

Infant Mortality Promising Practices



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What Is Community Engagement?

Community engagement is “the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest or similar situations to address issues affecting the well-being of those people...(It) involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as a catalyst for changing policies, programs and practices.”¹

Why Is Community Engagement Important?

Community engagement increases a program’s influence and ability to achieve the desired change. It broadens the base of support and can put organizers in touch with important contacts to leverage resources and get specialized expertise. That kind of support makes a program more effective and improves its prospects for sustainability.

Local Program Highlight: Franklin County

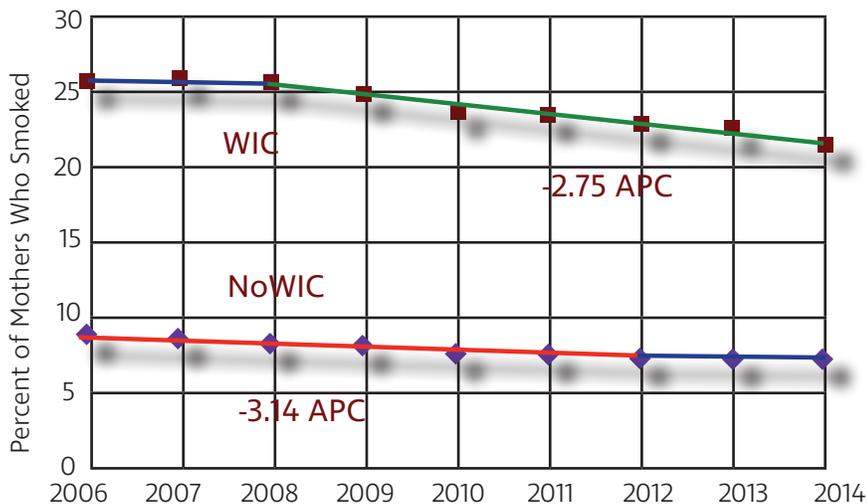
- Columbus Ohio Equity Institute team (South Side Network for Healthy Families and Babies) used a data-informed and community-driven decision-making process to identify interventions.
- Designated a point person.
- During the community engagement process South Side Network for Healthy Families and Babies identified a perceived limited availability of health services and no access to or use of birth control along with unplanned pregnancies.
- Developed an Ohio Equity Institute team community listserv then webpage along with a monthly newsletter.
- Engaged community members in a world café, sensitive to location, keeping on track and being consistent.
- Community input at each meeting.
- Through the coalition and community members including representatives from diverse partner organizations, the community voted to increase community engagement and foster education and mentoring.
- The downstream intervention addresses birth control and planning pregnancies and the upstream intervention launched the Community Connector program that uses trained lay person as connectors. Lay community workers are important in the connection of people in the community with community networks and services.

¹Community Engagement in Public Health. Mary Anne Morgan and Jennifer Lifshay. Contra Costa Health Services, 2006. http://newroutes.org/sites/default/files/live/community_engagement_in_ph_0.pdf

Perinatal Smoking

- 5-8% of U.S. preterm births and 5-7% of preterm-related infant deaths are attributable to smoking during pregnancy.
<http://www.ncbi.nlm.nih.gov/pubmed/20547278>
- 9% of Ohio preterm births are attributable to smoking.
<https://www.ncbi.nlm.nih.gov/pubmed/27485494>
- What works to help pregnant women quit smoking:
 - o Counseling by healthcare providers
 - Pregnancy-specific counseling (5As: Ask, Advise, Assess, Assist and Arrange)
 - Nicotine replacement therapy (considered if unable to quit on own or with counseling)
 - Quitlines
 - Health care systems changes (e.g., provider reminders, documentation)
 - o Population-based Interventions
 - Cigarette taxes
 - Full smoking bans in work sites
 - Mass reach media campaigns
 - Expanded Medicaid tobacco-cessation coverage
<http://www.cdc.gov/reproductivehealth/maternalinfanthealth/tobaccousepregnancy/providers.html>
- ODH-trained Ohio WIC clinics providing 5As (Ask, Advise, Assess, Assist and Arrange) smoking cessation increased quitting in pregnant women.

Trend in Smoking During 3rd Trimester, by WIC Participation, Ohio 2006-2014



Data Source: Ohio Vital Statistics (2014 data preliminary) Analysis in JoinPoint by Elizabeth Conley October 2015

Ohio Partnership for Smoke Free Families 2014-16 Activities

- Quality Improvement (QI) Project.
 - Reduce tobacco use by childbearing-aged women using QI to improve quality 5As (Ask, Advise, Assess, Assist and Arrange) implementation
 - Provider and patient toolkit
 - Training & ongoing support through a learning collaborative
 - CFHS, Home Visiting (Help Me Grow & Ohio Infant Mortality Reduction Initiative), Reproductive Health & Wellness, WIC
- Training on Medicaid billing for tobacco cessation.
- Program promotion materials.
- 6-County saturation in appalachia.
 - 5As (Ask, Advise, Assess, Assist and Arrange) training
 - Media campaign

Local Program Highlight: Franklin County

- Trained certified Tobacco Treatment Specialists.
- Implementing promising practice, *Baby & Me, Tobacco Free* program.
- Ohio Hispanic Coalition funded for *Moms Quit for Two* program.
- Multiple maternal and child health programs trained in and implementing the 5As (Ask, Advise, Assess, Assist and Arrange) brief counseling intervention for smoking cessation.

Local Program Highlight: Stark County

- Implementing *Baby & Me, Tobacco Free* in home visiting program targeting African-American women.
- Multiple maternal and child health programs trained in and implementing the 5As (Ask, Advise, Assess, Assist and Arrange) brief counseling intervention for smoking cessation.



Birth Spacing and Long-Acting Reversible Contraception (LARC)

What are Birth Spacing and LARC?

- Birth spacing is the time between a live birth and the next pregnancy.
- Long-acting reversible contraception (LARC) methods include the intrauterine device (IUD) and the birth control implant. Both last for several years and are the most effective reversible forms of birth control.
<http://www.acog.org/Patients/FAQs/Long-Acting-Reversible-Contraception-LARC-IUD-and-Implant#methods>

Why are Birth Spacing and LARC Important?

- Birth spacing may affect the risk of pregnancy complications, such as preterm birth, low birthweight, and small gestational age. Research has shown that short intervals (less than 18 months) and long intervals (60 months or more) were associated with higher risks of adverse health outcomes.²
- A 2015 study found 6% of Ohio preterm births were attributable to short birth spacing (interval between pregnancies less than 12 months).
<https://www.ncbi.nlm.nih.gov/pubmed/27485494>
- In 2011, about half of births were unintended.
<https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states>
- In 2011, 14% of live births in Ohio to women with a previous birth had an interval of 18 months or less.
https://www.odh.ohio.gov/~media/ODH/ASSETS/Files/data%20statistics/maternal%20and%20child%20health/wih_birthspacing.ashx

Local Program Highlight: Franklin County

- Standardized family planning curriculum across providers in targeted zip codes (CHOICE program).
- Subsidizes the cost of LARCs for women who are un/under-insured in targeted zip codes and promotes same day insertion.
- Partners include PrimaryOne federally qualified health center, Nationwide Children's Hospital BC4Teens Clinic and Columbus Public Health.

² Interpregnancy Intervals in the United States: Data From the Birth Certificate and the National Survey of Family Growth. Casey E. Copen, Ph.D.; Marie E. Thoma, Ph.D.; and Sharon Kirmeyer, Ph.D. National Vital Statistics Report, 2015. https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_03.pdf

CenteringPregnancy

What is CenteringPregnancy?

- CenteringPregnancy is an evidence-based health care delivery model that integrates maternal health care assessment, education, and support. Patients meet with their care provider and other group participants for an extended period of time, at regularly scheduled visits over the course of their pregnancy.

<https://www.odh.ohio.gov/odhprograms/cfhs/centering/pregnancy.aspx>

Why is CenteringPregnancy Important?

- CenteringPregnancy promotes patient engagement and community-building, and has been shown to significantly improve infant health outcomes.
- Health outcomes for pregnancies, specifically increased birthweight and gestational age, and the satisfaction expressed by both the women and their providers, support the effectiveness of this model for delivery of care.

<https://www.odh.ohio.gov/odhprograms/cfhs/centering/pregnancy.asp>

- In a study, the CenteringPregnancy group had less than half the preterm birth rate and low-birth-weight rate, and women were more likely to identify a pediatric provider and be breastfeeding at hospital discharge.³

Local Program Highlight: Stark County

- Developing organizational and grassroots community-based partnerships to address the health and social determinants of health impacting women of childbearing age focusing on African-American women.
- Establishing Community Outreach and Community Care Coordination in the zip codes where the worst birth outcomes occur.
- Partnered with local hospitals to implement a community-based care coordination program to increase awareness of, access to, and utilization of CenteringPregnancy.
- 1,189 community members reached through outreach and information dissemination about how to connect to CenteringPregnancy in the community.
- The development of the local Ohio Equity Institute team called THRIVE has provided new and increased opportunities for partnership and funding for infant mortality work throughout Canton and Stark County.

³Hackley B, Applebaum J, Wilcox WC, Arevalo S. Impact of Two Scheduling Systems on Early Enrollment in a Group Prenatal Care Program. *J Midwifery Womens Health*. 2009;54(3):168–175.
<http://www.ncbi.nlm.nih.gov/pubmed/25782854>

Local Program Highlight: Franklin County

- Neighborhood Health Association CenteringPregnancy site funded by the Governor's Office of Health Transformation as part of the CenteringPregnancy Demonstration Project with the Ohio Association of Community Health Centers.
- 5 current cohorts of patients, average of 5 patients with 2 providers each.
- Bilingual cohort (Spanish & English) and Spanish only cohort.
- Expanding to another site.



Safe Sleep

What Is Safe Sleep?

Sleep-related infant deaths are those that happen suddenly and unexpectedly in a sleep environment. The causes include sudden infant death syndrome (SIDS), accidental suffocation, positional asphyxia, overlay, and undetermined causes. Safe sleep, as recommended by the American Academy of Pediatrics (AAP) in its Task Force on Sudden Infant Death Syndrome's report - *SIDS and Other Sleep-Related Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment*,⁴ includes:

- Place infant to sleep wholly on its back for every sleep, nap time and night time.
- Use a firm sleep surface. A firm crib mattress with a tight-fitting sheet in a safety-approved crib is the recommended surface.
- Room-sharing without bedsharing – the infant's crib should be in the parents' bedroom, close to the parents' bed.
- Keep soft objects, loose bedding, and bumper pads out of the crib.
- Breastfeeding is recommended.
- Offer a pacifier at sleep time after breastfeeding has been established.
- Avoid overheating by excessive clothing, bundling, or room temperature.
- Avoid commercial devices such as wedges, positioners, and monitors marketed to reduce the risk of Sudden Infant Death Syndrome. None have been proven safe or effective.
- All infants should be immunized in accordance with AAP and Centers for Disease Control and Prevention recommendations.
- Women should receive regular prenatal and postpartum care.
- Do not smoke during pregnancy. Avoid exposure of infants and pregnant women to secondhand smoke.
- Not a single drop of alcohol or illicit drugs should be consumed during pregnancy, after birth, or while breastfeeding.

Why Is Safe Sleep Important?

Sleep-related deaths are the leading cause of death between one month and one year of age.

- More than three Ohio infant deaths each week are sleep-related.⁵
- Infant sleep-related deaths outnumber deaths of children of all ages (0-17 years) from vehicular crashes.⁵

⁴ Policy Statement: SIDS and Other Sleep-Related Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment, Pediatrics, October 2011. www.pediatrics.org/cgi/doi/10.1542/peds.2011-2284.

⁵ Ohio Child Fatality Review, 2006-2010 Deaths.

<http://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/cfhs/Infant-Mortality/Ohio-Department-of-Health-Safe-Sleep-Policy.pdf?la=en>

- 42% of infant deaths from one month to one year old are sleep-related.⁵
- 60% of sleep-related deaths occurred in adult beds, on couches or on chairs; only 23% occurred in cribs or bassinets.⁵
- 66% occurred to infants who were sharing a sleep surface with another person.⁵

Local Program Highlight: Franklin County

<https://www.columbus.gov/publichealth/programs/Safe-Sleep-for-Infants/Infant-Safe-Sleep/>

- Cribs for Kids program (23 partners).
 - o Since becoming a Cribs for Kids provider in July 2014, Columbus Public Health has distributed 1,413 survival kits
 - 1,848 Infant Vitality crib kits distributed in 2015
 - 913 Infant Vitality crib kits allocated for 2016; 25% through home visiting
 - o In partnership with CelebrateOne, launched the Safe Sleep Ambassador training in 2015. Safe Sleep Ambassadors are community residents and leaders who are trained in the ABC's of safe sleep and commit to sharing the safe sleep message with a minimum of 10 others
 - As of October 2016, a total of 17 trainings have been held and 390 residents have been trained as Safe Sleep Ambassadors
 - Bumper exchange program launched in late 2016
 - o In partnership with CelebrateOne, a community infant mortality coalition, launched a new safe sleep awareness campaign in 2015
 - <https://www.columbus.gov/publichealth/programs/Safe-Sleep-for-Infants/Infant-Safe-Sleep-Public-Awareness-Campaign/>
 - o Represented on the Ohio Better Birth Outcomes steering committee and safe sleep subcommittee

Local Program Highlight: Stark

- Promoting and educating parents, caregivers, first responders and residents on safe sleep practices and policy integration (reaching 483,725 people).
- Community presentations and meetings to raise awareness (reaching 4,924 people).
- Established safe sleep policies, modeling behavior and audited personnel practices in hospitals.
- Implement training for new parents upon hospital discharge.
- Outreach to faith based communities reaching (1,292 community members).
- Marketing campaign including toolkits (30 agencies), floor talkers (116 spaces) and changing tables (163 tables).
- Cribs for Kids program (11 agency partners including first responders).
 - o 520 Infant Vitality crib kits distributed in 2015
 - o 423 Infant Vitality crib kits allocated for 2016 (25% through home visiting)

HUBs

What is Pregnancy HUB/Pathways?

- HUB/Pathways is a program that connects social service and health providers to pregnant women at-risk for poor birth outcomes. The goal is to improve clinical outcomes by facilitating prenatal care and other social and health services while reducing costs.

<http://www.grc.osu.edu/Projects/MEDTAPP/MobileHealthTechnology>

Why is Pregnancy HUB/Pathways Important?

- The Northwest Ohio Pathways HUB reports, "African-American women are more than twice as likely to deliver a low birth weight baby compared to Caucasian women. In 2013 and 2014, however, African American women enrolled in Pathways had a low birth rate of 9.5%, much lower than the overall rates for African Americans in Lucas County (13.2% in 2013) and statewide (13.4% in 2013)."

<http://www.hcno.org/health-improvement-initiatives/pathways.html>

- The Southeast Ohio Community HUB, also known as the PATHWAYS Program, which is operated by the Integrating Professionals for Appalachian Children (IPAC), received approximately 250 referrals in little more than a year. "As of February 2014, the program held a rate of 89% of enrolled mothers giving birth to healthy weight babies."

<http://www.grc.osu.edu/Projects/MEDTAPP/MobileHealthTechnology>

- The Community Health Access Project (CHAP), in Richland, Ohio, implemented Pathways in 2001 and the full Pathways Community HUB Model in 2005. The programs reports:
 - The incidence of low birth weight reduced from 9.7% in 2005 to 8% in 2008 – providing significant cost savings and an overall healthier population.
 - The most recent analysis of CHAP data shows a continued low birth weight rate of 6-7% percent for women enrolled in the program.
 - In addition, the risk of having a low birth weight baby for women enrolled in CHAP was 6.1% compared to 13% in a matched control group.

<http://carecoordinationsystems.com/case-studies/community-health-access-project-chap-1/>

Local Program Highlight: Franklin County

- The United Way of Central Ohio – Columbus was awarded a replication grant by the Ohio Commission on Minority Health for 2016-2017. Project Abstract: "Through this proposal, United Way of Central Ohio will implement the Franklin County Pathways Community HUB to reduce incidence of infant mortality among minority women in Franklin County. The Franklin County Pathways Community HUB will be developed as a model that provides a community-wide care coordination delivery system that ties payment to outcomes. It will use standardized tools and strategies across a network of community based agencies and service providers to ensure at-risk individuals can access services and resources in a timely, coordinated manner. In year one of

implementation (FY 16), the Franklin County Pathways Community HUB will coordinate care for no less than 50 at-risk pregnant women (prioritizing minority populations) with a focus on ensuring key objectives related to healthy birth outcomes received. In year two of implementation (FY 17), the Franklin County Pathways Community HUB will coordinate care for no less 125 at-risk pregnant women. Throughout years one and two, the Franklin County Pathways Community HUB will ensure care coordination helps reduce and eliminate social determinates of health affecting health and birth outcomes. The Care Coordinators will initially focus their efforts on the three areas with the highest rates of infant mortality: South Linden, Near East side, and Near South side. During year two, three additional high-risk areas will be targeted. Community care coordinators will work with clients to identify the problems to be addressed, key intervention steps required, and measurable outcomes to be achieved. The key intervention steps will adhere to the Pathways care coordination process and represent a standard protocol for service delivery. The Pathways will include payment milestones that create built-in incentives and allow care coordinators to prioritize client needs and ensure they are linked with appropriate services that fully meet their needs. All of these activities will be monitored, reported, and reimbursed using a robust IT system known as Care Coordination Systems." <http://mih.ohio.gov/>



Breastfeeding

What is Breastfeeding?

- Breastfeeding is the preferred method of providing infant nutrition and promoting infant health.
https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/data-statistics/maternal-and-child-health/wih_breastfeeding.pdf?la=en

Why is Breastfeeding Important?

- Infants who are not breastfed have increased risk for Sudden Infant Death Syndrome (SIDS), necrotizing enterocolitis (NEC), ear infections, and GI infections. They may have higher risk for developing obesity.⁶
- Mothers who do not breastfeed are more likely to develop type 2 diabetes, osteoporosis, breast and ovarian cancers, and may take longer to return to their pre-pregnancy weight.⁷
- Ohio's rate for infants ever breastfed is 77.7 compared to the national rate, 81.1.⁸
- Ohio's rate for exclusive breastfeeding at six months is 22.3, the same as the national rate.⁸

What are the Ten Steps to Successful Breastfeeding?

- The Ten Steps are a set of evidence-based practices that have been shown to increase breastfeeding initiation and duration.
<http://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative/the-ten-steps>

State Program Highlight: First Steps for Healthy Babies

- Led by ODH and the Ohio Hospital Association (OHA).
- Recognizes and supports hospitals who are achieving the Ten Steps to Successful Breastfeeding.

⁶ Ip et al. Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries. Agency for Healthcare Research and Quality, 2007.

⁷ AAP Section on Breastfeeding. Breastfeeding and the use of Human Milk. Pediatrics, 2012. https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/data-statistics/maternal-and-child-health/wih_breastfeeding.pdf?la=en

⁸ CDC National Immunization Survey (NIS) 2014-2015, among 2013 births.
<https://www.cdc.gov/breastfeeding/pdf/2016breastfeedingreportcard.pdf>

- Voluntary program that follows a five-tier system—recognition is awarded for every 2 steps achieved.
- Encourages hospitals across the state to promote, protect and support breastfeeding one step at a time, while allowing hospitals to choose the order of implementation.
- 52 hospitals have achieved 279 steps collectively to increase breastfeeding initiation and duration rates.
- Official launch and kick-off webinar on March 25, 2015.
 - Over 85 attendees for kick-off webinar
- Over 50 surveys completed by hospitals with contact info.
- Partnership with the Ohio Lactation Consultants Association and Ohio Breastfeeding Alliance to create the Maternity Care Best Practice recognition for hospitals that did not provide free formula to new mothers in 2015. In its first year, this recognized 52 hospitals for their best practices.
- Created and maintains a Resource Guide document that resides on both the OHA and ODH webpages, hosting various resources for hospital staff on breastfeeding and working towards baby-friendly environments.
- During Fall 2016 and early Winter 2016, ODH hosted free Kangaroo Care trainings across the state of Ohio. Leveraged our First Steps contacts in order to increase the participation in these trainings.
 - There were 21 workshops offered across the state, reaching 391 hospital staff
 - These workshops reached 92 of the 107 maternity hospitals in Ohio
- Racial disparities webinar recorded in April 2016 for posting on First Steps resources page.
- A webinar on Step 3 of the Ten Steps was presented and recorded on August 2016. Over 65 people attended.

Local Program Highlight: Franklin County

- OhioHealth Doctor's Hospital (5 stars)
- Mount Carmel East (2 stars)
- Mount Carmel St. Ann's (2 stars)
- Mount Carmel West (2 stars)
- OhioHealth Grant Medical Center (2 stars)

Progesterone to Prevent Preterm Birth

What is Progesterone?

- Progesterone is a hormone that plays a key role during pregnancy. Progesterone helps the uterus grow and prevent contractions. In later pregnancy, progesterone helps breasts get ready to make breast milk and lungs work harder to give oxygen to the growing baby.

<http://www.marchofdimes.org/complications/progesterone-treatment-to-help-prevent-premature-birth.aspx>

Why is Progesterone Important?

- Progesterone may help prevent premature birth for some women. Vaginal progesterone may help women with a short cervix and pregnant with one baby reduce risk for premature birth. Progesterone shots may help reduce risk for premature birth for women pregnant with one baby who had previous a premature birth.

<http://www.marchofdimes.org/complications/progesterone-treatment-to-help-prevent-premature-birth.aspx>

- “For women who have had a spontaneous preterm delivery, the risk for preterm delivery in subsequent pregnancies is 1.5–2.0 times higher. Among women with a singleton pregnancy and history of spontaneous preterm delivery, 17 alpha-hydroxyprogesterone caproate (17P) can reduce the risk of preterm birth by approximately 30%.”⁹

State Program Highlight: Progesterone Quality Improvement Project

- The MEDTAPP Progesterone Quality Improvement project started in 2014 to improve the identification and treatment of women eligible for Progesterone therapy and to reduce early premature births in Ohio by 10%.
- 23 prenatal clinics associated with 20 large maternity hospitals, and 5 FQHC sites providing prenatal care for Medicaid-insured women, currently participate in the Progesterone Project with activities including monthly calls, learning sessions, data collection and reporting to the Ohio Perinatal Quality Collaborative (OPQC).
- Approximately 52% of infant mortality occurs in babies born before 32 weeks of gestation. Prevention of early premature births could decrease infant mortality.
- Quality improvement methods are used to improve processes to identify women eligible for Progesterone treatment, and to remove multiple barriers to prompt treatment.
- System-level changes included the expansion of Medicaid eligibility, maintenance of Medicaid coverage during pregnancy, adoption of uniform data collection, improved communication and efficient treatment protocols.

- The following Ohio Equity Institute communities are participating in the progesterone project; Cuyahoga, Summit, Stark, Mahoning, Lucas, Franklin, Montgomery and Hamilton.
- Preliminary results show systemic changes in the prescription and administration of Progesterone were associated with significant reductions in singleton births before 32 weeks in hospitals participating in a quality improvement project.

⁹ Committee on Practice Bulletins—Obstetrics; The American College of Obstetricians and Gynecologists. Practice bulletin no. 130: prediction and prevention of preterm birth. *Obstet Gynecol* 2012;120:964–73.

<http://www.cdc.gov/mmwr/volumes/65/wr/mm6532a4.htm>

