Improved Birth Outcomes through Health Plan and Community Hub Partnership

Authored by: Dr. Brad Lucas • Amber Detty, MA, CHDA

BACKGROUND

The impact of non-clinical barriers to care on direct medical costs should be accepted as a major impediment to our ability to impact major determinants of community vitality such as Infant Mortality.

- Community hubs use community care coordinators—mostly licensed community health workers to find at risk individuals, assess and lower risk, find and remove barriers to clinical care and then connect to effective clinical care.
- Buckeye Health Plan has long partnered with Community Hubs to help reduce our members’ non-clinical/social determinant barriers.
- We have shown previously that participation in health plan pregnancy management programs improves birth outcomes in women who are at risk for low birthweight deliveries.¹
- This additional care is a natural extension of the care management work that occurs in the world of Medicaid managed care.

We asked ourselves whether this partnership made a measurable and statistically significant difference in outcomes.


ANALYSIS AND METHODS

- A retrospective cohort study of 3,702 deliveries in the footprint of our busiest Community Hub (Health Council of Northwest Ohio). All deliveries in these areas between March 2013-February 2017 included.
- Analysis included the mother’s age, race/ethnicity, gestational age, birthweight, and whether the baby needed neonatal care.
- Bivariate and multivariate analysis to identify odds ratios for Neonatal/NICU Admission by select predictors for all deliveries and separately for deliveries to high-risk, moderate-risk, low-risk, and unknown risk mothers in the service area.

BuckeyeHealthPlan.com
**WHAT WE FOUND**

High-risk mothers in a community hub service area where the member was not exposed to any community hub activity were 1.55 times more likely to deliver a baby needing Special Care Nursery or NICU care when compared to high risk members who received hub services through delivery.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Hub enrollment through delivery and high risk</td>
<td>Significantly less chance of neonatal admission</td>
</tr>
<tr>
<td>Community Hub enrollment through delivery for all risk levels</td>
<td>Approached significance in reduced chance of neonatal admission</td>
</tr>
<tr>
<td>Community Hub enrollment through delivery for low risk pregnancy</td>
<td>No effect on risk of neonatal admission</td>
</tr>
</tbody>
</table>

This data shows Community Hub activity combined with Medicaid health plan clinical program/care management activity improves birth outcomes in high risk pregnancies compared to high risk pregnancies that are not exposed to this intervention.