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

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

Research-in-Progress Webinar
October 28, 2020
12-1pm ET/9-10am PT

Agenda

S4A
Systems for Action

Welcome: Carrington Lott, S4A Program Manager

Presenters: Irene Vidyanti, PhD, MEng • Los Angeles County Chief Information Office

William Nicholas, PhD, MPH • Los Angeles County Department of Public Health

Commentary: Agnieszka Rykaczewska • First 5 LA

Dr. Nuriya Robinson • MAMA'S Program

Q&A: Carrington Lott

Presenter

Irene Vidyanti, PhD

Irene Vidyanti is a Data Scientist for the Los Angeles County Chief Information Office (CIO). Her expertise is in using data science and systems science to evaluate the impact of interventions on multiple sectors and to drive data-driven decision-making at both operational and strategic levels. She is the Principal Investigator for this study. She is currently also the co-lead for a project to assess Countywide performance on supporting strong children, families, and communities in LA County.

Prior to joining the CIO, she was a Data Scientist at the Department of Public Health. She received her PhD in Industrial and Systems Engineering from University of Southern California and her Bachelor's and Master's degrees in Information and Computer Engineering from Cambridge University.

Will Nicholas, PhD

COUNTY OF LOS ANGELES
Public Health

In October 2015 Will Nicholas joined the LA County Department of Public Health (DPH), where he directs the Center for Health Impact Evaluation Center (CHIE). In that role he has authored four health impact assessments (HIAs): one on a local affordbale housing ballot measure (Measure JJJ), one on a local homeless services ballot measure (Measure H), one on the City of LA's Mobility Plan 2035, and one on cannabis regulation. Before joining DPH, Dr. Nicholas spent five years at the UCLA Center for Healthier Children, Families and Communities, where he co-directed the Los Angeles/Ventura Study Center of the National Children's Study. While there, he was also a lecturer at the UCLA Fielding School of Public Health, where he taught a course on children's health and health policy. Prior to his appointment at UCLA, he spent three years as Director of Research at the California Endowment where he oversaw the research and data development grant portfolio and the development of the data infrastructure for a statewide place-based initiative called Building Healthy Communities. Prior to that, Dr. Nicholas spent six years as a Senior Research Analyst at First 5 LA, Los Angeles County's Proposition 10 Commission, where he commissioned and managed evaluation and research grants related to early childhood health and development. Nicholas has also served as an Associate Policy Analyst for the Rand Corporation where he conducted policy research on childhood asthma and was involved in a number of health care quality improvement projects including and evaluation of the Chronic Care Model and the IHI's Breakthrough Series, and as a Research Analyst for the Los Angeles County Health Department's Tobacco Control Program.

Dr. Nicholas, a resident of Los Angeles, received a B.A. in Spanish Literature from the University of California, Berkeley; an M.A. in Latin American Studies and an M.P.H. in Population and Family Health from UCLA; and a Ph.D. in Health Policy from Yale University.

Agnieszka Rykaczewska

Agnieszka Rykaczewska is a Manager of Learning and Evaluation at First 5 LA, a county commission focused on improving conditions for L.A. County's young children through systems change. She has almost 10 years of experience implementing and leading program evaluation research across a wide variety of domestic and international programs aimed at supporting children and youth, including youth-focused mental health interventions, STEM education and career and trade skill development programs, and educational frameworks.

At First 5 LA, Miss. Rykaczewska leads the development of measurement in support of the Impact Framework, a tool to track progress on First 5 LA's systems change efforts. She also oversees several data and evaluation projects, including a randomized control trial (RCT) of the Welcome Baby home visiting program, administrative data-linking through the Children's Data Network, and administrative data mining through the L.A. County WIC Data Mining Partnership.

Miss Rykaczewska is a PhD Candidate at Claremont Graduate University, and her research focuses on improving communication of evaluation findings, exploring evaluator roles, and building methods to identify and mitigate evaluation anxiety.

About MAMA'S Initiative

Background

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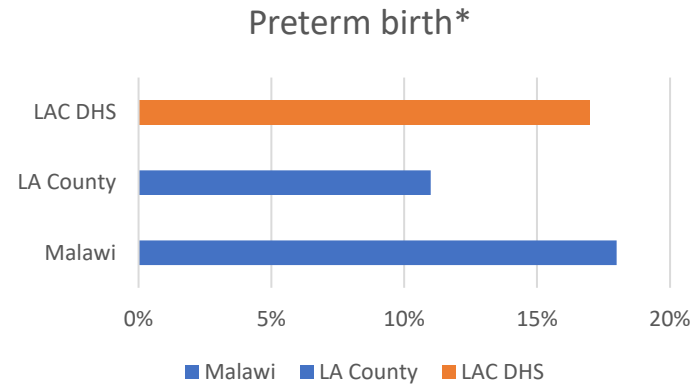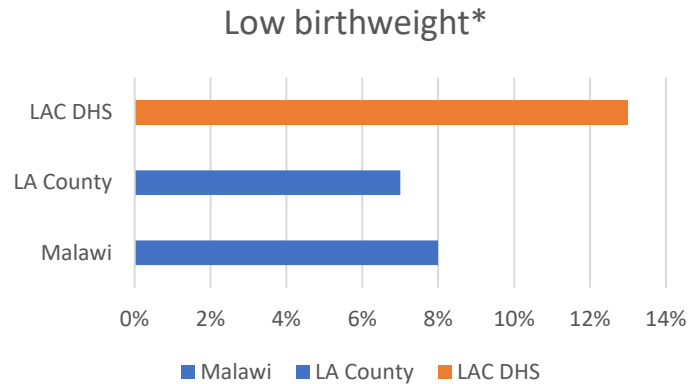

*LAMBS 2010; March of Dimes, 2010; WHO, 2010

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
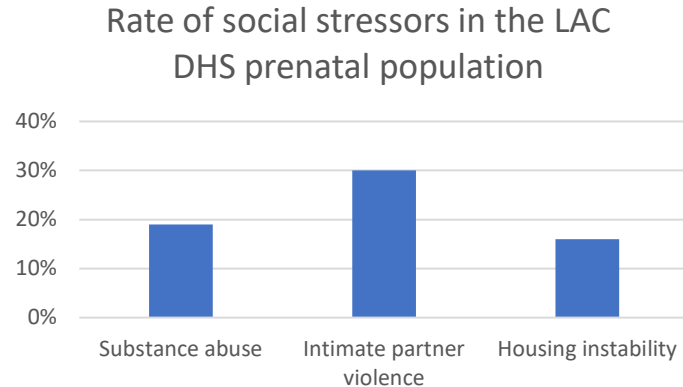
MAMA'S Neighborhood Initiative

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

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

Research Questions & Methodology

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

Impact of COVID-19 on the Study

Data collection

- **Format**: Pivot from focus groups to one-on-one phone interviews for qualitative data collection
- **Content**: Add COVID-19 related questions to qualitative and network data collection
- **Timeline**: Timeline for qualitative data collection is pushed back to accommodate redesign of qualitative data collection instrument and protocol to accommodate new format, add questions. Interview with providers is pushed back to accommodate providers' increased workload.
- **Response rate**: Not all partner organizations are operational and some are operating with decreased staffing. Response rate may be lower than expected for network survey / responses may take longer.

Data analysis

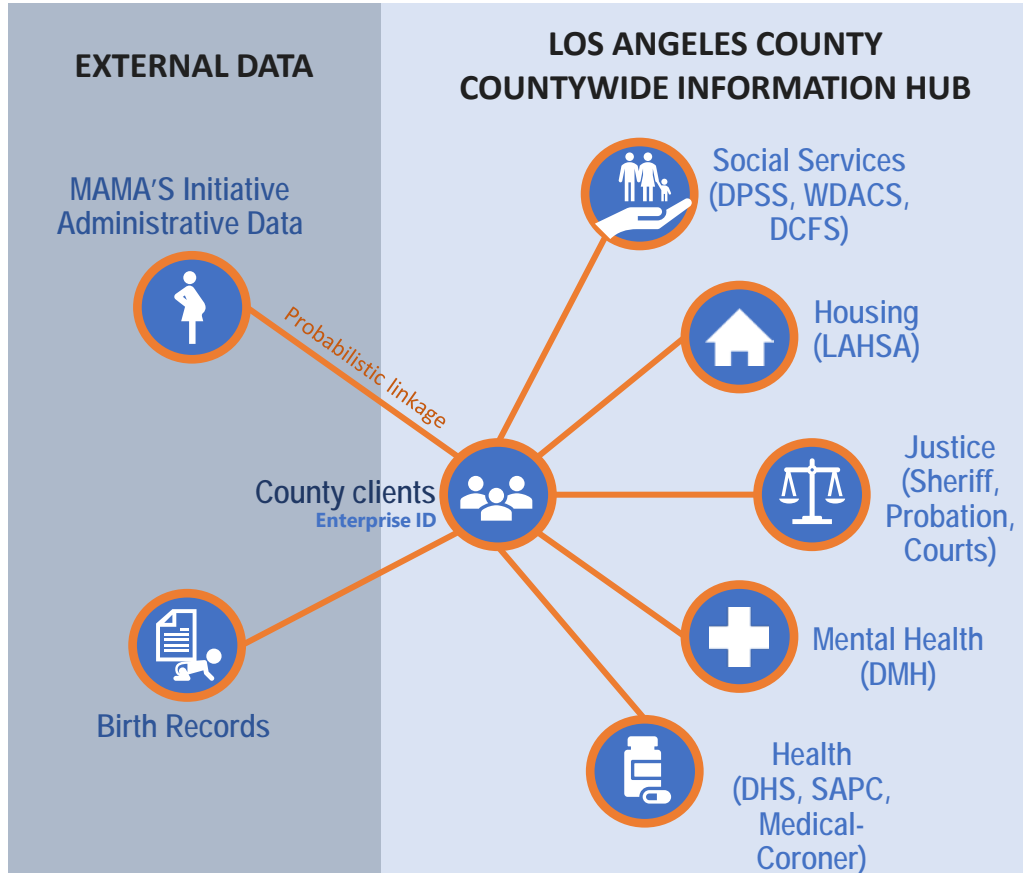- Analyses need to consider how COVID-19 affects outcomes

Resources

- **Personnel**: Study team members are involved in various COVID-19-related activities which affect resource availability
- **Procurement**: Procurement of software and services are affected by shifts in procedures due to COVID-19

Quantitative Analysis

Where We Are: Quantitative Data Linkage

EXTERNAL DATA

LOS ANGELES COUNTY COUNTYWIDE INFORMATION HUB

MAMA'S Initiative Administrative Data

Probabilistic linkage

County clients
Enterprise ID

Birth Records

Social Services (DPSS, WDACS, DCFS)

Housing (LAHSA)

Justice (Sheriff, Probation, Courts)

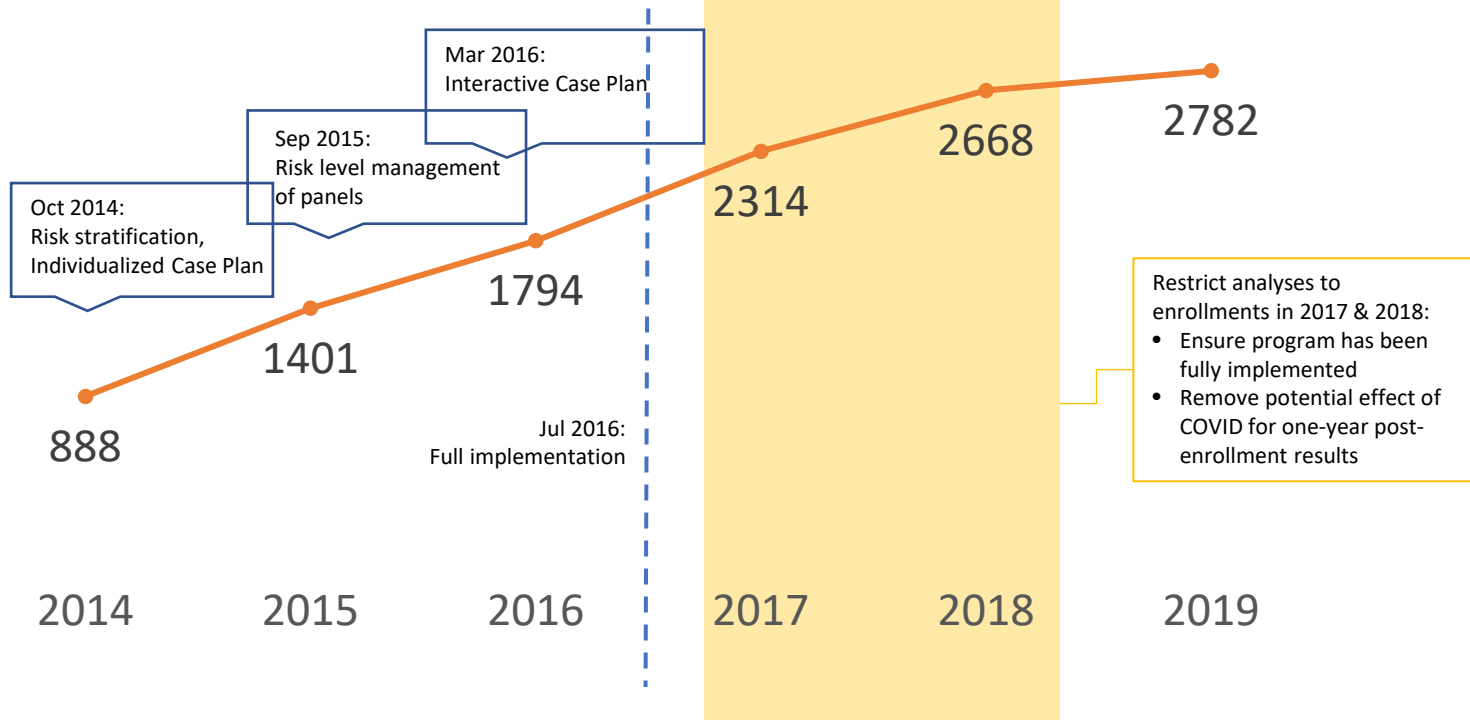Mental Health (DMH)

Health (DHS, SAPC, Medical-Coroner)

- We are utilizing LAC's Countywide Information Hub to allow assessment of cross-sector impact (health care and mental health utilization, food assistance / CalFresh, income assistance / CalWorks, housing, justice involvement)

- We linked MAMA's administrative data to the Information Hub

- We will link birth records to the Information Hub to allow assessment of birth outcomes, est. in November

- We will use the array of linked data to construct a comparison group of non-participants resembling MAMA's clients, propensity matched on individual characteristics, birth risk factors, social determinants, and service utilization, est. in December
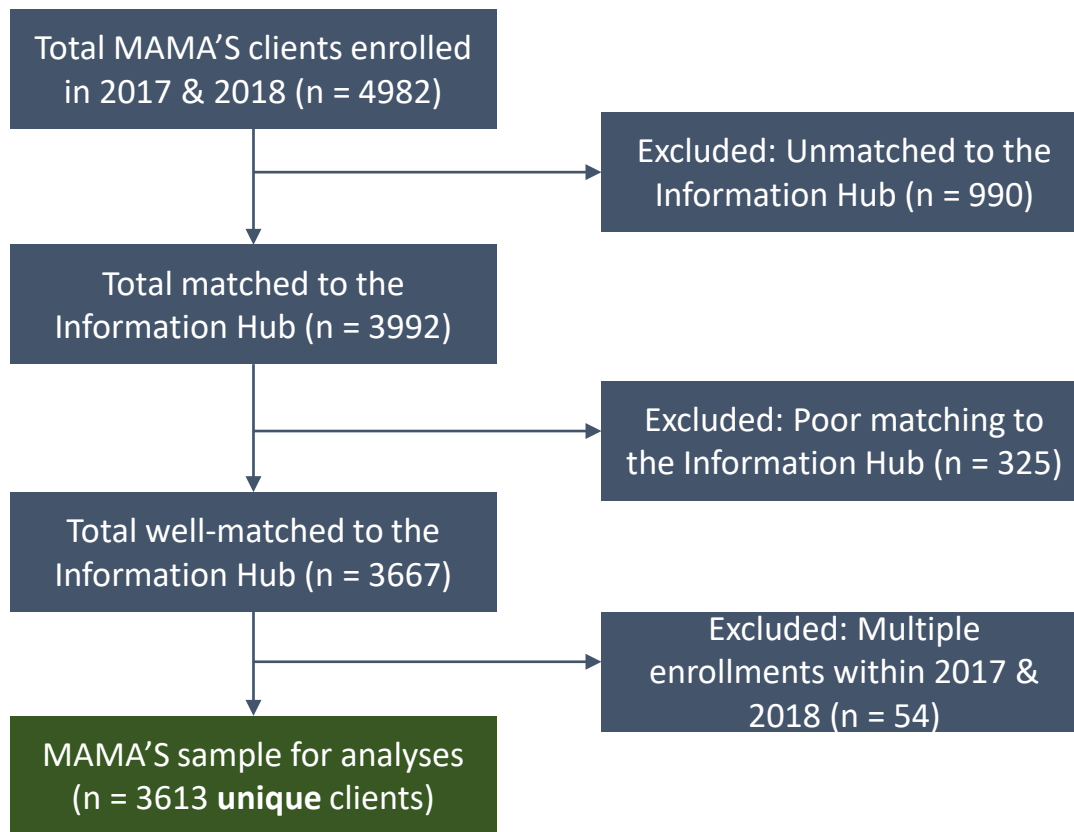
Growth Over Time of MAMA'S & Evolution of Program Implementation

Number of MAMA'S clients by enrollment year

Oct 2014:
Risk stratification,
Individualized Case Plan

Sep 2015:
Risk level management
of panels

Mar 2016:
Interactive Case Plan

Jul 2016:
Full implementation

Restrict analyses to
enrollments in 2017 & 2018:
- Ensure program has been
  fully implemented
- Remove potential effect of
  COVID for one-year post-
  enrollment results

888
1401
1794
2314
2668
2782

2014   2015   2016   2017   2018   2019

Analysis Sample: MAMA'S clients

Total MAMA'S clients enrolled in 2017 & 2018 (n = 4982)

Excluded: Unmatched to the Information Hub (n = 990)

Total matched to the Information Hub (n = 3992)

Excluded: Poor matching to the Information Hub (n = 325)

Total well-matched to the Information Hub (n = 3667)

Excluded: Multiple enrollments within 2017 & 2018 (n = 54)

MAMA'S sample for analyses (n = 3613 **unique** clients)
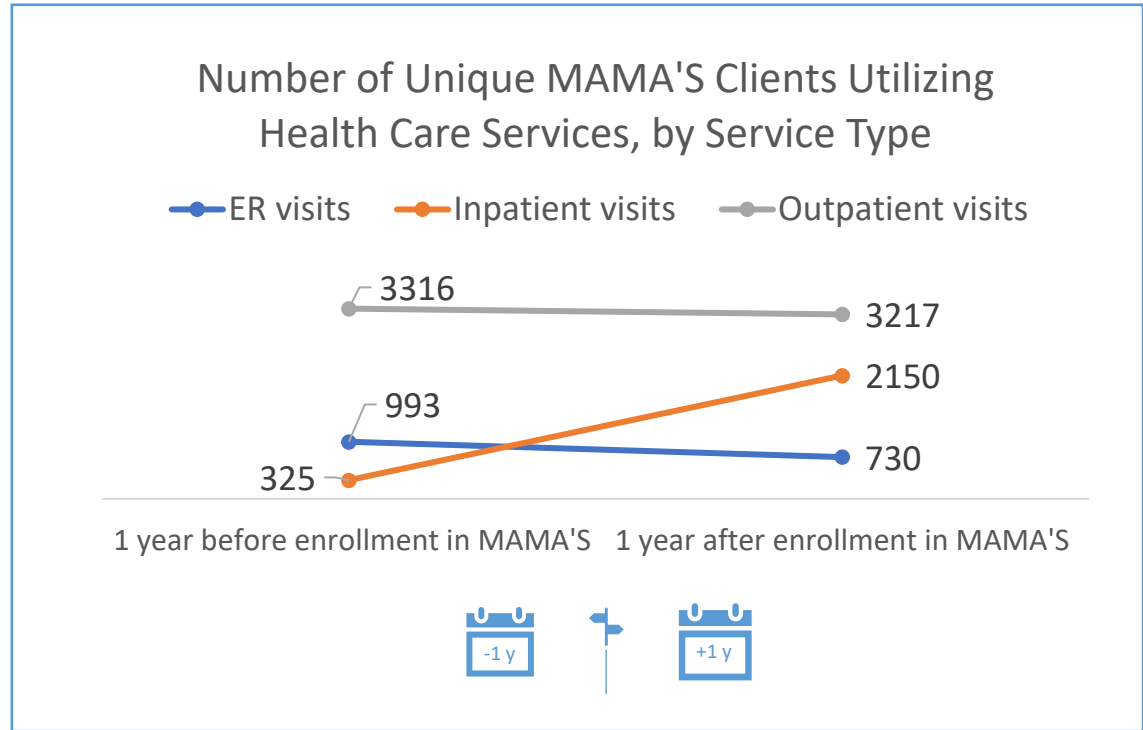
Preliminary Analysis: Pre- and Post-MAMA'S Health Care Utilization
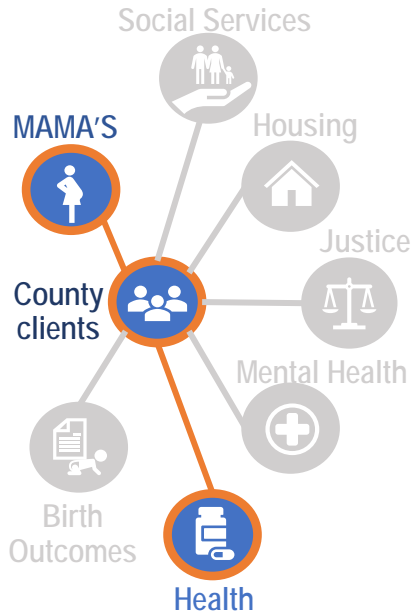
Social Services

Housing

MAMA'S

Justice

County clients

Mental Health

Birth Outcomes

Health

Number of Unique MAMA'S Clients Utilizing Health Care Services, by Service Type

━●━ ER visits ━●━ Inpatient visits ━●━ Outpatient visits

3316   3217

                                              2150

993

                                              730

325

1 year before enrollment in MAMA'S   1 year after enrollment in MAMA'S
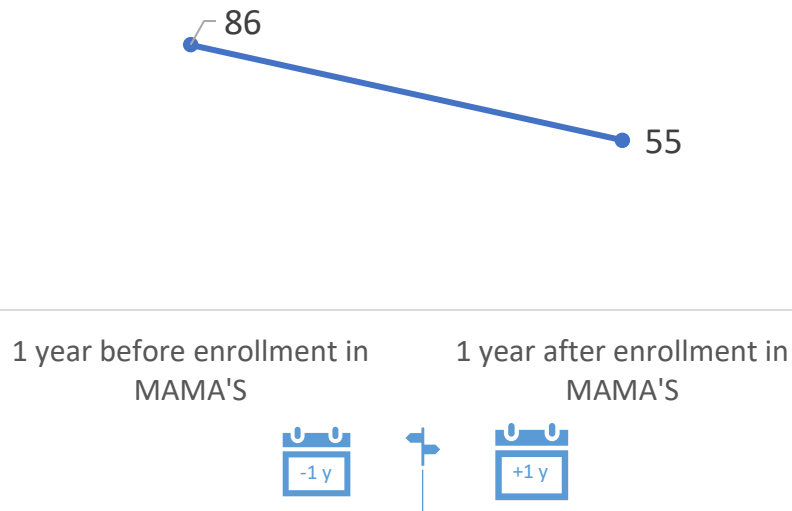
-1 y   +1 y

*Results are preliminary and may change as we refine our approach to analyze the data

Preliminary Analysis: Pre- and Post-MAMA'S Mental Health Crisis

Social Services

Housing

MAMA'S

Justice
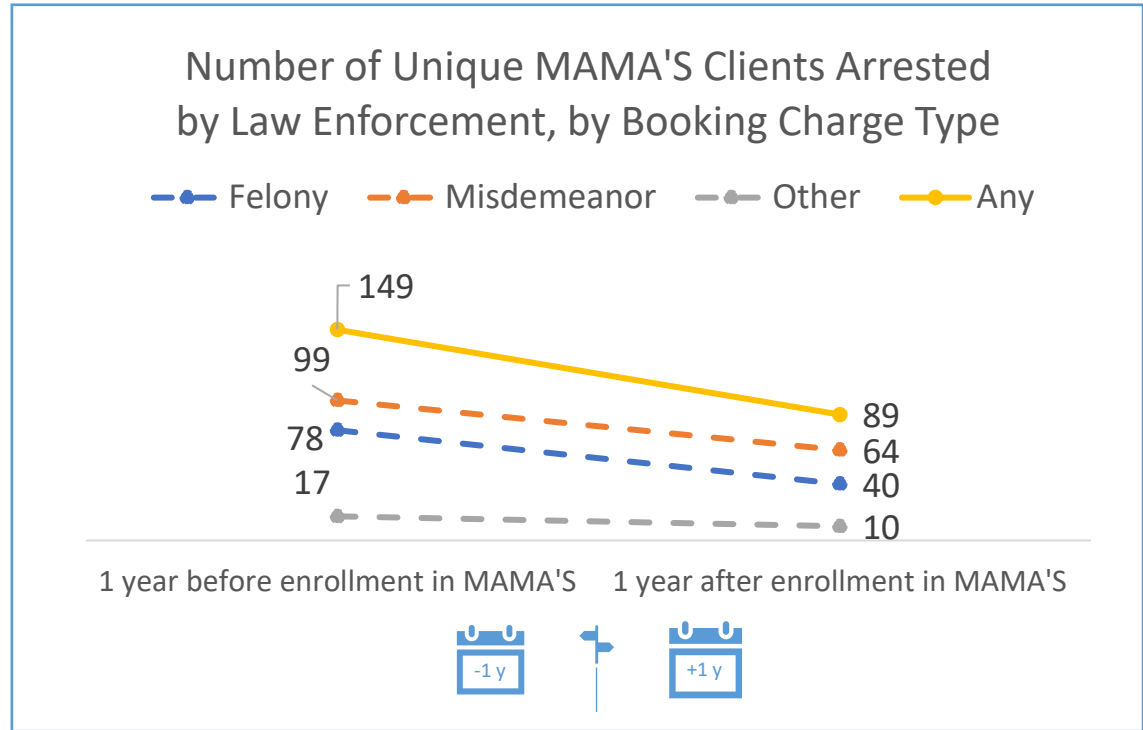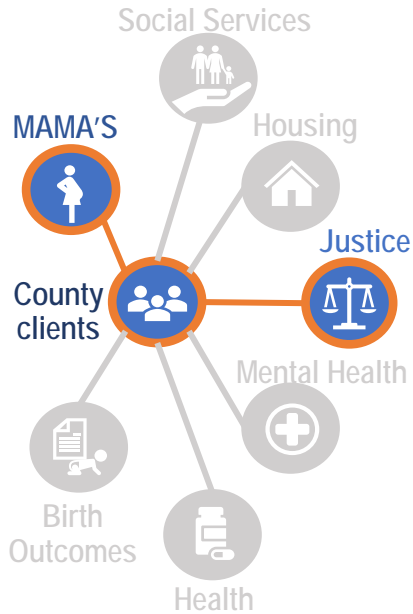
County clients

Mental Health

Birth Outcomes
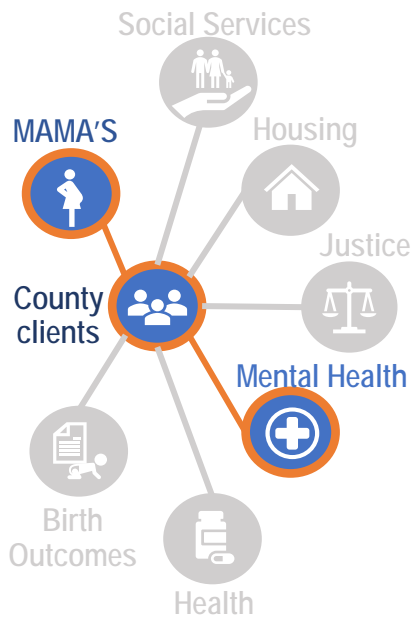
Health

Number of Unique MAMA'S Clients Experiencing Mental Health Crisis

86

55

1 year before enrollment in MAMA'S

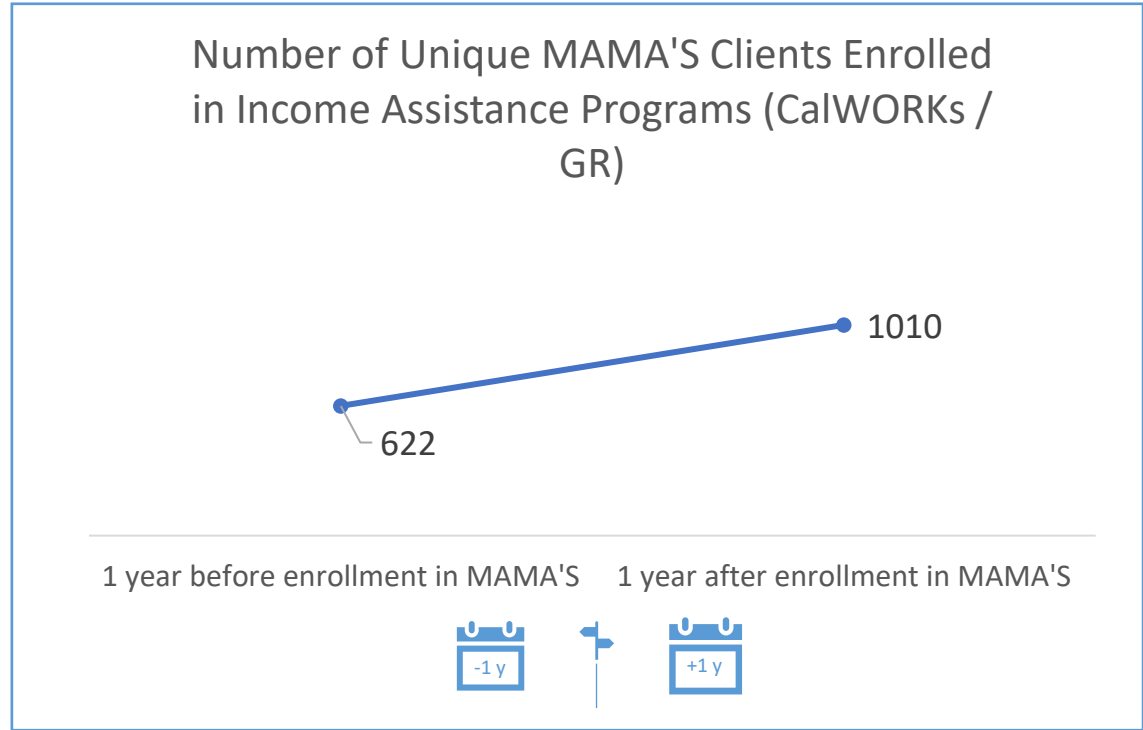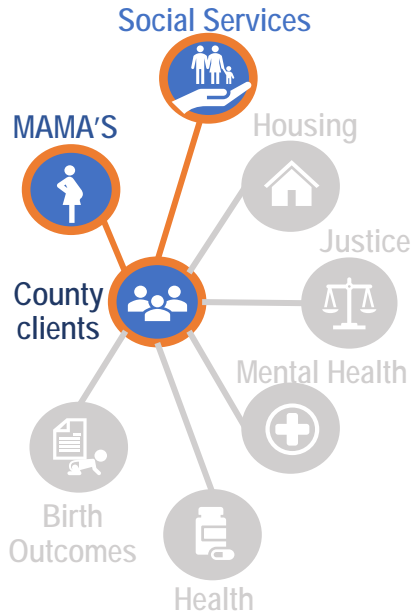1 year after enrollment in MAMA'S

-1 y

+1 y

*Results are preliminary and may change as we refine our approach to analyze the data

Preliminary Analysis: Pre- and Post-MAMA'S Justice Involvement

Number of Unique MAMA'S Clients Arrested by Law Enforcement, by Booking Charge Type

Felony — Misdemeanor — Other — Any

149
99
78
17

89
64
40
10

1 year before enrollment in MAMA'S   1 year after enrollment in MAMA'S
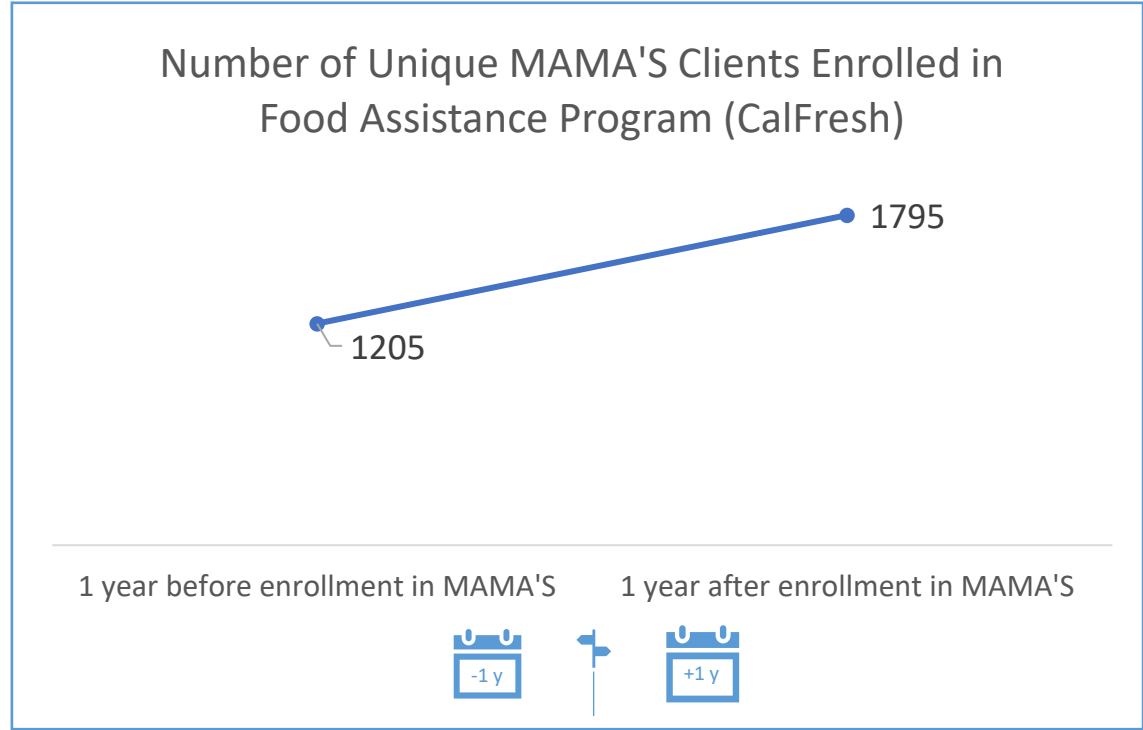
-1 y   +1 y

*Results are preliminary and may change as we refine our approach to analyze the data

Preliminary Analysis: Pre- and Post-MAMA'S Income Assistance Receipt

Social Services

MAMA'S

Housing

County clients

Justice

Mental Health

Birth Outcomes

Health

Number of Unique MAMA'S Clients Enrolled in Income Assistance Programs (CalWORKs / GR)

1010

622

1 year before enrollment in MAMA'S   1 year after enrollment in MAMA'S
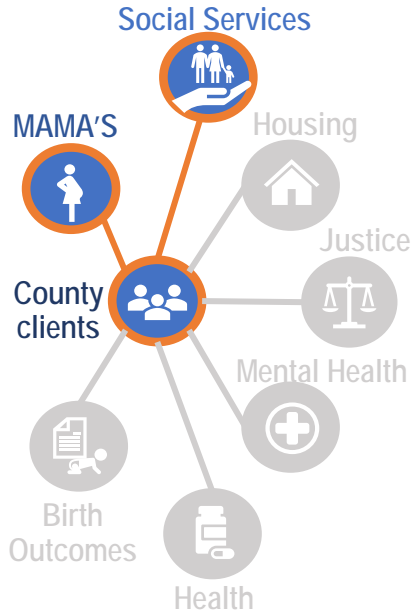
-1 y   +1 y

*Results are preliminary and may change as we refine our approach to analyze the data

Preliminary Analysis: Pre- and Post-MAMA'S Food Assistance Receipt

Social Services

MAMA'S

Housing

County clients

Justice

Mental Health

Birth Outcomes

Health

Number of Unique MAMA'S Clients Enrolled in Food Assistance Program (CalFresh)

1795

1205

1 year before enrollment in MAMA'S

1 year after enrollment in MAMA'S

-1 y

+1 y

*Results are preliminary and may change as we refine our approach to analyze the data

Network Analysis

Where We Are: Network Data Collection

Conducted by Visible Network Labs

Network Survey

- First pilot of network survey with research team and community partners completed in September
- Currently finalizing revision of survey questionnaire for second pilot and compiling survey recipients' contact information
- Second pilot will be conducted in early November
- Survey will be launched to community partners by late November
- Survey data collection expected to be complete in December

Where We Are: Qualitative Data Collection

Conducted by Southern California Center for Nonprofit Management
Phone Interviews substituted for Focus groups due to COVID

Patient Interviews
- Completed 12 out of 20 interviews with MAMAs patients (English and Spanish)
- The remaining 7 will be completed by November

Provider Interviews
- Currently finalizing interview questions
- Will schedule 20 interviews with MAMAs providers, to be completed by December

Key Informant Interviews
- Will schedule 8-10 interviews with Senior staff from MAMAs program and key partner agencies in January

Preliminary Analysis: Topline Findings Regarding Impact of COVID-19

Patient Interviews

- Of 12 interviews completed, 6 in English and 6 in Spanish

- 1 of 12 delivered right before LA County safer-at-home order (March 19th); 10 delivered after safer-at-home order; 1 still pregnant at time of interview

- Representation from all 4 geographic locations of MAMAs program across LA County

Preliminary Analysis: Topline Findings Regarding Impact of COVID-19

Patient Interviews

- 75% of those interviewed said that the pandemic did not affect their communications or interactions with MAMA's staff in a negative way.
  - MAMA's Neighborhood staff continued communication by phone, and were helpful in giving referrals to resources
  - Referrals and support included information about food pantries and housing programs, and tangible goods like newborn diapers and baby clothes

- 25% of those interviewed said that the pandemic did negatively affect their communication with MAMA's staff
  - Clients said it became a bit more difficult to connect with MAMA's staff, either because clinic visits were limited or made more impersonal according to Coronavirus rules, or because it was more difficult to connect with MAMA's staff via phone.
  - Patients who were still receiving medical care at the clinics felt the most negative impact of Coronavirus rules/adaptations on their interactions with the MAMA's Neighborhood program

Next Steps

Next Steps

Quantitative Analysis
- Construction of comparison group using propensity score matching
- Analyses of birth outcomes
- Difference-of-differences analyses of cross-sector outcomes

Network Analysis
- Conduct second pilot
- Launch network survey

Qualitative Analysis
- Finish patient interviews
- Conduct analysis of patient interview data
- Schedule provider interviews
- Develop interview guide for key informant interviews

Thank you

The S4A MAMA'S Team

- Irene Vidyanti (ividyanti@ceo.lacounty.gov), *Los Angeles County Chief Information Office*
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- Erin Saleeby, *Los Angeles County Department of Health Services*
- Laura Stroud, *Los Angeles County Department of Public Health*
- Ashaki Jackson, *Los Angeles County Department of Health Services*
- Lisa Greenwell, *Los Angeles County Department of Public Health*
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- Christine Newkirk and Maura Harrington, *Southern California Center for Nonprofit Management*
- Sara Sprong, Danielle Varda, Shannon Studden, and Kyle Brees, *Visible Network Labs*

Commentary
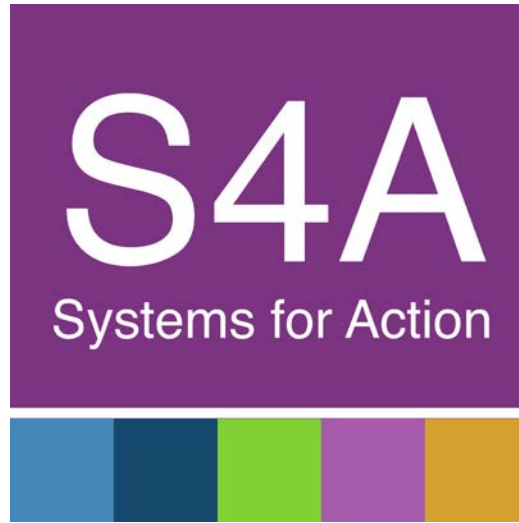
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Can Subsidized Transportation Options Slow Diabetes Progression?

Fei Li, PhD and Christopher Kajetan Wyczalkowski, PhD | Georgia State University

December 9th | 12pm ET

Financing Coordinated Medical and Social Services for Patients with Psychosis

Yuhua Bao, PhD | Cornell University

Acknowledgements