PRACTICE WITH BARKI  
BALLOON

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DISCUSS REMOTE SURGICAL TEAM AND HOW  
TO ASSEMBLE A TEAM



PERSPECTIVE

THE MATERNAL HEALTH COMPACT

RURAL HEALTH CARE

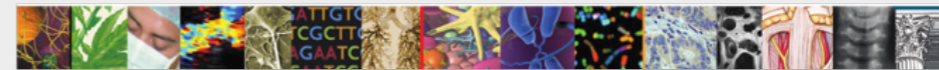
## The Maternal Health Compact

Susan Mann, M.D., Kimberlee McKay, M.D., and Haywood Brown, M.D.

In a rural Minnesota town with fewer than 5000 residents, an 18-year-old woman with a term service that provides real-time specialty expertise to lower-resource care settings. data pertaining to severe maternal complications and pregnancy-related deaths owing to varied

# MATERNAL HEALTH COMPACT

# 1 000 WORDS TO TELL A BIG STORY.



The NEW ENGLAND JOURNAL of MEDICINE

Perspective  
NOVEMBER 1, 2018

## What We Can Do about Maternal Mortality — And How to Do It Quickly

Susan Mann, M.D., Lisa M. Hollier, M.D., Kimberlee McKay, M.D., and Haywood Brown, M.D.

**M**ost Americans take for granted that giving birth in a U.S. hospital will be a safe experience resulting in a healthy mother and baby. However, recent reports in the lay media —

an NPR special series called “Lost Mothers: Maternal Mortality in the U.S.”; a *New York Times* article on closures of rural maternal services; and a *USA Today* series, “Deadly Deliveries” — discuss increasing maternal mortality in the United States and the significant concern it presents for child-bearing women and their families.

Women in the United States are more likely to die from child-birth- or pregnancy-related causes than women in any other high-income country, and black women die at a rate three to four times that of white women. Increasing maternal mortality is a tragedy, and though multiple factors contribute to the risk of maternal

death, national and state reviews have identified the most preventable contributors. The Centers for Disease Control and Prevention (CDC) defines a pregnancy-related death as “the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.” Three types of complications the CDC identifies as the most common potentially preventable are postpartum hemorrhage, severe hypertension, and venous thromboembolism.<sup>1</sup>

So how can the health care community reverse the devastat-

ing trend in pregnancy-related deaths? We recommend four actions that can be adopted by every hospital providing obstetrical care, regardless of its size.

First, hospitals can expand their focus on the preventable causes of obstetrical complications and related death. The Alliance for Innovation on Maternal Health (AIM) — a collaboration led by the American College of Obstetricians and Gynecologists (ACOG) and involving 30 other organizations representing the spectrum of women’s health care<sup>2</sup> — created several “bundles” of best practices for improving safety in maternity care, to help clinicians, the obstetrical team, and facilities consistently manage the care of high-risk pregnant women, including those with the three most common preventable complications identified by the CDC. We recommend implementation

# ***CMS QUALITY METRICS***

PC-01 EED

PC-02 PRIMARY CS

PC-03 ANTE STEROIDS

PC-04 NEWBORN

INFECTIONS

PC-05 EBF

# Not all Facilities are Joint Commission Accredited—and PC Measures are not a lever. (Lessons from PC 01 Implementation).



1. Implementing a standard process is possible for every facility—but accountability requires strategy.
2. Knowing CMS exceptions and communicating changes is helpful.
3. When in doubt: [www.hospitalcompare.org](http://www.hospitalcompare.org)

# DATA IN RURAL: THE AOI

National Perinatal Information Centers

## FACTS:

1. Data collection requires people and money —which rural facilities do not have.
2. Transfers are difficult to track.
3. Documentation consistency is imperative.
4. Coding consistency is imperative.

# CAN WE USE THE SAME MEASURES?

# SMM in Rural.

1. Hemorrhage
2. Unplanned ICU Admission
3. Hypertensive Crisis —not responsive
4. Sepsis
5. Transfer to a Higher Level of care

What keeps you up at 2 am?

# Implementing AIM Safety Bundles: Obstetric Hemorrhage.

## Readiness:

1. Carts are easy—but sometimes you forget where they are.
2. Blood bank—What is MTP without platelets?
3. Meds are important—but sometimes they are down the hall and around the corner.
4. Staffing—2 nurses in house, and one may be staffing the ED.





# Find the Levers.

## ❖ **Avera EMR System Governance—all order sets and documentation templates are managed within Service Lines**

1. Standard intra-partum sets include auto check of hemorrhage medications.
2. Standard Delivery Summary to capture correct documentation.
3. Standard Delayed PPH floor Note

## ❖ **Standardized Carts/Medication work flow.**

1. What is the process for medication verification in your facility?
  1. eCare Pharmacy oversight allows for medications to be released quickly when they fall outside standard medications. (TXA)
2. Refrigerate near or in the delivery room.
3. Bakri Baloon:
  1. Supply Chain for Avera Health negotiated a price and a pathway was created for ordering the device.



# • And then.....there is Blood Bank.

## • *Things to know:*

- Platelets are precious.
- FFP is distributed by a supplier that determines need of the facility.
- FFP takes 45 minutes to thaw in a water bath—which is rarely used in small facilities.
- MTPs in literature always includes platelets—but in our experience, they are rarely necessary.
- Facilities keep 8-10 units, only a few of which are O neg, so transfusing 4 units in an MTP is mostly impossible.
- Level 1 and 2 Facilities need to consider Type Specific MTP
- Type and Screen on EVERY patient shortens the process in tertiary care facilities, but is imperative if Type Specific MTP is implemented.





## RURAL BLOOD BANK INVENTORY

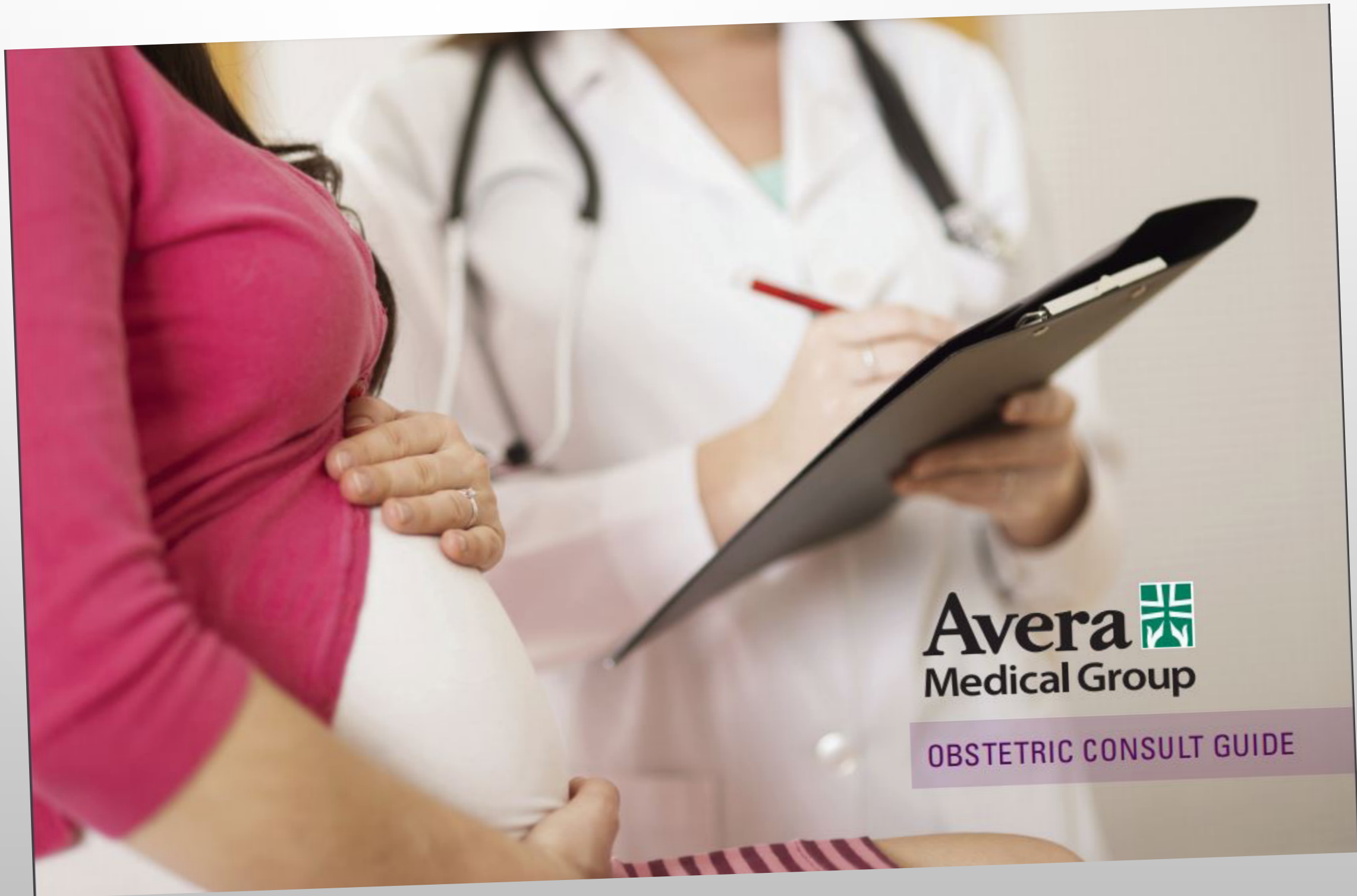
- 2-4 U O NEG
- 2-4 U O POS
- 2-4 U COMBINATION A/B POS
- 4 U FFP


# AVERA CONSULT GUIDE

***System initiative intended to guide patients to the right consultant.  
(Strengthened co-management relationships)***

**❖ *Examples:***

- 1. *VBAC (FP or CNMW with Ob Consultation)***
- 2. *Morbid obesity—(level 2 or higher)***
- 3. *Type 2 DM (Ob with MFM consult).***
- 4. *Maternal Cardiac Conditions (MFM)***



**Avera**   
**Medical Group**

OBSTETRIC CONSULT GUIDE



***AVERA eCare***  
***Maternity***

**INNOVATING A NEW CARE STANDARD**

**Avera Health and Avera eCare**



**Questions?**