CityMatCH Annual Conference
Portland, Oregon
September 14, 2018

Cradle Kalamazoo – Collective Impact in Action

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[3]Kalamazoo Health and Community Services, [4]National Birth Equity Collaborative

Getting in the Door and Staying There

Lisa Graves MD

Associate Dean, WMed & Cradle Clinical lead

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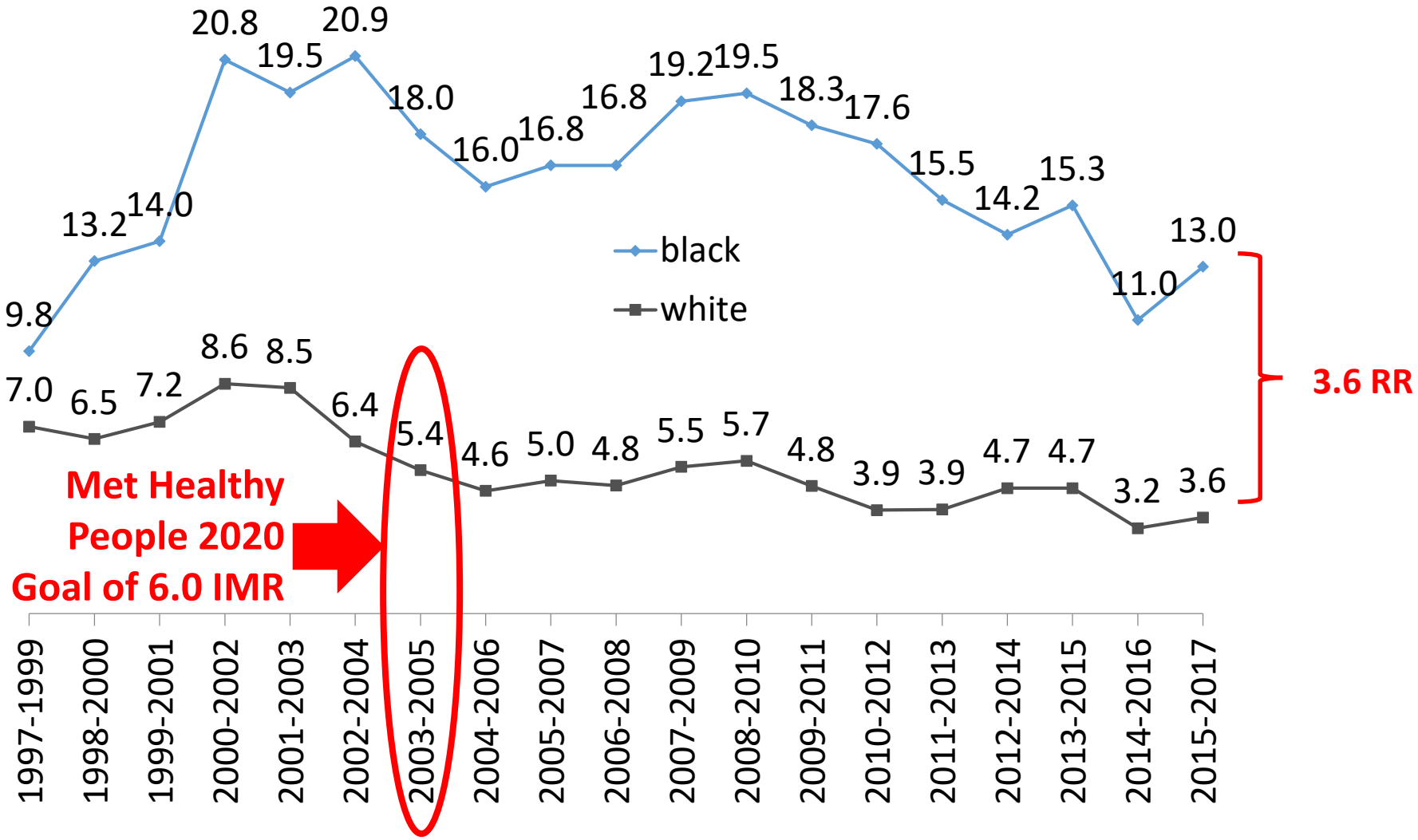
KALAMAZOO

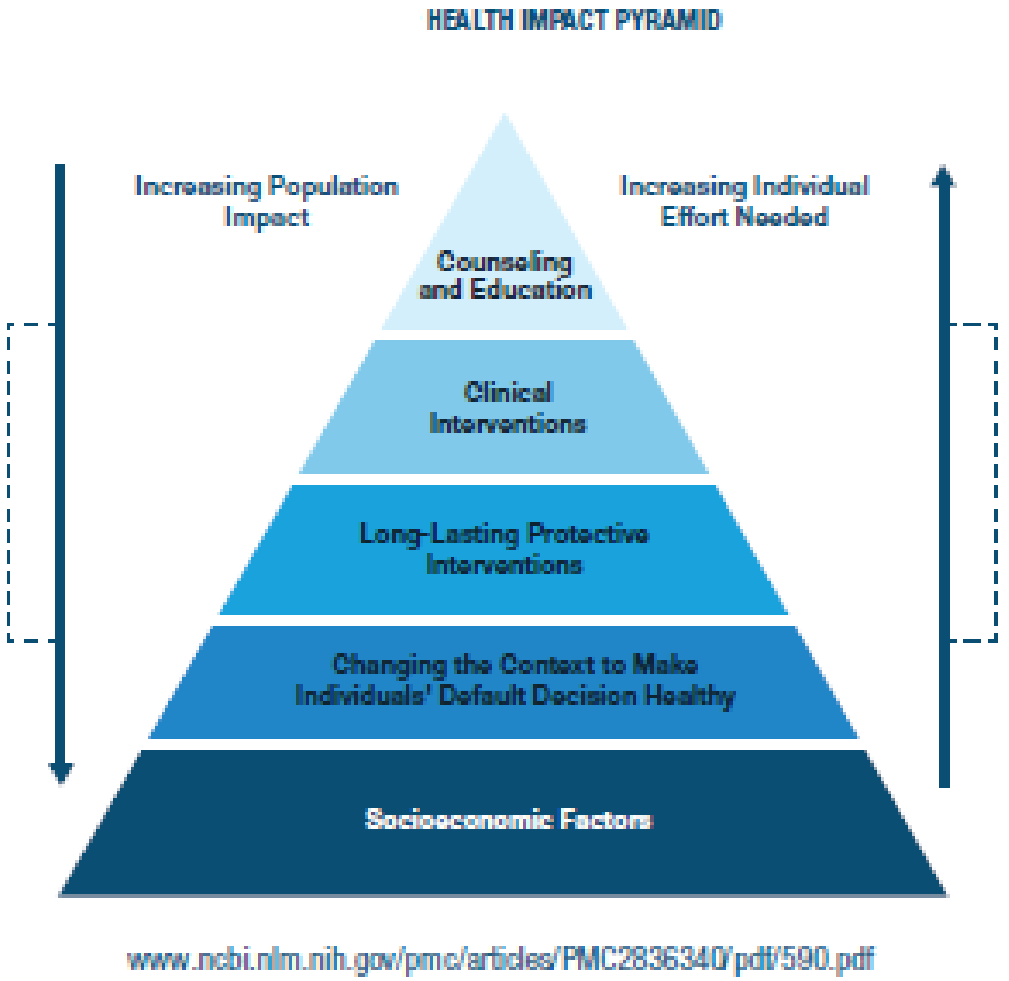
Kalamazoo County
Three Year Moving Average Infant Mortality Rate, By Race
-1997 to 2017*-



*2014-2016 & 2015-2017 are estimated, not the official rates.

COLLECTIVE IMPACT – The Goal

"Large-scale social change requires broad cross-sector coordination…."



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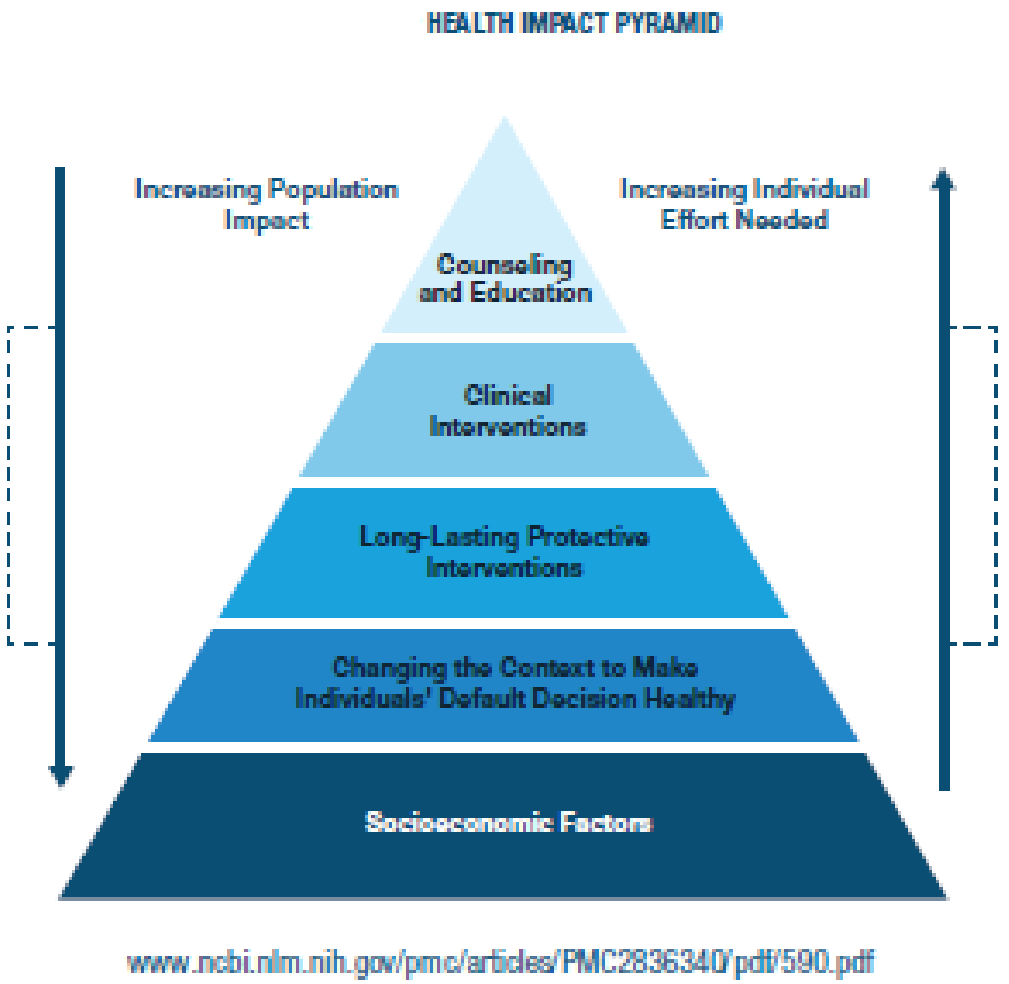
Kania, J. & Kramer, M. (2011) Collective Impact. *Stanford Social Innovation Review.* Winter, 2011.

COLLECTIVE IMPACT – The Challenges

"…yet [we] remain focused on the isolated intervention of individual organizations."



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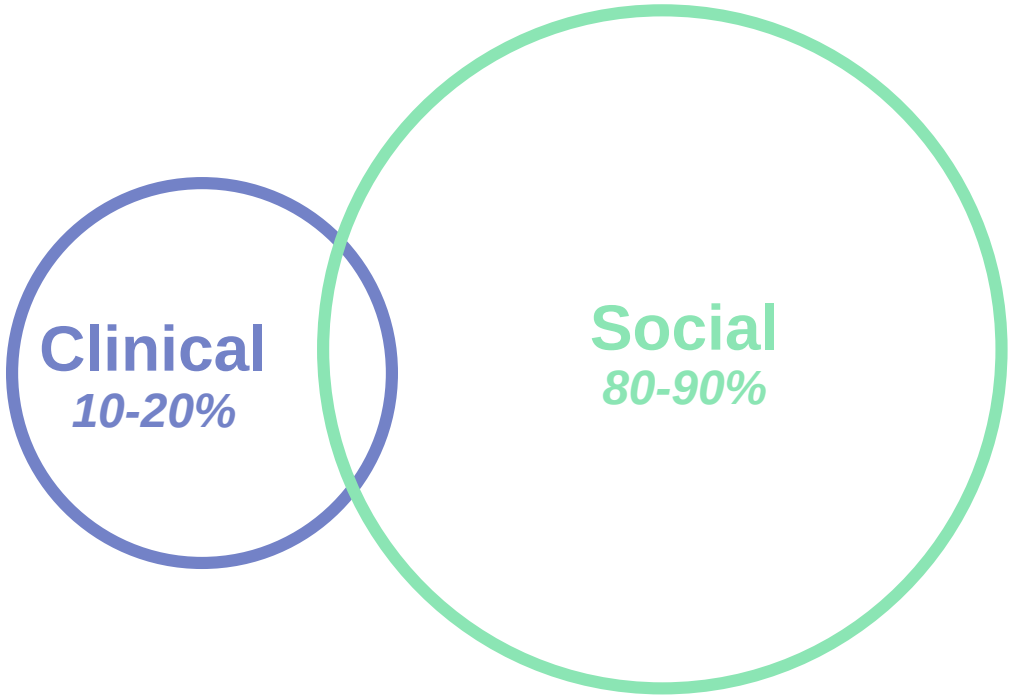
Kania, J. & Kramer, M. (2011) Collective Impact. *Stanford Social Innovation Review.* Winter, 2011.

COLLECTIVE IMPACT – The Parts

- **COMMON AGENDA**
- **BACKBONE SUPPORT**
- **SHARED MEASUREMENT**
- **CONTINUOUS COMMUNICATION**
- **MUTUALLY REINFORCING ACTIVITIES**

COLLECTIVE ACTION ➡ COLLECTIVE IMPACT

- Complex issues require **multidisciplinary strategies & interventions**.
- No one solution or organization will be able to solve infant mortality by themselves.
- Cradle's overall goal is to improve infant mortality, knowing that only **10-20% of health is impacted by clinical care**.



GETTING STARTED

PHASE 1: GENERATING IDEAS AND DIALOGUE: 2014

- Build awareness
- Build Community Partners
- Identify the issue in the community
- Learn from the past

ACTIVITIES

- One-on-one meetings with stakeholders
- Kickoff Conference (November, 2014)
- Media coverage

Equity Focus — **Data-Driven** — **Collective Impact** — **Community Engagement**

ROOTED IN STRATEGY

PHASE 1: GENERATING IDEAS AND DIALOGUE: 2014

PHASE 2: STRATEGIC PROCESS: 2015

Funding:

Healthy Babies Healthy Start
In Kalamazoo, Michigan

ASCENSION

Western Michigan University

- Identify priority areas
- Identify strategic partners
- Analyze baseline data and key issues
- Map the landscape and use data to make case

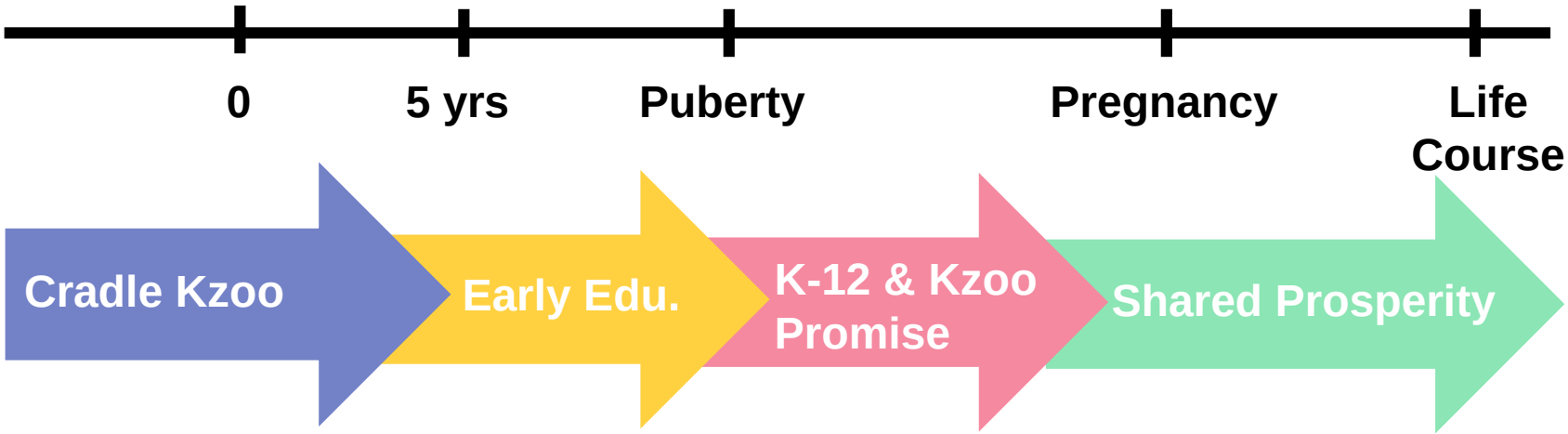
ACTIVITIES

- Community Workshops (March & May, 2015)
- Fundraising
- Research Race X SES further
- Strategic Planning Consultant / Process

Equity Focus — **Data-Driven** — **Collective Impact** — **Community Engagement**

CRADLE GOALS

- **Cradle Kalamazoo:** In the next 10 years, Cradle is organizing strategies to **create zero disparities** in infant mortality and an overall infant mortality rate of **less of 3.0** per 1,000 lives births



Overall well-being of all children & families in Kalamazoo

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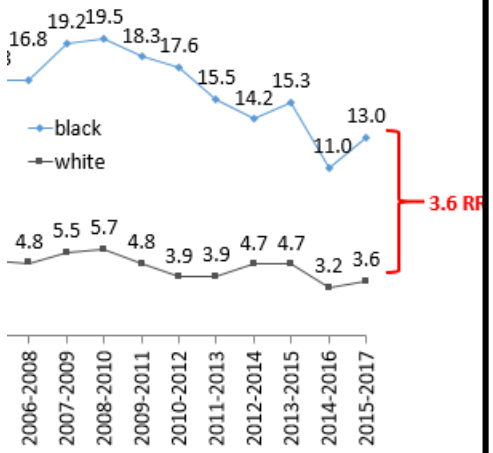
ALIGNING STRATEGY WITH CAUSE

Problem



Cause

1. Fragmented Systems of care

2. Stress from poverty & discrimination

3. Lack of opportunity & access

4. Health Literacy

Strategic Objectives

1. Coordinating perinatal **home visitation network**,

2. Incorporating **health equity** into practices & policies,

3. Providing **reproductive health education**,

4. Providing **safe sleep education**.

ORGANIZING

PHASE 1: GENERATING IDEAS AND DIALOGUE: 2014

PHASE 2: STRATEGIC PROCESS: 2014-15

PHASE 3: INITIAL ACTION: 2015-16

- Facilitate community outreach
- Identify funding
- Establish shared metrics

Funding:

- Kalamazoo County Health Plan
- Michigan Health Endowment Fund

ACTIVITIES

- Announced plan at annual meeting
- Workgroups to develop each objective
- Hired administrative backbone
- Public Health Marketing
- Fundraising

Equity Focus — **Data-Driven** — **Collective Impact** — **Community Engagement**

IMPLEMENTATION

PHASE 1: GENERATING IDEAS AND DIALOGUE: 2014

PHASE 2: STRATEGIC PROCESS: 2014-15

PHASE 3: INITIAL ACTION: 2015-16

PHASE 4: ORGANIZE FOR IMPACT: 2016 - 2018

Funding:

LIVE UNITED
United Way
United Way of the Battle Creek and Kalamazoo Region
uwbckr.org

- Create infrastructure and process
- Create common agenda, goals and strategy
- Continue to engage

ACTIVITIES

- Baby Hotline
- Implement Data Hub
- Fundraising
- Continuum of care

Equity Focus — **Data-Driven** — **Collective Impact** — **Community Engagement**

CRADLE ACHIEVEMENTS 2014-2018

- Administrative & Data Backbone raised $1.8 million (2014-2018) to support admin, data, and expanded programming
- Coordinated over 400 meetings with 30 community partners at 8 committees
- In 2017-2018, Hosted 22 community events with a total of 784 attendees and volunteers

CRADLE ACHIEVEMENTS 2014-2018

Home Visitation

- Built Care Coordination Registry with 7 perinatal HV programs
- Supported care coordination between programs with Frontline meetings

Safe Sleep

- Coordinated education with home visitation
- Designed standardized education and messaging

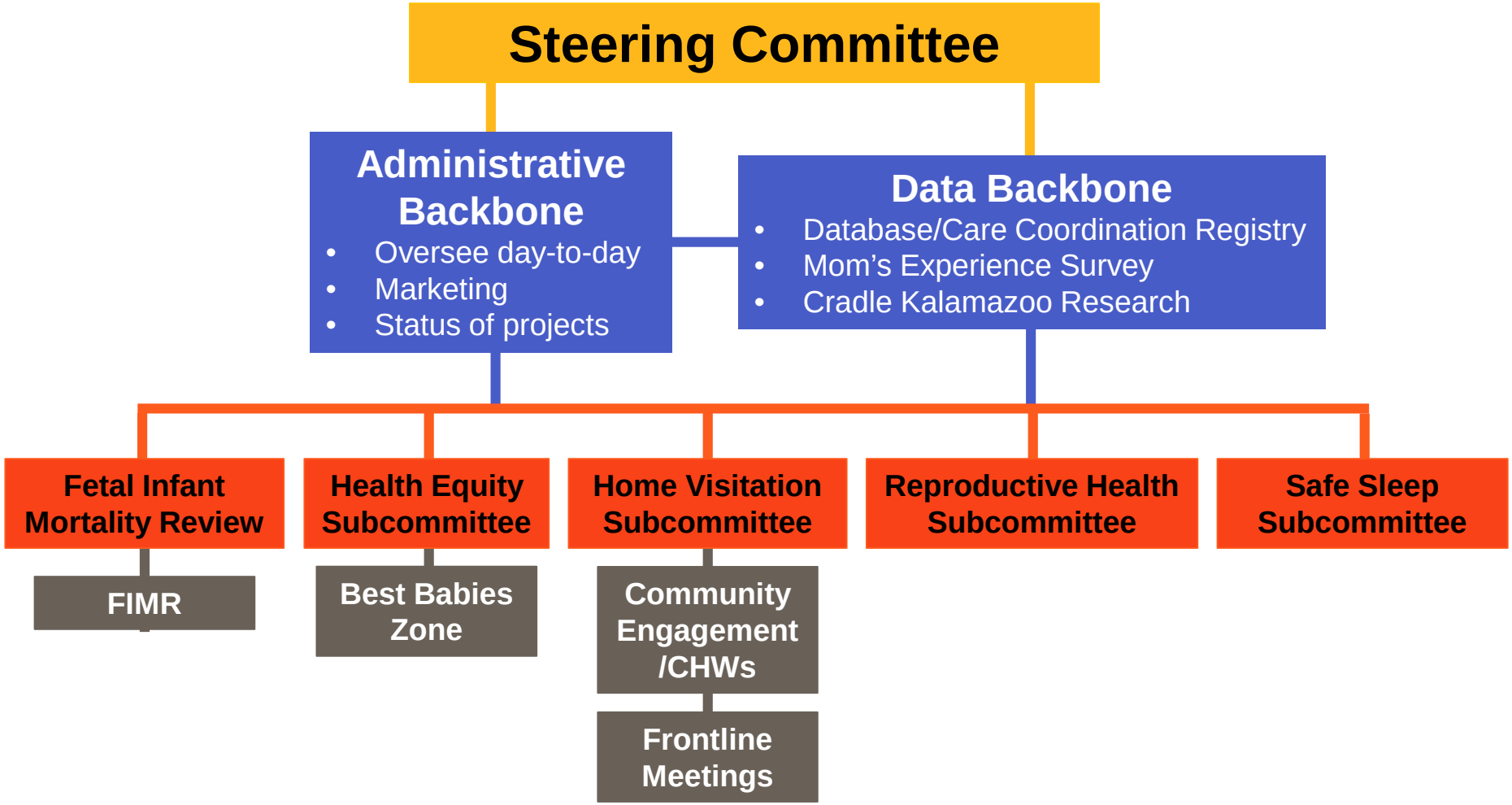
Reproductive Health

- Coordinated education with home visitation
- Designed standardized education and messaging

Health Equity

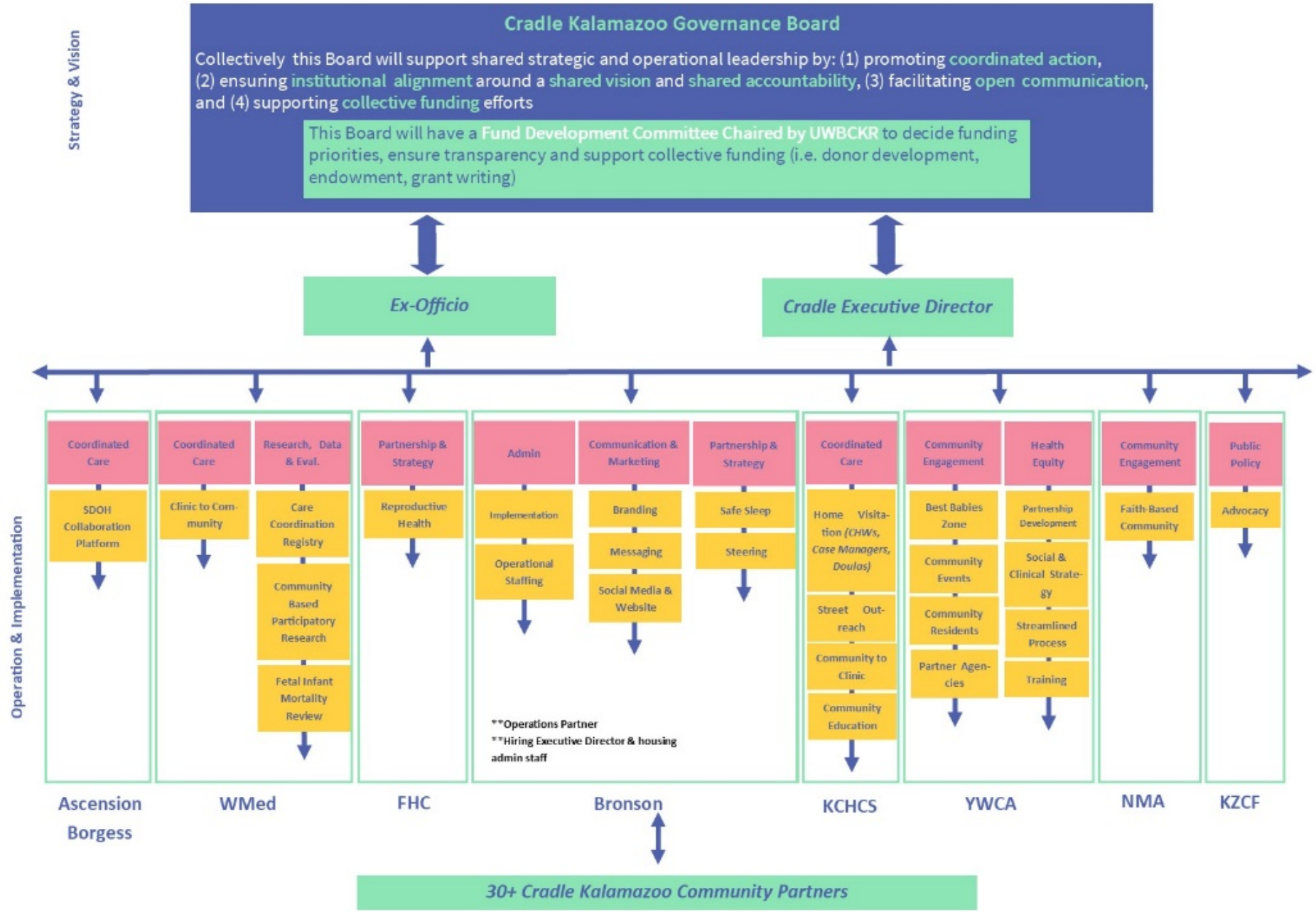
- Commitment for IM from City & County Commissions
- Review of equity in initiative
- Funded community engagement & equity work within clinics

WHERE WE STARTED: Cradle's first structure (2015)



Awareness ⟷ **Equity Focus** ⟷ **Intentional**

CRADLE RE-STRUCTURE



Coordinating Across Agencies & Programs

Terra Bautista (Healthy Babies Healthy Start Coord)

“Alone we can do so little…”

Cradle Hotline…. 2-1-1 Gryphon Place

Cradle Hotline (888-KIDS) & 2-1-1 Screening

- 100+ calls into hotline
- 10,000 2-1-1 callers screened annually for pregnancy
- 61 women enrolled in home visitation program

https://www.youtube.com/watch?v=GBC5Gu8MQFU&t=1s

CRADLE COORDINATION ACHIEVEMENTS

Home Visitation

- Built Care Coordination Registry with 6 perinatal HV programs
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Health Equity

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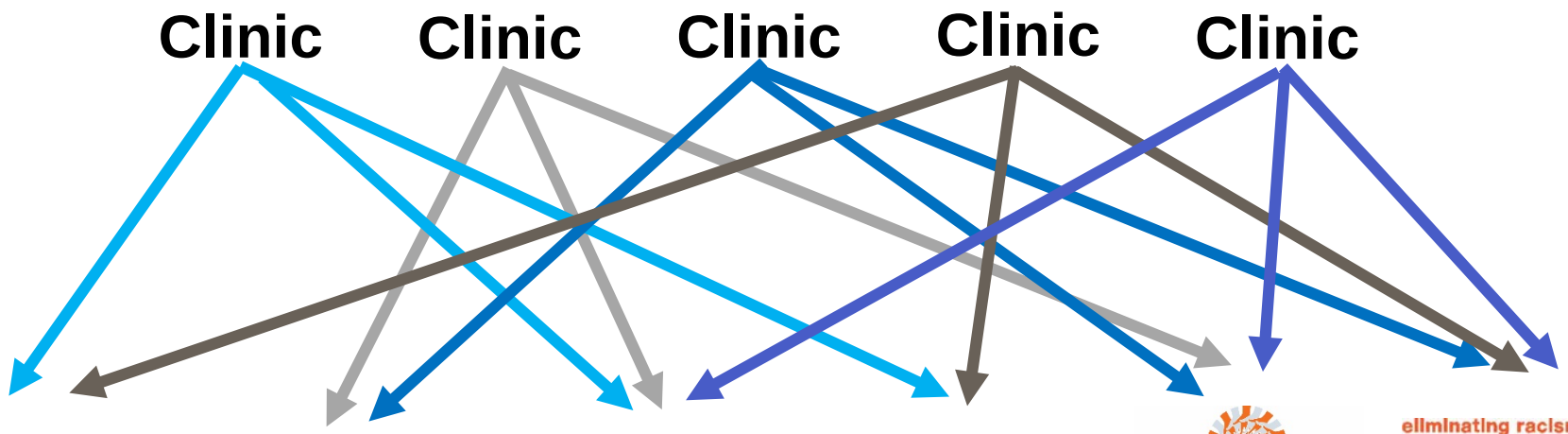
CRADLE Home Visitation Coordination



Healthy Babies Healthy Start
In Kalamazoo, Michigan

Healthy Families America

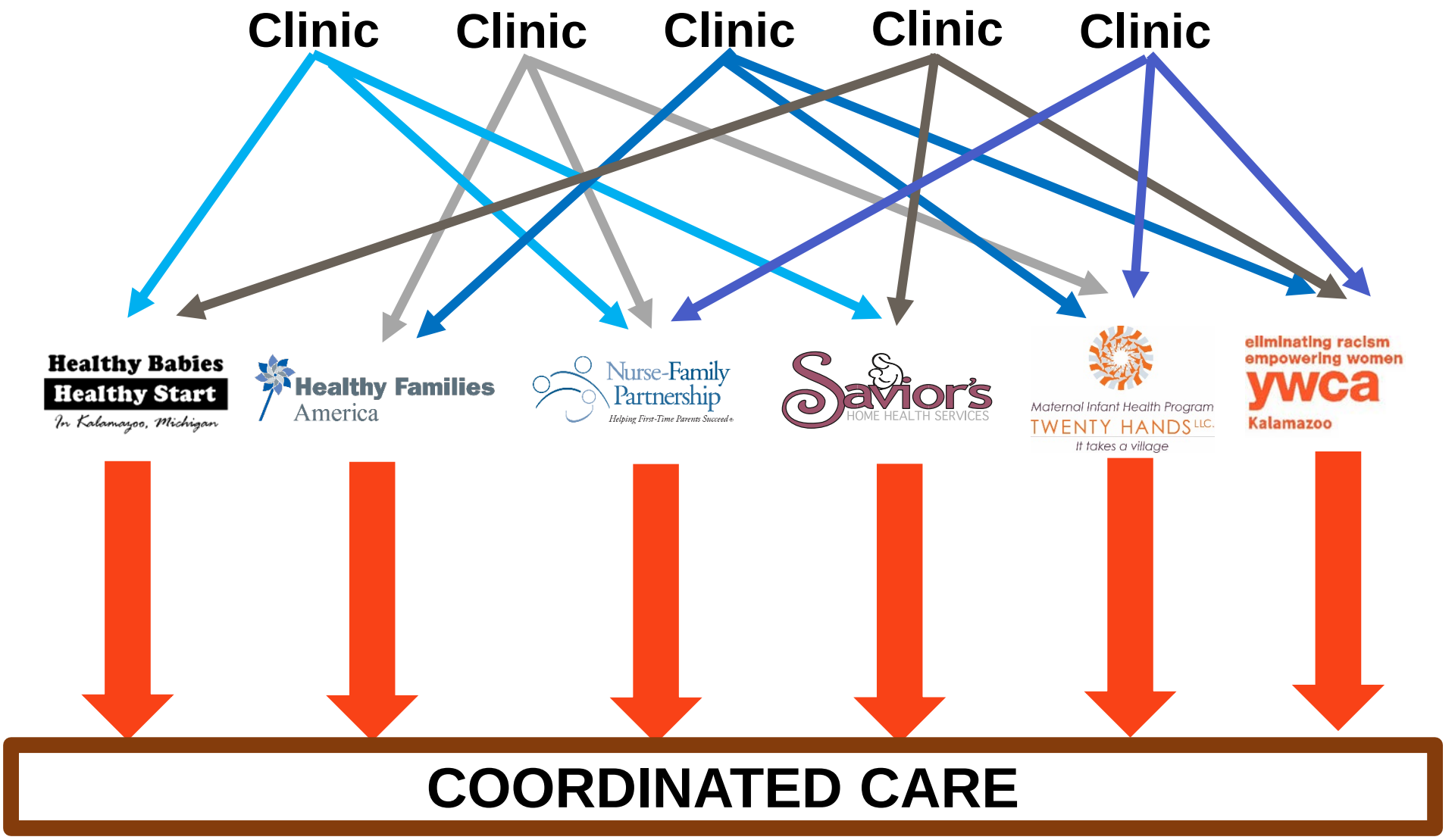
Nurse-Family Partnership
Helping First-Time Parents Succeed®

Savior's
HOME HEALTH SERVICES

Maternal Infant Health Program
TWENTY HANDS LLC.
It takes a village

eliminating racism empowering women
ywca
Kalamazoo

CLINIC TO COMMUNITY COORDINATION



“… together we can do so much”

9 data-sharing participants:

- Seven home visiting programs
- Two CHW programs

Multiple community programs

- Early childhood home visiting
- Service presentations

48 weekly meetings since 2017

254 Cases reviewed

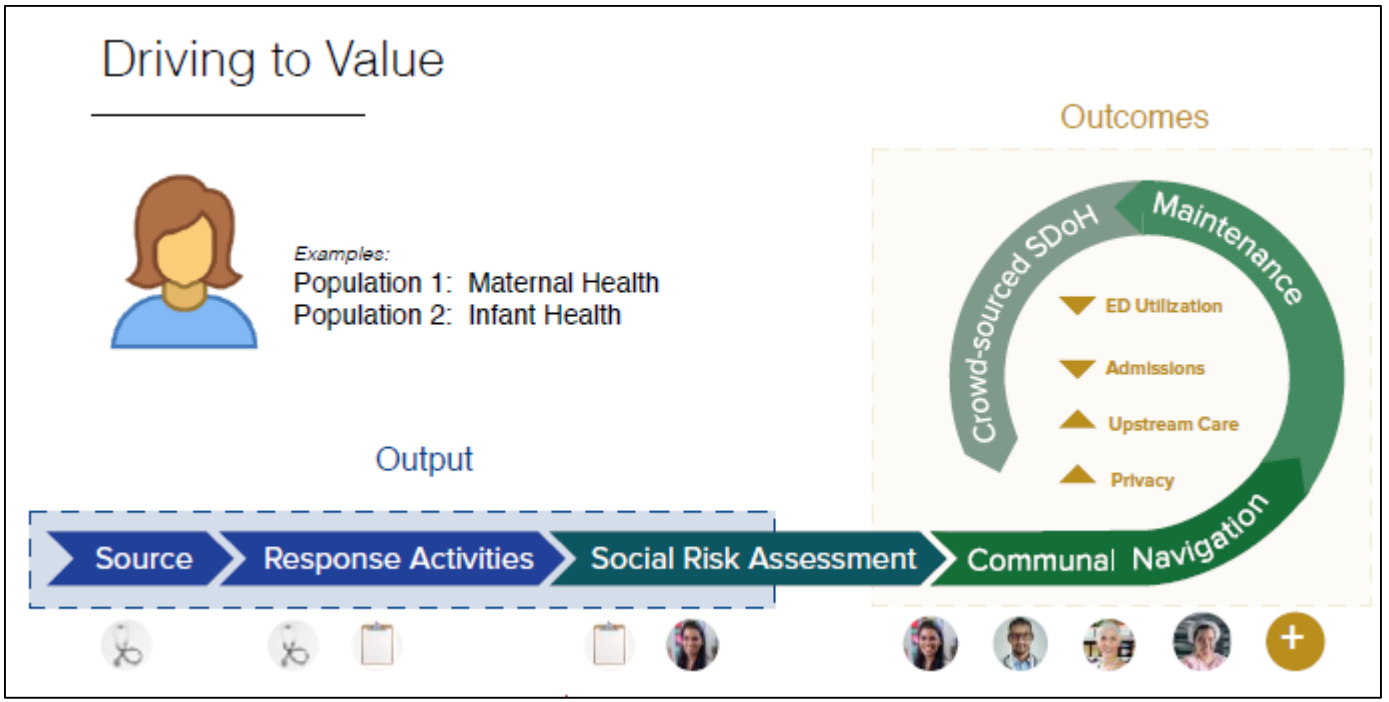
- Thirty-eight brain-storming
- Two hundred-sixteen hand-offs

COORDINATED CARE STRATEGIES

1. **Clinic to Community**
   - Home Visitation *(case managers, doulas, CHWs)*
   - Planning for automatic, universal referral
2. **SDOH Collaboration Platform, ASCENSION BORGESS TAV**
   - Promote coordination between clinic & community resources
3. **Community to Clinic**
   - Street outreach, resource linkage & re-engagement
   - Community education
4. **Care Coordination Registry**
   - Updated contact info for enrollment / retention
   - Referral portal for agencies, clinics, & community

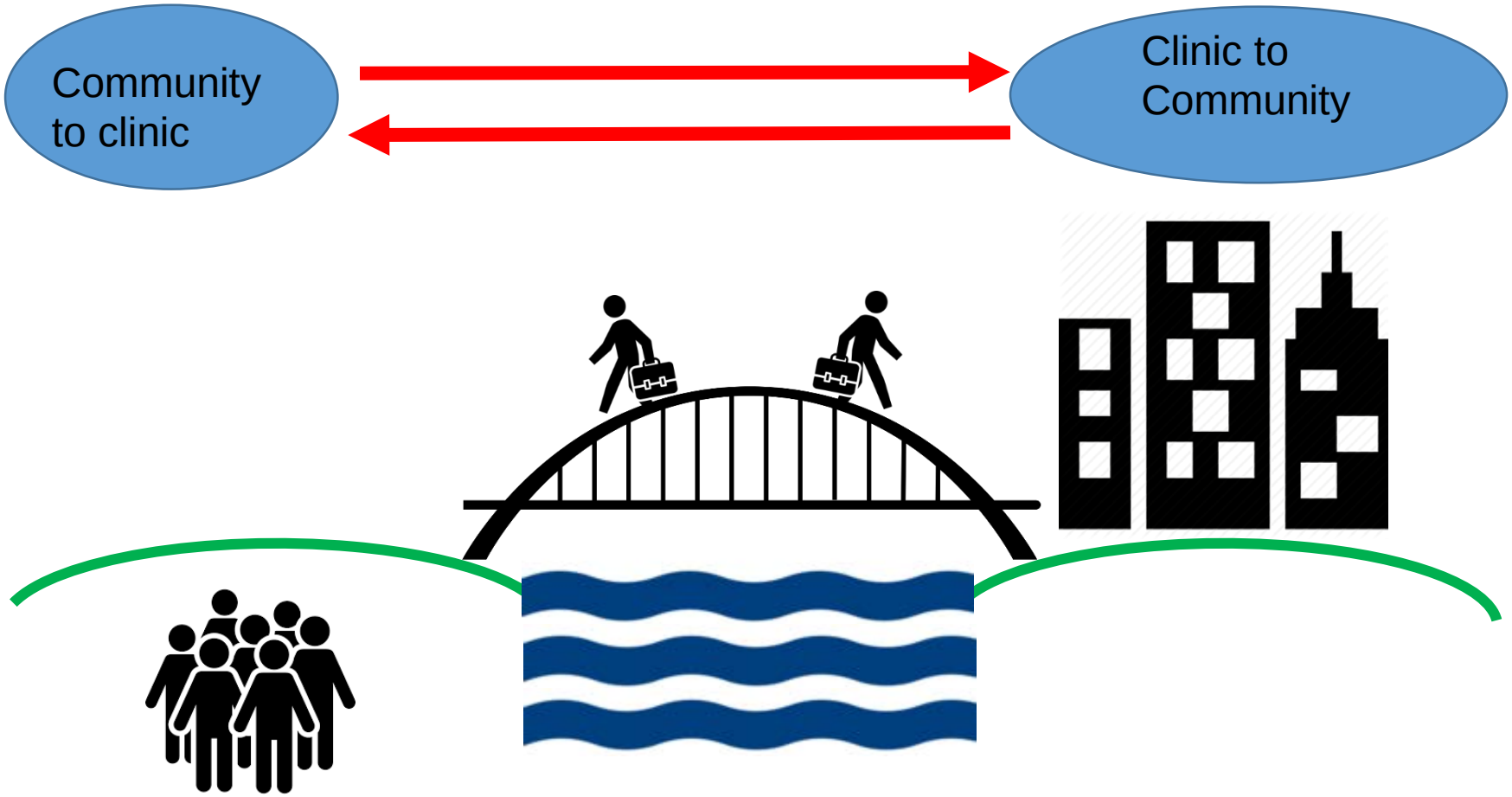
SDOH COLLABORATION PLATFORM

Pilot an electronic care coordination platform



BORGESS | Ascension

Bridging services



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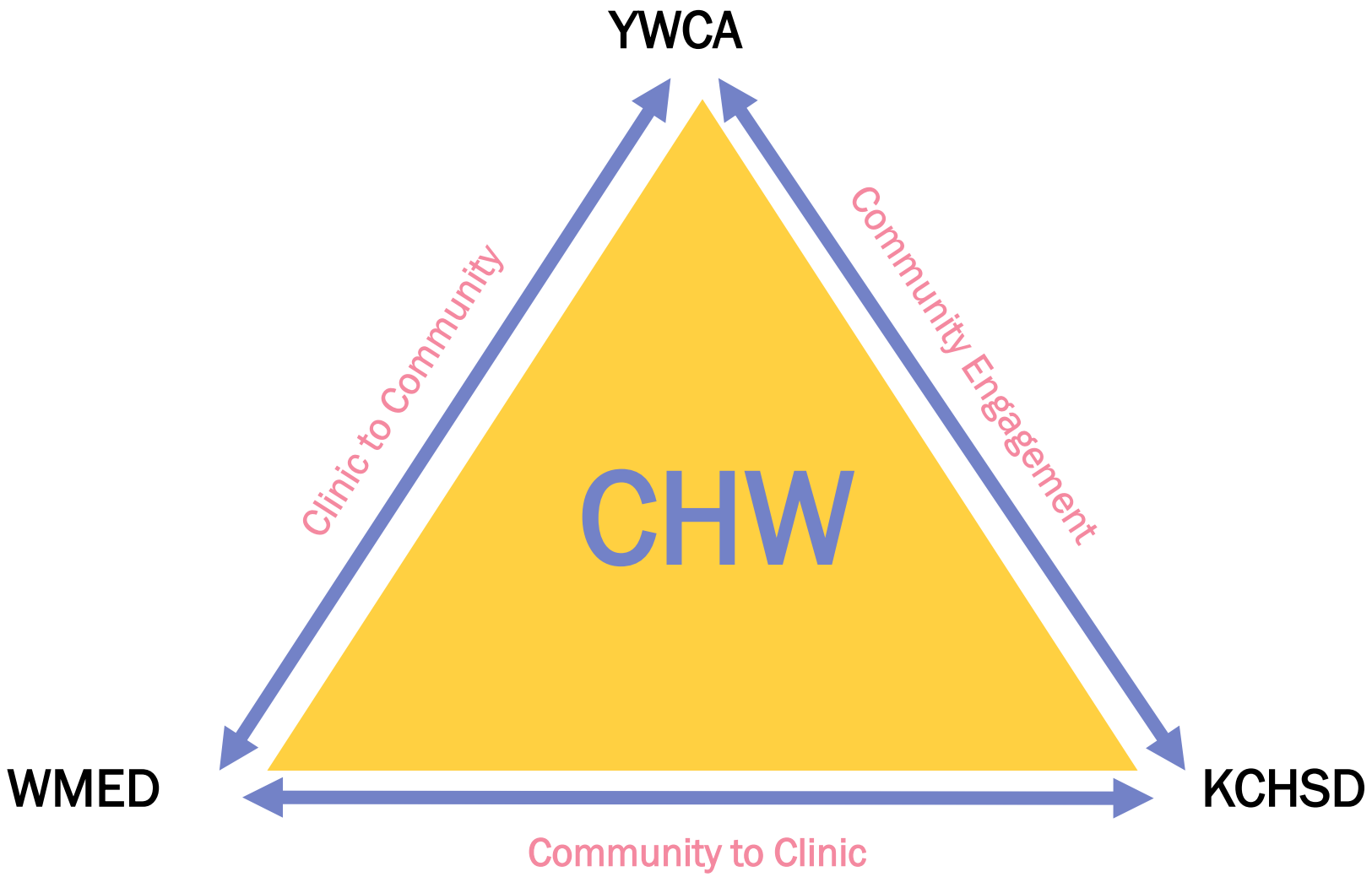
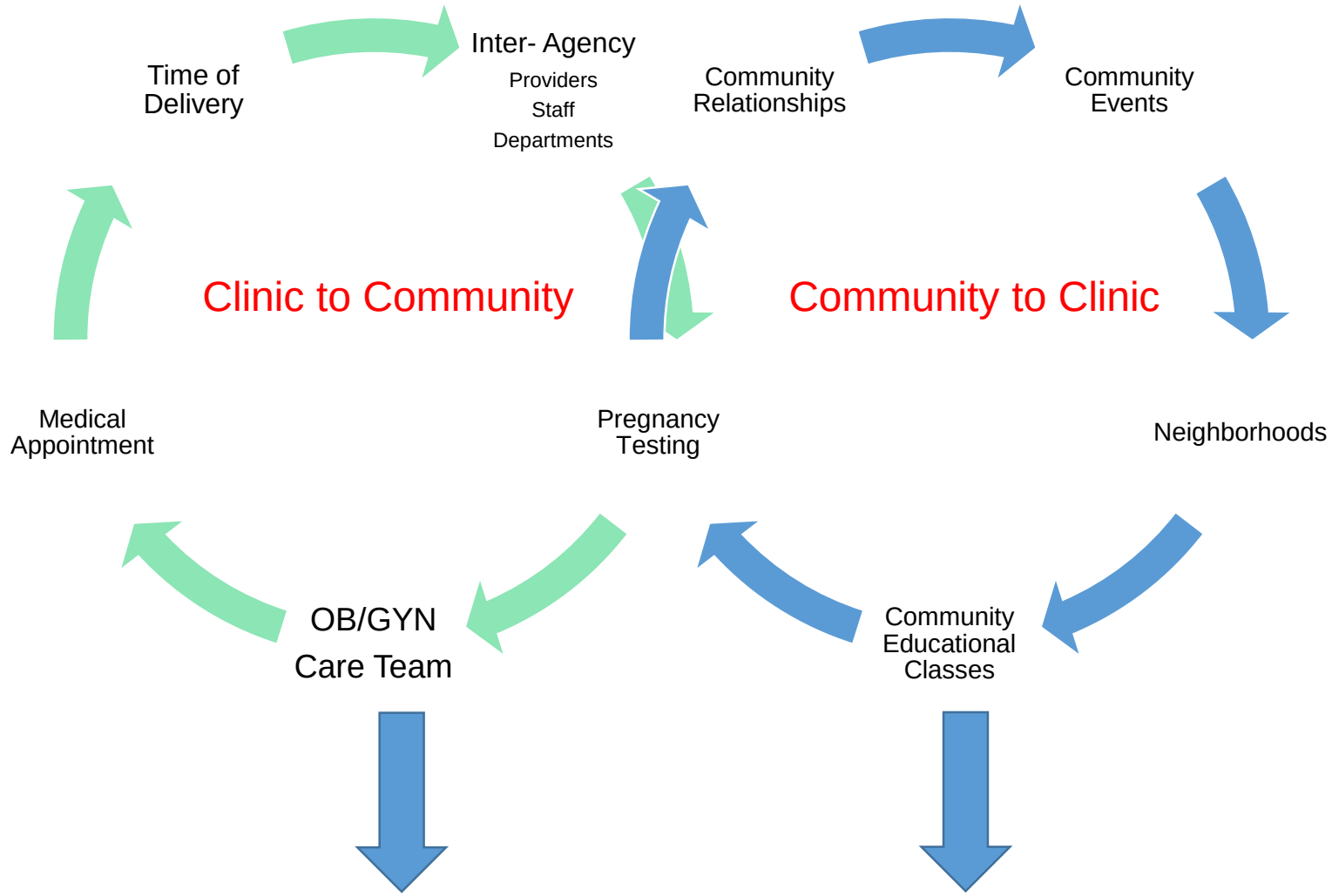
Coordinated Care: CHW Strategy





- Increased support for families
- Wrap-Around Case Sharing

Outreach increases community-engagement:

Taking Clinical Continuum-of-Care into Neighborhoods and Homes

Carmen Green MPH
(National Birth Equity Collaborative,
Cradle Health Equity Consultants)

Overview

- Capacity Building grant from MDHHS – Minority Health

- Goal to eliminate racial and ethnic health disparities through implementing culturally appropriate, evidence-based approaches

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Overall Program & Evaluation

- Purpose of this grant is to support goal**:** *ensuring health equity and cultural competency of programs, policies, and providers.*

- Partnering with **3 clinical sites** *(Ascension Borgess, Bronson, Family Health Center)* to improve cultural competency of clinical processes and procedures that impact maternal and infant health

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Mission

To reduce Black maternal and infant mortality through research, family centered collaboration and advocacy.

Goal

Reducing black infant mortality rates by 50% in the next 10 years.

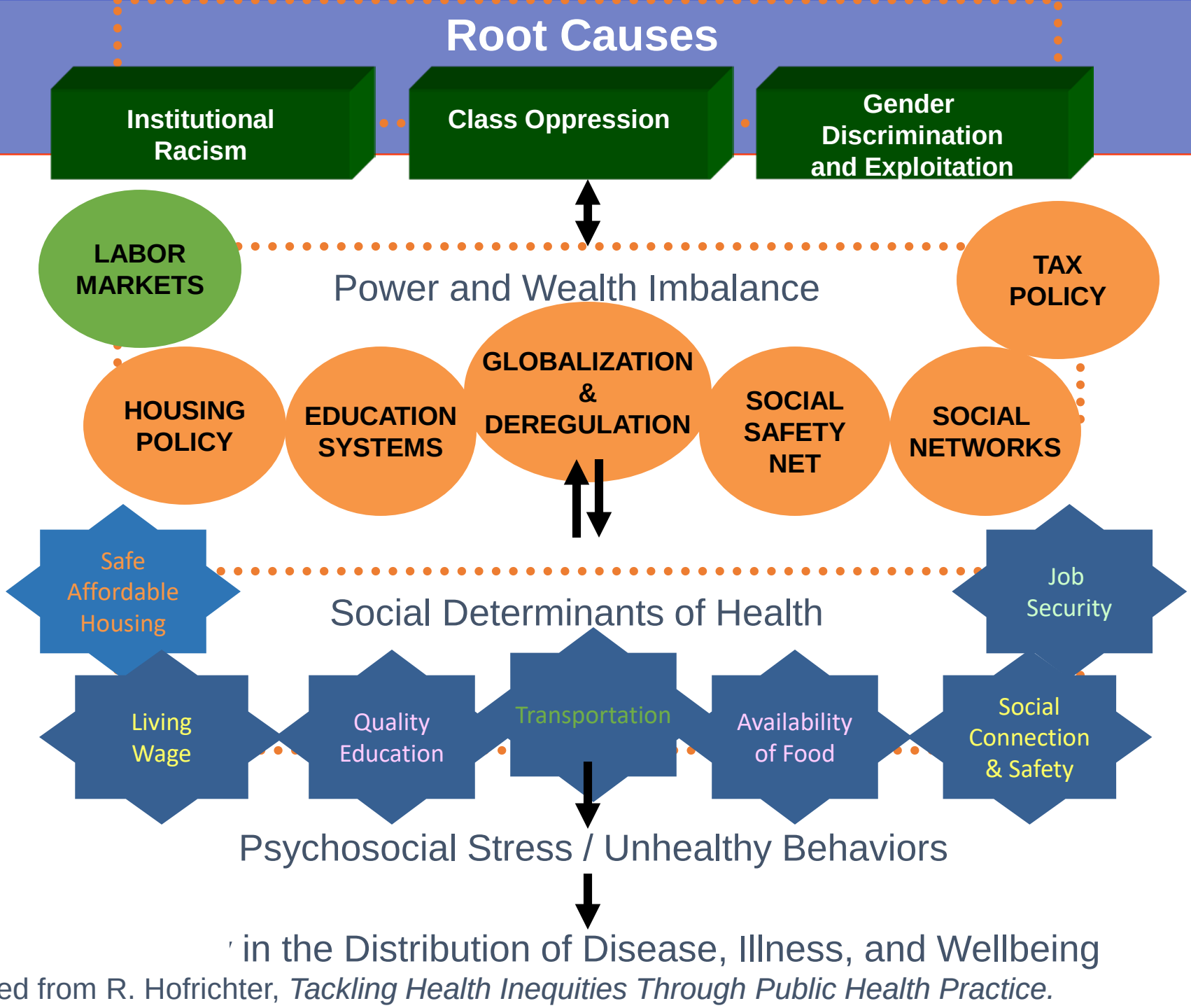
NATIONAL BIRTH EQUITY COLLABORATIVE

Our vision is that every Black infant will celebrate a healthy first birthday with their families.

birth equity *(noun)*:

1. The assurance of the conditions of optimal births for all people with a willingness to address racial and social inequalities in a sustained effort.

Joia Crear-Perry, MD
National Birth Equity Collaborative



Adapted from R. Hofrichter, *Tackling Health Inequities Through Public Health Practice.*

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IHI (Institute for Healthcare Improvement) Framework To Achieve Health Equity

1.	Make health equity a strategic priority	• Demonstrate leadership commitment to improving equity at all levels of the organization • Secure sustainable funding through new payment models
2.	Develop structure & processes to support health equity work	• Establish a governance committee to oversee and manage equity work across the organization • Dedicate resources in the budget to support equity work
3.	Deploy specific strategies to address the multiple determinants of health on which health care organizations can have a direct impact	• Health care services (CLAS, CHW, co-design processes) • Socioeconomic status (fair pay & opportunity for employees) • Physical environment • Healthy behaviors
4.	Decrease institutional racism within the organization	• Physical space: Buildings & design • Health insurance plans accepted by the organization • Reduce implicit bias within organization policies, structures & in patient care
5.	Develop partnerships with community organizations	• Leverage community assets to work together on community issues related to improving health & equity

Wyatt R., Laderman M., Botwinick L., Mate K., Wittington J. *Achieving Health Equity: A Guide for Health Care Organizations.* IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016. (Available at ihi.org)

Root cause analysis

Some of the underlying reasons for lack of effectiveness of RCAs in improving patient safety include the lack of standardized and explicit processes and techniques to:

- Identify hazards and vulnerabilities that impact patient safety and then prioritize them to determine if action is required
- Identify systems-based corrective actions
- Ensure the timely execution of an RCA and formulation of effective sustainable improvements and corrective actions Ensure follow-through to implement recommendations
- Measure whether corrective actions were successful
- Ensure that leadership at all levels of the organization participate in making certain that RCAs are performed when appropriate, in a timely manner, and that corrective actions are implemented to improve patient safety

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Rules to 5 whys

Rule 1. Clearly show the “cause and effect” relationship.

Rule 2. Use specific and accurate descriptors for what occurred, rather than negative and vague words. Avoid negative descriptors such as: Poor; Inadequate; Wrong; Bad; Failed; Careless.

Rule 3. Human errors must have a preceding cause.

Rule 4. Violations of procedure are not root causes, but must have a preceding cause.

Rule 5. Failure to act is only causal when there is a pre-existing duty to act.

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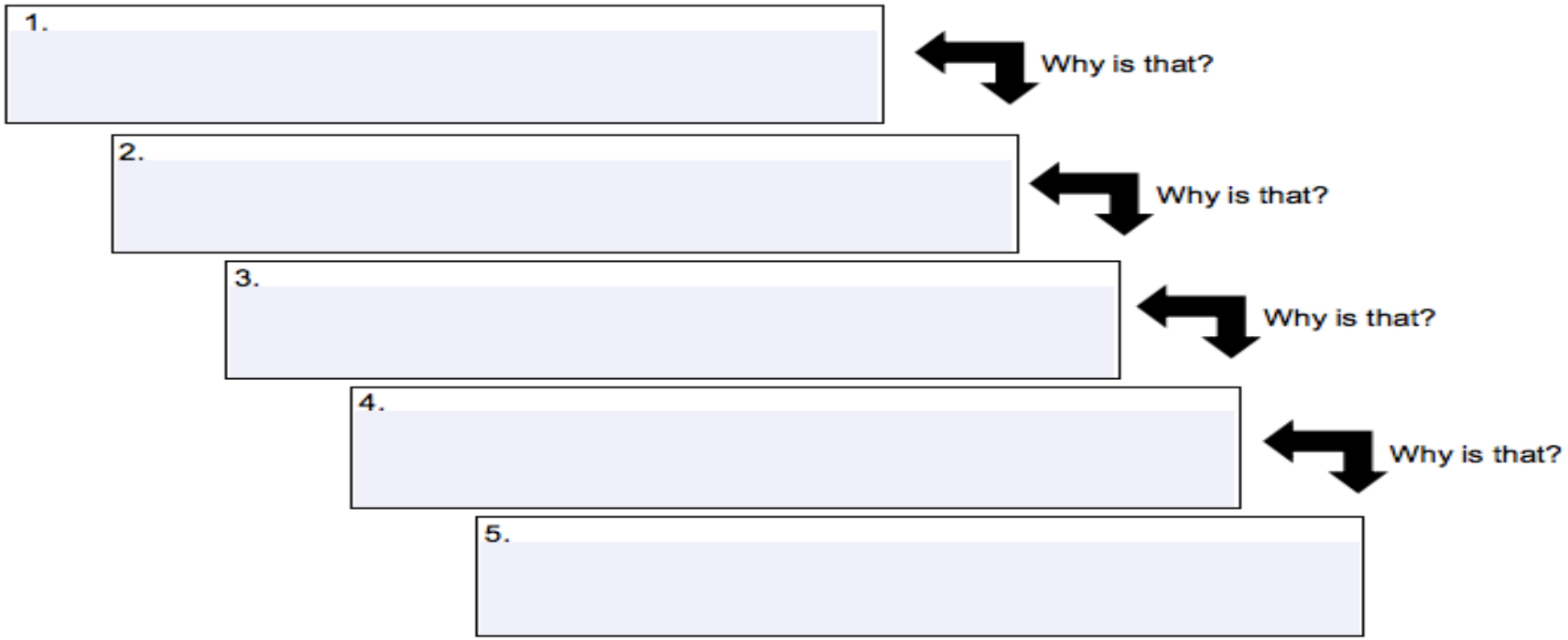
"5 Whys" Exercise

EVENT: **What happened?**

PATTERN: **What's been happening?**

STRUCTURE. Why is it happening? What are the tangible and intangible structures determining the results we see?



ACTION: <u>What are the implications for action?</u>

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Overall Program & Evaluation

Phase 1:

- Identified 3 clinical sites
- Assessed cultural competency of policies and procedures that impact maternal/infant health *(pre-assessment)*
- Met with sites to review assessment & talk about needs
- Drafted recommendations

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Overall Program & Evaluation

Phase 2:

- Reviewed recommendations (universal intake process, earlier access to care, equity trainings, substance abuse trainings, HR practices)

- Implement recommendations (training evaluations)

- Plan to assess after 1 year (post-assessment consultant evaluation, summary/process report)

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Current Work

- **Phase 2: Early Access to Care**
  - Updated and documented intake processes & workflow
  - Created reports with entrance to care data
  - Updated intake process for first prenatal visit
  - Working to create & implement unified SDOH questionnaire
  - Offered trainings
  - Post Assessment and review in September
- **Sustainability:**
  - Processes and procedures incorporated into each clinic
  - Connecting with partner agencies for continued training needs
  - Incorporate into internal QI processes

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Successes & Challenges

Successes

- Engagement from clinical partners
  - Unified approach to SDOH across Kalamazoo
- Changing culture around access to care
  - Support for early access to care
  - Median first prenatal visit now occurring in first trimester
- Interest in trainings
  - 8 events completed
  - 2 planned

Challenges

- Securing an external consultant
- Consistent follow-up with multi-sector partners

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Best Practices

HRSA MCH CoIIN

Association of Maternal & Child Health Programs (AMCHP)

FL, IL, KY, MA, NC, NM, NV, OH, OR, RI, SC, TX, WI

Social determinants of health

National Institute for Children's Health Quality (NICHQ)

AR, MS, NY, TN

Sudden Unexpected Infant Death

Project Concern International (PCI)

CoIIN Team States: AZ, CA, NM, TX

Early prenatal care & social determinants of health

University of North Carolina - Chapel Hill

CA, DE, NC, OK

Preconception health

AMCHP Innovation Station

Practice	State	Primary Interest	Category
Healthy Babies are Worth the Wait	Kentucky	Birth Outcomes	Best
Mississippi Interpregnancy Care Project	Mississippi	Birth Outcomes	Emerging
Early Intervention Partnerships Program (EIPP)	Massachusetts	Health Screening	Emerging
The JJ Way Model of Maternity Care	Florida	Infant Health	Emerging
Touching Hearts and Minds (THM)	Massachusetts	Infant Health	Emerging
Tennessee Safe Sleep Hospital Project	Tennessee	Infant Health	Emerging
Flordia Newborn Screening Results (FNSR)	Florida	Infant Health	Emerging
Tampa Bay Doula Program	Florida	Perinatal Health	Emerging
Birth and Beyond California	California	Quality Assurance	Promising
Baby Steps to Breastfeeding Success	Arizona	Quality Assurance	Emerging
Back to Sleep Nurse Training	Missouri	Workforce & Leadership Development	Promising
Safe Sleep Sweep	New York	Infant Health	Cutting Edge
Healthy Babies are Worth the Wait Consumer Education Initiative	New York	Birth Outcomes	Promising
Perinatal Substance Use	Indiana	Substance & Tobacco Use	Cutting Edge
Moving Beyond Depression	Ohio	Mental Health	Best
Baby and Me Tobacco Free		Substance & Tobacco Use	Best
Developing, Testing & Scaling Coordinated Intake & Referral	Florida	Systems Building	Promising
Welcome Family	Massachusetts	Health Promotion	Promising
Safe Infant Sleep	Georgia	Birth Outcomes	Emerging
DOSE: Direct On Scene Education Program	Florida	Injury Prevention	Cutting

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Data as a Health Justice Strategy

Cathy Kothari PhD (Assoc Prof, WMed & Cradle Epi)

CRADLE-KALAMAZOO DATA BACKBONE

COMMUNITY-BASED, POPULATION HEALTH RESEARCH

CQI – FIMR

CARE COORDINATION REGISTRY

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COMMUNITY-BASED POPULATION HEALTH RESEARCH

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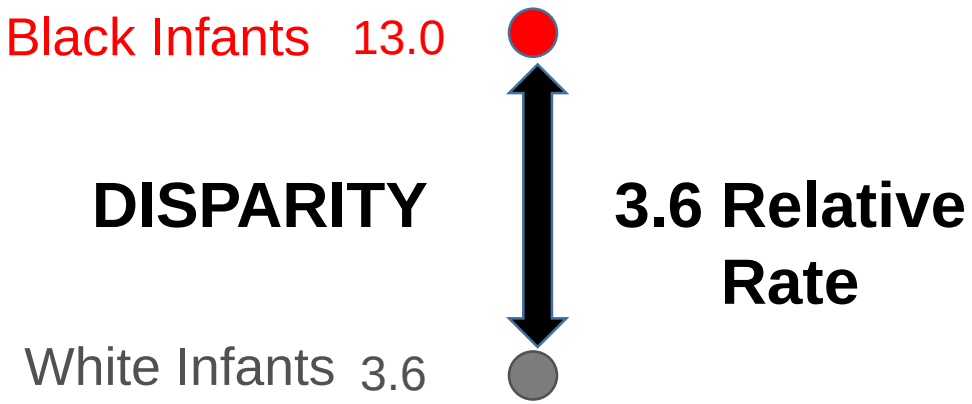
Laser on Equity

Infants of Color have Worse Birth Outcomes



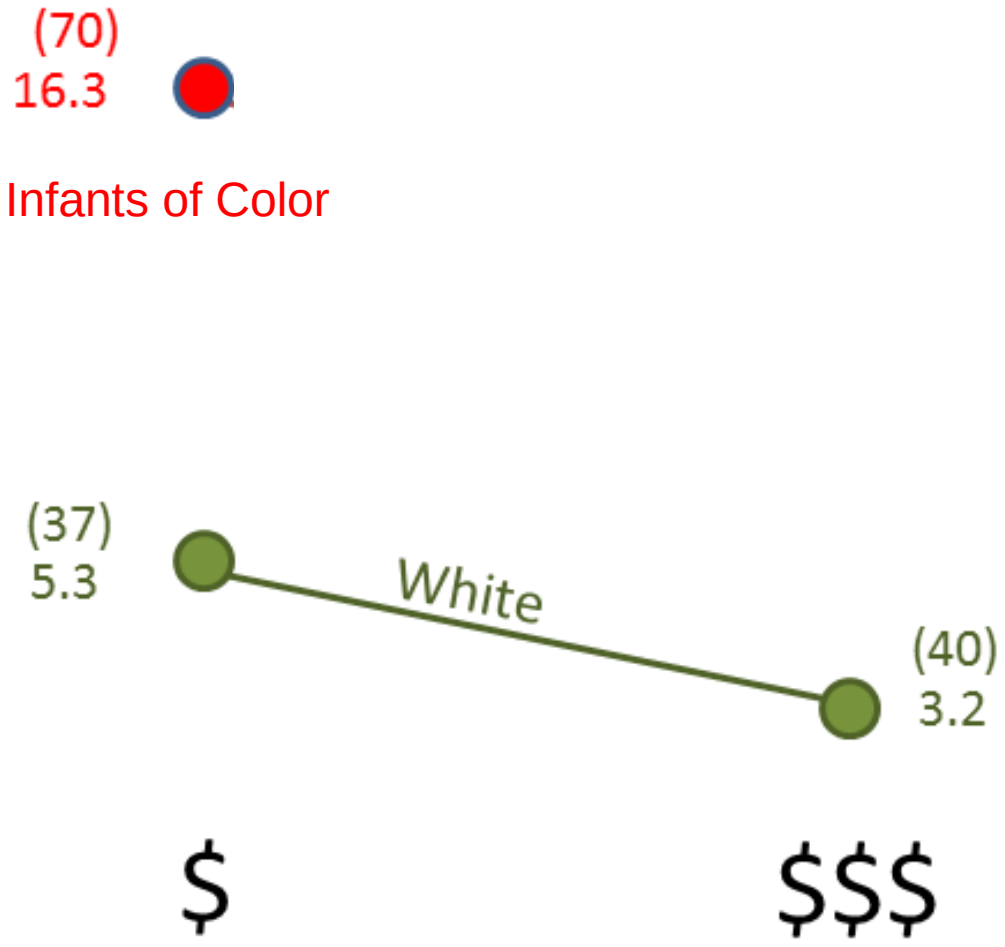
*3-year moving average, 2014-2016, Kalamazoo County

Parsing Root Causes: Poverty

Infant Mortality Rate
Kalamazoo County, 2010-2017 estimate

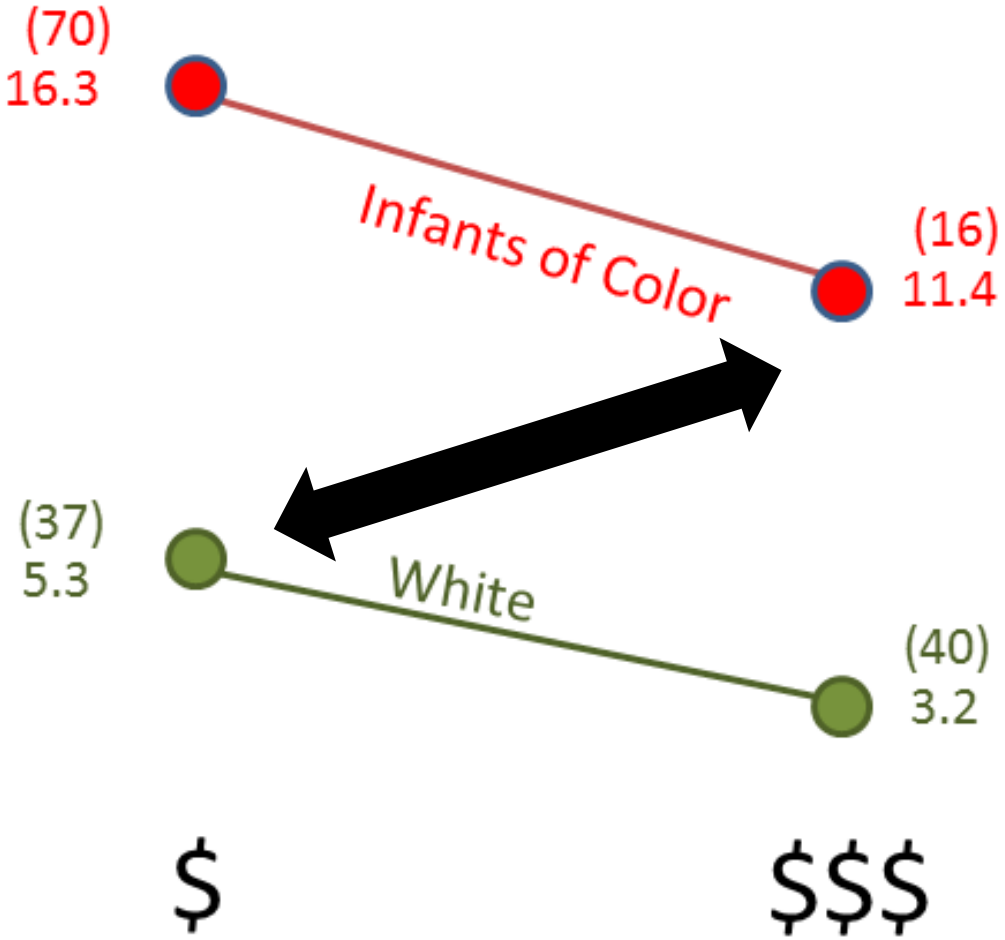
Poverty Risk Not Distributed Equally

Infant Mortality Rate
Kalamazoo County. 2010-2017 estimate



…Regardless of Income

Infant Mortality Rate
Kalamazoo County, 2010-2017 estimate



Parsing Root Causes: Structural Racism

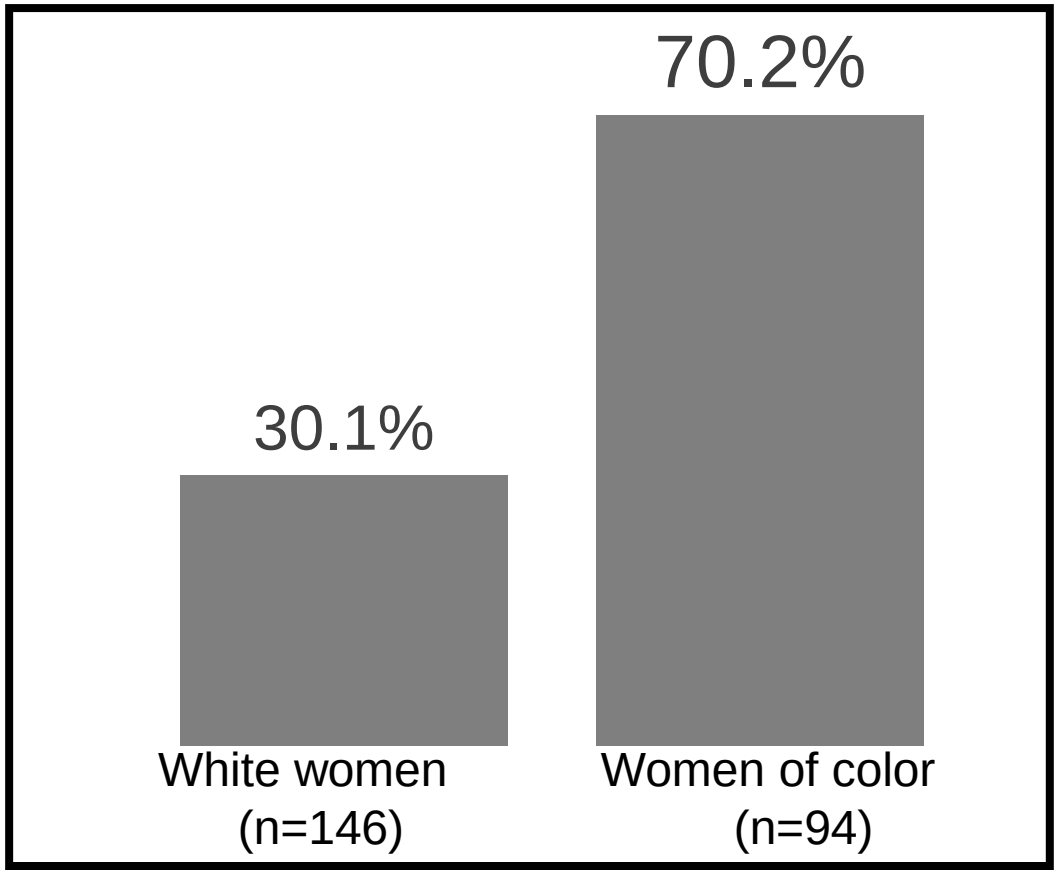
Structural Discrimination (SES)

Race

Moms Health Experiences Survey Study
-Recruited women from postpartum floor
-Recruited 10% of county maternal population
-Phone survey, 2 months postpartum
-Neighborhood & Personal SDOH

Parsing Root Causes: Poverty

% Exposed to Poverty (N=240)



Poverty is deeper among women of color

- more likely to be going hungry
- without transportation

Isolated

- without a support network
- or a network that is just as deprived

* $p<.001$

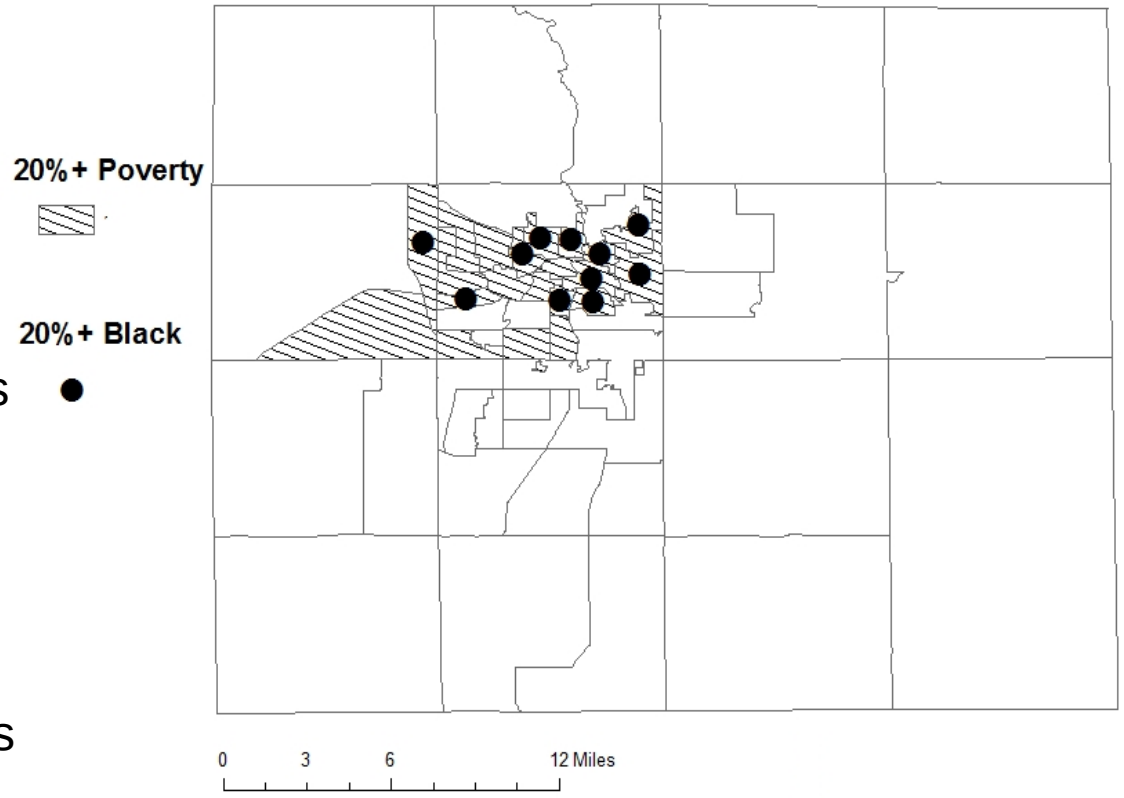
Parsing Root Causes: Segregation

<u>Segregated into poverty</u>

-Concentrated poverty in 100% higher density Black neighborhoods (11 of 11 census tracts)

VS

-Concentrated poverty in 21.1% of higher density White neighborhoods (8 of 38 census tracts)



Parsing Root Causes: Interpersonal Racism

Race

Structural Discrimination (SES)

Interpersonal Discrimination (EoD scale)

Parsing Root Causes: Interpersonal Racism

Interpersonal Discrimination (EoD scale)

% Monthly

Experiences of Discrimination Scale*

1. How often are you treated with less courtesy or respect
2. How often do you receive poorer service than other people
3. How often do people act as if they think you are not smart
4. How often do people act as if they are afraid of you
5. How often are you followed around in stores
6. How often are you threatened or harassed

White	Of Color
26.0%	43.6%
12.3%	22.3%
16.0%	28.7%
9.6%	16.1%
4.1%	16.0%
1.4%	3.2%

* $p<.001$

*Discrimination Index:

Almost every day, At least once a week, A few times a month, A few times a year, About once a year, Never

0 to 30, higher indicates greater discrimination

Everyday Discrimination Scale (Williams, 2012)

CQI – FIMR

Cradle-Kalamazoo Fetal Infant Mortality Review (FIMR)
(mid-2015 through mid-2018)

Kalamazoo County FIMR: Two-Tiered Process

1. CASE REVIEW TEAM:
..... the front line

Goals:
a) Review individual cases,
b) Identify system gaps,
c) Draft recommendations

Led by: Western Michigan University Homer Stryker M.D. School of Medicine; Kalamazoo County Health & Community Services

Members:
Hospitals, EMS
OB & Pediatric primary care
Behavioral health
Public Health, Home visitors
Criminal justice, Courts
Child welfare, Domestic violence
Community members

Member Responsibilities:
Provide case-related information
Attend Case Review meetings
Maintain confidentiality
Draft actionable recommendations

2. COMMUNITY ACTION TEAM:
.....leadership

Goals:
a) Synthesize data,
b) Prioritize issues,
c) Take action

Led by: cradle KALAMAZOO

Members:
Institutional administrators
Community leaders
Government
Funders

Member Responsibilities:
Leverage institutional resources
Focus on community realities
Commit to collective impact
Data driven, Evidence based action

FIMR: The Process

1. SURVEILLANCE
   - DEATH NOTIFICATION & MONITORING
2. REVIEW
   - ABSTRACT RECORDS
   - INTERVIEW FAMILY
   - CASE SUMMARY
3. ROOT CAUSE
   - MULTI-DISCIPL. REVIEW
   - IDENTIFY SYSTEM GAP(S)
   - RECOMMENDATIONS
4. PREVENTIVE ACTION
   - POLICY
   - COMMUNITY ACTION TEAM
   - STATE ADVISORY COUNCIL
   - NATIONAL FIMR

FIMR: The Accomplishments

Core Team:
-co-leads
-abstractors
-family interviewers
-coordinator
-MPH, MSW interns

Review Team:
-42 members
-15 organizations:
  -Medical
  -Public health
  -Social service
  -Criminal justice
  -Education
  -Behavioral health

Accomplishments:

- Held 34 monthly meetings
- Reviewed 56 cases of infant / stillbirth death
  - 76% with interviews (in last year)
- Identified multiple social / health system gaps
- Recommendations to Cradle Steering Team (CAT)

- Created process for submitting recommendations to the state
- Helped conduct state training

- Presenting at national medical QI conference
- National Workgroups on Disparities
- Mentor site, Nat'l Ctr Fatality Review & Prevention

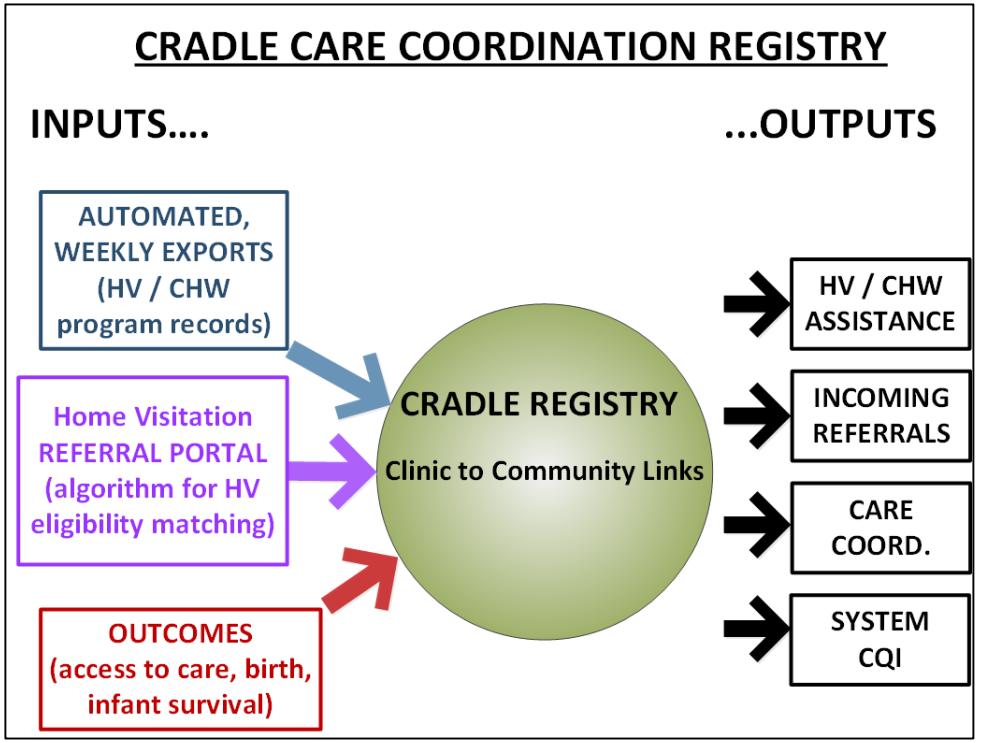
CARE COORDINATION REGISTRY

cradle
KALAMAZOO

Coordinating Resources: Data Backbone

OBJECTIVES

- **Facilitate access:**
  - **Home Visitation referral portal for agencies, clinics, & community**
  - **Gryphon Place 2-1-1 Hotline**
- **Frontline support:**
  - **Updated contact info for retention**
  - **Close the loop on open referrals through case sharing**
- **System-level CQI, continuum of care**
- **Accountability, health disparity outcomes**



CARE COORDINATION REGISTRY: Expanding the Registry

EXPANSIONS

completed…

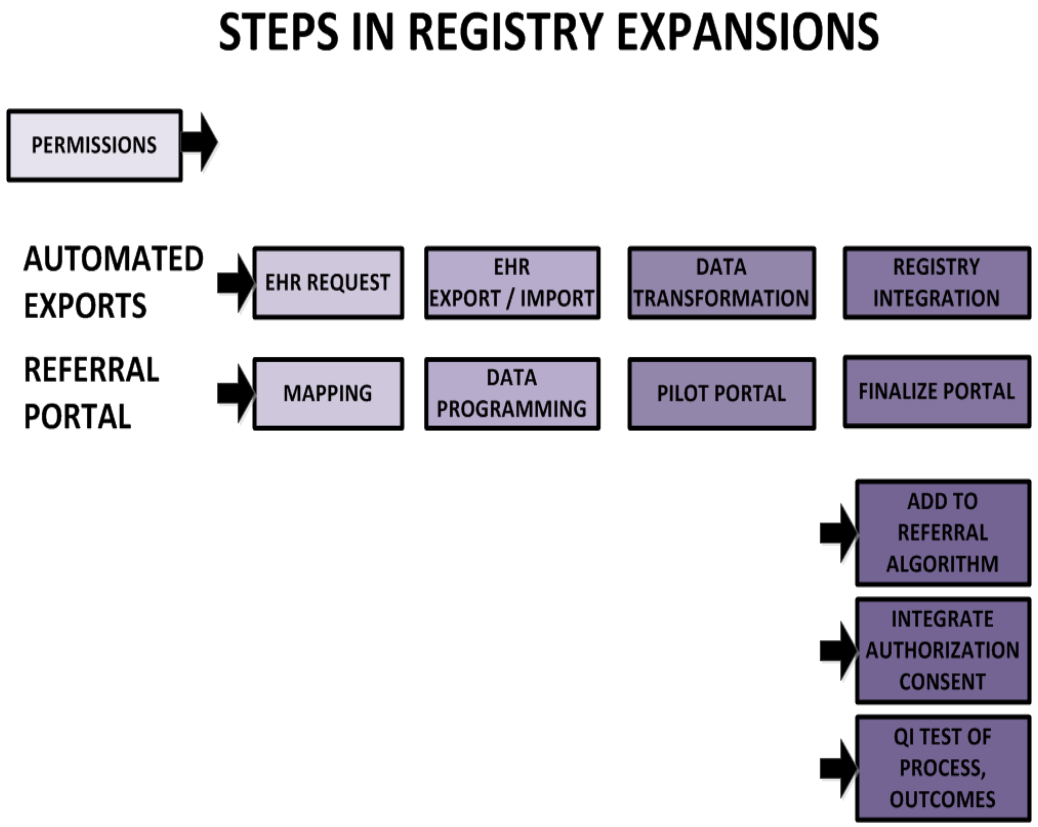
1. Agency-based CHW pilot exports / referrals

in process…

2. Community self-referrals

funded, planned….

3. Street-reach CHW exports/referrals
4. Interconceptional women, infants, fathers
5. Clinic, office referrals
6. EHR- birth / death exports



Coordinating Resources: Process Metrics

CRADLE REGISTRY
Clinic to Community Links

CARE COORDINATION REGISTRY: System-level CQI
(2016 through mid-2018)

cradle KALAMAZOO ending infant mortality together

3,725 women

PREGNANT POPULATION:

7,095 women

INCOMING REFERRALS* (1,916 Women)

51.4%
of Cradle-eligible women

ENROLLED (654 WOMEN)**

34.1%
Enrollment Rate

17.6%
of Cradle-eligible women

* Prenatal referrals in during 29-month period: January 1, 2016 through April 15, 2018

** Enrolled up through June 15, 2018

*** Retained through eligibility period as of September, 2017

CARE COORDINATION REGISTRY: System-level CQI
(2016 through mid-2018)

cradle KALAMAZOO ending infant mortality together

3,725 women

PREGNANT POPULATION:

7,095 women

INCOMING REFERRALS* (1,916 Women)

ENROLLED** (654 WOMEN)

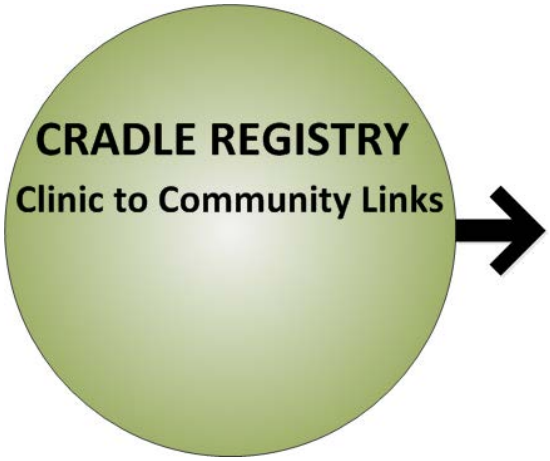
Race	Women	% of Referred	% of Popul.
Non	636	55.8 %	23.4%
White	504	44.2 %	76.6%
(blank)	776		
SES			
Medicaid	1075	97.0 %	43.5 %
Private	33	3.0 %	56.6 %
(blank)	808		
PPBO			
Yes	121	11.0%	6.5 %
No	982	89.0 %	93.5 %
(blank)	813		

Race	Women	Enrollment Rate
Non	337	53.0%
White	225	44.6 %
(blank)	92	
SES		
Medicaid	527	49.0 %
Private	20	60.6 %
(blank)	107	
PPBO		
Yes	56	46.3 %
No	558	56.8 %
(blank)	648	

* Prenatal referrals in during 29-month period: January 1, 2016 through April 15, 2018

** Enrolled up through June 15, 2018

Measuring Impact: Outcomes



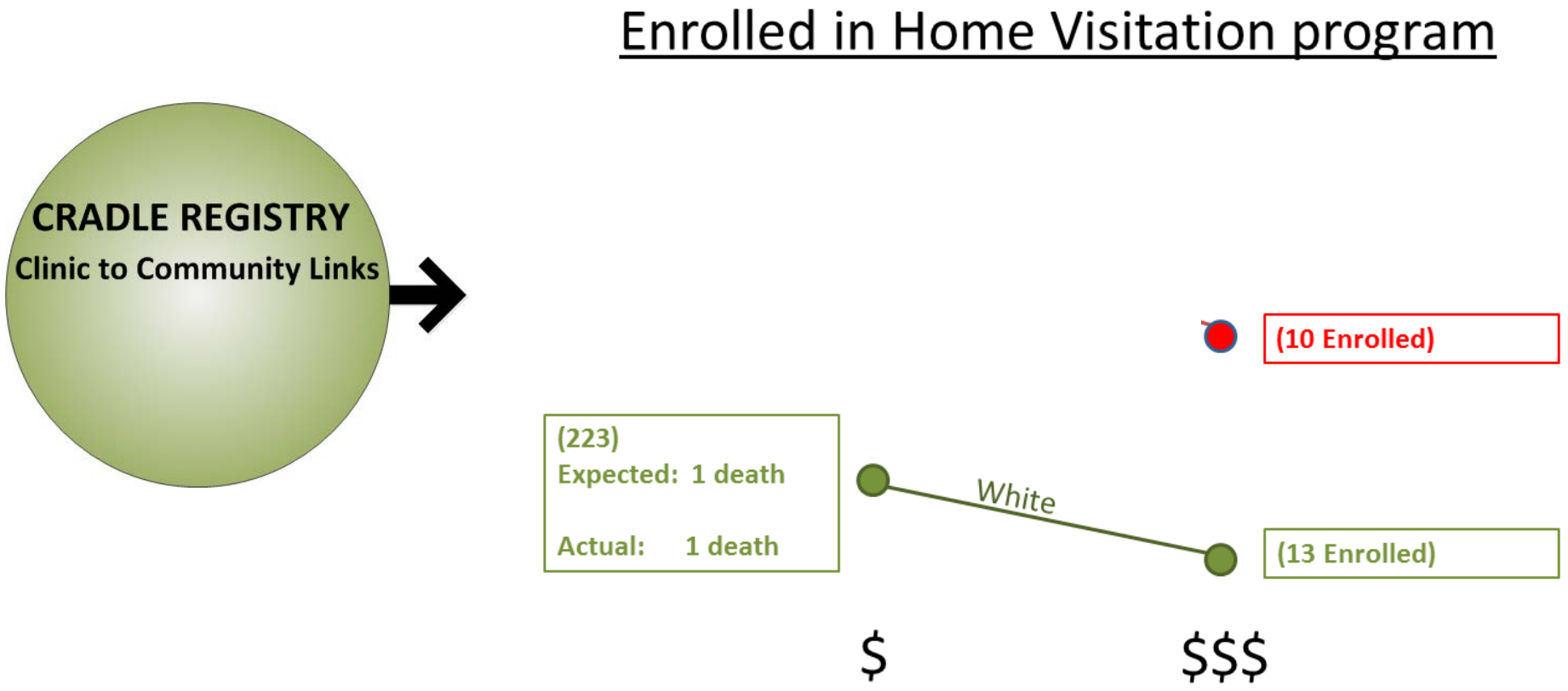
Enrolled in Home Visitation program

(10 Enrolled)

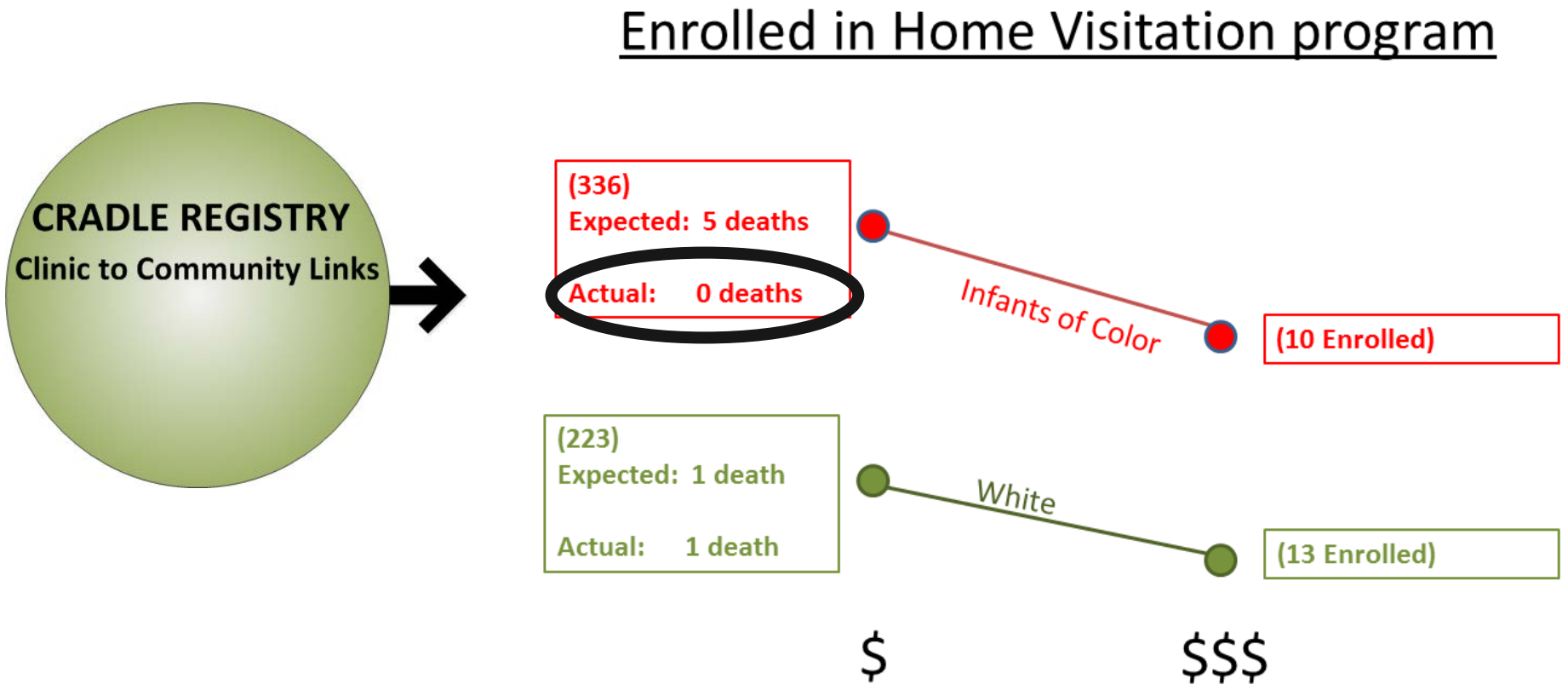
(13 Enrolled)

$ $$$

Measuring Impact: Outcomes



Measuring Impact: Outcomes



cradle KALAMAZOO

Thank You!!

Funding:

United Way of the Battle Creek and Kalamazoo Region
changethestory.org
LIVE UNITED United Way

Healthy Babies Healthy Start
In Kalamazoo, Michigan

KALAMAZOO Community FOUNDATION

Irving S. Gilmore FOUNDATION

eliminating racism empowering women ywca Kalamazoo

BORGESS | Ascension

BRONSON

MDHHS Michigan Department of Health & Human Services

MICHIGAN health ENDOWMENT FUND

KALAMAZOO COUNTY HealthPLAN
Administered by familyhealthcenter