



Thursday, October 22 10:00–11:15 am



















# Moderator: Katie Fallon

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Sanitarians, in addition to the evaluation form, please send your Name and RS number in the chat function, in order to ensure you receive credit

# Panel Member: Barbara Poppe

- Barbara Poppe is the founder of <u>Barbara</u>
   <u>Poppe and Associates</u>
- Former executive Director of the United States Interagency Council on Homelessness
- Serves on the national board of the
   Enterprise Community Partners and the
   national advisory board for the <u>Center</u>
   for Evidence-based Solution to
   Homelessness.





# Panel Member: Amy Riegel

- Amy Riegel is the Director of Housing at CareSource.
- Previously the Director of JobConnect Ohio at CareSource, leading the effort to assist Medicaid members in removing barriers to high quality employment opportunities.
- Prior to joining CareSource, Amy was with the City of Dayton for ten years serving as the Manager of Community Development and Grant Administration.
- Amy is a graduate of Wright State University. She is proud to live in Dayton, Ohio with her husband and three young daughters.

#### Panel Member: Priyam Chokshi

- Director of Community and Legislative Strategies for CelebrateOne
- Served as a policy advisor to Mayor Andrew J.
   Ginther and worked to create Kiva Columbus, the Columbus Women's Commission
- Legislative aide for Columbus City Council.
- Currently serves on the regional board of the Children's Hunger Alliance and is a member of the Leadership Ohio Class of 2020.
- Bachelor's degree in International Affairs George
   Washington University with and is currently pursuing her master's degree at Harvard University.
- She is a transplant from Cleveland and has been living in downtown Columbus for over 10 years and believes it's the best city to work, play and live.







## Panel

I never got this much support and help [before]. Having your first baby, you don't know what to expect ... They were there to support me and asked me about my baby, asked me if I needed transportation and all that stuff.

~ HBAH participant

- Amy Riegel, CareSource
- Barbara Poppe, Poppe & Associates
- Priyam Chokshi, CelebrateOne





# Agenda

- Why tackle housing when trying to improve maternal, birth, and child outcomes?
- Healthy Beginnings At Home
  - Overview
  - Preliminary Research findings
  - Process Evaluation
- Your turn: Q&A
- Policy Recommendations
- Your turn: Q&A





Why tackle housing to improve maternal, birth or child outcomes?





## Timing and Duration of Homelessness matters, Both Prenatally and in Early life, on Child Health

Homelessness During Pregnancy: A Unique, Time-Dependent Risk Factor of Birth Outcomes



Homelessness During Infancy: Associations With Infant and Maternal Health and Hardship Outcomes

Timing and Duration of Pre- and Postnatal Homelessness and the Health of Young Children











## Timing of Homelessness Matters

Matern Child Health J DOI 10.1007/s10995-014-1633-6

#### Homelessness During Pregnancy: A Unique, Time-Dependent Risk Factor of Birth Outcomes

Diana B. Cutts · Sharon Coleman · Maureen M. Black · Mariana M. Chilton John T. Cook · Stephanie Ettinger de Cuba · Timothy C. Heeren · Alan Meyers · Megan Sandel · Patrick H. Casey · Deborah A. Frank

© Springer Science+Business Media New York 2014

Abstract Evaluate homelessness during pregnancy as a unique, time-dependent risk factor for adverse birth outcomes. 9,995 mothers of children <48 months old surveyed at emergency departments and primary care clinics in five US cities. Mothers were classified as either homeless during pregnancy with the index child, homeless only after the index child's birth, or consistently housed. Outcomes included birth weight as a continuous variable, as well as categorical outcomes of low birth weight (LBW; <2,500 g) and preterm delivery (<37 weeks). Multiple logistic regression and adjusted linear regression analyses were performed, comparing prenatal and postnatal homelessness with the referent group of consistently housed mothers, controlling for maternal demographic characteristics, smoking, and child

B. Cutts (⋈)

Department of Pediatrics, Hennepin County Medical Center, 701 Park Avenue, Minneapolis, MN 55415, USA e-mail: diana.cutts@hcmed.org

S. Coleman · S. E. de Cuba · T. C. Heeren
Data Coordinating Center, Boston University School of Public
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#### I. M. Black

Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD, USA

#### M. M. Chilton

Department of Health Management and Policy, Drexel University School of Public Health, Philadelphia, PA, USA

J. T. Cook - A. Meyers - M. Sandel - D. A. Frank Department of Pediatrics, Boston University School of Medicine, Boston, MA, USA

#### P. H. Casey

Department of Pediatrics, University of Arkansas for Medical Sciences, Little Rock, AR, USA

Published online: 18 November 2014

Table 3 Adjusted birth
outcomes of pre and postnatal
homeless mothers

Adjusted for site, mother's birthplace, race/ethnicity, education, employment, marital status, child's age and mother's smoking history

AOR adjusted odds ratio, 95 % CI = 95 % confidence interval

	Consistently housed	Any prenatal homelessness AOR (95 % CI)	Postnatal homelessness only AOR (95 % CI)	Overall p value
Low birth weight				
<2500 g	1.00	1.43 (1.14, 1.80)	1.0(0.72, 1.40)	0.01
		p < 0.01	2.0p = 0.98	
Premature				
<37 weeks GA	1.00	1.24 (0.98, 1.56)	1.21 (0.89, 1.63)	0.13
		p = 0.08	p = 0.22	
Birth weight in grams				
Least square mean (SEM)	3,093 (7.1)	3,040 (29.2)	3,106 (38.1)	0.19
	(ref)	p = 0.08	p = 0.73	









#### Compounding Stress

The Timing and Duration Effects of Homelessness on Children's Health

#### By Megan Sandel, MD MPH, Richard Sheward, MPP, and Lisa Sturtevant, PhD June 2015

Decades of scientific research has demonstrated that homelessness experienced during early childhood is harmful to a child's growth and development. The stress of homelessness during early childhood can lead to potentially permanent harmful changes in brain and body function, in turn causing higher levels of stress-related

chronic diseases later in life.<sup>2</sup> In addition, a growing body of evidence has established that a child's health and development are critically dependent on his mother's mental and physical well-being during pregnancy.<sup>2</sup>



New research from Children's HealthWatch illustrates there is no safe level of homelessness. The tirring (pre-natal, post-natal) and duration of homelessness (more or less than six months) compounds the risk of harmful child health outcomes. The younger and longer a child experiences homelessness, the greater the cumulative toll of negative health outcomes, which can have lifelong effects on the child, the family, and the community.

#### The Children's HealthWatch Research Network

Researchers from Children's HealthWatch collected data from over 20,000 caregivers of low-income children under the age of four with public or no health insurance. These caregivers were interviewed in urban pediatric clinics and emergency departments in five U.S. cities from 2009 through 2014. Interview data were analyzed to assess children's health and development and to compare outcomes for children who experienced homelessness at some point in their lives with children who were never homeless.

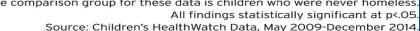
#### **New Research Findings**

While pre-natal and post-natal child homelessness were each separately associated with poor health outcomes for children, the combination of pre-natal and post-natal homelessness resulted in a so-called "dose-response" effect that compounded the health risks linked to both pre-natal and post-natal homelessness. In addition, longer periods of homelessness among children generally were associated with worse health outcomes.

THE CENTER FOR HOUSING POLICY IS THE RESEARCH DIVISION OF THE



#### FIGURE 1 Compounding Effect of Homelessness on Child Health 99% 100 80 he Percent Increased Risk of Poor Health Outcomes 59% 60 42% 41% 41% 38% 40 28% 23% 19% 20 0 Fair/Poor Developmental Child Hospitalizations Child Health Risk Pre- and Post-natal Pre-natal Post-natal Homelessness Only Homelessness Only Homelessness The comparison group for these data is children who were never homeless.











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#### FIGURE 2 Long Duration of Post-natal Homelessness Affects Child Health Post-natal Homelessness > 6 Months 250% 250 Percent Increased Risk Poor Health Outcomes 200 150 118% 100 67% 59% 46% 45% 50 0 Fair/Poor Developmental Child Hospitalizations\* Child Health Risk Infants (less than 12 months) Toddlers (over 12 months)

The comparison group for these data is children who were never homeless. All findings statistically significant at p<.05, except \*hospitalizations among infants (p=.06). Source: Children's HealthWatch Data, May 2009-December 2014.







# Health Affairs Key Findings

Housing Intervention for Medically **Complex Families** Associated with Improved Family Health: Pilot Randomized Trial

Difference-in-differences in changes from baseline to 6 months between intervention and control groups, among participants in Housing Prescriptions as Health Care in Boston, Massachusetts

	Difference	95% CI
Behind on rent in past year	19ª	(-2, 40)
Two or more moves in past year	-9ª	(-11, 28)
Homeless in past 6 months	15ª	(-11, 40)
Child in fair or poor health	-32 <sup>a</sup>	(-59, -06)
In past 6 months, mean no. of child: Urgent care visits ED visits Hospitalizations	-0.51 -0.41 0.05	(-1.54, 0.51) (-1.66, 0.83) (-0.38, 0.49)
Mean GAD-2 score	-1.38**	(-2.46, -0.31)
Mean PHQ-2 score	-1.04**	(-1.95, -0.13)

Analysis demonstrated significantly greater improvements in child health status and parent anxiety and depression scores among those in the intervention group, compared to the control group.







# Why tackle housing to improve maternal, birth or child outcomes?

Infants were the most common age accessing the homelessness assistance system in Ohio and the number of infants grew to 

2,943 in 2017

**A 53.0% INCREASE SINCE 2012** 





# Why tackle housing to improve maternal, birth or child outcomes?

Black Ohioans are only

13%
of the state's residents,
but make up nearly

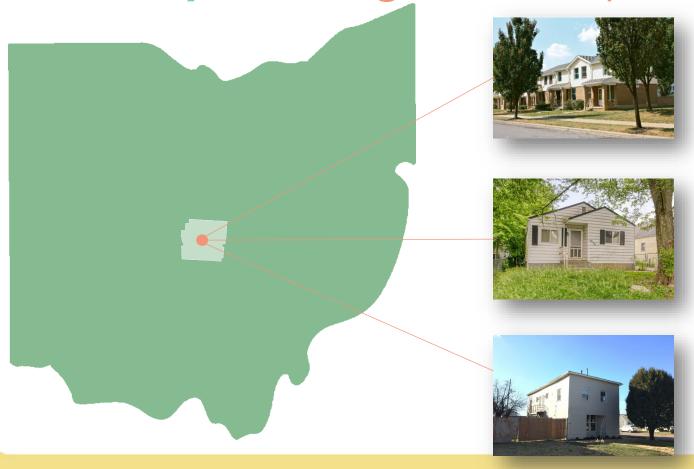
50%
of its homeless
population.

COVID-19 has exposed underlying racial disparities in health and housing. With new federal resources available for rental assistance, the opportunity to target some of the resources to pregnant women could have profound impact on the health and well-being of infants. HBAH provides a framework for communities to use to achieve better birth outcomes.





Franklin County housing landscape



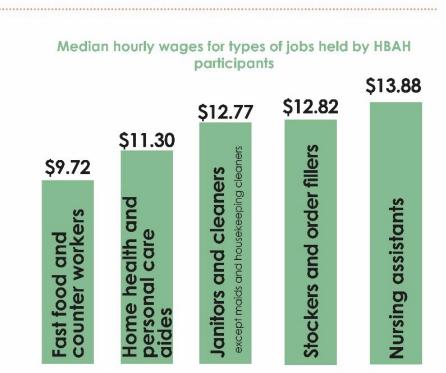




# How much does an average renter need to earn to afford a 2-bedroom apartment in Franklin County, Ohio?



# Housing wage The "housing wage" is defined as the hourly wage a full-time worker needs to earn to spend 30% or less of their income on housing. The housing wage for Ohio overall is \$15.99.

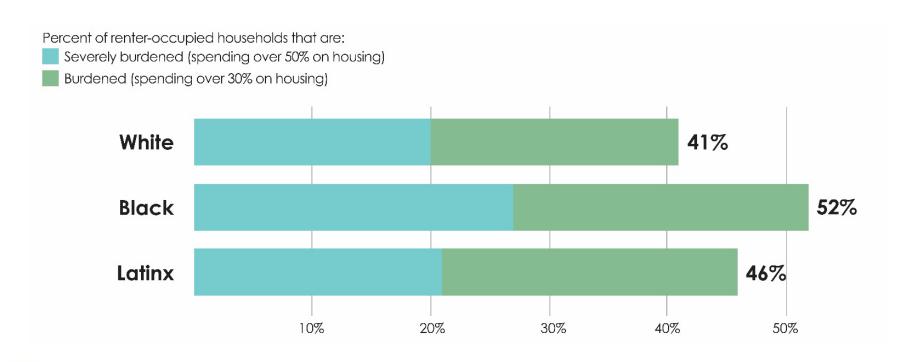


Sources: Data from the Department of Housing and Urban Development FY2020 Fair Market Rent, as compiled by the National Low Income Housing Coalition. "Out of Reach 2020: Ohio." National Low Income Housing Coalition. Accessed July 22, 2020.





# Housing cost burden by race/ethnicity and severity, Columbus region\*, 2017



\* Columbus Metropolitan Statistical Area

Source: "Housing Burden. Columbus, OH." National Equity Atlas. Accessed Aug. 18, 2020. https://nationalequityatlas.org/indicators/Housing\_burden#/?breakdown=2



# Priyam Chokshi

Director of Community and Legislative Strategies CelebrateOne, City of Columbus





# What is Healthy Beginnings At Home?

A community initiative striving to reduce infant mortality through an affordable housing intervention





## CelebrateOne

- CelebrateOne is a community-wide, collective impact initiative with the mission of improving Columbus' unacceptably high infant mortality rate
- Recognizing housing as an important social determinant of health, CelebrateOne convened partners to establish the Healthy Beginnings at Home pilot in 2018.

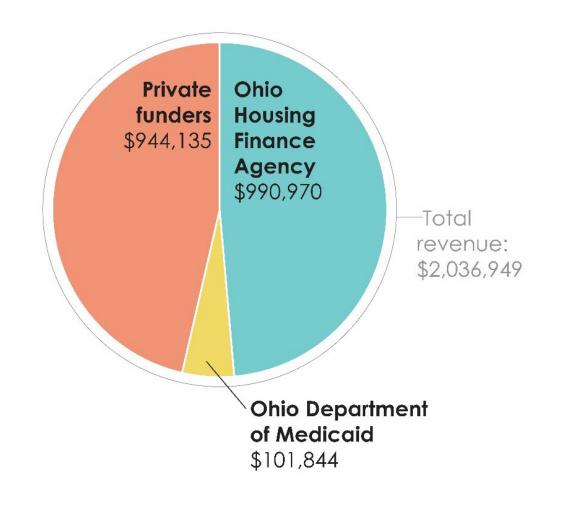






# HBAH revenue sources

(actual revenue as of 4/30/2020)







## Key Partners













#### Other partners:

- StepOne for a Healthy Pregnancy, Physicians Care Connection
- Barb Poppe
- Jacob Bowling
- Craig Thiele
- University of Delaware
- Community Shelter Board
- Health Policy Institute of Ohio

#### **Primary Funders**

- Anthem
- American Electric Power Foundation
- Ohio Housing Finance Agency
- Ohio Capital Corporation for Housing
- Warren W Tyler Memorial Fund
- Ohio Department of Medicaid
- CareSource Foundation
- Key Bank Foundation
- M/I Homes



# Amy Riegel

**Director of Housing** 

CareSource







"The fact that my son has his own room right now — that is something that is super sweet ... I get to put him in a situation of living where he can be comfortable, be a baby, be himself, learn and grow and be inquisitive and play. You can't have that if you aren't living in a stable home."

- HBAH participant





## Project Overview

- **Study design:** 100 women randomly assigned to receive either a housing intervention or usual care
  - pregnant adult in their first or second trimester,
  - living in Franklin County
  - household income <30% AMI</li>
  - enrolled in CareSource, and
  - experiencing housing instability or homelessness
- Housing intervention: rental subsidies (time-limited or ongoing) and housing stabilization services





## What is "housing unstable"?

# HOUSING IS UNSTABLE WHEN A FAMILY EXPERIENCES ANY OF THESE SITUATIONS:

- multiple moves
- eviction or risk of eviction
- overcrowded or doubled up
- a severe housing problem
- homeless living in a shelter or place not meant for human habitation.





#### **HBAH Intervention:**

Rental Assistance + Housing Stabilization Services

#### Rental Assistance

- 15-months of rental subsidy covering the gap between full market rent and 30% of the participants' income
- Followed by 6-month stepdown period in which the subsidy decreased gradually until the participant pays full rent.
- Some participants found housing in units that included a full rent subsidy on an ongoing basis rather than the time limited subsidy provided by HBAH





# Example of rental assistance step-down schedule as outlined in project model



Rental assistance\*

Tenant responsibility\*

\*Calculated based on average fair market rent for units occupied by HBAH participants (\$718.80 per month) and average tenant responsibility (\$27.82 per month). These amounts were reported to HPIO by CelebrateOne. Calculations were based on these averages through the formula used to identify tenant rent portion by CMHA.





#### **HBAH Intervention:**

Rental Assistance + Housing Stabilization Services

- Housing stabilization services helped participants identify housing, negotiate with landlords, and remain securely housed when faced with challenges
  - Family Critical Time Intervention (CTI)
  - Housing First approach
  - Clinical best practices: person-centered planning, motivational interviewing, and trauma-informed care
  - Other usual care support services included access to a CelebrateOne CHW, a CareSource Care Manager, and a JobConnect Life Coach





## **Usual Care**

- Participants randomized to the usual care group did not receive a rental subsidy from the HBAH program, but remained eligible for housing assistance from other sources
- All community-based services for which they were eligible, including support from CareSource and CelebrateOne, remained available to these participants







# What are we learning from the research and evaluation?

Healthy Beginnings At Home





### Research Objective

 Can provision of safe, affordable housing during pregnancy improve health outcomes - birth, maternal and infant — and reduce infant mortality?





### Health Research Overview

- Nationwide Children's Hospital
  - Surveys were conducted at baseline, 6-months, 12-months,
     18 months and 22 months after enrollment
  - Indicators include:
    - Birth outcomes
    - Housing stability
    - Maternal mental health
    - Health related social needs
    - Healthcare utilization through CareSource claims data





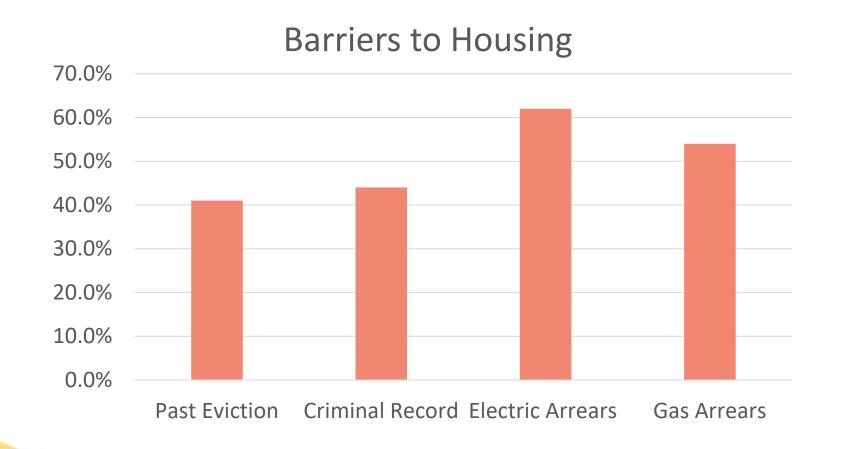
## Demographics

Participants	
Race/Ethnicity	
Non-Hispanic Black	81%
Non-Hispanic White	10%
Hispanic Black or Multiracial	9%
Average Age	25.5
Prior Pregnancy	81%





### Barriers to Finding Affordable, Safe and Quality Housing







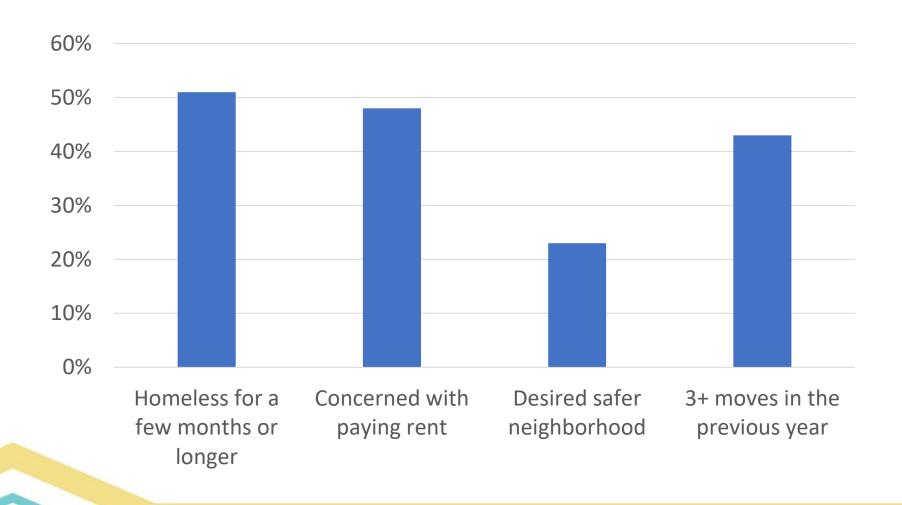
# Financial Barriers to Finding Affordable, Safe and Quality Housing

Financial Barriers to Stable Housing		
Income Per Month		
Zero	46%	
\$1 to \$500	9%	
\$501 to \$1,000	18%	
Above \$1,000	27%	
Credit Score		
Above 580 ("low" or "average")	8%	
Below 580 ("bad" or "poor")	38%	
No Score (insufficient information)	54%	





### Past Housing Experiences







### Preliminary Research Findings

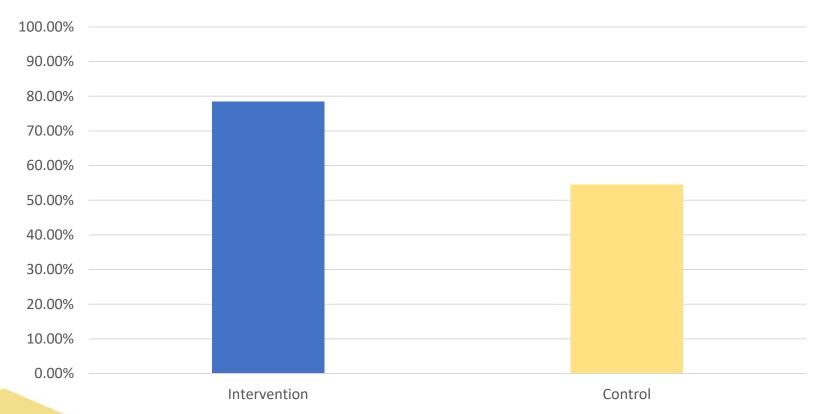
- Preliminary findings show differences between the birth outcomes for the intervention group and the usual care group
- Babies in the housing intervention group were less likely to be admitted to Neonatal Intensive Care Unit (NICU) and stayed just 8 days on average rather than 29 days for usual care NICU admissions





### Preliminary Findings

#### Babies Born Full Term and Healthy Weight





# Priyam Chokshi

Director of Community and Legislative Strategies CelebrateOne, City of Columbus





# Healthy Beginnings at Home

Process evaluation











### Key findings at a glance

- Cross-sector partnership is challenging, but worth it
- 2. Resilient participants formed strong relationships with Housing Stability Specialists, a critical component of the program
- 3. Rental assistance is necessary, but not sufficient
- 4. Racism, trauma and violence must be addressed
- 5. COVID-19 pandemic threatens tenuous progress





# Resilient participants formed strong relationships with Housing Stability Specialists

- "The program has really helped me to get my life back on track and provide stability to my children."
- "I can call [HFF HSS] and talk to her about anything. She answers questions. Apart from their case worker role, they are good mentors too ... They teach you not just how to be a mom, but how to be a good woman for yourself. Especially if you have a daughter, you must teach her how to be a better version of you."
- "I feel empowered to make decisions. I have shared personal information with [my HSS], and she respected me and made me feel safe."



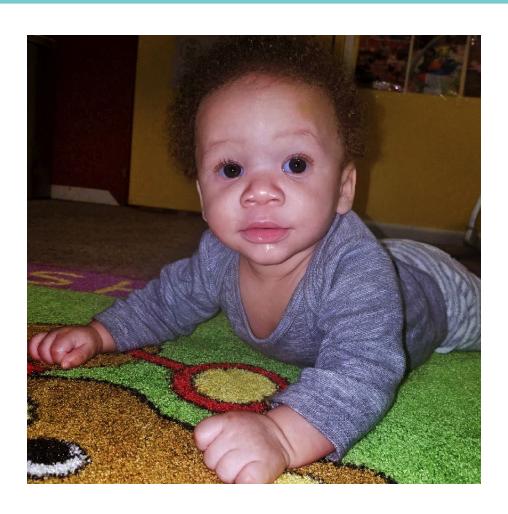


### Rental assistance is necessary, but not sufficient

- Difficult housing market and low wages
- Rental assistance is a critical foundation
- Intensive help beyond rental housing was needed
- Unexpected hurdles to housing stability







### BIRTH OUTCOMES

Four fetal deaths in the usual care group, and

#### NONE!

in the housing intervention group.

#### 40 of 51 babies

in the intervention group were born full-term and at a healthy birth weight in comparison to

#### 24 of 44 babies

in the usual care group.

Babies in the housing intervention group were less likely to be admitted to NICU and stayed just

#### 8 days rather than 29 days

for usual care NICU admissions.





### Questions?



"Before Healthy Beginnings at Home, I was sleeping on the floor at my boyfriend's mom's house — pregnant. Nobody wants to do that. It's not easy to do that. Now, not only do I have a stable place to grow my family, but I have a place for myself."

-HBAH participant



# Barb Poppe

Barbara Poppe & Associates





### Policy Recommendations

Core Policy Recommendation 1: Test the HBAH model in other communities and at a greater scale to better understand impacts on maternal, birth, and child health outcomes and potential cost benefits related to investment in the HBAH model. Apply a racial equity lens to better understand and reverse disparities associated with race and ethnicity.

- Preliminary evidence from the HBAH program suggests rental assistance and housing stabilization services may help pregnant housing instable women achieve better birth outcomes
- The HBAH model could be scaled and rigorously evaluated in Columbus as well as other communities that experience high rates of infant mortality
- This work could ultimately lead to a large nationally funded, multisite study





### Policy Recommendations

Core Policy Recommendation 2: Promote housing stability for pregnant women with extremely low incomes who experience homelessness or housing insecurity through rental assistance and access to safe quality rental units with housing stabilization services. Use an equity lens to better understand and reverse health disparities associated with race and ethnicity.

- Provide rental and utility assistance to bridge the gap between household income and housing costs for pregnant women with extremely low incomes
- Provide **housing stability services** that support the household and enable better relationships with landlords.
- Increase availability of **safe**, **quality rental housing** for households with extremely low incomes and reduce admission barriers.





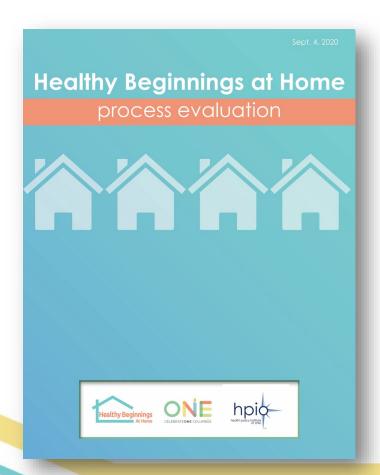
### Questions?



"Housing is the key. I kept trying and failing to save. But they gave you this opportunity to start fresh. That was a blessing."
-HBAH participant



### Learn more



Thank you!

For more information and a copy of the brief & evaluation summary check out:

https://www.columbus.gov/celebrate-one/







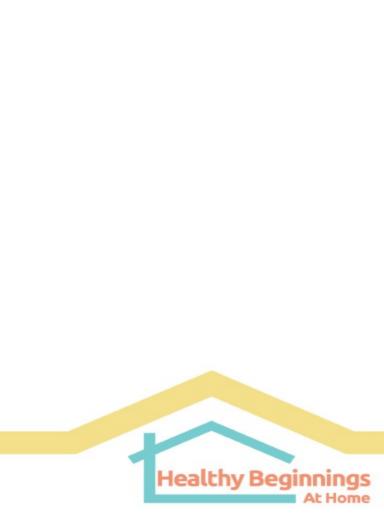
### Panel

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~ HBAH participant

- Amy Riegel, CareSource <u>Amy.Riegel@caresource.com</u>
- Barbara Poppe, Poppe & Associates <a href="mailto:barbara@poppeassociates.com">barbara@poppeassociates.com</a>
- Priyam Chokshi, CelebrateOne <a href="PDChokshi@columbus.gov">PDChokshi@columbus.gov</a>























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# We hope you enjoyed the webinar!



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