The Community Action Network and How Data are Used to Mobilize the Community for Action

Nathifa Miller, JD
Virginia Visconti, PhD
Vicki Swarr, MSN
Adam Anderson, MURP, MPH

Culture of Data Conference
June 23, 2017
Session Learning Objectives

Following participation in the session, individuals will be able to:

• Explain the collective impact approach to reduce African American/Black infant mortality and how we have created community partnerships.

• Describe how data are used in the Community Action Network, and, how it has moved the community to action.
Infant Mortality

• African American infants are 3-4 times more likely to die in the first year - >11% in 2015.

• African American mothers are also 3 times more likely to experience preterm delivery - >10.9% PTB rate in 2015. This is 28% higher than the rate for all other women.
Partnership Chronology

Jan 2015
Explored the IM data landscape

Apr 2015
Identified 3 root causes of IM

Jun 2015
Hosted African American/Black IM Summit*

Fall/Winter 2015/16
Contributed to RMPBS Race in Colorado documentary series

Oct 2015
Adopted a multi-tier engagement infrastructure

Feb-Jul 2016
 Identified strategies to address root causes & established work groups

Oct 2014
Continuous Stakeholder Engagement

Oct 2017

* See https://www.publichealthpractice.org/civicrm/event/info?id=133.

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Collective Impact

The commitment of a group of cross-sector actors to a common agenda for solving a targeted social problem through alignment and differentiation of efforts

Principles:

• Design and implement the initiative with a priority placed on equity
• Include community members in the collaborative
• Recruit and co-create with cross-sector partners
• Use data to continuously learn, adapt, and improve
• Cultivate leaders with unique system leadership skills
• Focus on program and system strategies
• Build a culture that fosters relationships, trust, and respect across participants
• Customize for local context

Source: http://collectiveimpactforum.org/resources.

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Community Action Network (CAN) operates at this level.

Community-Level Action on the Social Determinants of Health & Equity

Group-Level Programming

Individual-Level Direct Services

HBSF Advocates work at these levels.
Community Action Network (CAN)

A strength-based, action-oriented collaborative representative of multiple forms of expertise and lived experience

- Community-based organizations and academic public health partners: 42%
- Program participants, community members, public health practitioners, clinicians, local government, media, and business representatives: 58%

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Data Pathway

Identify Data Sources

Action

Access Data

Share Data

Assess
Data Definitions (continued)

• **Infant mortality rate**—Number of infant deaths/number of live births x 100,000

• **Fetal-infant mortality rate**—(Number of fetal deaths + infant deaths)/(number of fetal deaths + live births) x 100,000
Available Data

- PPOR – Perinatal Periods of Risk
- Data Mapping

![Perinatal Periods of Risk (PPOR) Chart]

**Mortality Based on Weight/Age**
- Fetal and Infant Deaths of Extremely/ Very Low Birth Weight
- Fetal Deaths of Low/Normal Birth Weight
- Neonatal Deaths of Low/Normal Birth Weight
- Postneonatal Deaths of Low/ Normal Birth Weight

**Categories**
- Maternal health/ prematurity
- Maternal care
- Newborn Care
- Infant Care

**Ways to Address Mortality**
- Preconception health
- Health behaviors
- Perinatal care
- Prenatal care
- High risk referral
- Obstetric care
- Perinatal management
- Neonatal care
- Pediatric surgery
- Sleep position
- Breast feeding
- Injury prevention

**Birth Weight Categories**
- Extremely Low Birth Weight (Less than 500 grams)
- Very Low Birth Weight (500-1499 grams)
- Low Birth Weight (1500 - 2499 grams)
- Normal Birth Weight (2500+ grams)

**Infant Deaths Categories**
- (age at death)
  - Fetal (unborn but > 20 weeks gestation)
  - Neonatal (up to 28 days of life)
  - Postneonatal (28 days to 1 year of life)
### Fetal and Infant Mortality (PPOR) for Black (Non-Hispanic)

#### Mortality Rate

<table>
<thead>
<tr>
<th>Birth Weight</th>
<th>Mortality Rate</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Low</td>
<td>5.19 / 1,000</td>
<td>92</td>
</tr>
<tr>
<td>Very Low</td>
<td>2.60 / 1,000</td>
<td>92</td>
</tr>
<tr>
<td>Low</td>
<td>1.30 / 1,000</td>
<td>23</td>
</tr>
<tr>
<td>Normal</td>
<td>2.71 / 1,000</td>
<td>48</td>
</tr>
</tbody>
</table>

Fetal and Infant Deaths of Very Low and Extremely Low Birth Weight

#### Time Periods

- **20+ Weeks Pregnancy**: Fetal Loss
- **Birth**: Neonatal Mortality
- **< 28 days of Life**: Neonatal Mortality
- **28 days - 1 year**: Postneonatal Mortality

### Fetal and Infant Mortality (PPOR) for Non-Black

#### Mortality Rate

<table>
<thead>
<tr>
<th>Birth Weight</th>
<th>Mortality Rate</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Low</td>
<td>2.60 / 1,000</td>
<td>475</td>
</tr>
<tr>
<td>Very Low</td>
<td>2.03 / 1,000</td>
<td>370</td>
</tr>
<tr>
<td>Low</td>
<td>1.19 / 1,000</td>
<td>217</td>
</tr>
<tr>
<td>Normal</td>
<td>1.29 / 1,000</td>
<td>236</td>
</tr>
</tbody>
</table>

Fetal and Infant Deaths of Very Low and Extremely Low Birth Weight

#### Time Periods

- **20+ Weeks Pregnancy**: Fetal Loss
- **Birth**: Neonatal Mortality
- **< 28 days of Life**: Neonatal Mortality
- **28 days - 1 year**: Postneonatal Mortality

Source: Vital Statistics Program, Colorado Department of Public Health and Environment
### Fetal and Infant Mortality (PPOR) for Black (Non-Hispanic)

**Mortality Rate**

5.19 / 1,000  
(92 deaths)

Fetal and Infant Deaths of Very Low and Extremely Low Birth Weight

<table>
<thead>
<tr>
<th>Birth</th>
<th>&lt; 28 days of life</th>
<th>28 days - 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mortality Rate</strong></td>
<td><strong>Mortality Rate</strong></td>
<td><strong>Mortality Rate</strong></td>
</tr>
<tr>
<td>2.60 / 1,000</td>
<td>2.71 / 1,000</td>
<td>1.30 / 1,000</td>
</tr>
<tr>
<td>(92 deaths)</td>
<td>(48 deaths)</td>
<td>(23 deaths)</td>
</tr>
<tr>
<td><strong>Fetal Deaths of Low and Normal Birth Weight</strong></td>
<td><strong>Infant Deaths of Low and Normal Birth Weight</strong></td>
<td><strong>Neonatal Deaths of Low/Normal Birth Weight</strong></td>
</tr>
</tbody>
</table>

### Fetal and Infant Mortality (PPOR) for Non-Black

**Mortality Rate**

2.60 / 1,000  
(475 deaths)

Fetal and Infant Deaths of Very Low and Extremely Low Birth Weight

<table>
<thead>
<tr>
<th>Birth</th>
<th>&lt; 28 days of life</th>
<th>28 days - 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mortality Rate</strong></td>
<td><strong>Mortality Rate</strong></td>
<td><strong>Mortality Rate</strong></td>
</tr>
<tr>
<td>2.03 / 1,000</td>
<td>1.29 / 1,000</td>
<td>1.19 / 1,000</td>
</tr>
<tr>
<td>(370 deaths)</td>
<td>(236 deaths)</td>
<td>(217 deaths)</td>
</tr>
<tr>
<td><strong>Fetal Deaths of Low and Normal Birth Weight</strong></td>
<td><strong>Infant Deaths of Low and Normal Birth Weight</strong></td>
<td><strong>Neonatal Deaths of Low/Normal Birth Weight</strong></td>
</tr>
</tbody>
</table>

Source: Vital Statistics Program, Colorado Department of Public Health and Environment
Percent of Singleton Births that are Low Birth Weight (<2500 grams) (2013-2015):
Adams, Arapahoe, and Denver Counties, Colorado

Legend
Percent Low Birth Weight (2013-2015)
By Census Tract (No. of Census Tracts)
- 0% - 5.3% (41)
- 5.3% - 8.2% (114)
- 8.2% - 10.2% (103)
- 10.2% - 13.1% (98)
- 13.1% - 21.6% (31)

Adams, Arapahoe, and Denver Area Average 8.2%
Range: 0% - 21.51%
Adams Average: 9.0%
Arapahoe Average: 6.8%
Denver Average: 9.1%

Census Tract Boundary Data: US Census 2010
Date: November, 2016
Created by Tri-County Health Department | Epidemiology, Planning, and Communications Division

Source: Colorado Department of Public Health and Environment, Vital Records
*388 Census tracts in Adams, Arapahoe, and Denver
Census Tracts with the Highest Percent of Low Birth Weight <2500 grams) (2013-2015) of Singleton Births: Metro Denver Area, Colorado
DATA REVIEW

Census Tracts with the Highest Percent of Low Birth Weight <2500 grams) (2013-2015) of Singleton Births: Aurora, Colorado

Legend
Percent Low Birth Weight (2013-2015)
by Census Tract (Aurora)
- 0% - 5.3% (20)
- 5.3% - 8.2% (45)
- 8.2% - 10.2% (57)
- 10.2% - 13.1% (58)
- 13.1% - 21.6% (18)
- Aurora Boundary (1)

*Census tracts are contained or overlap with the City of Aurora boundary.
Source: Colorado Department of Public Health and Environment, Vital Records

Census Tract Boundary Data: US Census 2010
Date: November, 2016
Created by Tri-County Health Department | Epidemiology, Planning, and Communications Division
Majority of black infant mortality disparity falls under the Maternal Health/Prematurity and Infant Care categories. Maternal Health/Prematurity is due to a higher proportion of very low birth weight births.²

Root Cause Analysis: Themes/Root Causes

- **Racism/Unjust Systems**
  - Structured inequality
  - Micro-aggressions
  - Cultural mistrust

- **Social Isolation**
  - No sense of belonging
  - Lack of community/family – including father involvement
  - Lack of leaders, mentors, advocates

- **Healthcare**
  - Access
  - Lack of engagement prior to pregnancy
  - Lack of cultural competence among providers

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Strategy Development: PICK Charts

Racism/Unjust Systems

Social Isolation

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Strategies to Address Root Causes

• Racism/Unjust Systems
  ✦ Host community screenings of the RMPBS documentary *Precious Loss* and develop a toolkit to foster dialogue and action

• Social Isolation
  ✦ Promote prenatal visits with fathers/co-parents present to reinforce their power in the birth and post-partum period

• Healthcare
  ✦ Hold discussion groups with medical professionals and moms (get moms together first to identify their main concerns)
Work Groups to Implement Strategies

Screenings & Toolkit Development

Father Involvement/Co-Parenting Promotion

General Communications Development & Coordination

www.moreblackbirthdays.org

©Virginia Visconti, PhD, Center for Public Health Practice, Colorado School of Public Health
Screening Precious Loss

“something freeing about telling your story instead of keeping it a secret”

“People like to conflate race and poverty, but the film shows that race is what it’s about.”

“This really takes a collective effort. I’m excited to hear about that effort. I’m done with studying; we know it.”

“Thank you for putting a face on it. That’s what we physicians need.”

Screenings: 10 thus far

Venues:
- Anschutz Medical Campus
- Community Centers
- Libraries
- Schools
- State/Local Public Health Agencies

http://video.rmpbs.org/video/2365670848/
Lessons Learned
Resources

- Colorado Department of Public Health:
  [https://www.colorado.gov/pacific/sites/default/files/LPH_MCH_Issue-Brief-2_Infant-Mortality.pdf](https://www.colorado.gov/pacific/sites/default/files/LPH_MCH_Issue-Brief-2_Infant-Mortality.pdf) and
- Zero to Three: Policy and Advocacy
- Families Forward Resource Center:
- Healthier Beginnings Inc: [http://www.healthierbeginning.org](http://www.healthierbeginning.org)
How can you learn more & get involved?

Contact Information

**Nathifa Miller, JD**, Collective Impact Coordinator
Healthy Babies Strong Families
nathifa@familiesforwardrc.org

**Virginia Visconti, PhD**, Community Practice Specialist
Center for Public Health Practice, Colorado School of Public Health
virginia.visconti@ucdenver.edu

**Vicki Swarr, MSN**, Perinatal Services Nurse Manager, Program Manager, Tri-County Health Department
vswarr@tchd.org

**Adam Anderson, MURP, MPH**, Population Health Epidemiologist, Tri-County Health Department
aanderson@tchd.org