Closing Gaps in Health & Social Services for Low-Income Pregnant Women

Strategies to Achieve Alignment, Collaboration and Synergy across Delivery and Financing Systems

Research-in-Progress Webinar
Nov 16, 2022
12pm ET

Agenda

Welcome: Amelia Mitchell • S4A Intramural Team

Presenter: Bridgette Blebu, PhD, MPH • The Lundquist Insitute for Biomedical Innovation at Harbor-UCLA Medical Center
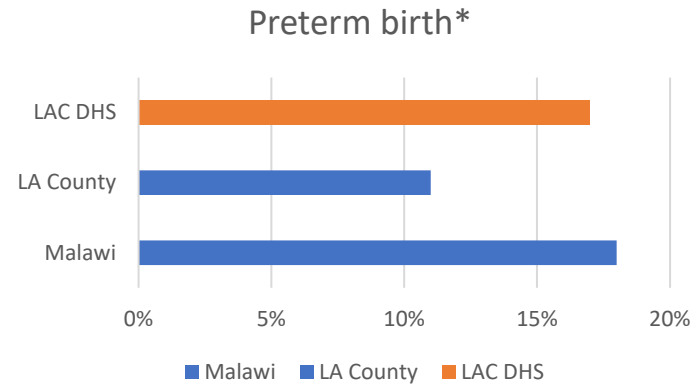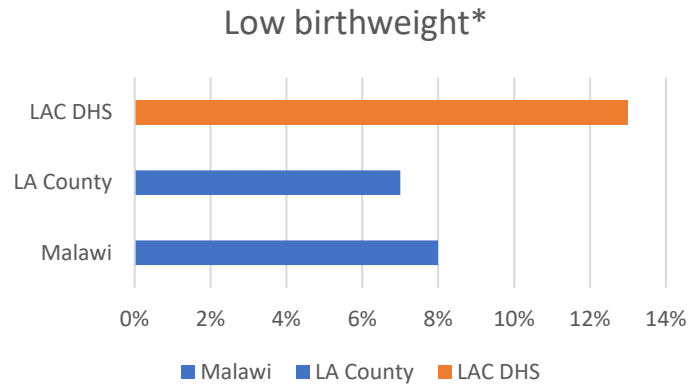
Q&A:

Presenter

Bridgette Blebu is an Investigator with the Lundquist Institute for Biomedical Innovation at Harbor-UCLA Medical Center (TLI). She is currently an AHRQ K12 scholar through the UC Los Angeles SPIRIT program, where she studies multilevel health system interventions to integrate social determinants of health in perinatal care. Her expertise is in implementation science and population health to address racial inequities in birth outcomes, particularly for Black birthing people.

Prior to joining TLI, she completed her postdoctoral training at UC San Francisco with the California Preterm Birth Initiative. Bridgette received her PhD in Public Health from UC Irvine, and Bachelor's/Master's degrees from the University of Southern California in Preventive Medicine.

About MAMA'S Initiative

Background

Poor birth outcomes in Los Angeles County Department of Health Services (LAC DHS) necessitates a different approach

Low birthweight*

LAC DHS	13%
LA County	7%
Malawi	8%

0% 2% 4% 6% 8% 10% 12% 14%

■ Malawi ■ LA County ■ LAC DHS

Preterm birth*

LAC DHS	17%
LA County	11%
Malawi	18%

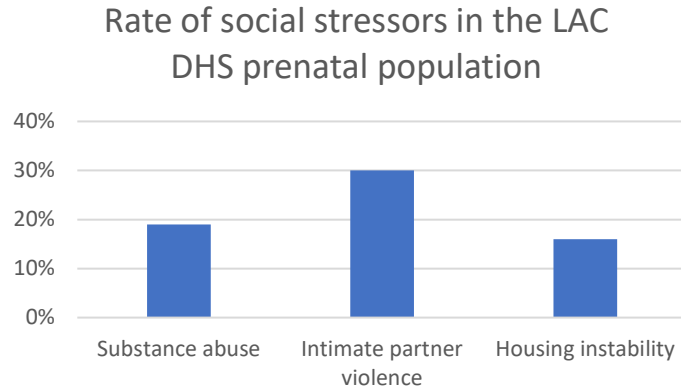0% 5% 10% 15% 20%

■ Malawi ■ LA County ■ LAC DHS

*LAMBS 2010; March of Dimes, 2010; WHO, 2010

A Different Approach

To influence outcomes, need to breach agency silos to address social stressors

- Social stressors contributing to poor outcomes are common in the DHS prenatal population
- Need to offer comprehensive services and supports to address social stressors alongside health care provision
- The MAMA'S Neighborhood initiative assesses clients' needs and connects clients to housing, social services, mental health treatment, and other needed services

Rate of social stressors in the LAC DHS prenatal population

	Substance abuse	Intimate partner violence	Housing instability
Rate	19%	30%	16%

MAMA'S Neighborhood Initiative

Maternity **A**ssessment **M**anagement **A**ccess and **S**ervice Synergy throughout the **Neighborhood**

Program core assumption: A **comprehensive, coordinated approach** that includes **three core pillars of health** (physical, mental, social) is required to address poor birth outcomes

- **Assessment**: Consistent **screening and identification of needs and risks**, including medical, social, and environmental determinants
- **Management of Access**: **Alignment of intensity of service provision** with identified risks
- **Service Synergy**: **Coordinated and collaborative care across sectors** to mitigate the determinants of poor outcomes
- Throughout the **Neighborhood**: Going **beyond borders of the clinic** to the community with community-based partners & MAMA'S Visits (home visits)

MAMA'S Neighborhood Network

Mother-Centered/Humanistic Services

Connected & Coordinated Svs

Innovation

Community Mental Health

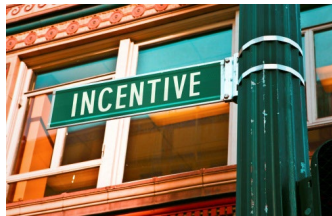Ecological/Participatory & Multi-disciplinary

Domestic/Intimate Partner Violence

Community Agency Assisted

Incentivized Providers

Housing

WICs, Food Banks, Farmers Markets, Churches

Substance Abuse Svs

Our Research Questions

	Quantitative analysis	Qualitative analysis	Network analysis
What are the outcomes of the MAMA's initiative?			
How do outcomes among MAMA'S clients compare to outcomes among mothers who did not participate in the program, specifically: • **Birth outcomes**, and • Cross-sector outcomes?			
How do the program impact health equity?			
• Are the needs of the high-risk groups adequately met? • Has the program helped to reduce inequities in birth outcomes?			
How effective are the cross-sector linkages?			
How effectively has MAMA'S aligned linkages across social, health care, and public health services?			

Research Method: Concurrent Embedded Mixed-Methods Approach

Quantitative Analysis

- Secondary data:
  - Countywide Information Hub
  - MAMA'S administrative data
  - Birth records
- Difference-in-differences analyses of cross-sector outcomes
- Analyses of birth outcomes
- Analyses utilize matched samples (MAMA'S clients vs propensity-matched comparison group)

Network Analysis

- Primary data:
  - Network survey of MAMA'S Neighborhood community-based partner agencies
- Network map of partnership network
- Network scores

Qualitative Analysis

- Primary data:
  - Patient interviews
  - Provider interviews
  - Key informant interviews
- Analysis based on grounded theory

Deep dive: Implementing cross-sector partnerships

Goal: Identify barriers and facilitators of cross-sector collaboration implementation

Framing: Emerging scholarship offers some insights related to foundational components: shared theory of change, relational structures, linked data and communication platforms

Shared theory of change to incorporate life course/socioecological approach

- *Shared understanding of how cross-sector partnerships address upstream drivers*

- *Shared metrics, resources, and processes for maintaining accountability.*

Relational structures that enable shared leadership, trust, and learning among partners

- *Structures: networked governance, horizontal coordination*

- *Inclusive of individual partners' priorities and program delivery models*

Linked data and communication platforms

- *Innovation to support real-time data sharing, communication, coordination, and adaptation*

- *Promote accessibility and action among partners while protecting client confidentiality*

Liu, P. Y., Beck, A. F., Lindau, S. T., Holguin, M., Kahn, R. S., Fleegler, E., Henize, A. W., Halfon, N., & Schickedanz, A. (2022). A Framework for Cross-Sector Partnerships to Address Childhood Adversity and Improve Life Course Health. In *Pediatrics* (Vol. 149). https://doi.org/10.1542/peds.2021-053509O

Deep dive: Implementing cross-sector partnerships

Provider Interviews (n = 18):

- 13 with neighborhood care team (care coordinator, social worker, RN, health educator)

- 5 physician staff members

- Representation from all 4 geographic areas targeted by MAMAs

- Phone interviews conducted by Southern California Center for Nonprofit Management
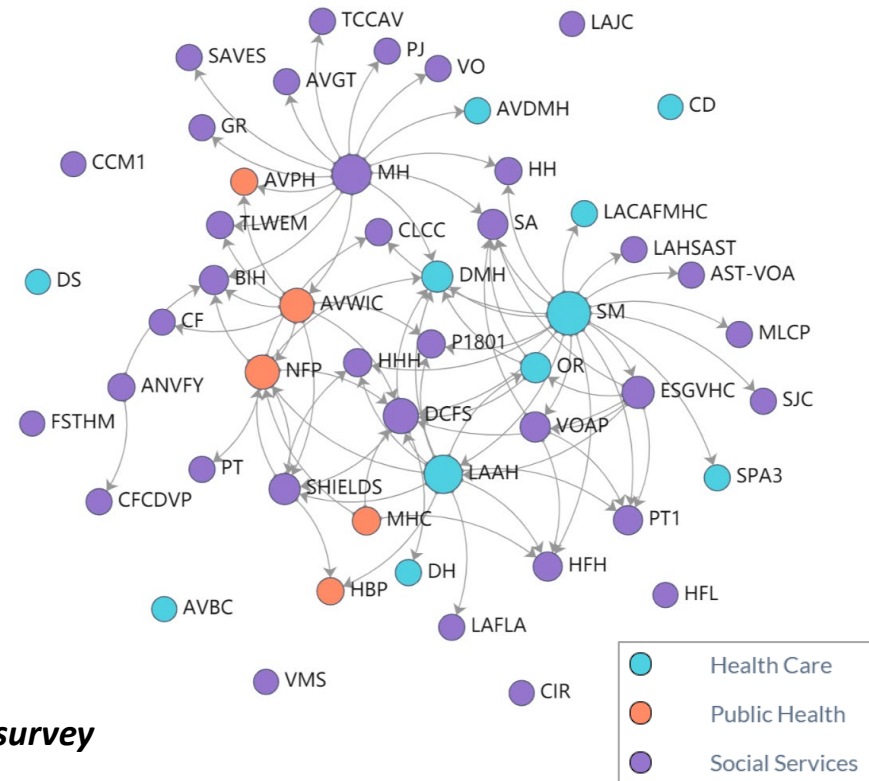
- Interviews were audio-recording and transcribed

Guiding Interview Questions:

- What does the intake process entail? To what extent does it serve its intended purpose?

- Where does the collaboration among MAMA's staff occur? How does collaboration contribute to engaging the patient and to the overall success of the patient's health, pregnancy, delivery, and motherhood experience?

- What contributes to a successful referral to resources and programs outside of the MAMA's program?

- What strategies are effective in maintaining a patient's engagement with the MAMA's program?

⚬ Deep dive: Implementing cross-sector partnerships

MAMA's Neighborhood Network (n = 80 partnerships)

- MAMA'S staff identifies 51 organizations as part of the network. Social service organizations make up around 68% of the network.

- The network is diverse with a low level of density.

- 40 members were invited to participate in a social network analysis survey using the PARTNER tool. 19 members responded (48% response rate).

- Respondents collectively had 80 partnerships.
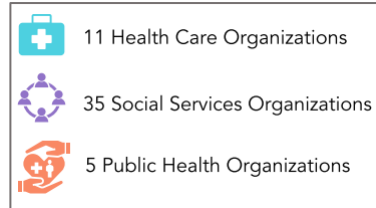
Integration focused primarily on implementation-related survey responses.

11 Health Care Organizations

35 Social Services Organizations

5 Public Health Organizations

Health Care
Public Health
Social Services

Integration Method

Triangulation Steps (Convergence Matrix)

1. Sorting

   Identify emerging themes related to cross-sector partnerships and referral in each data set

2. Convergence coding*

   Code Scheme: Full Agreement, Partial Agreement, Disagreement, Silence

3. Convergence assessment

   Evaluate converge across themes

4. Completeness assessment

   Extent to which convergent/divergent themes capture data overall

5. Researcher comparison

   Reflection on overall findings and convergence patterns
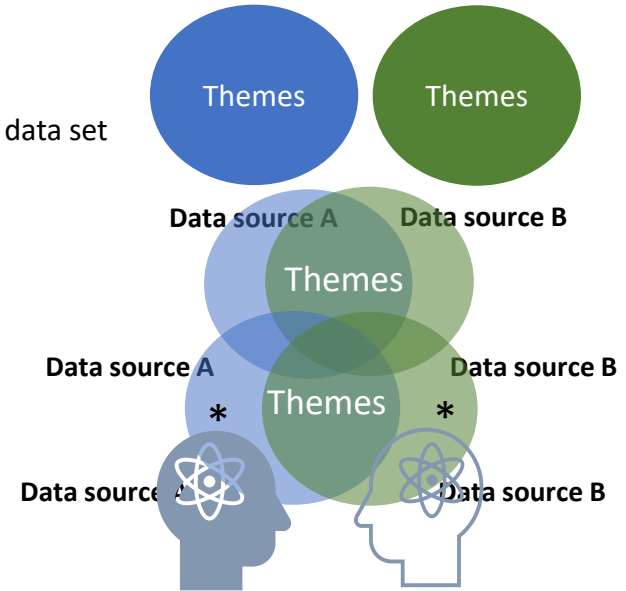
*Comparison Criteria
- Meaning of a given factor as it relates to implementation (i.e., barrier or facilitator)
- Mechanistic descriptions of *how* a factor supports or hinders implementation

Farmer, T., Robinson, K., Elliott, S. J., & Eyles, J. (2006). Developing and implementing a triangulation protocol for qualitative health research. Qualitative Health Research, 16(3), 377–394. https://doi.org/10.1177/1049732305285708

Convergence Matrix

Implementation Factors (N = 7)	Full Agreement	Partial Agreement	Disagreement	Silence
Facilitators (n = 5)				
Designated point of contact	X			
CC* embody a place-based person-centered approach	X			
CC/client relationship as a resource for partner agencies		X		
Networking, training, informational meetings	X			
A network approach to partner collaboration	X			
Barriers (n = 2)				
Varied documentation of referral outcomes among partners				X
Referral process documentation is centralized with CC				X

*CC: Care Coordinators

Summary of foundational structures for cross-sector partnership and implementation barriers and facilitators

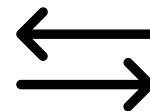| Foundational structures	Implementation factors
Shared theory of change to incorporate life course/socioecological approach	Facilitator: Care coordinators embody person-centered and place-based approach to SDOH integration Mechanism: knowledge of community resources, relational skills
	Barrier: Referral documentation centralized with care coordinators Mechanism: process occurs via client follow-up, but largely verbal and informal

Summary of foundational structures for cross-sector partnership and implementation barriers and facilitators

Foundational structures	Implementation factors
Relational structures that enable shared leadership, trust, and learning among partners	Facilitator: Network structure to Neighborhood Partnership collaboration Mechanism: bi-directional referrals
	Facilitator: Networking, training, and informational meetings Mechanism: shared knowledge, transparency

# Summary of foundational structures for cross-sector partnership and implementation barriers and facilitators

Foundational structures	Implementation factors
Linked data and communication platforms	Facilitator: Designated point of contact Mechanism: streamlined communication
	Facilitator: Care coordinator/client relationship as a resource for partner agencies Mechanism: referral follow-up, communication
	Barrier: Varied documentation of referral outcomes Mechanism: lack of clarity on referral quality, limits on shared metrics

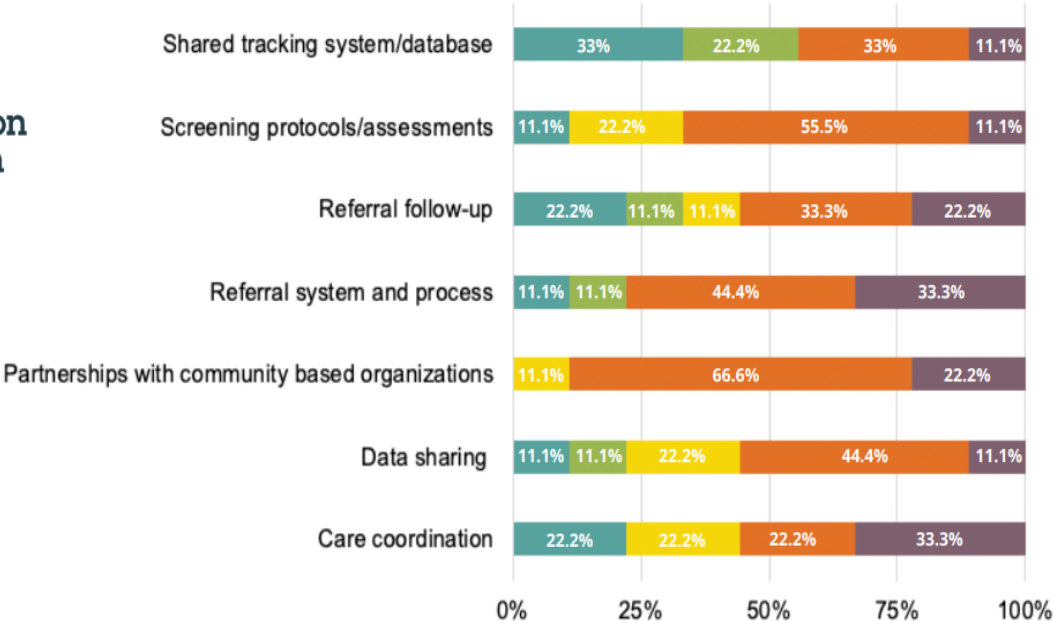# Facilitator: A network approach to partner collaboration

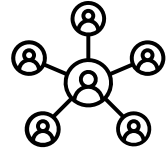| Foundational Structure	Mechanism: bi-directional referrals between MAMA's staff and partner agencies and among partner agencies
Relational structures that enable shared leadership, trust, and learning among partners • *Structures: networked governance, horizontal coordination* • *Inclusive of individual partners' priorities and program delivery models*	*"Yes, usually through the MAMA's Visits Program. We receive a lot of referrals, especially now this past year because of the pandemic. We've been receiving a lot of community referrals from the Sheriff Department, through PATH homeless outreach teams. And the majority, of course, are in crisis because they're currently homeless, and because we also coordinate with the Housing for Health Interim Bridge Program. We do a lot of coordination linking up to that service. So usually, they're not already in the MAMA's Program, so a lot of times it's the outreach. We do a lot of **outreaching and coordinating with that particular homeless outreach team member.**"* **Source: provider Interviews** *"We connect several women a month with MAMA's, we are also able to connect them with other services traditionally we don't have access to."* **Source: Network analysis open-ended response**

Facilitator: A network approach to partner collaboration
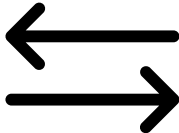
how successful do you think MAMA's efforts have been to foster cross-sector collaboration to improve well-being in each of the following ways: (n=9)

Legend:
- Very Successful
- Successful
- Somewhat Successful
- Not successful
- Don't Know

Category	Breakdown
Shared tracking system/database	33% / 22.2% / 33% / 11.1%
Screening protocols/assessments	11.1% / 22.2% / 55.5% / 11.1%
Referral follow-up	22.2% / 11.1% / 11.1% / 33.3% / 22.2%
Referral system and process	11.1% / 11.1% / 44.4% / 33.3%
Partnerships with community based organizations	11.1% / 66.6% / 22.2%
Data sharing	11.1% / 11.1% / 22.2% / 44.4% / 11.1%
Care coordination	22.2% / 22.2% / 22.2% / 33.3%

Facilitator: Care coordinator/client relationship as a resource for partner agencies

Foundational structures	Mechanism: referral follow-up, communication between MAMA's and partner agencies
Linked data and communication platforms • *Innovation to support real-time data sharing, communication, coordination, and adaptation* • *Promote accessibility and action among partners while protecting client confidentiality*	*"Most of the time the partnering agencies are not reaching out to us. But is really surprises me because we do spend a lot of time with our patients. They start of their prenatal appointments once a month. And then at some point we're seeing our patients every week. So, that is a huge disconnect that these agencies are not reaching out to MAMA's for information or just for extra support. I find that I'm the one calling these places."* **Source: provider interviews** *"Mama's Family has been successful in referring patients to our programs as well as following up to find out status of that client's referral. If additional information is needed or additional contact with client to obtain the information needed Mama's Family is good about assisting in communication."* - **Source: Open-ended response (network analysis)**

Barrier: Varied documentation of referral outcomes

Foundational Structure	Mechanism: lack of clarity on referral quality, limits on shared metrics
Linked data and communication platforms • *Innovation to support real-time data sharing, communication, coordination, and adaptation* • *Promote accessibility and action among partners while protecting client confidentiality*	*"Every referral that comes in gets entered into our database and providers (like MAMA's) get recorded. Our database allows us to run reports by provider which would give us the total amount of referrals received by MAMA's. Each service is recorded into the database. Whether it is forms, notes, telephone calls, etc. The services received are documented either directly into the database or via forms which the nurse has documented the service/s received."* **source: network analysis** Partner agencies described varying degrees of internal referral tracking that was often not shared with MAMAs/other partners. One respondent described a system for sharing patient information with a MAMAs site (through MOU) • 23% of partnerships entail information exchange • 18% of partnerships entail data sharing

Summary

- Identifying barriers and facilitators shed light on implementation processes that support cross-sector collaboration

- Challenges remain with uniformity of referral tracking processes

- Care coordinators and their relational skills are critical to implementation
  - Additional strategies to streamline their processes are needed
  - Integrating care coordinator knowledge to expand the network could be fruitful

Next Steps

Integration (qual and network analysis)

- Frontiers in Public Health Manuscript – in progress
- In-depth analysis of patient experiences

Quantitative Analysis – in progress

- Construction of comparison group using propensity score matching
- Analyses of birth outcomes

Thank you

The S4A MAMA'S Team

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- Ricardo Basurto-Davila, *Los Angeles County Chief Information Office*
- *Southern California Center for Nonprofit Management*
- *Visible Network Labs*

*Special Thanks!