Lower First Year of Life Costs for Babies through Health Plan and Community Hub Partnership

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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.

Buckeye Health Plan has long partnered with Community Hubs to help reduce our members' non-clinical/social determinant barriers. We have shown that the combination of community coordination of social services and health plan care management improves birth outcomes in high risk pregnant members.*

We asked whether health plan investment in reduction of non-clinical barriers could lead to healthcare savings... it does.

*See our poster on the success of Community Hub Partnerships for more information.

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.
- Total paid amounts (medical and pharmacy) for baby's cost of care in their first year of life were calculated to best determine any savings. Babies whose mothers were enrolled with a Community Hub through delivery were compared to babies whose mothers who did not have care through a Community Hub.

Buckeye Newborns:
Inpatient Cost Through First Year of Life When Enrolled with Start Smart and Hub Enrollment at Delivery, 2013-2016

Risk Level	Hub Group	Newborn Inpatient PMPM Through 1st Birthday	Enrolled with Hub at Delivery Inpatient PMPM Savings*
High Risk	Enrolled with Hub at Delivery	$301.38	$378.72
	Participated in the Hub, but not through delivery	$186.34	
	Not Enrolled with Hub	$680.10	
High Risk Total		$596.44	
Medium Risk	Enrolled with Hub at Delivery	$192.67	$209.13
	Participated in the Hub, but not through delivery	$102.84	
	Not Enrolled with Hub	$401.80	
Medium Risk Total		$386.60	
Low Risk	Enrolled with Hub at Delivery	$101.81	$161.87
	Participated in the Hub, but not through delivery	$54.54	
	Not Enrolled with Hub	$263.68	
Low Risk Total		$257.04	
Unknown Risk (Not Enrolled in Start Smart)	Enrolled with Hub at Delivery	$483.25	$131.78
	Participated in the Hub, but not through delivery	$1,261.39	
	Not Enrolled with Hub	$615.04	
Unknown Risk Total		$616.78	
Total		$551.60	

*Compared to Not Enrolled with Hub

WHAT WE FOUND

Active use of Community Hubs combined with traditional health plan care management to reduce non-clinical barriers to care leads to a lower total cost of care in baby's first year of life.

For every dollar spent on Community Hub activities for our members there was a savings of **$2.36**.

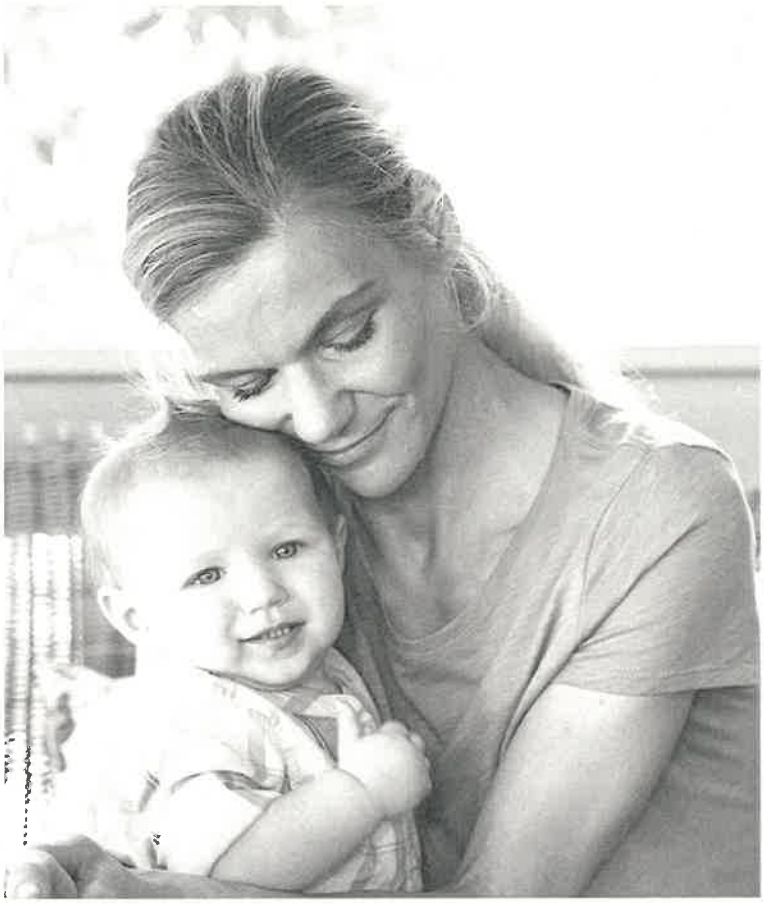
ROI: 236%

While newborns born to mothers at high risk have the greatest overall PMPM cost savings **($403)** during their first year of life when comparing those born to mothers enrolled with the Hub at delivery to those not enrolled with the Hub, there is an overall PMPM cost savings at all risk levels.

Newborns born to mothers at medium risk have an overall PMPM cost savings of **$252**, while newborns born to mothers with low risk have an overall PMPM cost savings of **$171** for infants born to mothers enrolled with the Hub at delivery to those not enrolled with the Hub.

Most of the cost savings (**94%** for newborns born to mothers at high risk) is through inpatient cost savings.

Newborns born to mothers at high risk have an inpatient PMPM cost savings of **$379** during the first year of life when comparing those born to mothers enrolled with the Hub at delivery to those not enrolled with the Hub.



SOME EXAMPLES OF REIMBURSABLE ACTIVITIES ARE:

- Attaching a member to safe housing for 6 months
- Connecting member to 3 behavioral health visits
- Documented smoking cessation
- Referral to Buckeye's Addiction in Pregnancy Program

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