



HEALTHY BEGINNINGS

COLLABORATING TO CHANGE THE NUMBERS ON CENTRAL OHIO PRETERM BIRTHS: Ohio Better Birth Outcomes 2009 Report



Tanya lies in an incubator at Nationwide Children’s Hospital. She is dangerously ill.

She is seven days old, but because she was born eleven weeks early, she is small enough to fit in an adult’s hand. Her slight body is loaded down with an intravenous line, a ventilator tube to breathe for her, special “bilirubin” lights, and bandages.

A host of staff work to help Tanya survive her immature lungs and bacterial infection. Her skin is almost translucent because it is underdeveloped, and she has no fat underneath, adding to her frail appearance. She is at risk of dying in the next few days. If she survives, she has a high likelihood of long-term disabilities. **The most frustrating part for Tanya’s care team: they know the number of preterm births is rising and they will soon be caring for another infant who is as ill as Tanya.**

Preterm births have been steadily rising, and we are realizing more and more its poor outcomes and high costs. Fortunately, health care, human service, government and other organizations are acting to reduce the number and consequences of preterm births.

A promising initiative is currently underway in Franklin County, called **Ohio Better Birth Outcomes (OBBO)**. This report is about the programs and preliminary results of this initiative.

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Changing the Numbers

The statistics are alarming. Each year, more than 2,000 babies are born too early in Franklin County. Preterm birth — birth before 37 weeks gestation — is the leading cause of death among newborns in our community. In 2009, the March of Dimes gave Ohio an “F” grade in our efforts to reduce preterm births. Ohio is ranked 34th among the 50 states, Puerto Rico and the District of Columbia.

Even for the increasing number of children who, through advances in medical care, survive their preterm birth, there are often life-long medical and financial hardships for both baby and family. We know that a variety of factors contribute to preterm births — lack of health care; smoking; back-to-back pregnancies; increased rates of cesarean deliveries and early induced labor. There is no one solution to the problem. However, there are specific actions, such as prenatal treatment with a particular form of progesterone, that we know are effective in reducing preterm birth and preventing repeat premature deliveries. In fact, four of these proven interventions are at the heart of our community-wide effort.

We have come together to reduce the incidence of preterm births through the Ohio Better Birth Outcomes (OBBO) initiative. Focused on Franklin County, OBBO is a prevention program designed around four focused components to reduce the frequency of prematurity and its consequences. The Central Ohio Hospital Council, representing all of Franklin County’s health systems, provides a platform to bring together this proactive effort.

OBBO unites central Ohio’s hospitals and physicians, the Columbus Public Health Department and related community organizations to help the most vulnerable through landmark funding from the Franklin County Commissioners. This unique collaboration of public and private sectors targeting high-risk families is a model for future work on complex health and social issues.

We encourage you to read this report highlighting OBBO, our hopeful preliminary findings, and, most importantly, the faces of those on the front lines of combating preterm birth morbidity and mortality in our community. Our goal is to successfully change birth outcomes in our community and serve as a national model for what is possible in addressing prematurity. Together, we can make a lasting difference for generations to come.

Steve Allen, MD



Chief Executive Officer
Nationwide Children’s Hospital



David P. Blom



President
Chief Executive Officer
OhioHealth



Steven G. Gabbe, MD



Senior Vice President for Health Sciences
Chief Executive Officer
The Ohio State University Medical Center



Claus von Zychlin



President
Chief Executive Officer
Mount Carmel Health System



For the Well-Being of Our Youngest Citizens and Their Families

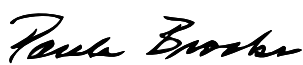
Being a parent is a tough job. And, as parents, we want the best for our kids – from before birth and throughout their lives. Sadly, the immediate and long-term health, developmental and economic consequences of premature births in our community are staggering.

In Franklin County alone, more than 13 percent of births occur preterm with that rate rising as high as one in five births for mothers with high risk conditions. This is one of the most serious health care challenges our county is facing.

We're committed to reducing the incidence of prematurity in Franklin County. This complex issue requires a cohesive and collaborative response. We are proud to be partnering with Nationwide Children's Hospital and others to support the research, clinical and public health efforts being undertaken to reduce preterm births. Specifically, we've pledged our support to the Ohio Better Birth Outcomes (OBBO) initiative. We anticipate that this initiative will lead to a more effective use of resources, more intact families and healthier and more productive communities.

We applaud the efforts of the private and public sector partners to create a community-focused response that will have a measurable impact on reducing the number of preterm births. The collaboration of all the hospital systems in the county through OBBO enables a comprehensive safety net for high risk pregnant women. With the best interests of families at the forefront of OBBO's mission, we are confident that through this and related endeavors, Franklin County will become widely known for the scarcity of its preterm births and the well-being of its youngest citizens and their families.

Paula Brooks



Marilyn Brown



John O'Grady



Franklin County Board of Commissioners



The Public Health Perspective

Reducing infant mortality and morbidity through preterm birth prevention

The well-being of infants and mothers is central to the mission of Columbus Public Health. Our efforts to protect and promote the health of childbearing women and their infants run the gamut from systems planning and surveillance initiatives to services for individual women and infants. Some of our direct services to women include prenatal care, family planning, sexual health, immunizations, home visiting, and WIC.

In spite of all our communities' efforts, the rate of preterm births is increasing and preterm delivery remains the single largest cause of infant mortality and morbidity. Columbus is similar to other large cities in Ohio with a preterm birth rate that exceeds the state average and is considerably more than the U.S. Public Health Service, Healthy People 2010 goal. Our efforts alone are not sufficient.

For these reasons, we are enthusiastic about our active role in the Ohio Better Birth Outcomes (OBBO) initiative. From the first day, OBBO has been a joint effort between hospital systems and the public sector. This collaborative approach encourages the participation of neighborhoods and advocacy groups and allows us the best chance of successful implementation.

Columbus Public Health intends to continue our role in OBBO in both evaluation of the effects of targeted services and also the linkage of high risk women to the supplemental services provided by the four intervention components of OBBO described on the following pages. We are pleased to be part of a collaborative that can be a model for the rest of the state and the country to follow in planning for and implementing approaches to reducing both the number and the effects of preterm births.

Teresa Long, MD



Health Commissioner
Columbus Public Health



Reducing the Number and Consequences of Preterm Births

Infant mortality is considered the single best indicator of a community's health status because it takes into account the general health of women in the community, access to medical services for young women, and care offered to infants.

Shockingly, the United States trails almost all other developed nations in infant mortality, and Ohio ranks near the bottom among the states.

Preterm birth (the birth of infants before 37 weeks gestational age) is the largest contributor to infant mortality, accounting for almost one-third of infant deaths. Franklin County, like the other large metropolitan areas in the state, has high preterm birth rates that have increased substantially since 1980.

- The county's preterm birth rate of 13 percent is almost double the U.S. public health goal of 6.9 percent and higher than the state overall, costing businesses, government and families emotionally and financially.
- In high risk populations in Franklin County, the preterm birth rate is as high as 20 percent.

Preterm birth is the result of a complex set of maternal, environmental and infant factors that are still poorly understood, but its consequences are clear.

- Besides being the leading cause of infant mortality, preterm birth is associated with extremely high rates of lung disease, eye disease, neurological disabilities and developmental delay.
- Medical costs for preterm birth are substantial. The average cost of an infant admitted to neonatal intensive care units in Franklin County is \$66,000 and some babies cost in excess of \$2 million.

Unfortunately, this is just the beginning for the family and society. Children born preterm are more likely to require lifelong medical care, special education services, and parents to stay at home and care for them. They are more vulnerable to influenza and other infections and less likely to function effectively in society. In the U.S., preterm births generated more than \$26.2 billion in medical and educational costs and lost productivity in 2005.

“Franklin County's preterm birth rate of 13 percent is almost double the U.S. public health goal of 6.9 percent and higher than Ohio overall.”

In response to the rising numbers and personal and societal costs of preterm births, a collaborative of central Ohio hospital systems, city and county government agencies, education and not-for-profit groups is using the newest research to see if it can improve outcomes for pregnant women and their children in Franklin County.

OBBO operates under the following guiding principles and procedures:

- All initiatives will be based on the best available research for enhancing birth outcomes focused on the problems resulting from preterm birth.
- All research interventions will be subjected to local pilot testing for their relevance to Franklin County mothers and children.
- Programs will be evaluated for improvements to the health of mothers and babies and costs of medical care.
- All initiatives found to be cost-effective will be made available throughout our health care systems, beginning with the most vulnerable populations.

Four specific interventions have been identified that have strong empirical data - suggesting that they may reduce preterm morbidity and mortality. Two of these interventions were already being implemented in Franklin County as OBBO was conducting its first meetings. And, beginning this past summer, the other two were launched in a four-component assault on the problem of preterm birth.

These interventions are described in the ensuing pages as an example of a multi-faceted countywide initiative aimed at preventing sickness and death among our smallest residents. The programs are:

- **Progesterone Caproate Project (17P)**
- **Nurse-Family Partnership**
- **Central Ohio Scheduled Births Initiative (COSBI)**
- **Safe Spacing**

OBBO represents unprecedented collaboration in our community, with every major hospital system and relevant government agency participating.



Delivering a Healthy Daughter Fades Trauma of Preterm Losses

The dread of more heartache stopped Jienev and William Sieck from trying again after losing two sons, each born too early two years apart. Jienev first became pregnant in 1997. She lost their son after going into preterm labor at 24 weeks of pregnancy.

“I believed this was a fluke,” exclaims Jienev. “We decided to try for another baby right away.” Sadly, a second son was lost after delivery at 22 weeks.

“The thought it could happen again made us give up, it was too traumatic. But then my dad passed away in 2005.” Jienev’s father had never stopped hoping for grandchildren, even researching surrogacy. Losing him reminded the couple how much family meant to them and inspired them to find resources to help Jienev carry a child full-term.

After becoming pregnant a third time, Jienev was referred to the Prematurity Prevention Program at The Ohio State University Medical Center. “I knew having two preterm births greatly increased my risk of another,” explains Jienev. “But I learned that progesterone shots might help me reduce that risk.”

During her pregnancy, she received weekly shots of the progesterone formulation 17P for 21 weeks and her cervix was checked frequently with ultrasound. She was put on bed rest starting the fourth month and also had to manage gestational diabetes. “It was all worth it! Our daughter Charlotte was born healthy at 38 weeks.”

“We’re excited and hopeful to have a second child. We plan to do this all again.”



What Works

Progesterone to Prevent Recurrent Preterm Births

A woman who has a spontaneous preterm birth is at 20 to 50 percent greater risk of having another preterm birth. Prenatal therapy with injections of 17 Alpha Hydroxyprogesterone Caproate (17P):

- Reduces recurrent preterm births by 35 percent
- Improves newborn health

Progesterone is a normal pregnancy hormone long thought to “quiet the uterus” until fetal development is complete. It was therefore tested as a possible preventive treatment for women with one or more prior preterm births. This research found that a form of progesterone called 17P acts by preventing or slowing cervical ripening, the earliest step leading to preterm birth.

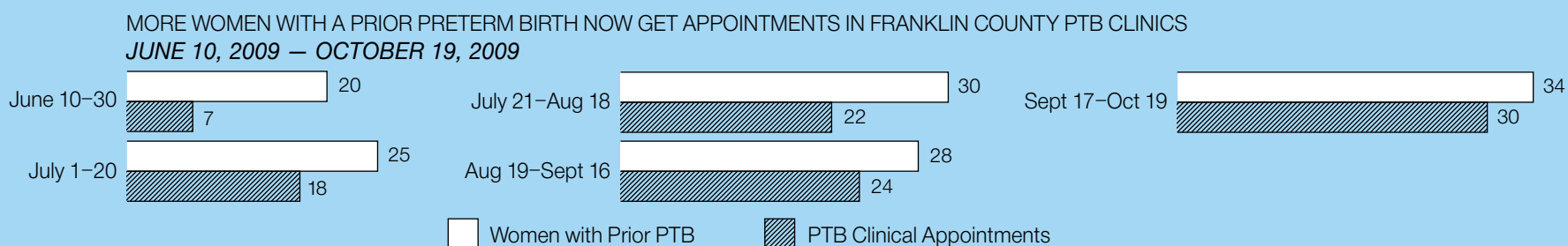
The evidence of benefit is now strong enough that the American College of Obstetricians and Gynecologists recommends that women with a previous preterm birth due to preterm labor or preterm ruptured membranes should be treated with weekly injections of 17P beginning at 16 weeks of pregnancy through 36 weeks.

- Providing 17P therapy to all pregnant women with a history of spontaneous preterm birth would reduce the overall rate of preterm birth from 12.5 to about 10.5 percent.¹
- In Ohio, this reduction would mean eight fewer preterm babies each week.²

The therapy is safe for the mother and no adverse effects have been found in children of mothers treated with 17P. 17P does not reduce the risk of preterm birth in women with twins or triplets.

The OBBO collaborative is working to make this powerful intervention available to more central Ohio women with a history of spontaneous preterm birth.

Changing the Numbers



Making a Difference in Central Ohio

Our priority is getting eligible women into the 17P program early enough for it to help. In its first three months, the 17P program doubled capacity at the OSU Medical Center Preterm Birth Clinic.

– **Pat Temple Gabbe, MD**

Launched in June 2009, the 17P program is a true community health care partnership designed to treat low-income women who otherwise would not have access to this therapy. Women who call Pregnancy Care Connection (PCC) are screened to identify those who previously had a baby born four or more weeks early (currently nine to ten percent of pregnant women who call PCC). Eligible women are first offered appointments in the Prematurity Prevention Clinic at OSU Medical Center. Mount Carmel Health System and OhioHealth birthing hospitals also offer 17P.

Critical goals of the 17P program include:

- Reduce by 30 percent the number of infants born at fewer than 32 weeks pregnancy
- Reduce by 10 days the time an infant spends in a neonatal intensive care unit (NICU)
- Enroll half of participating women in Safe Spacing (see page 20) after delivery and reduce by 30 percent the number of early repeat pregnancies in these women

If eligible women were routinely treated with 17P, their children's lifetime medical costs could be reduced nationally by more than \$2 billion annually.³

Keys to Success

- A broad base of doctors, nurses and health care administrators meet regularly to solve problems and remove barriers to participation and treatment.
- Uninsured women get coverage.
- Transportation can be provided to the PTB clinics for injections and cervical monitoring appointments.

Access and Support

Program Medical Director: Jay Iams, MD

Program Information: Hetty Walker, RN: 614-293-8949

Pregnancy Care Connection: 614-227-9866

Funding: Nationwide Children's Hospital

Community Partners: Mount Carmel Health System, OhioHealth, Nationwide Children's Hospital, Ohio State University Medical Center, OSU College of Nursing, Pregnancy Care Connection, Neighborhood Health Centers, Inc., Columbus Public Health, March of Dimes, Medicaid Managed Care, Medicaid

1. Petrini, Joann R., et al. Estimated Effect of 17 Alpha-Hydroxyprogesterone Caproate on Preterm Birth in the United States. *Obstetrics & Gynecology*, volume 105, number 2.

2. 385 babies are born preterm in an average week in Ohio. (www.marchofdimes.com, Peristats)

3. Bailit, J.L., Votruba M.E. Medical cost savings associated with 17 alpha hydroxyprogesterone caproate. *Am J Obstet Gynecol* 2007;196:219.e1-219.e7.



COSBI Ensures Safe Timing for Routine Deliveries

When a pregnancy-weary mom asks him to deliver her baby early, obstetrician Todd Jenkins reaches for an encouraging sports metaphor. “Pregnancy is like running a marathon and the last two miles are uphill. You can’t give up,” he coaches. “You can walk, but you have to cross the finish line.”

In spite of what we see on TV, pregnancy is hard and moms don’t know that early delivery is clinically against their best interests. This is particularly true when a woman is close to her due date or has given birth to a healthy preterm infant before.

Responsibility for nonmedical scheduled preterm births does not rest solely with moms. “We see these early births because doctors want their patients to be happy,” says Dr. Jenkins. “Plus, if it’s a busy time, it may be more convenient to schedule an early delivery.”

Dr. Jenkins says the impetus for the Central Ohio Scheduled Birth Initiative (COSBI) is not something new. A practicing physician for 10 years, he learned in his residency that **nonmedical inductions performed before 39 weeks pose an unacceptable risk to the baby**. Yet, even when the right choice is clear, convenience can win out over safety.

That’s why Dr. Jenkins believes it’s positive that, with COSBI, central Ohio birth hospitals have drawn a line in the sand at 39 weeks. He’s also enthusiastic about health care providers working together on evidence-based programs addressing preventable causes of preterm births. “It makes us remember why we’re doing this in the first place.”

“No scheduled nonmedical deliveries before 39 weeks. It’s the standard.”



Todd Jenkins, MD
MaternOhio Clinical Associates

What Works

Making Every Week Count

Compelling images of teacup-size newborns on life support focus attention on very preterm infants. While these babies do suffer the most serious problems and highest rates of death, babies born at late preterm (34 to 36 weeks) occupy the most NICU beds.

The Central Ohio Scheduled Births Initiative teaches hospitals and doctors about the importance of the last few weeks of pregnancy and monitors whether hospitals have a clear and appropriate indication for any scheduled delivery.

Infants born even a few weeks too early are at higher risk for respiratory and other life-threatening problems at birth. They also are at higher risk for cognitive, behavioral and developmental problems that may follow them through life.

What difference does a few weeks make?

- Each week a baby stays in the womb between 36 and 39 weeks corresponds with a 23 percent decrease in respiratory distress, jaundice, seizures, temperature instability, brain hemorrhages, and other problems.¹

Increasing rates of admission to neonatal intensive care units track with decreasing weeks in near-term elective (nonmedical scheduled) births:

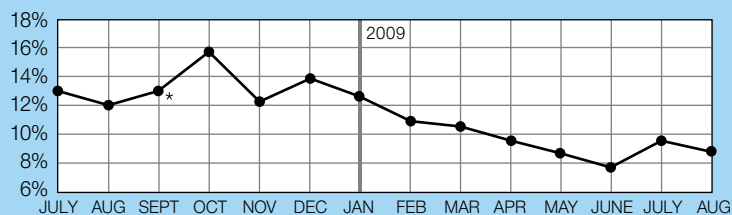
- 5 percent admitted when born at 39 weeks
- 8 percent admitted when born at 38 weeks
- 18 percent admitted when born at 37 weeks²

The significant health risks to infants makes it imperative to eliminate medically unnecessary preterm births. COSBI provides training and feedback to hospitals about their performance in this important area.

Inducing labor before 39 weeks pregnancy for nonmedical reasons has been increasing since the 1980s.

Changing the Numbers

COSBI IS HELPING REDUCE NONMEDICAL SCHEDULED DELIVERIES BEFORE 39 WEEKS IN FRANKLIN COUNTY
(PERCENT OF ALL BIRTHS SCHEDULED PRETERM FOR NONMEDICAL REASONS **JULY 2008 – AUGUST 2009**)



*Project began September 1, 2008

1. Bastek JA, Sammel MD, Paré E, et al. Adverse neonatal outcomes: examining the risks between preterm, late preterm, and term infants. Am J Obstet Gynecol 2008;199:367.e1-367.e8.
2. Clark SL, Miller DD, Belfort MA, et al. Neonatal and maternal outcomes associated with elective term delivery. Am J Obstet Gynecol 2009;200:156.e1-156.e4.

Making a Difference in Central Ohio

“Babies sometimes need to be delivered early for the health of the baby and/or mother. But parents and doctors need to understand and respect the risks of delivering babies early when it is not medically necessary.”

– *Jay Iams, MD*

The American College of Obstetricians and Gynecologists (ACOG) recommends not performing elective deliveries before 39 weeks of pregnancy. Unfortunately, this guideline is disregarded in at least 10 percent of all deliveries.

The Central Ohio Scheduled Birth Initiative brings together central Ohio obstetricians and hospitals to increase compliance with the ACOG recommendation so the health and future prospects of newborns are improved.

Since September 2008, doctors scheduling preterm births in central Ohio’s maternity hospitals have been required to complete a form stating:

- Reason for the preterm delivery
- Term date for the baby and how that date was determined

Knowing how it was determined is important in judging the accuracy of the due date. If it is off by two weeks, for instance, a baby believed to be 37 weeks may be only 35 weeks and so at greater risk of complications.

COSBI is one of the most direct and immediate OBBO programs. Rates of nonmedical preterm births have declined in central Ohio almost every month since it was initiated. COSBI is part of a statewide program by the Ohio Perinatal Quality Collaborative (OPQC) that has modeled similar results for the whole state (see www.opqc.net).

Keys to Success

- The public understands preterm delivery can cause more problems than it solves.
- Hospitals are flexible in their scheduling of deliveries to avoid preterm dates.
- All hospitals with maternity programs participate.
- Doctors take time to educate parents about the risks.

Access and Support

Program Medical Director: Jay Iams, MD

Program Information: Jay Iams, MD, 614-293-8736

Community Partners: Mount Carmel Health System, OhioHealth, Nationwide Children’s Hospital, Ohio State University Medical Center

Funding: Ohio Perinatal Quality Consortium



Bond with Nurse Inspires Young Mother

Veronica Valdez became pregnant at the age of 16. She didn't know how to take care of herself and her unborn child. And what about her future? What paths would still be open?

Fortunately, Veronica volunteered for the Nurse-Family Partnership (NFP) program after hearing how it could help address these concerns. She chose Shelly Spicer, RN, as her nurse.

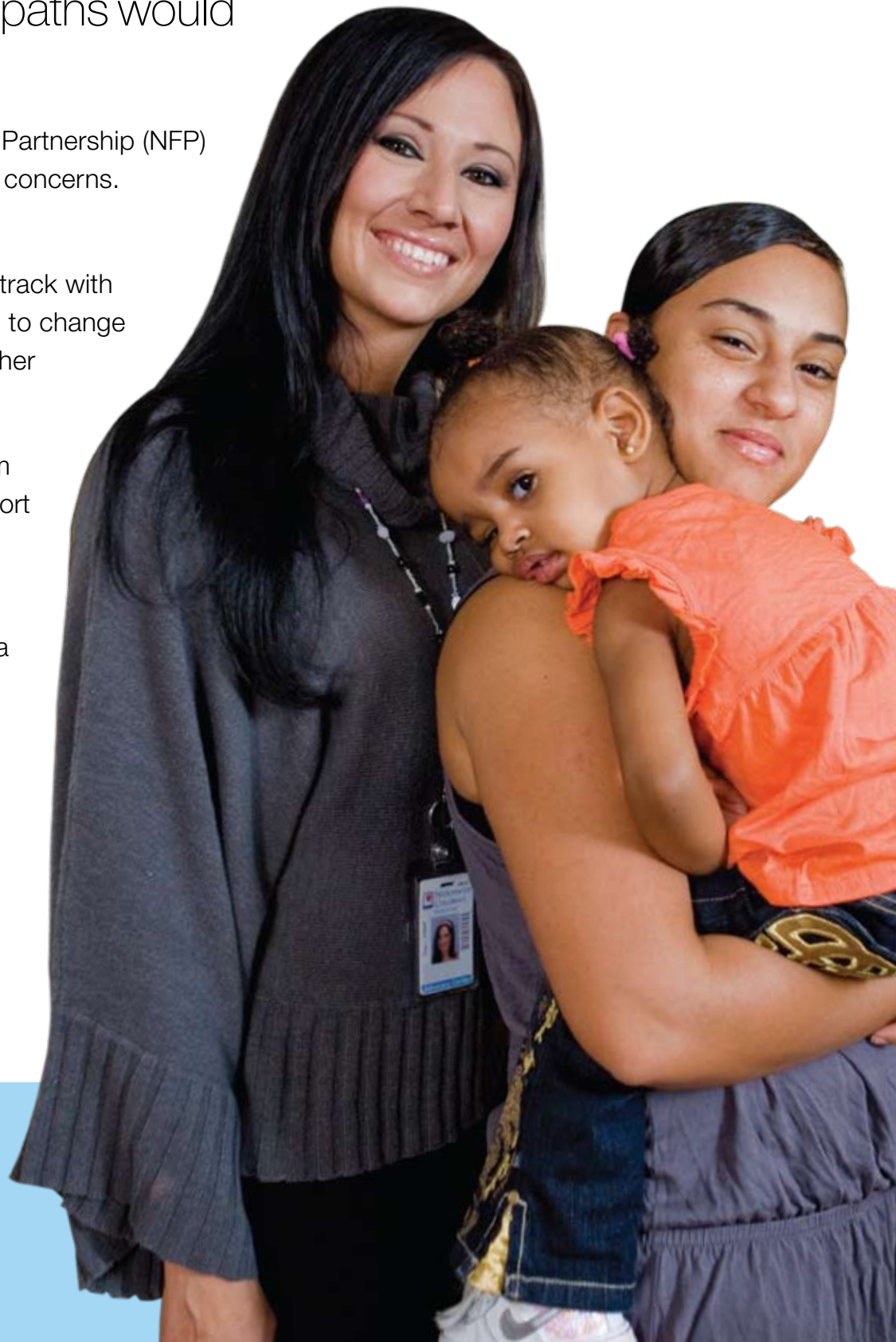
Shelly taught Veronica about nutrition and kept her on track with prenatal appointments. "I ate a lot of fast food so I had to change my diet," Veronica explains. "Now I like broccoli and other vegetables I never tried before."

Veronica also worried about a possible genetic problem with her unborn baby. Shelly gave information and support during her visits that helped Veronica understand tests and make decisions.

After giving birth to healthy daughter Marissa, "Veronica was a natural mother, but needed encouragement in breast feeding," says Shelly. "She ended up breast feeding past Marissa's first birthday!"

"I appreciated Shelly's support, because Marissa's father was not around much," says Veronica. "Later, she helped me figure out problems with my boyfriend. She also helped me apply for a GED program - I hope to become a nurse myself someday."

"Without this program,
I would already have
another baby."



What Works

Registered Nurses Partnering with Vulnerable First-time Moms

Low-income women under the age of 20 are at higher risk for preterm births.

The Nurse-Family Partnership is a national, evidence-based program that may help reduce preterm births in low-income, first-time mothers who participate in the program. These women tend to be very young and have multiple risk factors for preterm births.

We know the best chance to promote and teach positive health and development behaviors between a mother and her baby is during a first pregnancy. We also know transitioning to motherhood can be especially hard for the young, low-income, first-time mom. She may be socially isolated or facing severe hardships that threaten her own wellbeing and that of her unborn child.

A nurse's expertise can help reassure her and guide her to make good decisions that will benefit both mother and her baby. The nurse's efforts can promote well child care and family immunizations.

Nationally, consistent effects of NFP in randomized trials as compared to controls are:

- Improved prenatal health
- Fewer childhood injuries
- Fewer subsequent pregnancies
- Increased intervals between births
- Increased maternal employment

Independent research demonstrates that every dollar invested in Nurse-Family Partnership can return more than five dollars in health and societal savings.

Changing the Numbers

NFP IS IMPROVING PRETERM BIRTH OUTCOMES IN CENTRAL OHIO
PRETERM BIRTHS IN YOUNG (<20 YEARS OLD), FIRST TIME, LOW-INCOME MOTHERS

NFP 10% Preterm Birth Rate

Comparison Group 18.4% Preterm Birth Rate

Making a Difference in Central Ohio

“The women in the population we serve have a 20 percent risk of preterm birth. But women in our Nurse-Family Partnership program have half that rate.”

– *Philip Scribano, DO, MSCE*

In 2006, the Center for Child and Family Advocacy at Nationwide Children’s Hospital began an NFP program based on the national model. As of June 2009, 220 low-income, first-time mothers had enrolled.

Locally, NFP goals are focused on outcomes related to preterm births:

- Reduce preterm births
- Delay subsequent pregnancy to at least a 24-month interval

To achieve these goals, mothers are partnered with a registered nurse before the 28th week of pregnancy and the nurse visits her at home through her child’s second birthday. The structured NFP curriculum covers a spectrum of topics the nurse draws upon when most relevant to the mother. Empowering the mother to be self-sufficient is critical.

The program is logging major successes. Relative to a comparison group, the local NFP:

- Preterm birth rate has been reduced by 37 to 45 percent
- NICU dollars per participant have been reduced by 75 percent
- NICU days per NFP participant are down by 30 to 40 percent
- **For every 100 of our NFP participants, approximately \$700,000 NICU dollars are saved.**

Keys to Success

- A passionate, dedicated and highly-trained team
- The credibility and expertise of registered nurses
- The belief you can change people’s lives
- The ability to empower women to make difficult changes

Access and Support

Program Medical Director: Philip Scribano, DO, MSCE

Program Information: Center for Child and Family Advocacy, 614-722-8222

Community Partners: Ohio State University Medical Center, OhioHealth, Neighborhood Health Centers, Inc., Columbus Public Health, Medicaid Managed Care Plans

Funding: Ohio Department of Health, Central Benefits Health Care Foundation, Nationwide Children’s Hospital, Columbus Medical Association and Foundation, Columbus Foundation



Mother of Seven Hopes to Prevent Another Preterm Birth

Tiny Raisheda Angus has a giant heart. She drives neighbors to doctor visits and opens her home to folks down on their luck. She loves children most of all.

Raisheda had her first child when she was 16 years old. Now 27, her seven living children range in age from 3 weeks to 11 years. Four of her children were born preterm:

- Akilah died of sudden infant death syndrome
- Nevaeh returned to the hospital with breathing problems and was in the neonatal intensive care unit (NICU) for three weeks
- Ashawn has behavioral problems
- Newborn Tah’Jai spent three days in the NICU

Raisheda learned about Safe Spacing and enrolled in the program after Tah’Jai was born. “Most of my children were born less than 18 months apart,” says Raisheda. “I wish I had known about safe spacing before. I didn’t know my body needed to heal.”

Raisheda thinks birth spacing also makes sense as a way to bond with her children. Her second youngest child, son Ja’Mine, is barely one year old. When she was pregnant with Tah’Jai, she couldn’t care for Ja’Mine when she had to be on bed rest, so he went to live with her mother.

Back home now that the new baby has arrived, “Ja’Mine doesn’t understand that I have to take care of Tah’Jai, that Tah’Jai is the baby now. It’s stressful.”

Raisheda wants one more child but plans to wait at least two years before getting pregnant again.

“Raisheda hopes Safe Spacing will give her time to finish her college degree.”



What Works

Spacing Pregnancies to Allow Time for Recovery

Mothers have a 10 to 40 percent increased risk of future preterm birth if they conceive again within 18 months of delivery.

These outcomes have led experts to recommend mothers wait 18 to 24 months between pregnancies.

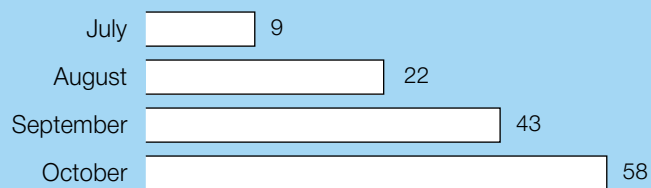
Safe spacing allows time for the mother's body to recover from pregnancy and build up stores of essential nutrients. It allows moms time to bond with each child and takes away the stress of having two very young children to care for at the same time.

A key component of the Safe Spacing program is providing case management so women receive ongoing education and support to address their unique needs.

Case management often improves adherence and clinical outcomes in patients who are prescribed a health care regimen.

Changing the Numbers

SAFE SPACING HAS REACHED 58 MOTHERS IN ONLY FOUR MONTHS
TOTAL MOTHERS REACHED JULY 31–OCTOBER 31, 2009



Making a Difference in Central Ohio

“Our Safe Spacing program uses case management comprehensively to address many aspects of our clients’ lives – even education and financial assistance.”

– *Jack Stevens, PhD*

The case manager for the Safe Spacing program is Rox Ann Sullivan, RN. She provides ongoing education, problem solving and monitoring for moms of preterm infants (born before 35 weeks). She connects with mothers whose babies are in Nationwide Children’s Hospital NICUs. In the first 3 months of the program, which began in late July 2009, she reached 58 mothers.

More than 90 percent of moms who learn about Safe Spacing want to join the program, which lasts one to two years after birth. Program goals are to:

- Reduce the rate of future preterm births by spacing interpregnancy intervals by at least 18 months.
- Demonstrate cost-savings by preventing future preterm births and increasing healthy maternal behaviors, such as breastfeeding.

Case management is estimated to prevent one subsequent preterm birth for every 60 women served by Safe Spacing.

Keys to Success

- Educate women about the risks of conceiving too soon after giving birth.
- Address other health and social concerns of these mothers.

Access and Support

Program Director: Jack Stevens, PhD

Program Information: Jack Stevens, PhD, 614-355-8021

Community Partners: Nationwide Children’s Hospital and Ohio State University Medical Center

OBBO Collaborative Approach

OBBO represents a landmark, innovative collaboration among all the local health care systems coming together around a challenging community health issue. This unique commitment is enabling responsive interventions across the spectrum from prenatal to post-birth and into childhood.

Physicians and researchers serving on the OBBO Coordinating Committee include:



PATRICIA TEMPLE GABBE, MD, MPH
Clinical Professor of Pediatrics, The Ohio State University College of Medicine; Physician, Nationwide Children's Hospital



JAY IAMS, MD
Frederick P. Zuspan Professor and Endowed Chair, Division of Maternal Fetal Medicine; Vice Chair, Department of Obstetrics and Gynecology, The Ohio State University Medical Center



KELLY KELLEHER, MD, MPH
Director of the Center for Innovation in Pediatric Practice, The Research Institute at Nationwide Children's Hospital; Vice President of Community Health and Community Health Service Research, Nationwide Children's Hospital



RICHARD S. MARGER, MD
Medical Director of the OhioHealth Community Outreach Wellness on Wheels program



AUGUSTUS G. PARKER III, MD, FACOG
Medical Director of Obstetrics and Gynecology (House Coverage), Mount Carmel East Hospital; President and Founder, Columbus Women's Care, Inc.; President, Columbus Board of Health



PHILIP V. SCRIBANO, DO, MSCE
Medical Director of the Center for Child and Family Advocacy at Nationwide Children's Hospital; Chief, Division of Child and Family Advocacy; Associate Professor, Clinical Pediatrics, The Ohio State University College of Medicine



JACK STEVENS, PhD
Principal Investigator, Center for Biobehavioral Health, The Research Institute at Nationwide Children's Hospital; Assistant Professor of Pediatrics, The Ohio State University College of Medicine

Q and A with Key Members of the Coordinating Committee

Why is it important to address the problem of preterm births?

IAMS: People do not know that preterm birth is the leading killer of babies in the first year of life, or that preterm infants are more likely to experience school problems, behavioral problems, cerebral palsy. People think that prematurity is a problem that has been solved by technology. That, by far, is the number one obstacle we face.

STEVENS: As a psychologist, I have seen some of the longer term cognitive and behavioral problems that are often associated with prematurity. By the time these children come to one of my colleagues or me, often it can be very challenging to assist these families. If there are opportunities to prevent some of these problems in the first place, so much the better.

What are the primary goals of OBBO?

KELLEHER: Every one of these interventions has at its core relationship building with young women in the community. And every single component of the program is about bringing people together toward a common goal and trying to make a difference in some very vulnerable people's lives. It's very real people with very real stories and they're very difficult challenges, but this community is one of the few places where we could bring the right people and organizations together to really make an impact.

IAMS: This is not a cure for prematurity that we're talking about. The four OBBO prematurity prevention projects are based on the latest and best research. We want to bring these strategies and treatments to all the women in central Ohio who might benefit from them. They are significantly less expensive than neonatal intensive care.

Why is collaboration necessary to make progress?

IAMS: The collaboration we have going now is essential for this program to work. If we fight it out in isolation, one hospital at a time, we're not likely to make the kind of progress we can together.

PARKER: This isn't a hospital system issue, we're trying to do what's best for the community.

MARGER: We've got every hospital system represented and a diverse population from all over Franklin County. The multi-site approach will hopefully lead to much more accurate results and a reduction in perinatal morbidity and mortality in this community and other communities similar to central Ohio.

What is the thinking behind the four OBBO programs?

STEVENS: Safe Spacing is the idea that women may benefit by taking time to recover fully after a pregnancy so they can be in the best shape possible for their next pregnancy.

PARKER: COSBI is about recognizing that a baby is not full-term until 39 weeks. Even at 37 weeks, the brain may not be fully developed, babies may not yet have a suck reflex to be able to feed properly without assistance, they can't maintain their body temperature because their skin hasn't thickened like a full-term baby, so they lose body heat. Their heart rate will drop. When we intervene for nonmedical reasons, we're putting that infant at potential risk.

SCRIBANO: Poverty is one of the known risks for preterm births. The Nurse-Family Partnership program offers a home-based case management approach to pregnancy to assist mothers in optimal nutritional support, to facilitate regular access to prenatal care, to understand how psychological stress can influence prenatal health, and to teach the mother about potential warning signs of preterm delivery so she can notify her doctor right away.

TEMPLE GABBE: In women who have had a prior preterm birth, injections of the progesterone formulation 17P reduce the risk of another preterm birth by 35 percent. Most high-risk obstetricians offer this therapy to their patients. The challenge is identifying low income, uninsured women who could benefit from treatment, and getting them into the program early enough for it to help. That's what we are doing in central Ohio now, and it's working.

Working together, building relationships with young women in our community, educating people that technology does not solve the problem of preterm births - these goals are at the heart of OBBO.

Expanding on OBBO's Success

We are far behind our vision of a central Ohio where all children grow to reach their full potential in healthy families and neighborhoods. But we are making progress.

The numbers of preterm births in our community, their tremendous costs, and the gripping burden for affected individuals and families as well as our county could easily make this a depressing story.

However, in coming together through OBBO and related programs, we have new stories – stories of small successes and helping families make a much better start. The early successes of OBBO suggest that, although we have our work largely before us, we can make a clear difference.

The Governor's Task Force on Infant Mortality recently outlined the most important next steps in reducing the burden of preterm birth in our state and community. First, they identified important evidence-based programs to help prevent preterm births:

- Disseminate and increase the adoption of innovative, evidence-based prenatal care models. **This includes our Franklin County Nurse-Family Partnership.**
- Distribute information to educate and intervene with women who have experienced a prior preterm birth, including women in Level III maternity units to prevent future preterm births. **Our Safe Spacing initiative does precisely this with contact to women delivering preterm infants.**
- Educating providers about the use of 17-OH progesterone injections starting at 16 weeks gestation in patients with a history of preterm birth. **In central Ohio, our 17P program is rapidly increasing the number of at-risk women receiving 17P.**
- Implement quality improvement activities to decrease late-preterm and early-term deliveries (avoid scheduled deliveries without medical indications prior to 39 weeks gestation). **COSBI already is demonstrating marked improvements in central Ohio through education and monitoring at birthing hospitals.**

Providing Access to Services

Partners for Kids

Partners for Kids (PFK) is a hospital physician organization established by Nationwide Children's Hospital to participate in Medicaid Managed Care. PFK provides integrated health care delivery to approximately 270,000 children in 34 counties in central and southeast Ohio. PFK is financially responsible for all medical care provided to its members, whether services are provided by a PFK affiliated provider or by providers and facilities located outside its network. PFK's financial model is aligned with wellness promotion and preventive services. As such, decreasing the incidence and long-term effects of prematurity is a focus for the organization. PFK's current involvement with the OBBO initiative is largely centered on data collection and analysis. PFK collects full health care data on all its members, regardless of where their care was received, allowing OBBO to track the long-term health outcomes of the babies in its programs who are covered by PFK.

Making a Lasting Difference

“We fully expect that OBBO and related initiatives can reduce the numbers and consequences of preterm births. To make a real and lasting impact in our community, we need to address policy barriers that prevent expansion of these programs.”

– *Steve Allen, MD, CEO, Nationwide Children's Hospital*

The following practical steps are necessary at the policy level to ensure the OBBO programs achieve their potential to reach and serve all women who can benefit.

- Obtain a Medicaid waiver from the Centers for Medicare and Medicaid Services to extend coverage for low income women after delivery from the current six weeks to a minimum of six months – providing access to comprehensive post partum services during a critical period for their babies. **Our State partners are working with us to prepare a waiver application to the federal government.**
- Implement presumptive eligibility for Medicaid among newly pregnant women. Provide coverage through Medicaid for prenatal visits before Medicaid paperwork is processed so the first visit happens as soon as possible. Early prenatal care allows for early identification of risk factors and educational needs that may prolong pregnancy and improve outcomes.
- Ensure every provider in Ohio has access to medical specialists via telemedicine, including high-speed Internet access, to improve the quality of care for pregnant women and newborns. **Our preliminary work with telemedicine for isolated hospitals suggest improved care and reduced costs are achievable with commitment on both sides if we can address remaining broadband limitations in some rural hospitals.**

Finally, healthy babies come from healthy mothers. Each of us has a responsibility to reach out to women in our lives and in our communities before or very soon after they become pregnant to make sure they receive the best possible care, including:

- Vitamins and nutrition support before, during and after pregnancy
- Routine primary care medical services
- Reproductive health services of their choice
- Mental health and substance abuse services where needed
- Resources for counseling, domestic violence, transportation, housing and smoking cessation

Providing Access to Services

Pregnancy Care Connection

Pregnancy Care Connection (PCC) provides uninsured and underinsured pregnant women in Franklin County with a centralized system for scheduling initial prenatal care appointments and referrals to additional support services, including OBBO programs. PCC is a program of the Council on Healthy Mothers and Babies and since its inception in 2003, it has helped more than 10,000 women obtain prenatal care. PCC provides its services through a hotline, enabling women to call one number to get quickly connected to prenatal care services. To contact the PCC hotline, call 614-227-9866.



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