

# Part 1: Maternal Mortality & Morbidity Skill-Building Session

Healthy Start Regions 1, 2,  
& 3 Meeting

Monday, April 24 from 11:45-12:45



# Addressing Maternal Mortality through Community Clinical Integration

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Clinical Community Integration & Patient  
Safety Implementation Strategist  
AIM-CCI

# Objectives: Part 1

Upon completion of this skill building session, participants will be able to:

- Articulate how our work within the community has potential to impact the effects of social and structural determinants on maternal health
- Utilize the CCI pathway as a framework to guide power shifting strategies
- Consider approaches to leveraging existing resources to inform communities about maternal mortality and preventive measures

*“If the baby dies, the mother cannot be well .*

*If the mother dies, the baby cannot be well.”*

*Dr. Albert Tuyishime, Manager of Planning, Monitoring and Evaluation and  
Business Strategy, Rwanda Biomedical Center, June 18, 2019*

# Maternal Mortality Rates

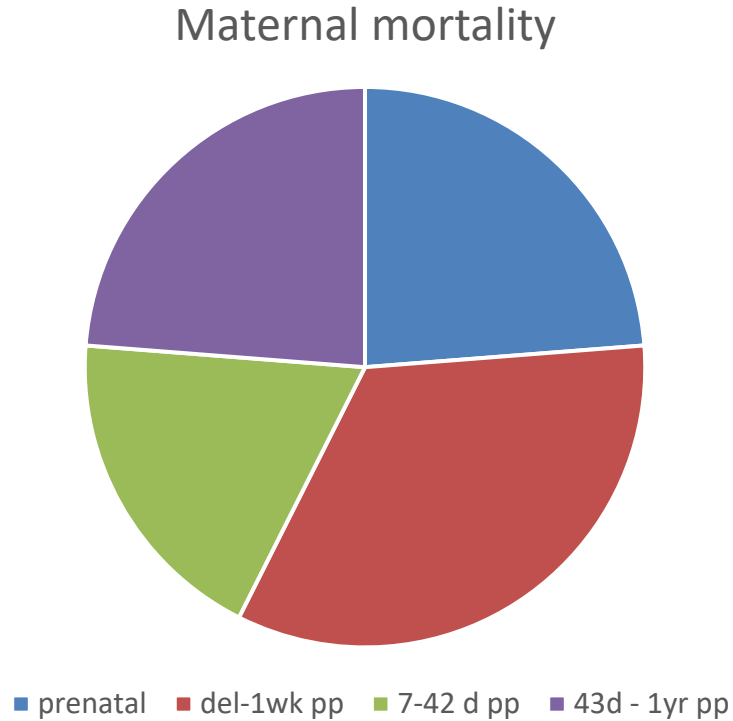
Regions 1, 2 & 3

State	Maternal Deaths/100,000 Births
New Jersey	24.1
Virginia	22.3
Puerto Rico	21*
New York	20.2
Maryland	18.6
Pennsylvania	15
Connecticut	NR
District of Columbia	NR
West Virginia	NR

<https://www.cdc.gov/nchs/maternal-mortality/mmr-2018-2020-state-data.pdf>;

\*<https://www.macrotrends.net/countries/PR/puerto-rico/maternal-mortality-rate>

# Why Do We Need a Continuous, Comprehensive Approach to Birthing People's Health Care?



Cardiovascular conditions, hemorrhage, infection, embolism, cardiomyopathy, mental health, SUD, preeclampsia leading causes of death nationwide in first year postpartum.

# What About Those Who Live?

Severe Maternal Morbidity (SMM) – unexpected outcomes of labor and delivery (CDC)

“Any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman’s well-being”. WHO Maternal Morbidity Working Group)

## Recognizing SMM

- CDC identifies 21 indicators that comprise the most widely used measures for SMM
- Approximately 1.4% of birthing persons in 2016-2017 experienced one of those indicators
- Affects approximately 60,000 birthing people annually (Commonwealth Fund, 2021)



# What We Do Here Today ..... and Every Day Matters More Than We Know





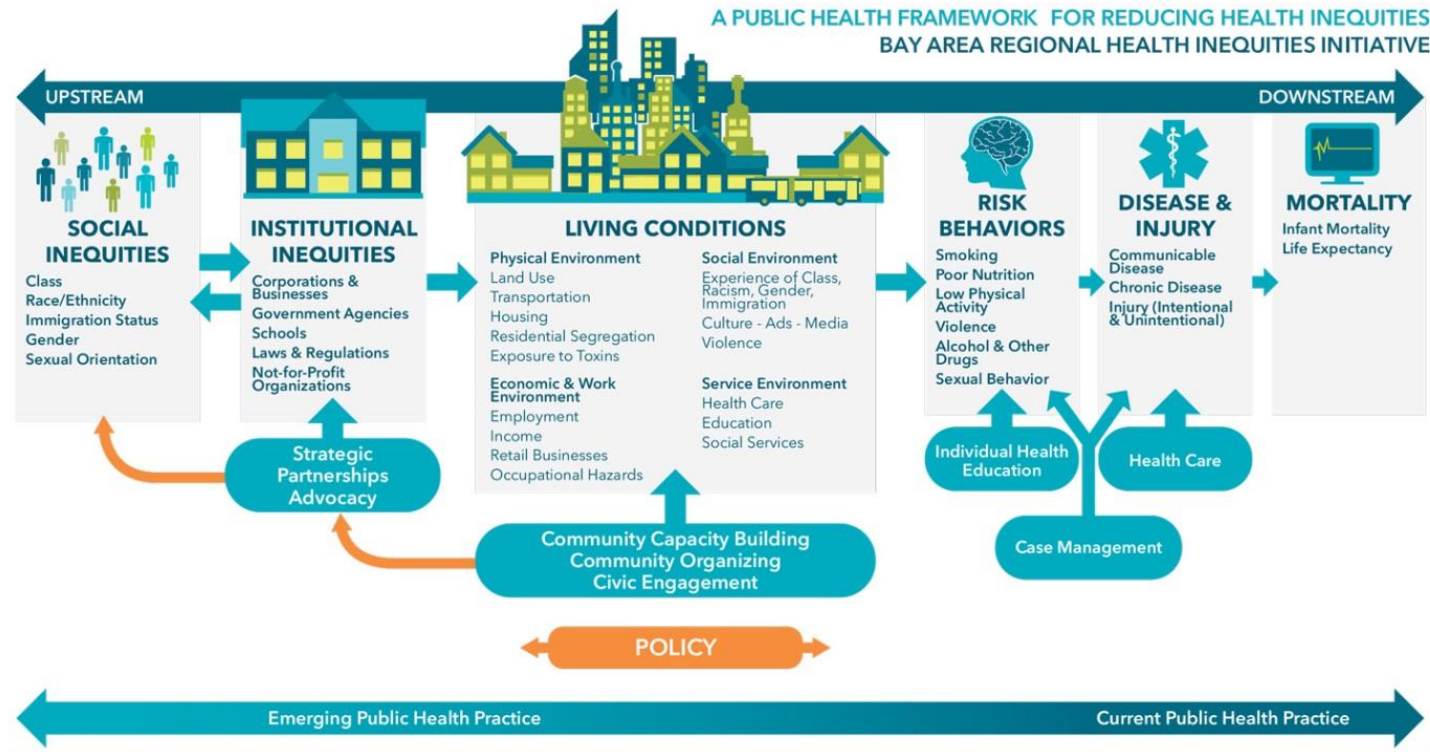
**DO SOCIAL AND STRUCTURAL  
DETERMINANTS IMPACT MATERNAL  
HEALTH?**

# Defining “Determinants”



- **Social Determinants of Health (SDOH)** – Community-level conditions in environments where people live, learn, work, play, worship, and age that affect health and health outcomes. (CDC, 2019)
- **Health-related social needs (HRSN)** - nonmedical circumstances that impact individuals and their disease outcomes. (Castrucci & Auerbach, Health Affairs, 2019)
- **Structural Determinants** - the ‘root causes’ of health inequities. They affect whether the resources necessary to support health are equitably distributed.
  - Shape the quality of the social determinants of health experienced by individuals
  - Include the governing process, economic and social policies that affect pay, working conditions, housing, and education. (IDPH, 2020)

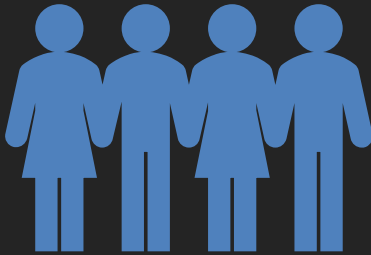
# The context of health inequities does not exist only within healthcare





## Systemic Drivers of Social Inequities

- Barriers to care, provider shortages, quality of care gaps
- Unstructured environments produce a higher prevalence of unhealthy behaviors
- Lag in educational attainment resulting in a concentration of resources among a small population
- Built environment
  - More racially segregated communities
  - Does not encourage healthy behaviors



## Structural Racism as a Root Cause of SDoH

Racism is “a system of structuring opportunity and assigning value based on the social interpretation of how one looks that unfairly disadvantages some individuals and communities unfairly, advantages other individuals and communities, and unfairly saps the strength of the whole society through the waste of human resources.” (Dr. Camara

Phyllis Jones, 2018)

# How Do SDoH Impact Maternal Health?

“SDoH help shape the proximal risk factors that affect our health, functioning and quality of life.”

(Dagher & Linares, 2022, Children)

*They are the “but for....” factors*

- Study examining population level factors and increased maternal deaths 1997-2012
  - Increased prevalence of obesity, diabetes, chronic disease only partially explained outcomes
  - Also attributable to SDoH factors at multiple levels, such as
    - Less than high school educational attainment
    - Attended less prenatal visits



# SDOH and Maternal Health: Additional Considerations

- Cumulative exposure to SDoH over time can lead to accelerated biologic aging, or “weathering”. (Howell, 2018, [Clin Obstet Gynecol](#); Fishman, 2020, [Demogr Res](#))
- Link between adverse childhood events and chronic health problems. (Lu, 2018, [JAMA](#))
- Preliminary evidence shows potential relationship between maternal mortality and morbidity and “neighborhood deprivation”. (Dagher & Linares, 2022, [Children](#))
- National study of data from 2007-2015 found a 9% higher probability of severe maternal mortality and morbidity among rural residents as compared to urban residents. (Kozhimamil, 2019, [Health Affairs](#))
  - Lower initiation of first trimester prenatal care
  - Less than ½ live within 30 min. drive to perinatal center
  - Report highest rates of no or delayed care due to cost (ACOG. 2014. Committee Opinion 586)

# Screening for Social Determinants of Health

## CMS IPPS Rule 2023

SDOH-1 – Screening for social drivers of health



SDOH-2 – Screen positive rate for social drivers of health

Food  
insecurity

Unstable  
housing

Transportation

Utility  
difficulties

Interpersonal  
safety

# Does Screening for the “Big 5” SDoH Tell the Whole Story?

- Experience of living with low income and material hardship influences parental stress and mental illness. (Gershoff et al., 2007, [Child Development](#))
- Food insufficiency was shown to increase risk for depression in poor Black women, even after adjusting for unemployment, unstable housing, childcare availability, transportation and discrimination. (Seifert, et al., 2007, [Am J Orthopsychiatry](#))
- Mothers experiencing diaper need exhibited higher depression scores than those with food insecurity. (Austin, A & Smith, 2017, [Health Equity](#); Smith, MV et al, 2013, [Pediatrics](#).)

- What do birthing people know?
- How can we incorporate prevention strategies into community education?

## **COMMUNITY EDUCATION REGARDING MATERNAL MORTALITY**

# Considerations in Planning Community Education Targeting Maternal Mortality

Patient education to enhance risk awareness, activate health promoting behaviors and improve communication with clinicians are common strategies to improve maternal outcomes.

Birthing people's health related decisions are affected by perceptions of respectful care, health literacy, personal health risk, and cultural or community differences in lived experience.

# Perceptions of Maternal Mortality in a Missouri Birthing Population\*

**Goal:** Capture community voice and explore birthing person's understanding of local maternal mortality rates, groups affected, and causal perceptions

**Methods:** Anonymous, cross-sectional survey conducted from May to August 2022. Target population included individuals  $\geq 18$  living in a Missouri zip code. 1,738 qualified respondents completed the survey



# Perceptions of Maternal Mortality in a Missouri Birthing Population: Selected Data\*

Question	Answer(n=1738)	Percent
Are you aware there are deaths due to pregnancy in your state?	Yes	78%
Do you know someone who has died in pregnancy?	Yes	14.7%
Do you think there is a certain group that suffers more from pregnancy related deaths?	Yes <ul style="list-style-type: none"> <li>• Black</li> <li>• Poor</li> <li>• Uninsured</li> </ul>	66.4% 58.7% 71.0% 61.9%
What time period do you believe has the highest risk of death?	Delivery/pushing After discharge After PP visit	42.4% 3.6% 1.6%
What health problems do you think can happen as a result of pregnancy?	Depression/anxiety High BP Blood clots Diabetes	79.6% 78.5% 63.2% 59.8%

\*Florio, et al. (2023).Preliminary, unpublished data\*

# Perceptions of Maternal Mortality: Preliminary Findings\*

- Birthing people know that people are dying in pregnancy
- Birthing people recognize that Black birthing people experience maternal mortality at greater rates than white people
- Birthing people can name the top drivers of maternal mortality
- Birthing people are less sure of the timing of maternal deaths

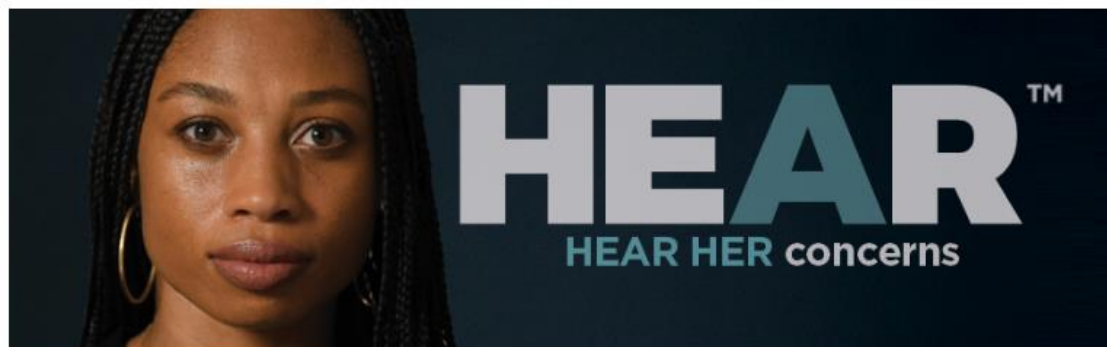
## HEAR HER™ Campaign

[Español \(Spanish\)](#) | [Print](#)

### Learn the Warning Signs

It could help save a life

[Learn More](#)



Pregnant & Postpartum  
People



Partners, Friends &  
Family



Healthcare Professionals

# Pregnant now or within the last year?

Get medical care right away if you experience any of the following symptoms:



Headache that won't go away or gets worse over time



Dizziness or fainting



Changes in your vision



Fever of 100.4°F or higher



Extreme swelling of your hands or face



Thoughts of harming yourself or your baby



Trouble breathing



Chest pain or fast beating heart



Severe nausea and throwing up



Severe belly pain that doesn't go away



Baby's movement stopping or slowing during pregnancy



Severe swelling, redness or pain of your leg or arm



Vaginal bleeding or fluid leaking during pregnancy



Heavy vaginal bleeding or discharge after pregnancy



Overwhelming tiredness

These could be signs of very serious complications. If you can't reach a healthcare provider, go to the emergency room. Be sure to tell them you are pregnant or were pregnant within the last year.

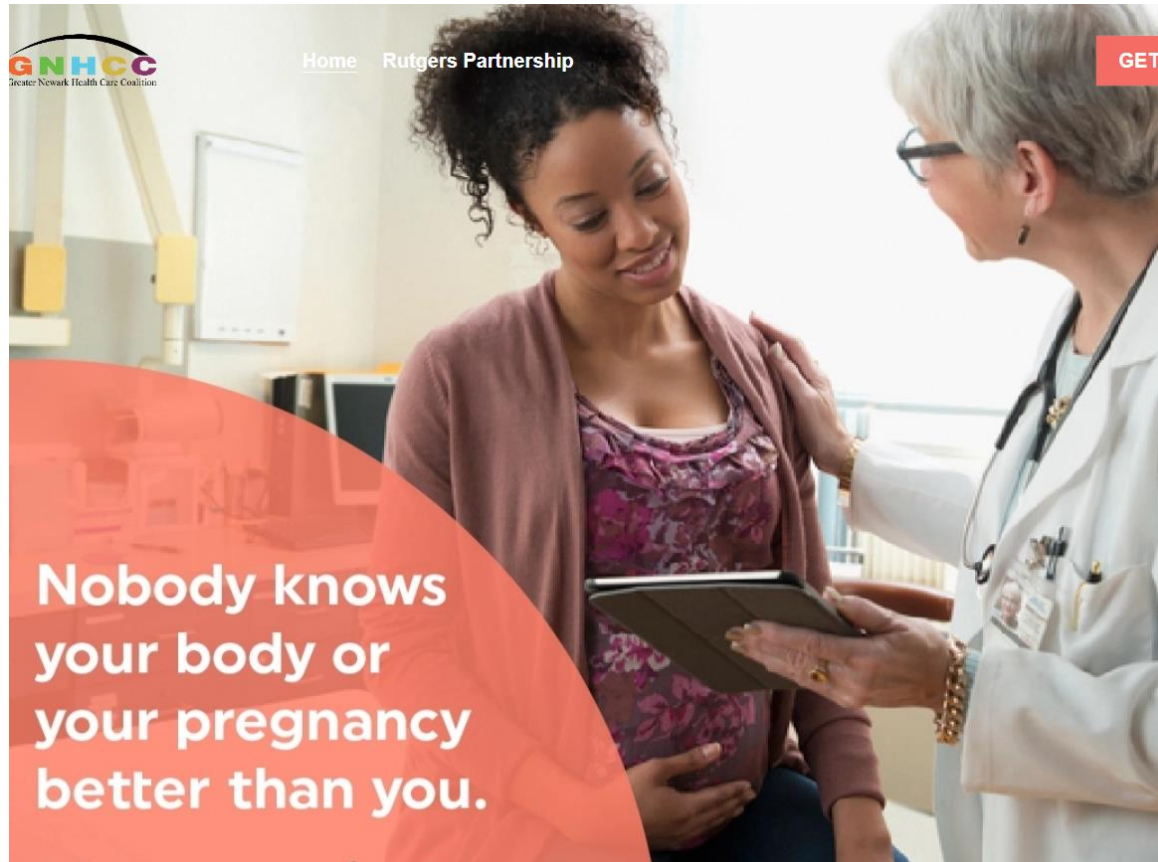
Learn more at [www.cdc.gov/HearHer](https://www.cdc.gov/HearHer)



**HEAR**  
HEAR HER CONCERNS

*This list of urgent maternal warning signs was developed by the Council on Patient Safety in Women's Health Care.*

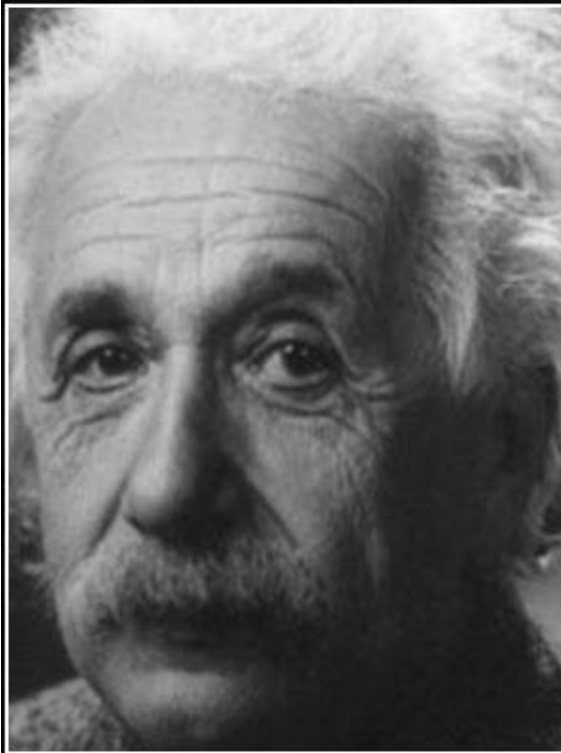
# Greater Newark Health Care Coalition



Clinician Accountability

# **SHIFTING POWER THROUGH CLINICAL COMMUNITY INTEGRATION**





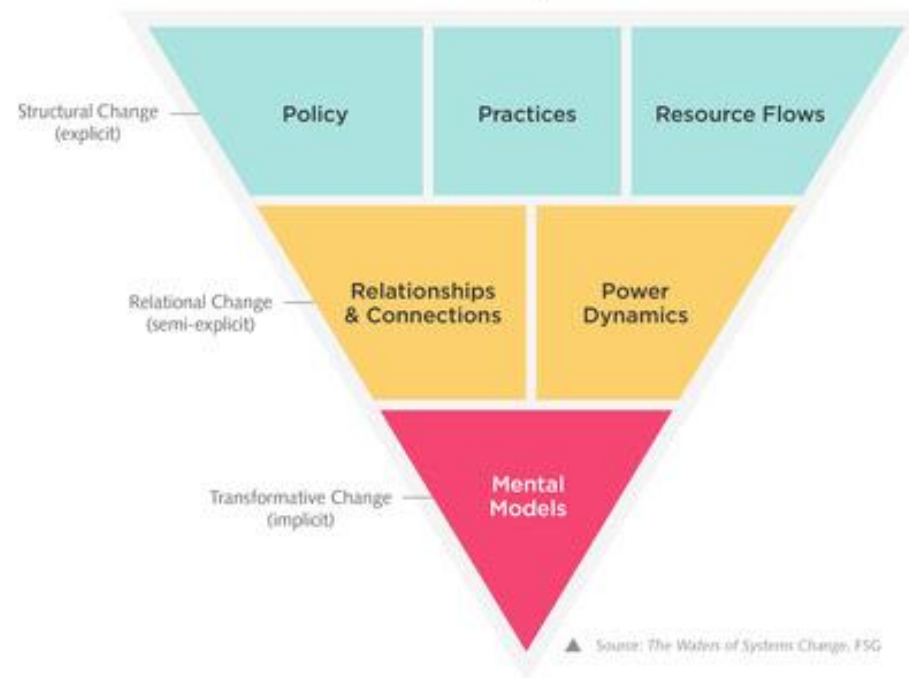
The world as we have created it is a  
process of our thinking. It cannot be  
changed without changing our  
thinking.

— *Albert Einstein* —

AZ QUOTES

# System Change

## Six Conditions That Hold Systemic Problems in Place



Kania J., Kramer M., Senge P. (2018) *The Water of Systems Change*. Retrieved from <http://efc.issuelab.org/resources/30855/30855.pdf>



# Indicator vs. Framework

## Indicator is a Data Point

- Measurement limited by current reality
- A product of our past understanding of health and science
- Systems are more apt to adhere to specific prescribed indicators than to determine alternatives

## Framework is a Vision

- Expands understanding of current reality
- Allows freedom to explore language of indicators
- Exploration of alternatives to traditional data collection
- Questions historical construction of health systems

# What is Clinical Community Integration?

- Provides an architecture to engage with patients and their communities as partners in shaping health care and improving public health. (Krist et al., 2013)
- “Intentional strategies to connect traditional healthcare structure with community-based organizations and programs.” (Bascom, 2017)
- Encourages tailoring of clinical services to fit the individual’s and community’s unique experiences to address unmet social needs. (Connecticut Health Foundation, 2018)



# Why Clinical Community Integration?

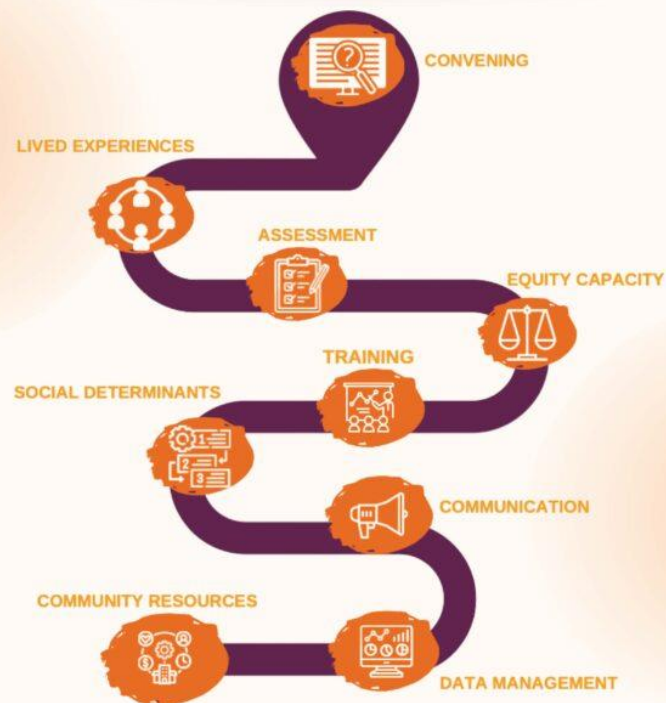
- Core features of Clinical Community Integration
  - At least one step occurs in each setting
  - Activities coordinated among participants
  - Participants reinforce and support all steps
  - Shared resources
  - Shared accountability (Krist et al, 2012)
- Examples of successful clinical-community integration efforts:
  - Breast cancer screening rates increased from 5% to 29% after intervention.
  - Bundled delivery of preventive services increased with Clinical-Community interventions (Krist et al, 2012)
  - Initiative designed to integrate community health into primary care improved referral to community organizations, changed local practice and policy (Lachance et al, 2016)



# How is AIM CCI Working to Foster Clinical Community Integration?

## CLINICAL COMMUNITY INTEGRATION

*An AIM CCI Guide to Establish a Collective Impact Model to Improve Maternal Health*



ALLIANCE FOR INNOVATION ON MATERNAL HEALTH  
Community Care Initiative (AIM CCI)



NATIONAL  
HEALTHY START  
ASSOCIATION



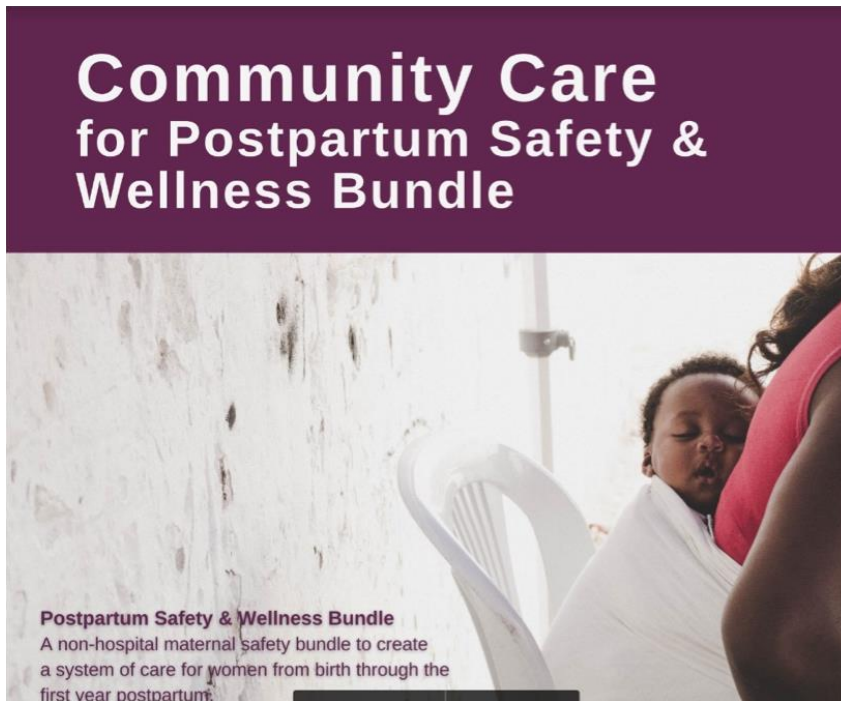
# AIM CCI Maternal Safety Bundles



- A Bundle is a small set of evidence-based interventions that combines medical and improvement science to achieve improved outcomes
- When care processes are grouped into simple bundles, caregivers are more likely to implement them by making fundamental changes in how the work is done.
- When the care processes are evidence based, subsequent outcomes will improve.
- Encourages interdisciplinary teams to organize work, adapt the delivery system, and deliver bundle components reliably.

# AIM CCI

## Bundles Designed for Community



- **Community Care for Maternal Mental Health & Wellness**
- **IPV**
  - Depression, Anxiety, Stress
- **Managing Chronic Conditions**
  - Hypertension, Diabetes, Healthy Weight
  - Prenatal and postpartum period




# Bundles Designed for Community

## FOUNDATIONAL LEVEL ACTIONS

- ▶ *Stratify health outcomes data by race, ethnicity, social determinants of health, and other identifiers to guide actions to address root causes of inequities.*
- ▶ *Assess Local Maternal Safety Workgroups (LMSW) and lead organization's equity capacity using the Self-Assessed Measurement of Racial Equity Capacity (SAMREC).*
- ▶ *Provide on-going training and education to LMSW members on equity capacity and sustainability using NHA AIM CCI Racial Equity Learning Series (RELS).*
- ▶ *Create and implement communication pathways between inpatient, outpatient, and community-based providers to facilitate/ensure continuity of care.*
- ▶ *Implement and maintain an up-to-date inventory of accessible community resources to assist with emergent and unmet medical, mental health, social and material needs by working collaboratively with community partners.*

## FOUNDATIONAL RESOURCES

**Foundational:** [ *foun-dey-shuh-nl* ], adjective - of or relating to the basis or groundwork on which something rests or is built; needing to be understood or established at the beginning AIM CCI foundational level actions are intended to be a core part of a community's approach to improve maternal health outcomes.

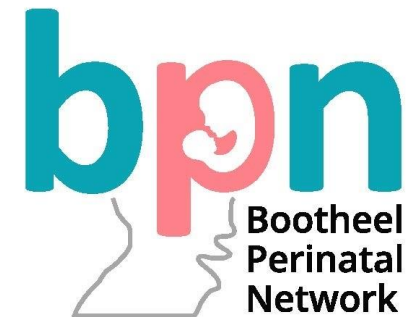
Title	Description	Resource Link
Clinical Community Integration Roadmap	Guide to create the framework for a perinatal system of care within our daily processes, organizational and community structures and culture to ensure that every woman, from pregnancy through the first year postpartum, receives equitable care that addresses her medical, behavioral health, and psychosocial needs	<a href="#">Click here</a> 
AIM CCI Self-Assessed Measure of Racial Equity Capacity (SAMREC)	Assessment designed to identify stage of readiness to promote equity	<a href="#">Click here</a> 
Racial Equity Learning Series (RELS)	Learning series to increase racial equity	<a href="#">Click here</a> 

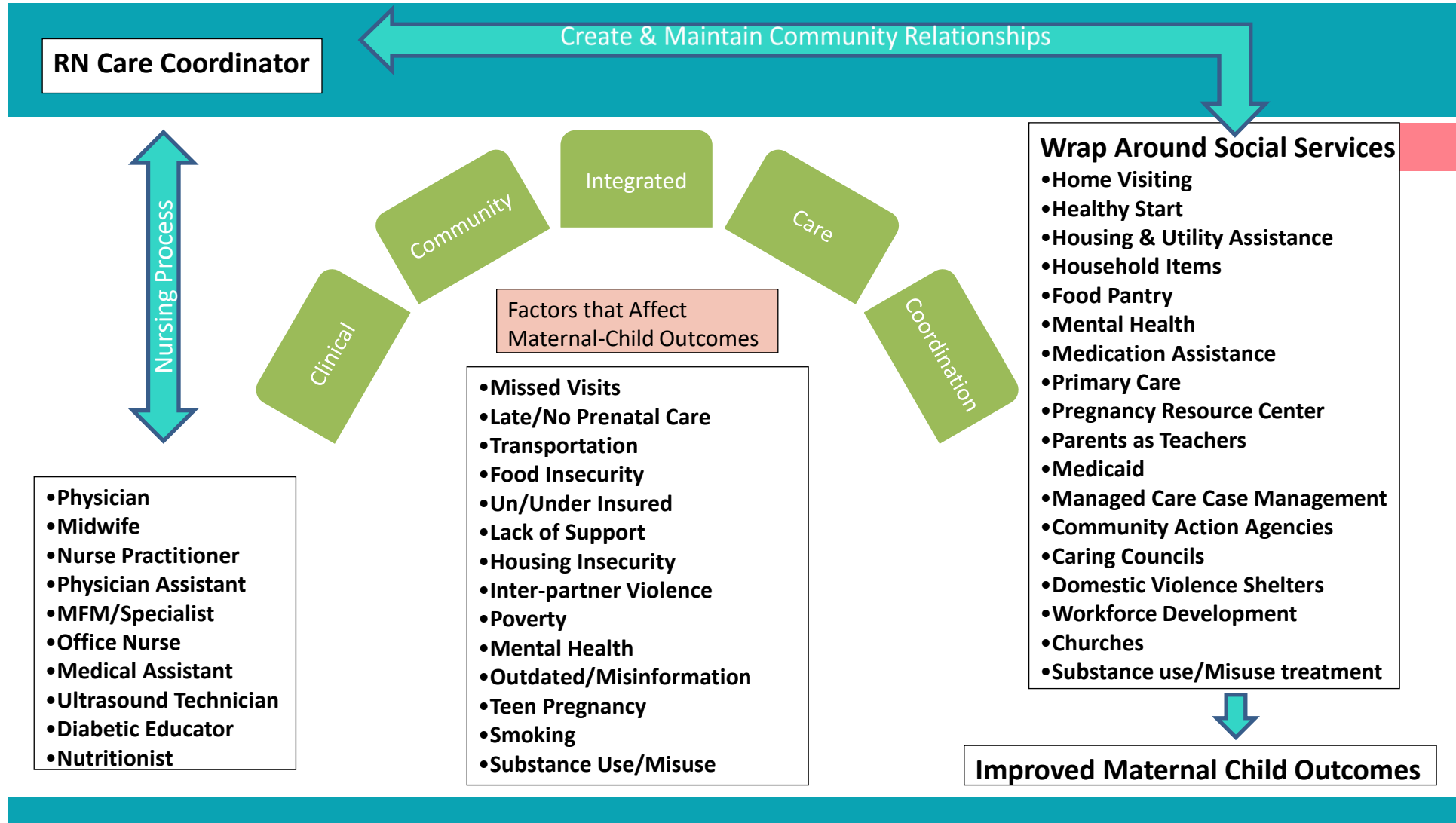
# Rural Maternity and Obstetrics Management Strategies (RMOMS)

- Develop a perinatal system of care to increase access, impact continuity of care from pregnancy through 6 mo. postpartum and improve outcomes in rural areas.
- Network composition **must** include:
  - At least 2 rural hospitals or CAHs
  - At least one FQHC or FQHC look-alike
  - State home visiting and **Healthy Start** programs if regionally available
  - The state Medicaid agency

*Thank you to the BPN Team for sharing their story on the following slides*

- Barbara Gleason, RN, MSN – Project Director,  
Bootheel Perinatal Network, RMOMS HRSA Grant  
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- Rebecca Burger, RN, BSN, System Care Coordinator,  
Bootheel Perinatal Network, RMOMS HRSA Grant  
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# Care Coordination Campaign

**You Matter! Your Voice Matters!**

Gives mothers the opportunity to share their unique stories of success, challenges, and gaps in pregnancy care and beyond while giving them a voice in improving maternal care

Build rapport with clients and ensure that clients feel comfortable and secure no matter the situation.

Care Coordinators use their nursing skillset to identify mental and physical risk factors, listen to clients' stories, identify social service needs, and connect them to existing community resources, creating a bridge between clinical care and community health

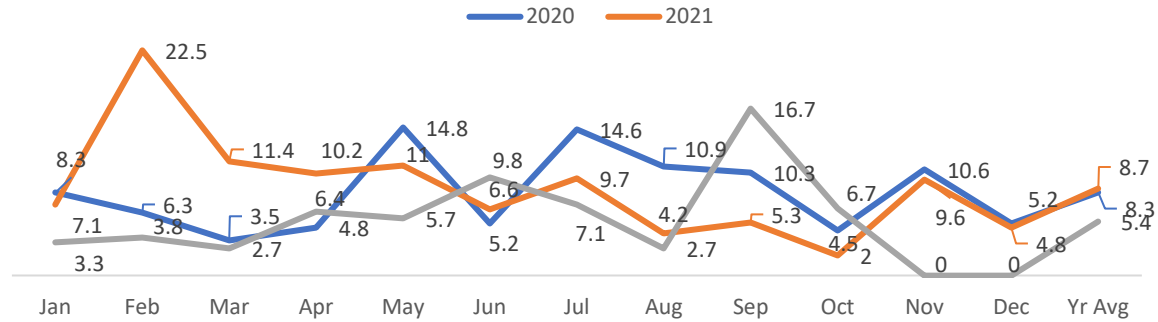
Time spent with mothers is uniquely tailored to their needs and guided by evidence-based assessment tools.

Touchpoints & Follow Ups well into the post-partum period

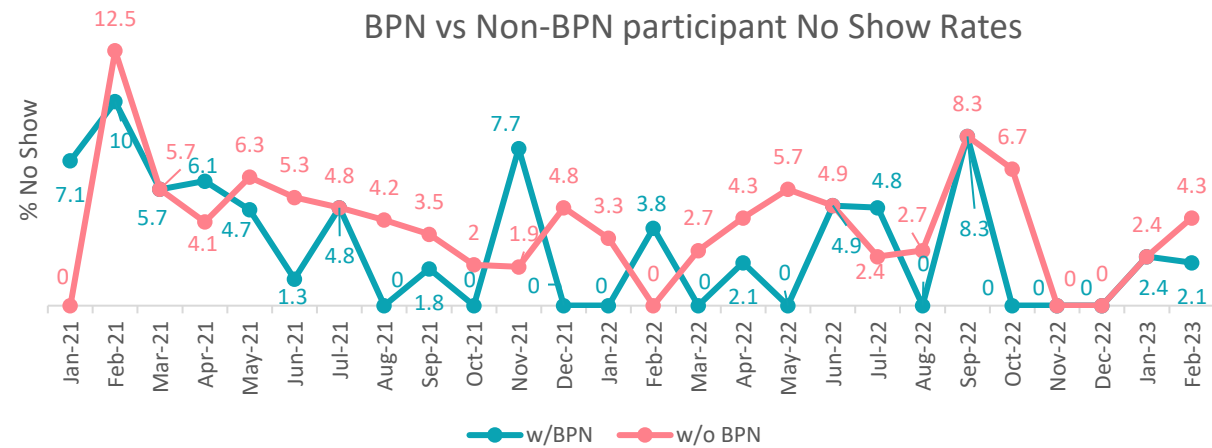


# MFM Clinic No Show Rates

Bootheel No Shows



BPN vs Non-BPN participant No Show Rates

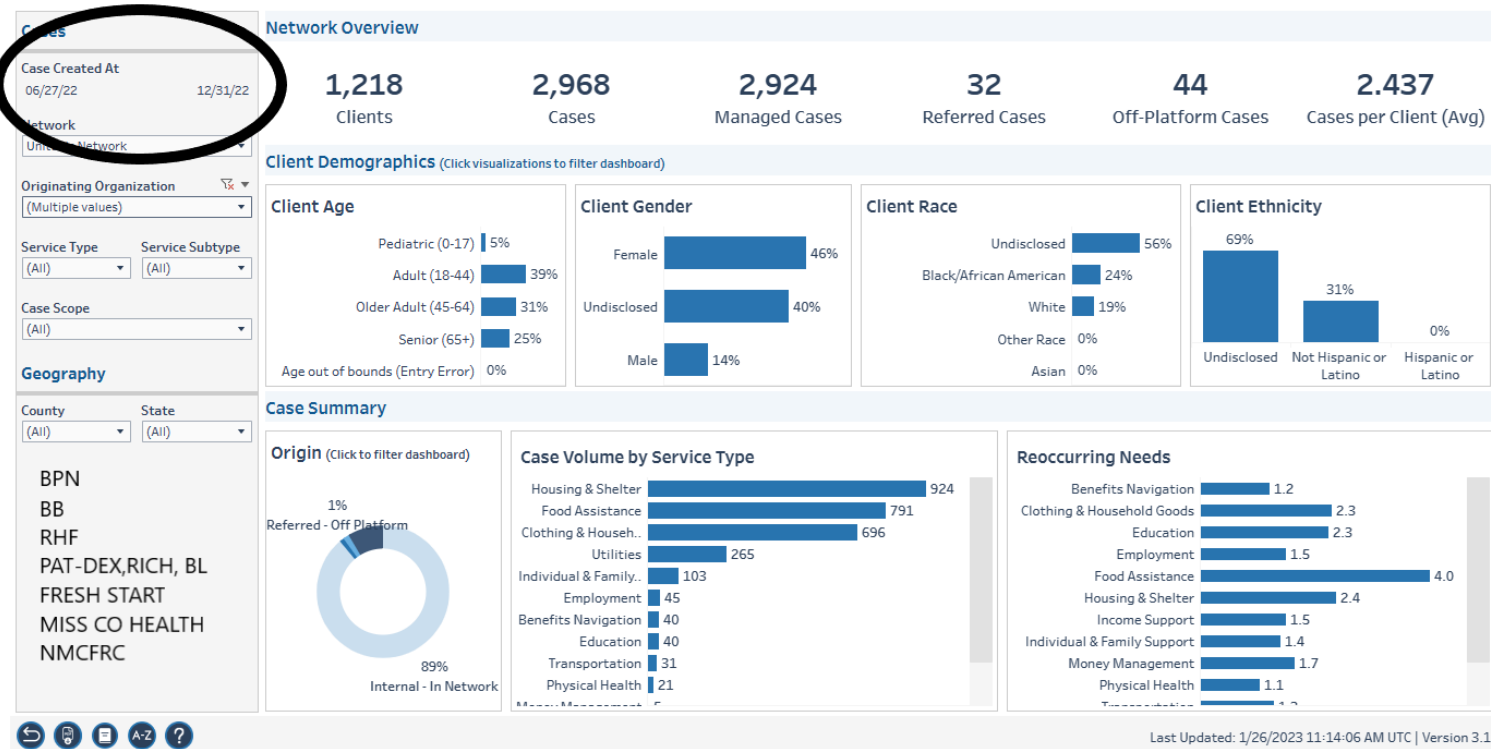


# BoRN Q2 Data



## Network Activity Overview

Monitor critical network metrics over time



# Telling Our Story: Defining Evidence

**Evidence Based Medicine (EBM)** – “conscientious, explicit Judicious, and reasonable use of modern, best evidence in making decisions about the care of individual patients.”

**Experiential Evidence** – Derived from professional insight, understanding, skill and expertise accumulated over time.

**Contextual Evidence** – Derived from actors that address whether a strategy is useful, feasible to implement, and accepted by a given community

# Celebrating Our Story!

- Michigan study showed strong evidence for the effectiveness of a Medicaid sponsored population-based home visiting programs in improving maternal and infant care. (Meghea, et al. 2013, AM J of Prev Med)
- Home visitors in rural areas address community wide issues by adapting content to meet the needs of rural families. (Whittaker, et al, 2021, JPHMP)
- Specific features of trust based CHW-client relationships may mitigate the burden of stress and facilitate health promoting behaviors in perinatal people with chronic conditions. (Boyd, et al. 2021, Maternal and Child Health Journal.)



# Stay Tuned for Part 2!!



INTERACTIVE  
COLLABORATIVE LEARNING



APPLICATION OF THE AIM  
CCI CLINICAL COMMUNITY  
INTEGRATION ROADMAP  
TO SUPPORT POWER  
SHIFTING



A DEEPER DIVE INTO  
CLINICIAN  
ACCOUNTABILITY



IDEAS FOR COMMUNITY  
EDUCATION STRATEGIES



AND MORE.....



**Our “North Star” Challenge:**

**Equity inculcated in all work**

**Zero disparities in all health  
outcomes**

**Susan Kendig, JD, WHNP-BC, FAANP**

**[suekendig@gmail.com](mailto:suekendig@gmail.com)**

# Addressing Maternal Mortality through Community Clinical Integration: Skill Building Activities

Susan Kendig, JD, WHNP-BC, FAANP Clinical  
Community Integration & Patient Safety  
Implementation Strategist, AIM-CCI

Lidyvez Sawyer, EdD, MPH  
Equity Implementation Strategist, AIM-CCI



## Objectives: Part 2

- Utilize the Clinical Community Integration pathway as a guide to develop strategies to shift power dynamics and foster equitable collaboration
- Articulate how community-based strategies have potential to impact the effects of social and structural determinants on maternal health
- Identify strategies to inform communities about maternal mortality and preventive measures



- Please tell us:
  - Your name
  - Where you are from
  - Roll in Healthy Start
  - One thing you hope to gain from this workshop

# Survey Deep Dive

Thank you to those of you who have already completed the pre-session survey. If you have not completed the survey, please take a few minutes now to review the questions in preparation for our discussion.

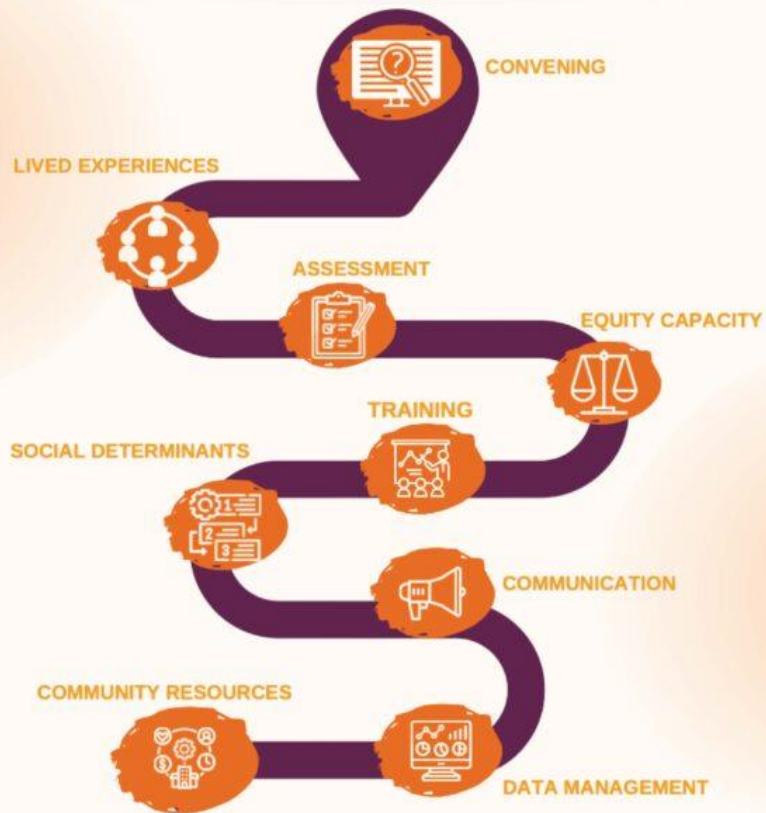
## Discussion Questions

- How do you believe that Social and Structural Determinants Impact maternal health outcomes?
- How do you believe that racism drives SDoH and contributes to maternal mortality and morbidity?
- Please share the types of maternal mortality prevention strategies your community has implemented? What would you like to try?
- What does “clinician accountability” mean?
  - What clinicians?
  - What are the challenges in holding clinicians accountable for maternal mortality and morbidity prevention?
  - How can you help to develop shared accountability?

# **CHANGING THE NARRATIVE**

# CLINICAL COMMUNITY INTEGRATION

*An AIM CCI Guide to Establish a Collective Impact Model to Improve Maternal Health*



## Utilizing the CCI Pathway to Support Power Shifting

**At any given moment,  
you have the power to say:  
this is not how the story  
is going to end.**

—CHRISTINE MASON MILLER,  
AUTHOR

# Convening



Identifying and engaging community partners using a collective impact approach will help to build a network of community members, organizations, and institutions who advance equity by learning together, aligning, and integrating actions to achieve system level change.

# Refresher: Collective Impact

“a structured approach to organizing collaboration of organizations from different sectors to address a specific social issue. "Collective Impact is a network of community members, organizations, and institutions who advance equity by learning together, aligning, and integrating their actions to achieve population and systems-level change. This definition identifies **EQUITY** as the North Star for why and how collective impact work takes place, specifically names community members as key actors along with other partners and emphasizes the importance of systems change in this work.”

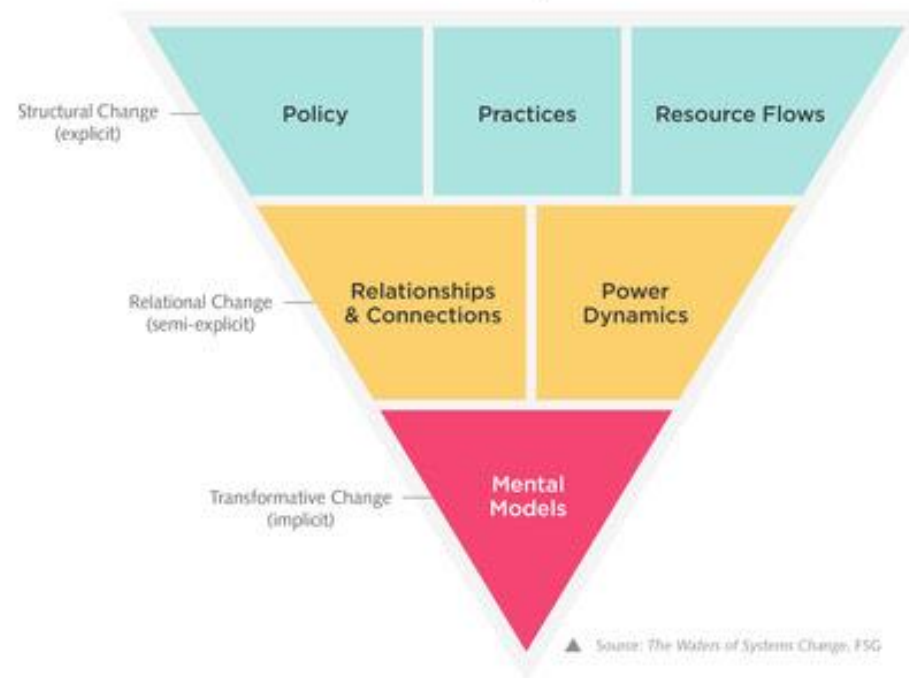
## Five Pillars of Collective Impact

- Common agenda
- Shared measurement
- Mutually reinforcing activities
- Continuous communication
- Backbone support organization



# Refresher: System Change

## Six Conditions That Hold Systemic Problems in Place



Kania J., Kramer M., Senge P. (2018) *The Water of Systems Change*. Retrieved from <http://efc.issuelab.org/resources/30855/30855.pdf>

# Lived Experience



Community members are key players, along with other community partners. Regarding women, birthing persons, their families and supporters as experts in their own right enhances the learning, strategy and collaborative work.



# Assessment

Assess organizational and individual capacity to participate in or lead collaborative initiatives.



# Assessment: Group Discussion

A local hospital is beginning a new maternal health initiative and your agency is invited to partner. You want to do this as your Healthy Start program has not been invited to partner with any of the hospital entities before and multiple linkages to partners that would be helpful.

- What types of internal questions might be helpful as you make your decisions?
- What types of questions might be helpful to ask the potential partner as you make your decisions?

# Equity Capacity



By establishing and developing ongoing sessions centered on equity, collaborative partners can assess racial equity capacity and build a plan for ongoing education and conversations centered on equity to measure equitable practice and implementation among teams, organizations and systems.

- Self-Assessed Measurement of Racial Equity Capacity (SAMREC)
- Racial Equity Learning Series (RELS)

# AIM CCI Health Equity Framework

## AIM CCI HEALTH EQUITY FRAMEWORK





## The Racial Equity Learning Series: Our Journey & Evolution

<https://youtu.be/GDkc-rN1Ss>



Stretch Break

# **GROUP CASE STUDIES**

# Training



Inculcating equitable practice is a journey. It must be fundamental to an organization and prioritized among leadership. Developing or contributing to a training plan that supports this concept, such as incorporating RELS into collaborative work, can support equity goals.

## Discussion Question

Your agency is a partner in a community wide effort to improve maternal and infant mortality and morbidity. How can you help to assure that equity is at the forefront?

# Social Determinants



Data on race, ethnicity and indicators related to social determinants of health must be collected to guide efforts and to help determine if we are making a difference in building health equity.

# Communication



Clinical Community Integration efforts necessitate a communication pathway that links inpatient, outpatient and community-based partners to ensure continuity of care and closed loop referrals.



# Data Management



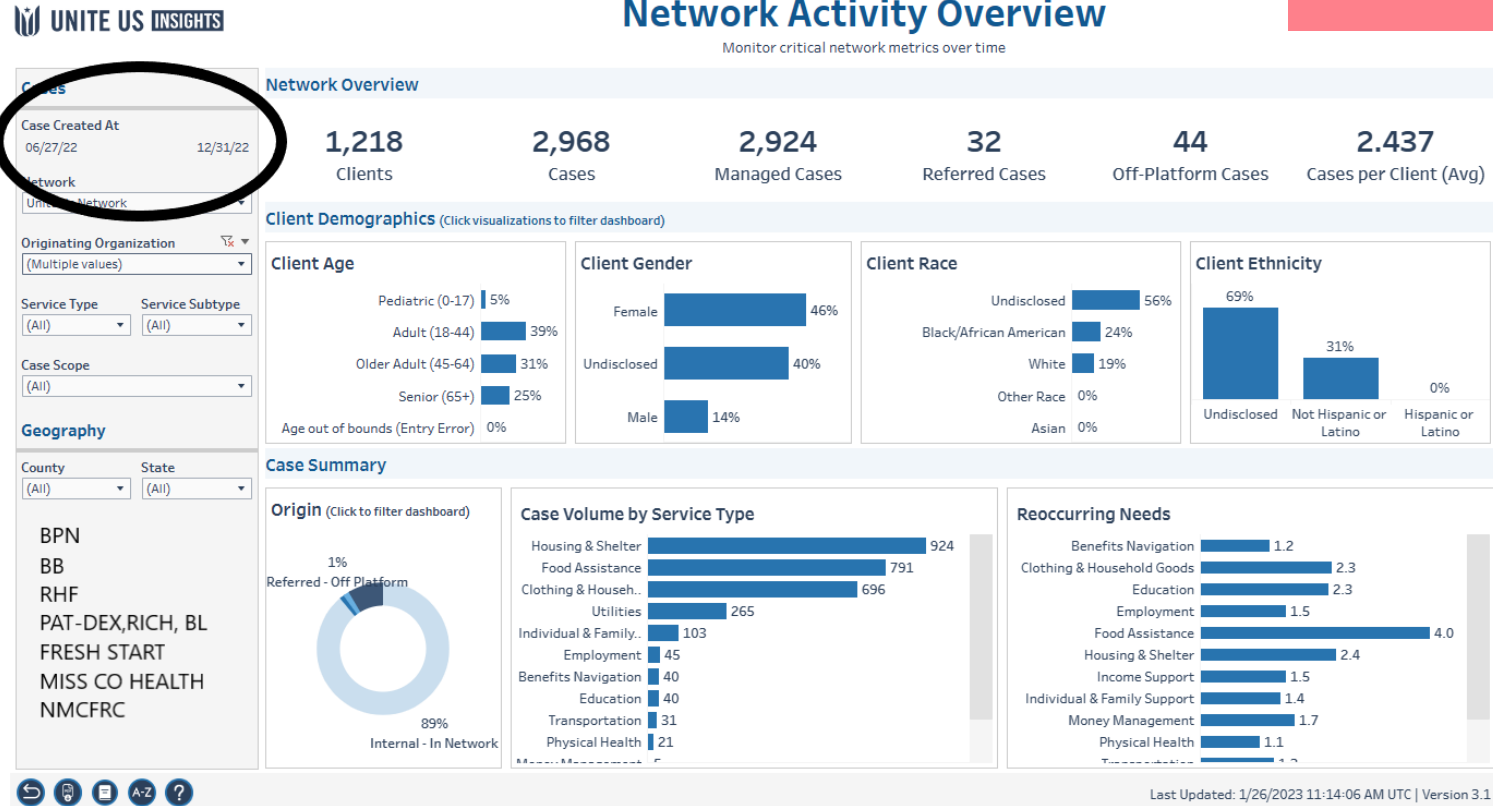
Initiatives that lead to system change are driven by what the data tells us. As we are invited to participate in or lead collaborative work, it is important to consider how shared mechanisms for data collection, analysis and reporting can occur.

## Discussion Questions

- What advantages can you see for participating in a shared data mechanism?
- What barriers might you encounter?

# Example of a Closed Loop Resource and Referral System

## BoRN Q2 Data



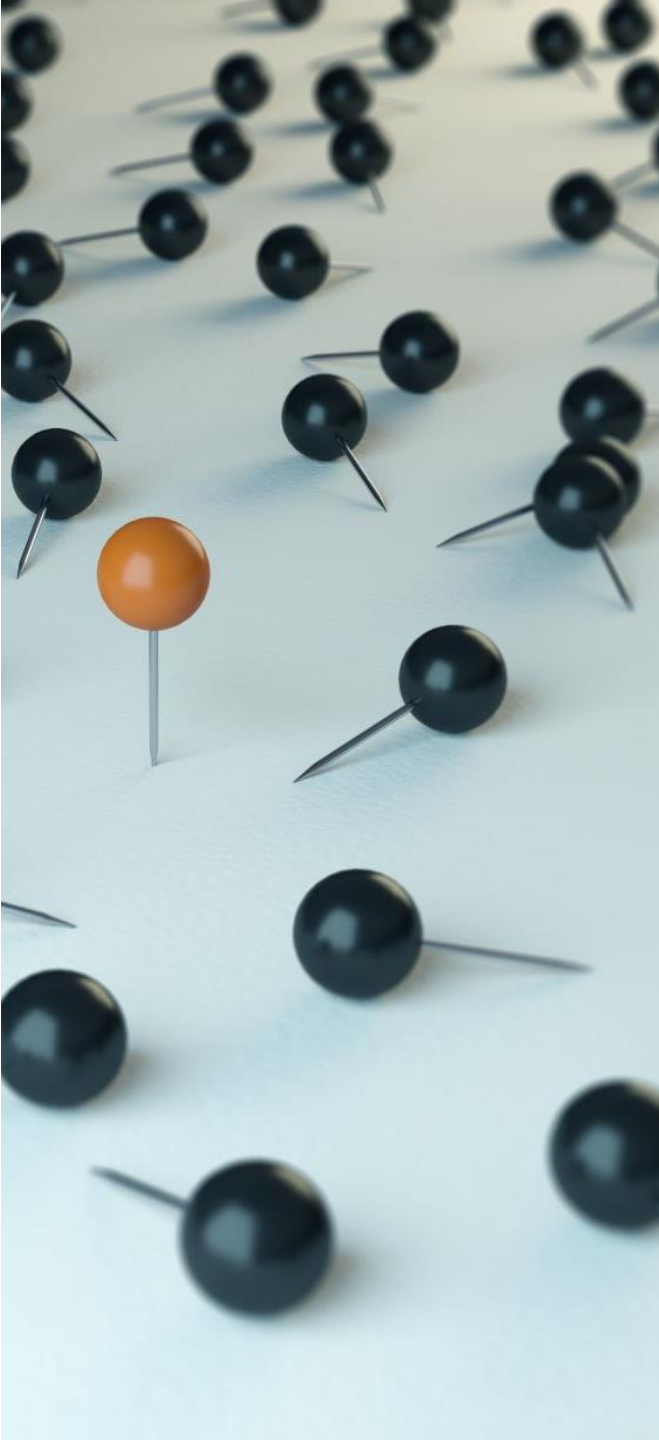
# Community Resources



Working with partners to identify and systematically update and share resources can facilitate referrals for social, material and practical support and remove barriers to care.

## Discussion Question

In addition to assisting clients with improved access to current and reliable resources, how can participation in developing a collaborative community resource help to support your program?



# Community Education Strategies

## **Group discussion exercise:**

Each group please select a facilitator and a reporter who will capture your discussion on the flip chart and report out.

## **Please discuss:**

1. Provide an example of your proudest community education effort on maternal mortality? What made this successful? How did you overcome barriers?
2. What barriers have you experienced in trying to plan community education related to maternal mortality?
3. Please share at least one resource on maternal mortality that you have found helpful in facilitating community education on this topic.



# AIM CCI Community Education Resources

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**Planning for Pregnancy and Beyond** -This is a FREE learning series to guide pre-pregnancy and interpregnancy planning and patient education (P4P). Course topics range from reproductive anatomy and self-care to pregnancy complications and loss. CE are available

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**Maternal Monologues for Community Conversation and Action-** Community presentations of stories by women/birthing persons, their partners, and supporters along the journey of birthing and maternal health. These stories are based on real experiences. They are designed to serve as a tool for communities to tell their own stories for healing, raising awareness, and mobilizing for change.

## Final Check in

- What additional information would you like to have about application of the Clinical Community Integration Roadmap in facilitating power sharing and system change?
- What additional information would you like to have about utilizing the SAMREC and RELS to drive improvements in equity?
- Anything else you would like to say?



**Our “North Star” Challenge:**

**Equity inculcated in all work**

**Zero disparities in all health  
outcomes**

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**Lidyvez Sawyer**  
**[Lsawyer@nationalhealthystart.org](mailto:Lsawyer@nationalhealthystart.org)**



# Thank you!

*Healthy Start Regions 1, 2, & 3 Regional Meeting  
Hosted by the Healthy Start TA & Support Center at NICHQ*

**NICHQ**  
National Institute for  
Children's Health Quality

**HEALTHY**  
**start**  
TA & SUPPORT CENTER

