

Center of Excellence
in Maternal
& Child Health

THE GEORGE WASHINGTON UNIVERSITY

Maternal Health Disparities: The Women Behind the Data

Dr. Karen McDonnell



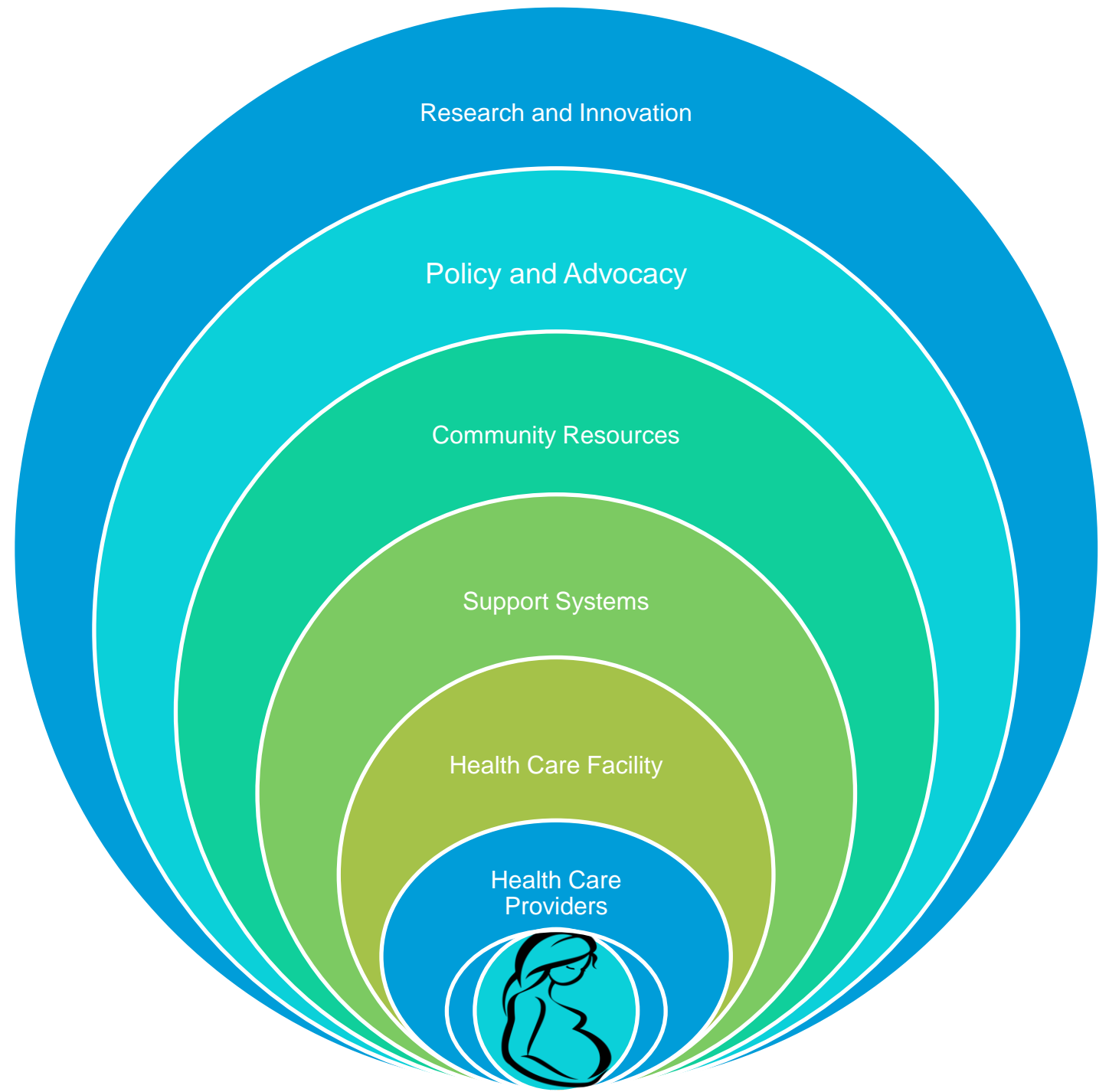
“Maternal”
“Pregnant women”
“Pregnant people”

***Throughout the webinars we use the terms “maternal”, “mothers”, “women” as shorthand for all people who get pregnant, give birth, use maternity care services, or relating to these roles. However, we recognize not all such people identify with the terms that are used, and we remain committed to using respectful, inclusive language.*

Roots of Inequity: Social and Structural Determinants of Health (SSDoH)

- SSDoH are the conditions in which people are born, grow, live, work, play, pray, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels.
- Social and structural determinants lead to health disparities or inequities—the unfair and avoidable differences in health status seen within and between different groups.

Maternal Health Ecosystem



Question

What can health professional education do that could help address maternal health disparities?

These can be at any level of the ecosystem, including institutions, educators, associations, policies, and research/innovation.

Thank you!

Please join us 12:00pm ET

May 31, 2024

*Outcome Studies of Maternal Health Care and
Disparities within Active-Duty Service*



MIDWIFERY CARE, BIRTH CENTERS AND HOME BIRTHS

Emilia N. Iwu PhD, RN, APNC, FWACN

Rutgers University, School of Nursing

Associate Prof. & Assistant Dean, Center for Global Health

EQUAL (Ensuring Quality Access and Learning for Mothers and Newborns in Conflict-Affected Contexts)



EQUAL Consortium Partners

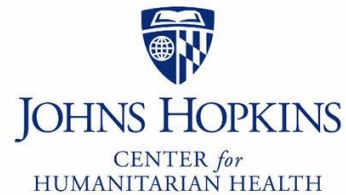
We are a **group of research partners united in our shared commitment to reduce maternal & neonatal deaths** by ensuring quality health services are accessible to every woman and newborn, regardless of where they live.



International
Rescue
Committee



Institute of
Human Virology
Nigeria



Johns Hopkins
Bloomberg
School of Public
Health



Somali
Research and
Development
Institute



Université
Catholique de
Bukavu (DRC)

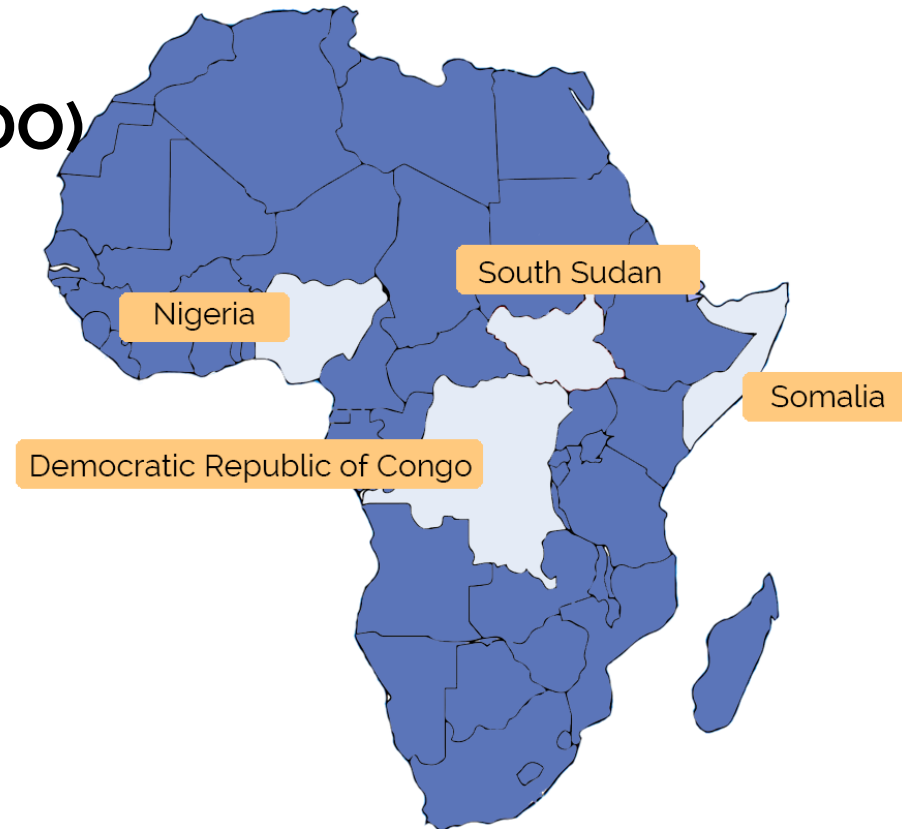
Introducing EQUAL

Donor: Foreign Commonwealth & Dev. Office (**FCDO**)

Timeframe: July 1 2021 – Apr 30 2026,

Location:

- Yobe State, **Nigeria**
 - North and South Kivu, **DRC**
 - Benadir and Galgaduud Provinces, **Somalia**
 - Aweil East State, **South Sudan**
-
- **SDG 3.1** Target: Reduce Global Maternal Death to <7 per 100,000 live births by 2030



Maternal & Newborn Health in Nigeria

Shortage of health workers: Four physicians and 15 nurses/midwives per 10,000 people in 2019.

Home births: only ~43% of all childbirths occur in health facilities with a skilled provider

Access to care: Access in the North East is impacted by insecurity which has left many facilities damaged, destroyed, or not functioning.

Maternal Mortality Ratio: 1047 deaths per 100,000 live births.

Newborn Mortality: 35 deaths per 1,000 live births.

Complications during pregnancy and childbirth are a **leading cause of death among women in Nigeria**





COMMUNITY MIDWIFERY

A Safe Motherhood Strategy endorsed by ICM, UNFPA and WHO to:

- ☐ Increase Access to Skilled Birth Attendants
- ☐ Reduce Maternal & Newborn Death
- ☐ Address shortage of Midwives in Communities
- ☐ Adopted by: Afghanistan, Kenya, Nigeria & other countries



PRIORITIZATION OF MNH & MIDWIFERY EDUCATION RAPID ASSESSMENT

Credit: EPIAfric2016

EQUAL Research Priorities

Research Theme	Work streams	Geographies
Positionality of MNH in low-income, conflict-affected contexts	Political economy analysis (PEA) of the evolution of politics, financing, and practice affecting MNH	DRC, Nigeria, Somalia, South Sudan
Leveraging community health system	Maternal and perinatal death estimation leveraging community health systems	DRC
	Implementation research on community health worker-delivered MNH services	Somalia and South Sudan
Improving facility-based quality of care	Longitudinal assessment of midwifery education and services	Nigeria and Somalia
	Evaluation of readiness and quality of MNH care in health facilities	DRC and Nigeria

PEA Study Overview

Design

- **Single case Descriptive study** to understand factors that influence prioritisation of MNH services.
- Guided by the **Health Policy Analysis (HPA) Triangle** framework.
- **Focus** - Nigerian health decision making space - Yobe state.

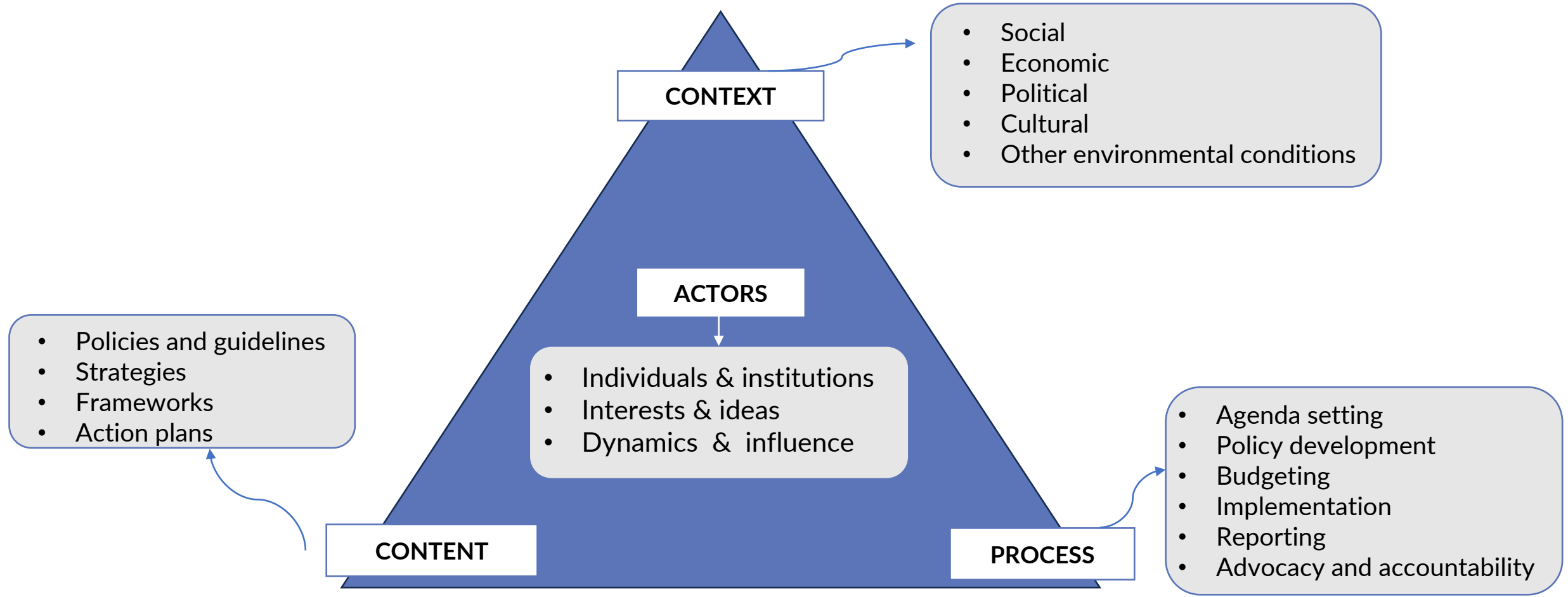
Methodology

- **Desk review of literature** from academic, policy, and technical reports.
- **19 Key Informant Interviews** with Government, Civil Society, UN, Donors, and Private Sector actors
- **Data collection:** April 2022 – Jan. 2023

Data Analysis

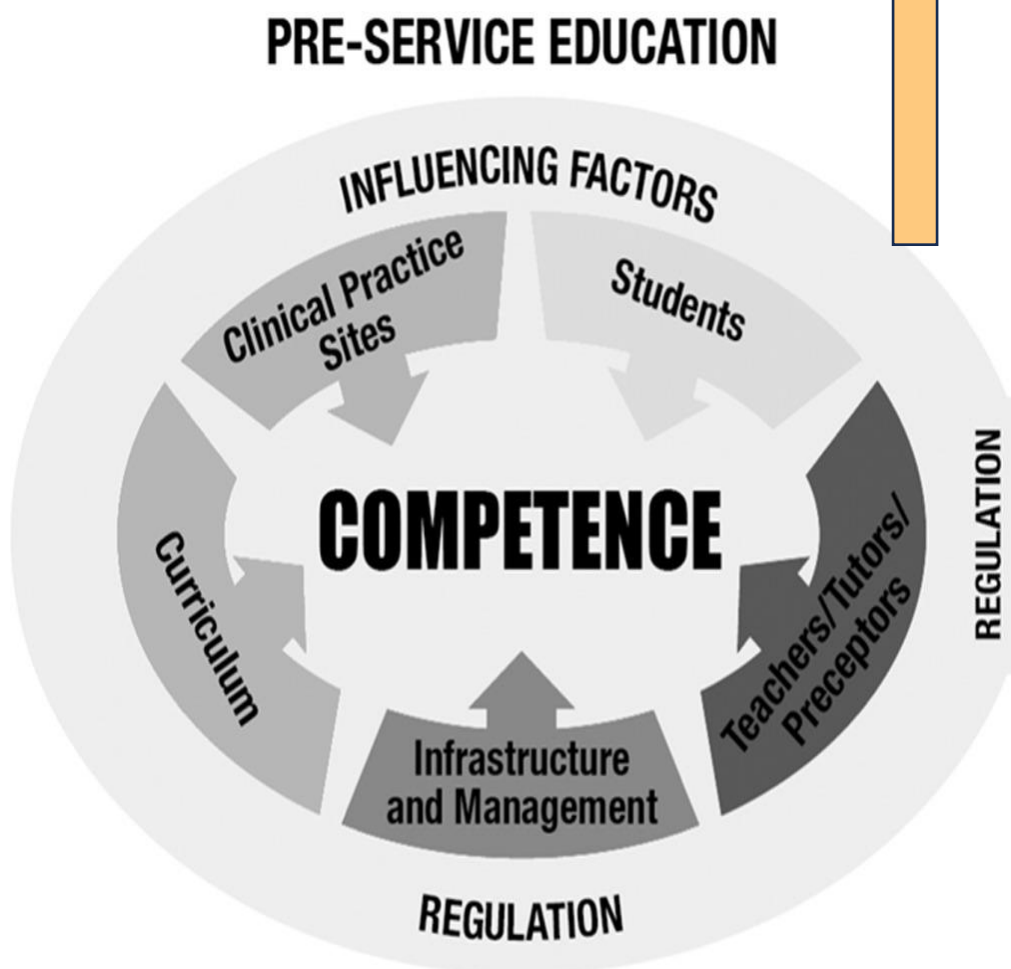
- Desk review of evidence extracted into **MS Excel** using **HPA triangle framework categories** and **synthesised before interviews**.
- Interview data analysed **iteratively using deductive approach in Dedoose Software and pattern coding**.

Health Policy Analysis Triangle



Walt & Gilson (1994)

Rapid Assessment: Study Design



Tools

- **A cross-sectional systematic assessment** of midwifery schools
- **Adapted** the globally validated Midwifery **Education Rapid Assessment Tool** to address national standards and context specific questions
- Pilot tested in Kano Midwifery School

Methods

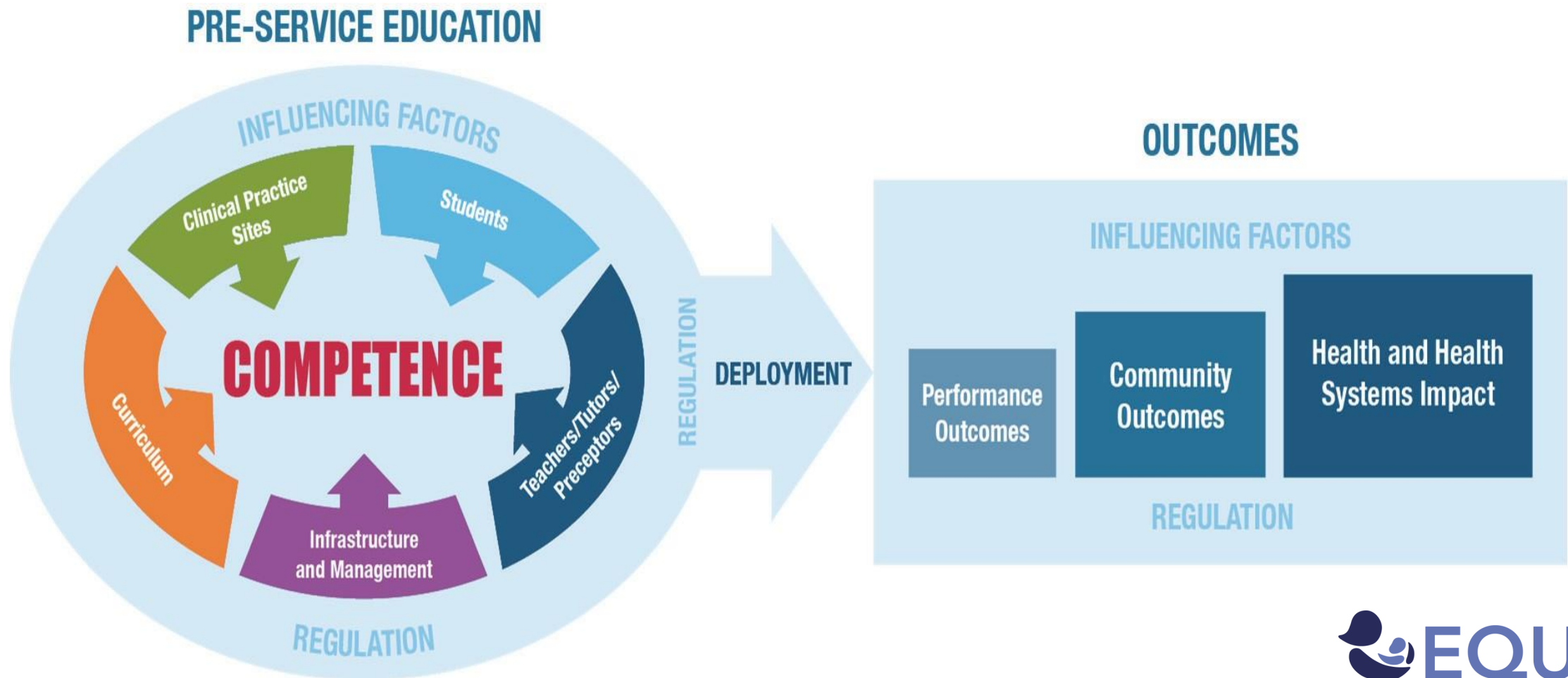
- **38 interviews** with midwifery education program leadership, teachers, students, clinical preceptors and other stakeholders including MoH officials and UN representatives.
- **Tours of schools and practice sites** to assess the availability of equipment, staff, and other resources.

Data Analysis

- **Descriptive analysis**, including calculation of means, variation measures, and percentages
- **Assigned scores based on the scoring** rubric and guidance outlined in the Education Rapid Assessment Tool.

Research Methods

Rapid Assessment → Longitudinal Cohort Study



Study Findings

















PEA: Armed Conflict has disrupted women's access to essential MNH services.











- ❖ *Destruction of facilities & equipment, theft of medical supplies, displacement of staff, and limited access to services for pregnant women.*
- ❖ Reprioritization of MNH resources for security and emergency response
- ❖ HCW face heightened risks of threats, abduction and murder
- ❖ Unwillingness to accept posting in vulnerable areas.
- ❖ Need to address compensation given the challenging conditions HCW experience including difficulty accessing food, transportation, and accommodation













Teachers, Tutors, and Preceptors

Indicator	Basic School of Midwifery	Community School of Midwifery
The school has sufficient midwives and appropriate non-midwives that are needed to educate existing students in the academic/theory components of the curriculum (1:30 teacher: student ratio)		
Teachers have completed a course preparing them for their teaching role		
Teachers have acquired and maintain their clinical competency		
Teachers have the resources that they need to be effective		
Teachers receive salary equal to or greater than midwives in clinical practice		
The education system has clinicians prepared for the role of clinical preceptor (clinical teacher)		
The education system has clinicians supported in the role of clinical preceptor (clinical teacher)		











Clinical Practice Sites

Indicator	Basic School of Midwifery	Community School of Midwifery
The school has sufficient clinical sites needed to prepare students to competency in accord with ICM guidelines: (1. Number of Sites ; 2. Average number of supervised clinical practice experiences conducted by students)		
The school has clinical practice sites that are accessible to students and teachers (commutable from school to clinical facility in accord with the schedule of clinical experiences)		
The clinical practice site has sufficient medical supplies and other resources needed to train students to competency		
The clinical practice site models practice that is consistent with evidence-based best practices		









Infrastructure & Management

Indicator	Basic School of Midwifery	Community School of Midwifery
The country has sufficient schools needed to produce the number of fully competent midwives needed in the workforce		
The midwifery program or school being assessed is led by a midwife with appropriate clinical, administrative, academic and leadership experience		
The school being assessed has sufficient space needed to facilitate theoretical (classroom) learning needs of students		
The school has the textbooks and journals or library Internet access to journals, and other library resources needed for existing students		
The school has a functional clinical skills lab needed for practice and simulation		
The school has a computer lab with sufficient functional computers, and appropriately skilled teaching/support staff		




Curriculum

Indicator	Basic School of Midwifery	Community School of Midwifery
The curriculum is aligned with national health priorities, and has been endorsed by the ministry of health and the relevant regulatory and professional bodies		
The curriculum is competency-based (contains varied teaching approaches, simulation, clinical practice opportunity, assessment of measurable clinical behaviors)		
The curricular content is current and evidence-based		
The curriculum has been reviewed and updated within the past five years		
Teachers have an active role in updating and revising the curriculum		

Students

Indicator	Basic School of Midwifery	Community School of Midwifery
This school has sufficient qualified applicants to midwifery education programs (2:1 qualified applicant/enrollment)		
The school is located in communities accessible to targeted students (commutable from residence to school on a daily basis)		
The majority of students enrolled are enthusiastic about entering the midwifery profession		
The country and/or school has student selection criteria that account for anticipated deployment and retention		

Influencing Factors

Indicators	FMoH/SMoH/UN-Agency/Health Professional
The Country has quality standards for midwifery education that address, at minimum, the domains of this framework and ICM Educational standards	
A midwifery education accreditation system is operative in the country that reviews and documents educational quality at least every five years addressing, at minimum, the domains of this framework and ICM Educational standards	
The Country has a mechanism for independently assessing the competency of graduates prior to deployment within the health system (Licensing exam)	
The government (country or administrative district) has a committed budget for sustaining midwifery education to meet current and anticipated workforce needs (not dependent on external support)	Not Assessed

Q&A



An abstract geometric design on the left side of the slide, separated from the rest by a diagonal white line. The design includes a dark blue triangle at the top left with a small white circle, a light blue square with concentric circles, a white semi-circle, a pink triangle with diagonal lines, a pink square with concentric lines, a blue square, a grey triangle, and a pink triangle at the bottom. The background is a solid blue color.

THANK YOU

References (PEA)

1. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.
2. United Nations Inter-agency Group for Child Mortality Estimation (2023).
3. United Nations in Nigeria (2024) Sustainable Development Goal 3: Good Health and Well-being. <https://nigeria.un.org/en/sdgs/3> (Accessed Feb. 3, 2024).
4. National Population Commission (NPC) [Nigeria] and ICF. 2019. Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF.
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6. Walt, G., & Gilson, L. (1994). Reforming the health sector in developing countries: the central role of policy analysis. Health policy and planning, 9(4), 353-370. Chicago

References (Midwifery Educ.)

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6. Nursing and Midwifery Council of Nigeria. (2019). Retrieved from Nmcn.gov.ng website: <https://www.nmcn.gov.ng/>
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8. United Nations Population Fund (2006). A UNFPA-ICM Joint Initiative to support the call for a Decade of Action for Human Resources for Healthmade at World Health Assembly. https://www.unfpa.org › pub-pdf › midwifery_eng

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PREPARED FOR THE NATIONAL ACADEMIES OF
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Charles R. Drew University of Medicine and Science

Black
Maternal
Health
Center of
Excellence

INNOVATIVE MODELS FOR BIRTH EQUITY



black maternal health center of excellence

OBJECTIVES

- To expand access to Black-centered, community-based, multi-disciplinary care that reduces maternal stress and improves birth outcomes and experiences
 - To develop and strengthen a diverse MCH pipeline and workforce; and increase awareness across many specialties on the role of community-based care and implicit bias in delivery of care
 - To improve hospital integration, transport, and communication between community and hospital based maternal and child health workers
 - To co-create and advocate for a new vision of Black maternal health that dismantles structural racism and transforms systems to protect and promote the holistic well-being of Black mothers and their families across the life course
-

today's flow

OBJECTIVES

- Participants will be able to describe the root causes of disparities in Black infant and maternal health
- Participants will be able to describe frameworks and specific care models and adaptations that can address root causes

AGENDA

- Root Causes & Frameworks for Solutions:
 - Structural Racism
 - Maternal Stress & Weathering
 - Culturally Concordant Care
 - Community-based models
- Innovative Models:
 - Guaranteed Basic Income
 - Maternity Homes
 - Group Prenatal Care
 - Pregnancy Medical Homes

root causes and frameworks

"We need to make sure that at the very beginning of life, every baby has an equal chance of survival, regardless of the color of their skin or where their families live. Our commitment is to work together to eliminate injustices, such as racism and homophobia, so that all our communities are thriving and all residents have what they need to be healthy."

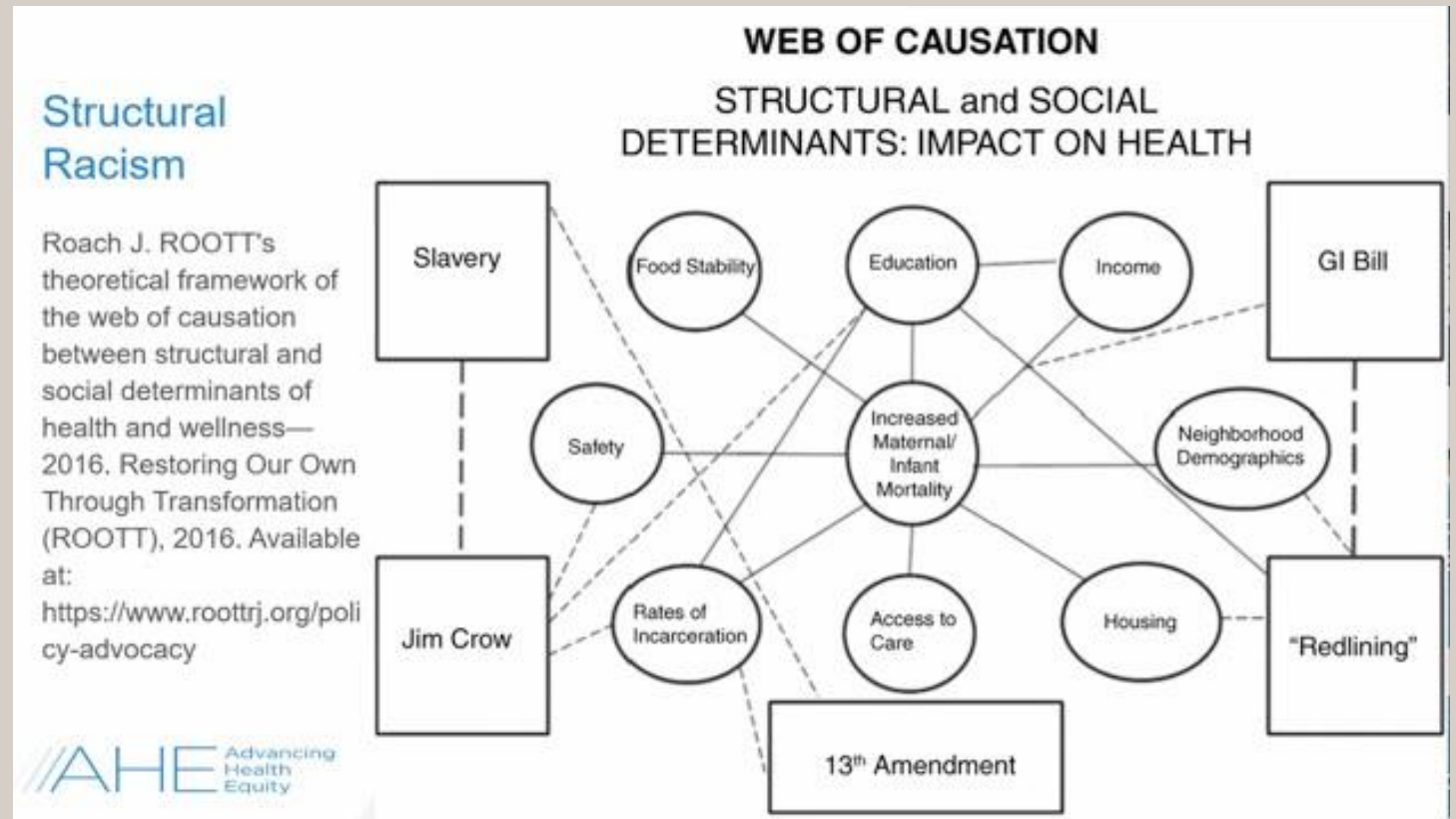
Dr. Barbara Ferrer,
Director, Los Angeles County Department of Public Health

"**Race** is a **political system** that governs people by sorting them into social groupings based on **invented** biological demarcations."

Dorothy Roberts, JD

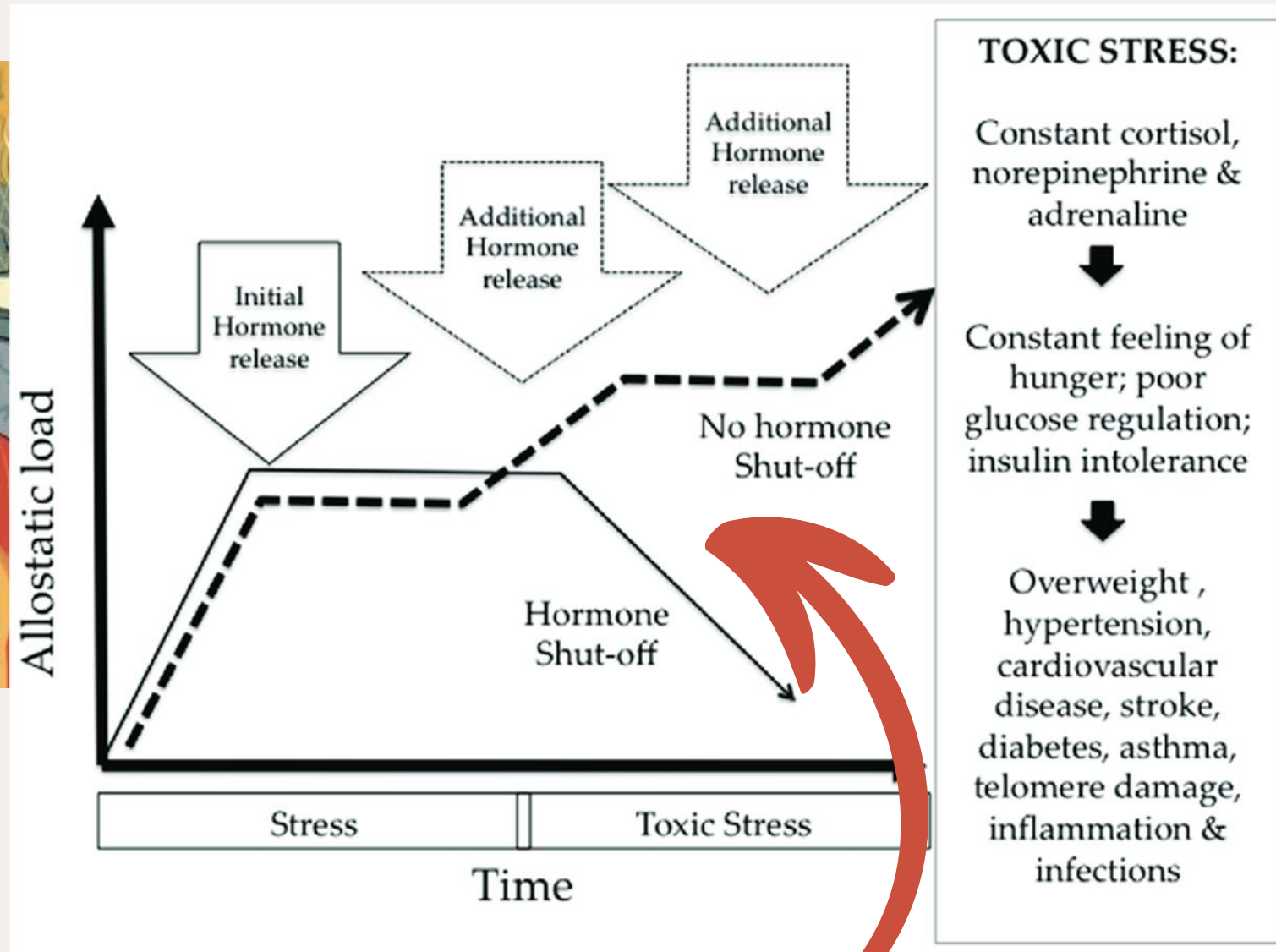
"**Racism**, specifically, is the **state-sanctioned** or extralegal production and exploitation of group-differentiated vulnerability to **premature death**."

Ruth Wilson Gilmore, PhD





reducing maternal stress



Our interventions aim to stop the transition from social stress to physiological stress

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. American journal of public health, 96(5), 826–833.

<https://doi.org/10.2105/AJPH.2004.060749>

Corburn, Jason. (2017). Urban Place and Health Equity: Critical Issues and Practices. International Journal of Environmental Research and Public Health. 14. 117. 10.3390/ijerph14020117.

culturally concordant care

"Concordance, or congruence, occurs when patients and providers share one or more of several demographic characteristics: gender, social class, age, ethnicity, race, language, sexual orientation, beliefs, and values. A number of studies have found that patient-provider concordance was positively associated with high ratings of patient experience."

Moore C, Coates E, Watson A, de Heer R, McLeod A, Prudhomme A. "It's Important to Work with People that Look Like Me": Black Patients' Preferences for Patient-Provider Race Concordance. *J Racial Ethn Health Disparities*. 2023 Oct;10(5):2552-2564. doi: 10.1007/s40615-022-01435-y. Epub 2022 Nov 7. Erratum in: *J Racial Ethn Health Disparities*. 2022 Dec 19;; PMID: 36344747; PMCID: PMC9640880.

"Achieving equitable patient outcomes may also depend on health insurance payers (e.g., Medicaid or private insurers) holding health care providers, irrespective of their race or ethnicity, accountable for delivering culturally and linguistically effective evidence-based care to all of their patients."

Gonzalez, D., Kenney, G., McDaniel, M., & O'Brien, C. (2022). Racial, Ethnic, and Language Concordance between Patients and Their Usual Health Care Providers. *Urban Institute*. <https://www.urban.org/research/publication/racial-ethnic-and-language-concordance-between-patients-and-their-usual-health-care-providers>



community-based models

INCORPORATING DIVERSE GROUPS OF HEALTH CARE PROVIDERS

- Community-based doulas
- Midwives
- Lactation

OFFERING NON-HOSPITAL-BASED CARE

- Free-standing Birth Centers
- Maternity homes
- Home-Births

EXPLORING INNOVATIVE MODELS OF MATERNITY CARE

- Group Prenatal Care
- Pregnancy Medical Homes

ROLE OF PAYMENT AND DELIVERY SYSTEM REFORM

- Expanding and improving reimbursement for the provider types
- Improving access to services
- Incentivizing health systems and providers to adopt evidence-based models of care

Community-Based Models to Improve Maternal Health Outcomes and Promote Health Equity



▲ Stephanie Dixon, left, and Deundra Hundon, a mother-daughter doula duo and owners of Bare With Me, demonstrate how a birthing person can be supported while in the bathroom. Bare With Me is part of a new partnership with the San Francisco Department of Public Health aimed at providing doulas to low-income Black and Pacific Islander women. Photo: Carlos Avila Gonzalez/San Francisco Chronicle via Getty Images

Source: Laurie Zephyrin et al., Community-Based Models to Improve Maternal Health Outcomes and Promote Health Equity (Commonwealth Fund, Mar. 2021).
<https://doi.org/10.26099/6s6k-5330>

guaranteed basic income

The model:

- Unconditional, direct and recurring cash payments to participants

The impact:

- Reduces poverty
- Not shown to have an impact on willingness to work

The innovation:

- Pilot to test if addressing economic security as a social determinants can improve perinatal health
- Designed to prevent stress during pregnancy
- Monthly payments to pregnant women at high risk for preterm birth
- \$600+ for 12-18 months
- Supportive resources including “Abundance Coach” to support financial literacy



THE CALIFORNIA
Abundant
BIRTHPROJECT

CELEBRATE YOUR BIRTH JOURNEY

Apply for the chance to receive a monthly cash gift during pregnancy and postpartum.
NO STRINGS ATTACHED.

ELIGIBILITY

- Live in Alameda, Contra Costa, Los Angeles, or Riverside counties
- Be 8-27 weeks pregnant at the time of the Abundance Drawing
- Meet income requirements*
- Meet one of the top five risk factors for preterm birth, including:
 - Identifying as Black
 - Have had a previous preterm birth
 - Have preexisting hypertension
 - Have preexisting diabetes
 - Have sickle cell anemia (SCA)

For more information, required documents and to apply, visit

ABUNDANTBIRTHPROJECT.ORG

The California Abundant Birth Project is designed to provide monthly cash gifts to eligible participants in order to support women/birthing people that are at highest risk of disparate pregnancy/birthing outcomes

group prenatal care

The model:

- Cohorts of patients at similar gestational age
- 10 prenatal health sessions that include
 - Private physical assessment with clinician
 - Facilitated group discussion on pregnancy health topics

The impact:

- Reduction in preterm birth rates by more than 40%
- Reduced rates of low birthweight
- Reduced NICU admissions
- Reduced emergency department use during pregnancy
- Higher patient health knowledge and satisfaction
- Reduced care costs

The innovation:

- Training, certification and technical assistance for model development and implementation for cohorts of Black birthing families
- Culturally concordant materials and community-based practitioners as GPC providers or facilitators
- Wraparound services and postpartum support
- Client incentives to address social determinants of health

GROUP PRENATAL CARE



FREE FOR BLACK BIRTHING FAMILIES
REGARDLESS OF INCOME

FUNDED BY THE LOS ANGELES COUNTY DEPARTMENT
OF PUBLIC HEALTH AAIMM INITIATIVE

Our group prenatal care sessions use evidence-based models to provide high quality, accessible and empowering care.

Participants receive:

- care from a medical provider
- health education
- additional risk screenings
- access to free baby supplies
- lactation support
- a community of Black birthing families and birth workers
- \$50 gas or grocery gift card for every session attended

2 LOCATIONS IN SOUTH LOS ANGELES
1 LOCATION IN THE ANTELOPE VALLEY

Enroll
here →



DON'T NEED PRENATAL
CARE BUT STILL NEED
SUPPORT?
CONTACT US!

(323) 563-9320
www.bmhce.org
bmhce@cdrewu.edu



Kindred Space LA



maternity homes

The model:

- Residences that house pregnant women or newly parenting moms with live-in or shift staff to provide support, training and coordination

The impact:

- Increased housing stability, skill building and well-being and pre and postnatal visits

The innovation:

- Accessible community health infrastructure where Black families live that feels more like home, less clinical
- Supported by interdisciplinary teams of birth workers, care providers and community advocates that provide responsive, evolving services
- Space is designed to be baby safe and parent comfortable, and allow Black families to see themselves celebrated through the art and decor
- Homes are well stocked with food and medical supplies for immediate, tangible support
- Each location includes a library with books on topics including self care, mental health, nutrition, reproductive justice, pregnancy and childbirth, and fiction



perinatal medical homes

The model:

- Provide comprehensive perinatal health care with a focus on early and expanded access
- Care is patient-centered and promotes health education and shared decision making
- Care teams are collaborative and incentivized to meet goals including increased screenings and improved health outcomes

The impact:

- Reduced rates of low-birth weight
- Reduced rates of cesarean births
- Reduced visits to emergency room and hospitalizations during pregnancy
- Increased likelihood of postpartum healthcare visits

The innovation:

- Perinatal medical home focused on screening and addressing risk factors including maternal stress, hypertension and social determinants of health for Black birthing families
- Community-based, interdisciplinary care team that expands the capacity of the primary care team
- Designed to support and integrate into hospitals, FQHCs, birth centers and midwifery practices
- Supported by data infrastructure and workforce development to enhance maternal care practice





let's build!

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BLACK MATERNAL HEALTH CENTER OF EXCELLENCE

www.bmhce.org



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