



# ACUTE HYPERTENSION



Quality Improvement & AIM Patient  
Safety Bundle Implementation

# The Numbers

## Prevalance **01**

5-7% of all pregnancies  
70,000 maternal deaths  
50,000 fetal deaths

## During **02** 2017-2019

HDP during delivery hospitalizations increased from 13/3% to 15.9%

Pregnancy-associated HTN increased from 10.8% to 13%

Chronic HTN increased from 2.0% to 2.3%

Delivery hospitalization deaths = 31.6% HDP

## Rural (2017- **03** 2019)

Prevalence of any HDP higher among those residing in rural counties (15.5%) and in zip codes in the lowest median household-level income quartile (16.4%)

Rural counties = higher risk for pregnancy-related mortality

## SMM **04**

HDP accounted for 7% maternal deaths in 2019

Pregnancy-associated stroke accounts for 7.7% of maternal deaths

>80% preventable

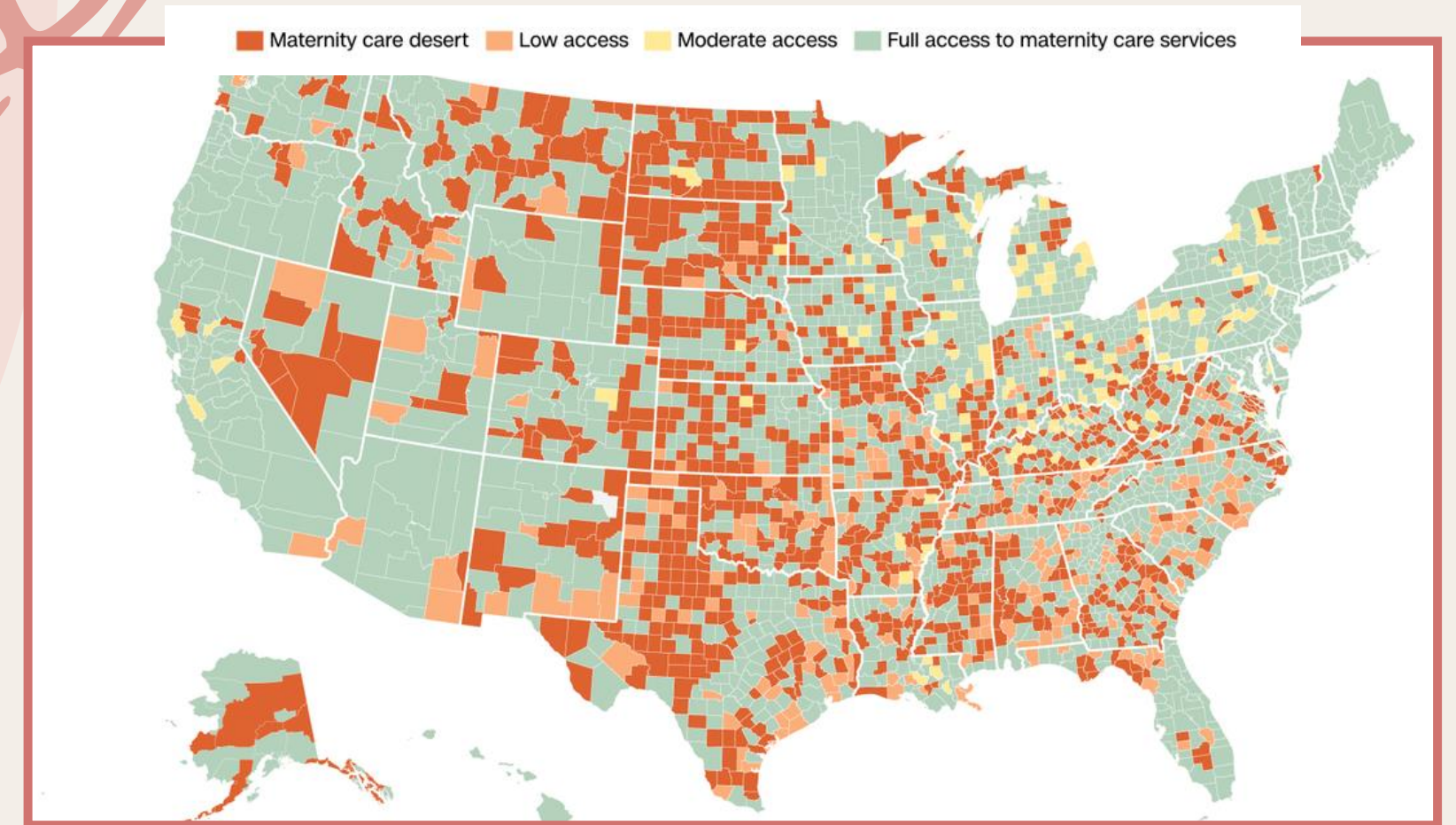
2nd leading cause of severe morbidity



# Maternity Care Deserts

**1/3 US Counties considered maternity care desert**

29% Idaho counties are defined as maternity care deserts compared to 32.6% in the U.S.



## National

89 closures 2015-2019  
(AHA)

301 closures 2018-2023  
(MOD)

70 in the last year

17 closures so far in 2024

## Idaho

26 hospitals with L&D services with deliveries in 2022 & 2023

11-13 Freestanding Birth Centers

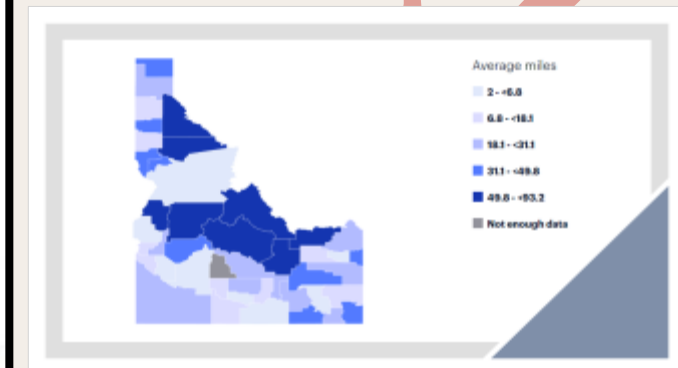
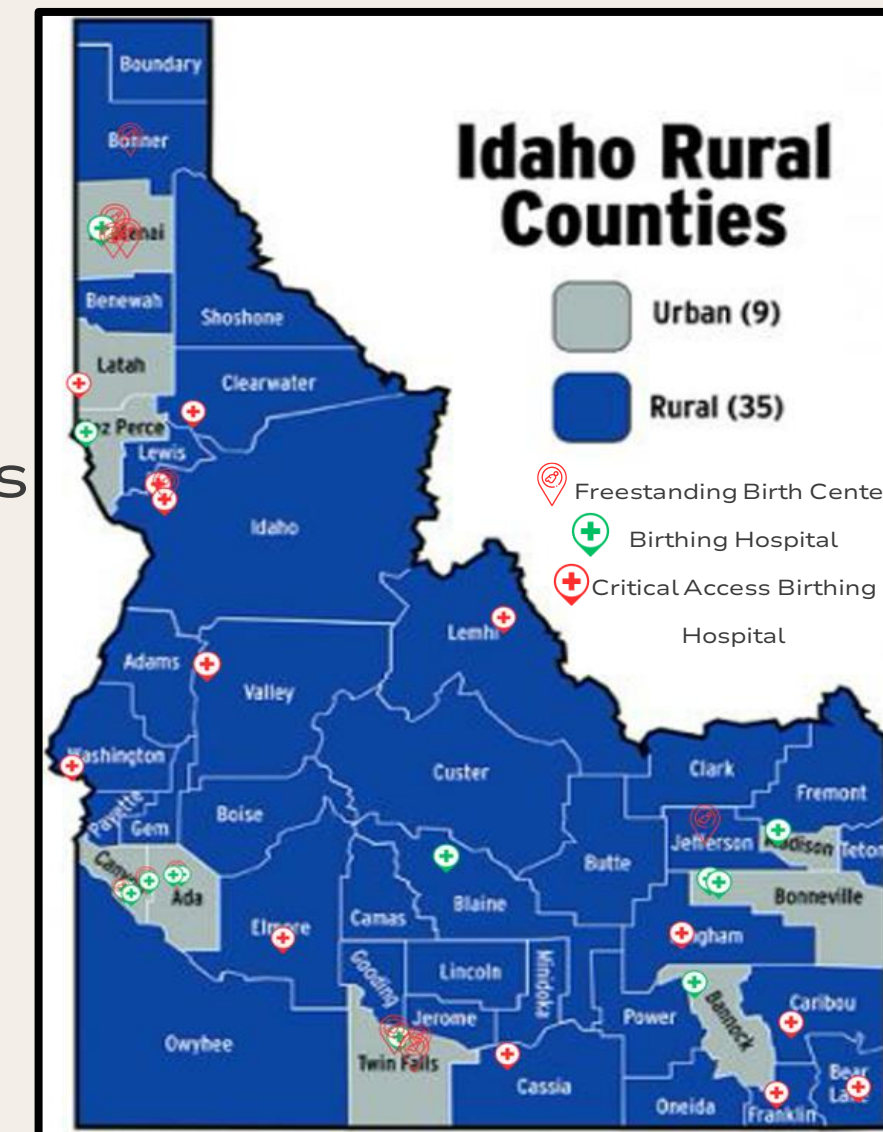
4 OB service closures since 2021

St. Luke's Jerome - 2021

Valor Health - 2023

Bonner General - 2023 West

Valley - 2024



# What are the Biggest Opportunities?



## Treating the BP

In the right way, at the  
right time  
Every patient, every  
time



## Postpartum Follow up

BP checks 3-7 days  
Appts made prior to  
d/c  
Patient education



## Engaging Ambulatory, ED & EMS Partners

Delayed recognition  
Dismissal of symptoms  
as “normal”

Rural Resources

# The Gaps

Delivery is a treatment **NOT** a  
cure

3  
Deadly  
D's

Denial

Delay

Dismissal

**TREAT THE BLOOD PRESSURE!**

# AIM Safety Bundles

Patient safety bundles are a structured way of improving processes of care and patient outcomes.

Collections of evidence-based practices, developed by multidisciplinary experts, to address clinically specific conditions

Supported by quality metrics and measures through the AIM Data Center to address the leading known causes of preventable severe maternal morbidity and mortality

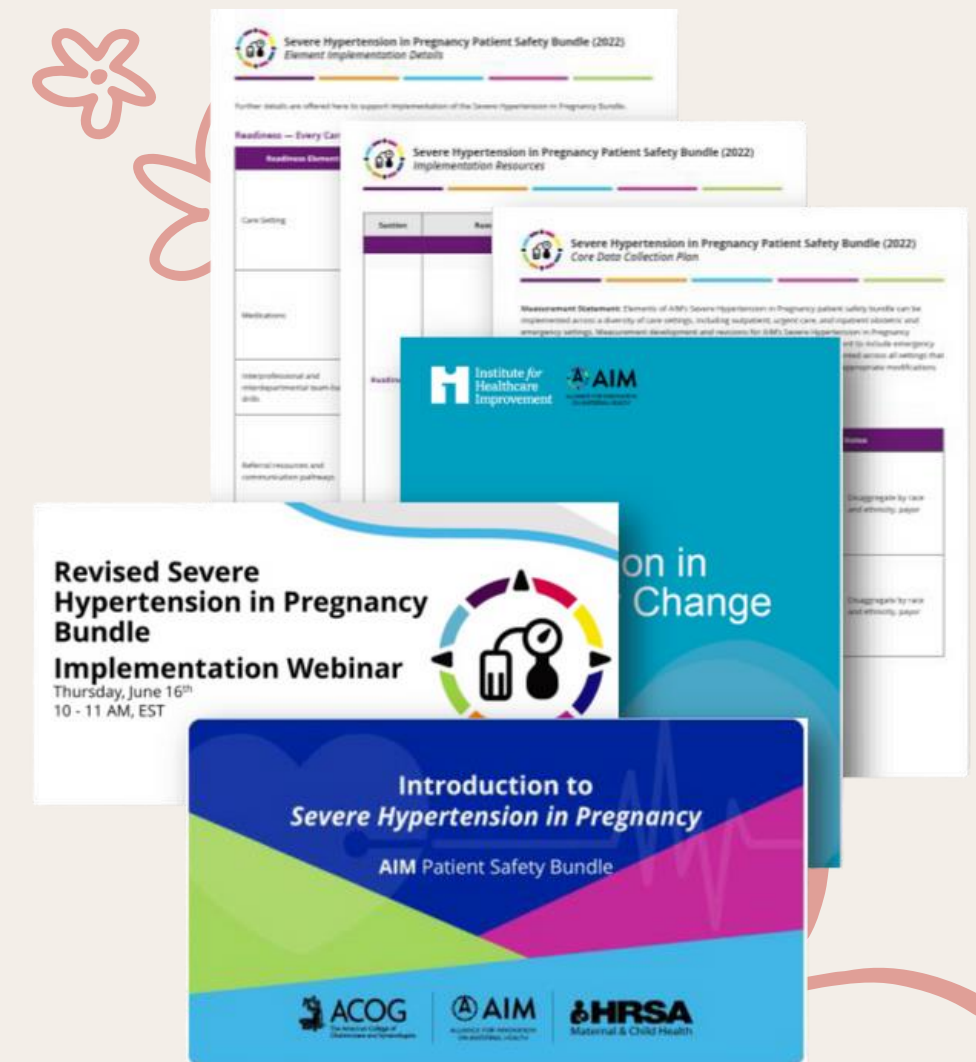
Includes actionable steps that can be adapted to a variety of facilities and resource levels



To improve the way care is provided to improve outcomes

# Each Safety Bundle Includes

Implementation details  
implementation resources  
data collection plan  
implementation webinar  
change package  
introductory video  
learning module



**R**

**READINESS**

**R**

**RECOGNITION**

**R**

**RESPONSE**

**R**

**REPORTING**

**R**

**RESPECTFUL**





# EVERY CARE SETTING

Developing processes for management:

standard protocol

process for timely triage and evaluation

system plan for escalation

rapid access to medications

guide for administration

interprofessional and interdepartmental team-based drills

referral resources and communication pathways

trauma-informed protocols and education to address biases

# R

READINESS

# EVERY PATIENT

Assess and document if a patient is pregnant or has been pregnant

Accurate measurement and assessment of blood pressure

Screen for social determinants of health

Provide ongoing education to all patients (Empower them to seek care)

Provide ongoing education to all health care team members

**R**  
**RECOGNITION**  
**& PREVENTION**

# EVERY PATIENT

R

RESPONSE

Utilize a standardized protocol

Initiate postpartum follow up visit to occur within 3 days of discharge

Provide trauma-informed support

## EVERY UNIT

R

Establish a culture of multidisciplinary planning, huddles and post-event debriefs for every case of severe hypertension

Perform multidisciplinary reviews of all cases

Monitor outcomes and process data

LEARNING & REPORTING SYSTEMS

**EVERY UNIT/PROVIDER/  
TEAM MEMBER**

Engage in open, transparent and empathetic communication  
Include pregnant and postpartum patients as part of the  
multidisciplinary care team

**R**

**SUPPORTIVE,  
EQUITABLE,  
RESPECTFUL,**

# AIM Data Center

## Objective:

Allow states to implement data collection systems that most closely align with their quality improvement goals.

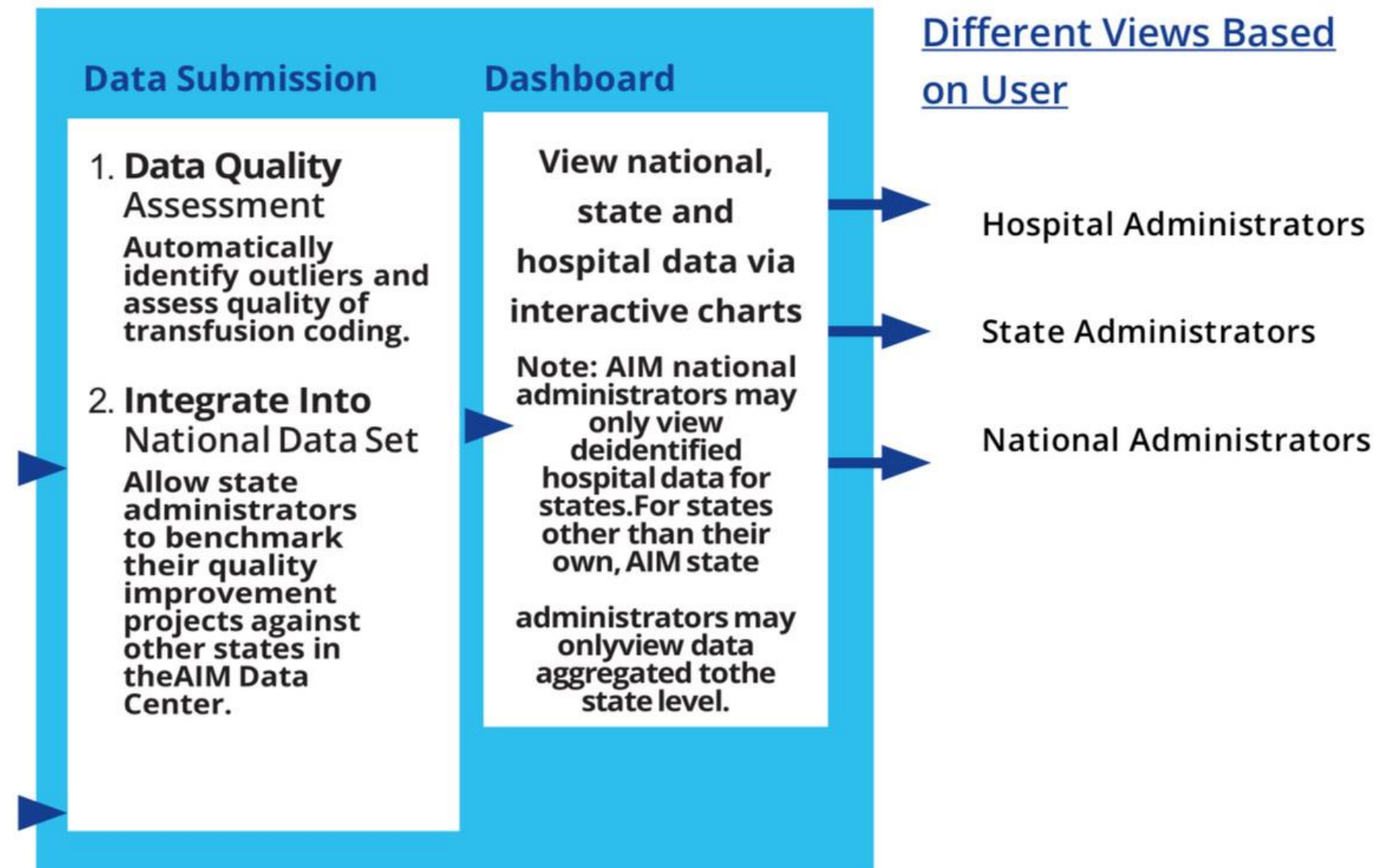
**Hospitals Submit Data Directly to the AIM Data Center**

Hospital administrators upload process and structure data directly to the AIM Data Center. State administrators upload outcome data on hospitals' behalf.

**States Develop Their Own Data Collection System**

Hospital administrators upload process and structure data to a state-run data collection system. State administrators upload structure, process, and outcome data on hospitals' behalf.

## AIM Data Center



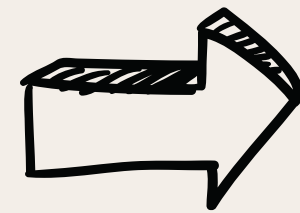
# Implementation Science

What is it?

Study of methods that promote the systematic capture of research findings and other EBP into routine practice

Examines what works, for whom, and under what circumstances and how interventions can be adapted and scaled in ways that are accessible

What we need to do

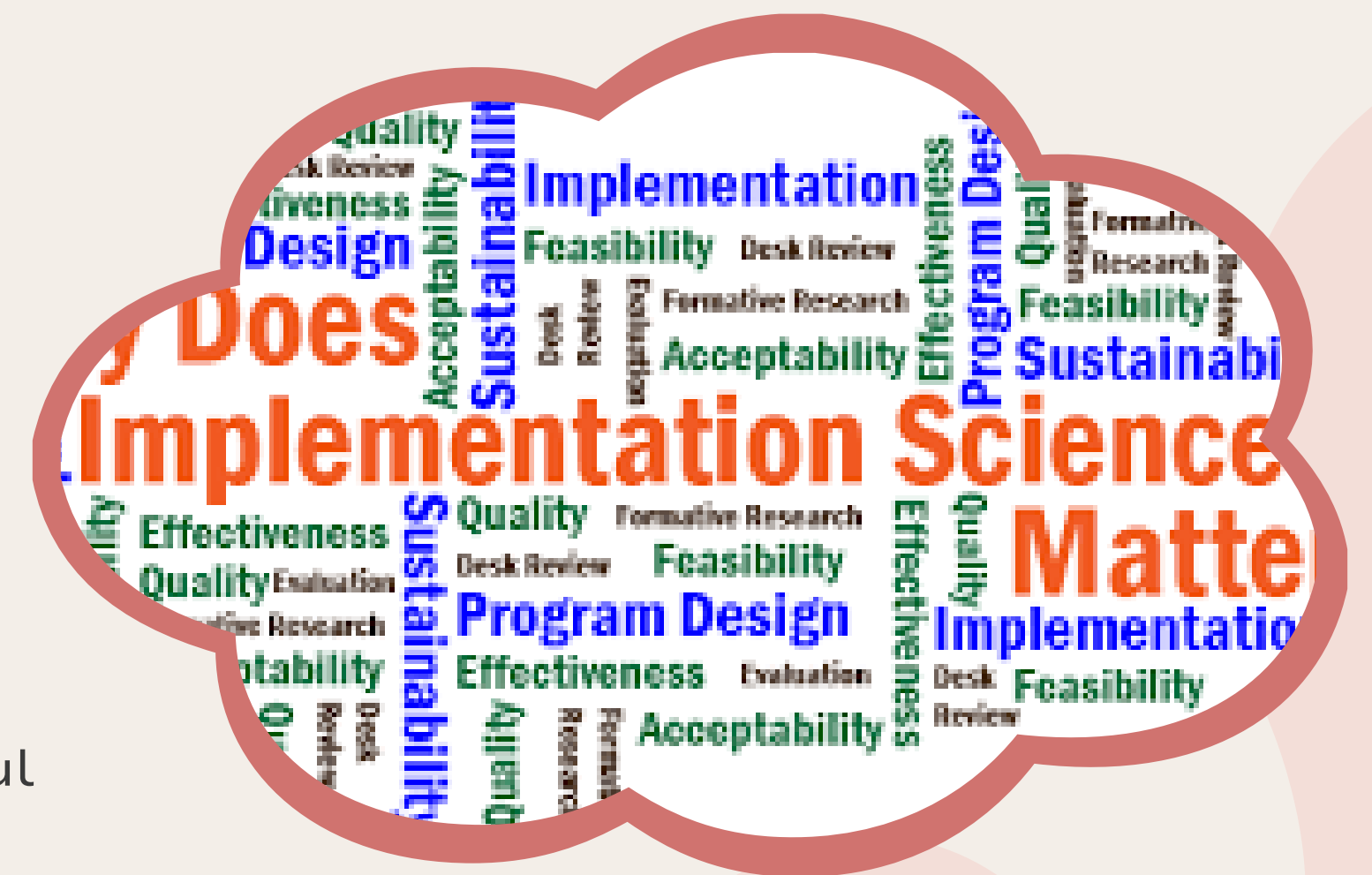


How do we do it

How can we use it?

Investigate and address major factors that hinder successful implementation

continual focus on evaluating the process of implementation  
not just compliance



# Comparing EBP, QI & IS

Goal/Actions	EBP	QI	IS
Identify the problem	Improve health outcomes Review the literature	Improved health outcomes Problems identified through error reporting or internal audits	Improved health outcomes May have EBP program but may not be adopted in practice
Solving the problem	Assess strength of evidence	Review of internal data (audits, protocols, guidelines) Analyze the situation and determine what measures need taken (fishbone)	<b>Basic tenet: evidence and education alone will not change the behaviors or systems</b> <b>Target at system factors that affect the implementation of EBP</b>
Implement solutions	Implement the plan (teach staff about the evidence & they will implement the approach)	Engage in PDSA/PDCA cycles (develop toolkits, checklists, etc. and provide audit feedback)	Assess acceptability, feasibility, and appropriateness of EBP in the specific content

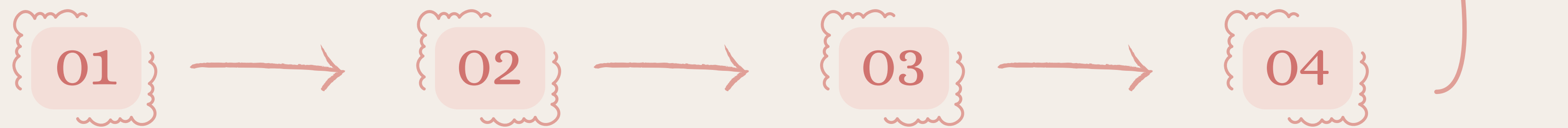
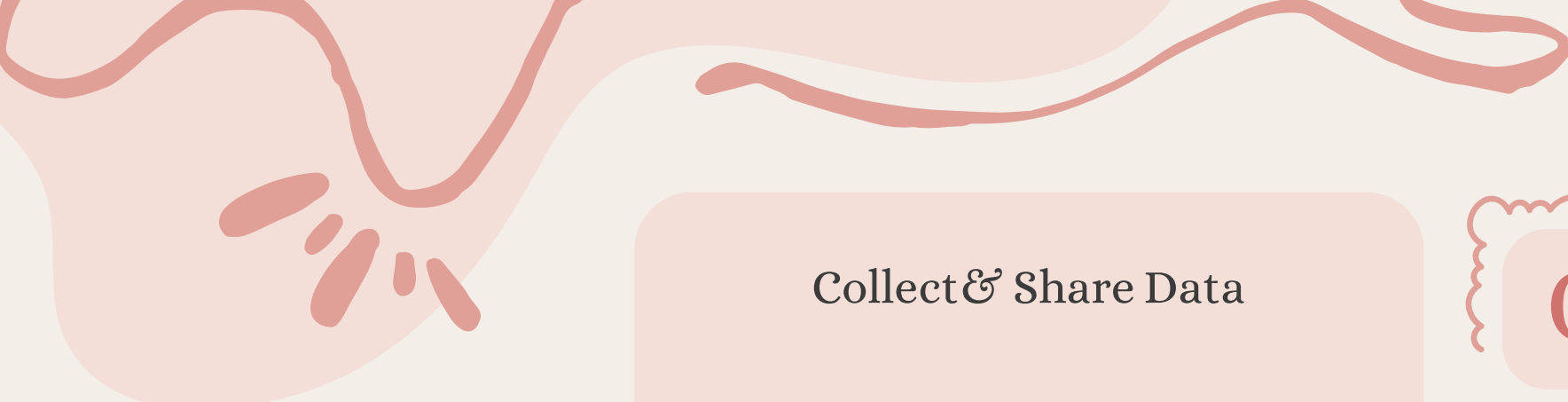


# Comparing EBP, QI & IS

Evaluation/Sustainability	EBP	QI	IS
Evaluation	Similar to the evaluation of the effect of an intervention	Examine percentage of compliance	Document and <b>measure implementation strategies and outcomes</b> ; Calculation of return on investment
Transfer solution to other areas of the organization		Standardize QI approach used throughout the organization	Suitable IS strategies selected for each implementation; Scaling up of the implementation efforts/strategies and spread to other areas
Sustainability		Continuation of <b>measuring standard QI outcomes</b>	Design for sustainability starts right at the beginning; <b>Continuous monitoring and adaption</b> with organizational commitment

THE POWER OF COMMUNITY COMING TOGETHER

# Our Shared Journey Forward



**05**  
Collect & Share Data  
  
Celebrate the wins;  
Identify opportunities;  
Never stop improving

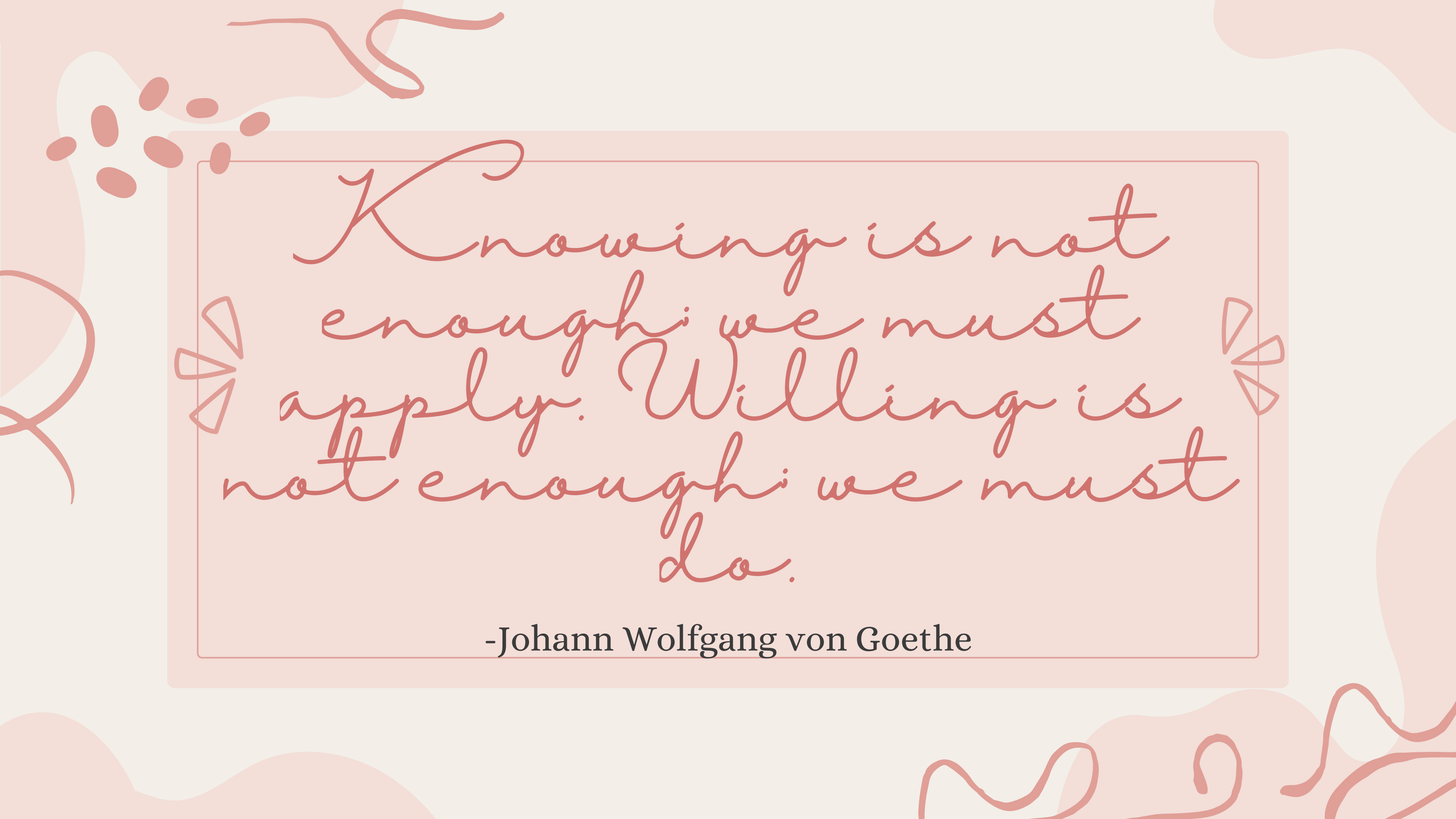
**01**  
**Perinatal Quality Collaboratives**  
  
Implement evidence-based quality improvement initiatives in healthcare facilities



**02**  
**Create Resources**  
  
That every facility in the state can use to put the bundles into place, and easily modify to fit within their needs.

**03**  
**Collaborate**  
  
Use collaborative learning, training, toolkits, and maternal safety bundles to improve the quality of care and outcomes statewide.

**04**  
**Communication & Support**  
  
Promote implementation support and connect leaders to peers across the state



Knowing is not  
enough; we must  
apply. Willing is  
not enough; we must  
do.

-Johann Wolfgang von Goethe

# THANK YOU

*so much!*

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