Using Data to Drive Diabetes Prevention Efforts in Ohio

"By collaborating together, the Title V and chronic disease programs have accomplished more than either would have alone. The collaborative is poised to impact the health of Ohioans by preventing the devastating effects of Type 2 diabetes among women who are at an increased risk."

—Ohio Department of Health, 2011 Overview of the Ohio Gestational Diabetes Mellitus Collaboration

In May 2010, Ohio was selected as one of three states to participate in a year-long collaborative aimed at fostering integration between maternal and child health and chronic disease programs. Although the Ohio Department of Health (ODH) programs had worked together in the past, the project—sponsored by the National Association of Chronic Disease Directors (NACDD) and the Association of Maternal and Child Health Programs (AMCHP)—brought the two programs together around the shared goal of reducing Type 2 diabetes among women with a history of gestational diabetes mellitus (GDM). This is significant because about half of all women diagnosed with gestational diabetes eventually develop Type 2 diabetes, a disease that brings with it lifelong health risks for both mother and child. "We traditionally worked cooperatively, but never to the same extent as with this project," says Nan Migliozzi, GDM project co-chair and director of the Office of Healthy Ohio. "This project has enabled us to look at each other's resources and truly develop a much more collaborative approach."

The project paved the way for an integrated approach between programs, not through a specific funding source—the grant provided technical assistance and some funding, primarily for travel—but rather with an explicit expectation that programs would collaborate to achieve shared goals. Unlike traditional funding streams, which often reinforce parallel work, the project required integration from the outset. According to Cynthia Shellhaas, MD, MPH , GDM project co-chair and medical director of the Bureau of Child and Family Health Services, separate funding streams reinforce program silos, and it's difficult to work against the stream. "Separation [usually] comes from the get-go. Since you're applying to your funder, you're not sharing goals and objectives [with other programs]," says Shellhaas.

This project was different, however. The ODH Gestational Diabetes Project leverages resources to accomplish more collectively than would have been possible through one program. Shellhaas explains, "This is truly an example of what you can do with little [resources or funding]." The collaborative members share the workload and find the resources needed. They call upon a subject expert from one area, a data set is provided by another member, and a small pocket of funding is found within another member's budget until a particular goal is accomplished.

Partnering to Advance Public Health Goals

Focusing on gestational diabetes is a natural focal point for programs that address chronic disease and maternal and child health. "It's a perfect starting point because it's hitting both [program's] goals: healthy babies and moms and diabetes prevention and control," Migliozzi says.

The Gestational Diabetes Project team includes representatives from the ODH Division of Family and Community Health Services (which administers MCH programs), the Office of Healthy Ohio (which includes diabetes prevention and control and other chronic disease programs), and the State Epidemiology Office. The team works closely with other partners, including Ohio Medicaid and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.

The project team focuses on increasing the number of women who receive postpartum screening and education, with the ultimate goal of preventing or delaying Type 2 diabetes among women of reproductive age. According to Shellhaas, "Recent data … clearly shows that by screening early and putting in treatment, you can prevent—if not delay—development of Type 2 diabetes, which is the end game."

First Things First: Addressing Knowledge Gaps Through Surveys and Focus Groups

Unlike other states in the learning collaborative that had a longer track record of working together to address gestational diabetes, Shellhaas says that Ohio's chronic disease and MCH programs are just starting. "We started from ground zero and [so we had to] start out fact-finding," Shellhaas says. "We didn't have preconceived ideas. We had very limited information to work with, so the first thing was to gather information."

Although they had basic prevalence data, Shellhaas explains that they were missing critical qualitative information, such as an understanding of what barriers impede follow-up screening and testing, both from the provider and the patient perspective. "We need to know what the barriers are before we can [develop] interventions or programs or else we are spinning our wheels in the dark," Shellhaas says.

In order to develop effective interventions, Shellhaas says it's important to answer the question, "What are women willing to do and at what point in their lives?" Identifying these windows of opportunity is a critical first step. Smoking cessation programs, for example, work better when a woman becomes pregnant, because she is more motivated to improve her health for the sake of her baby's health and well-being.

To that end, the project is conducting a provider survey and patient focus groups to learn from women and healthcare providers. With support from the CDC and the Case Western Reserve University Prevention Research Center, the project team has surveyed more than 1,000 Ohio prenatal and primary care providers to learn about diagnosis and care during pregnancy, postpartum follow-up care, care between pregnancies, and long-term care and monitoring. In addition, the Diabetes Prevention and Control Program and the Division of Family and Child Health Services are combining resources to conduct focus groups to understand how to best reach and communicate with women who have a history of gestational diabetes.

Gathering information from both healthcare providers and patients is critical, since achieving the project's goals will require a broad coalition of partners working to improve the system and better

coordinate care. The project will promote current clinical guidelines to primary care providers to get them up to speed on postpartum monitoring and care. The collaborative is also identifying ways to improve coordination among providers so that patients are appropriately screened and given opportunities to reduce their risk for developing Type 2 diabetes. However, Shellhaas says that it's equally important to inform women about the importance of screening and ongoing monitoring: "Providers can only do it if women show up in their office, so understanding both perspectives is important so we can figure out what will work."

Piggybacking on Other Media and Public Awareness Strategies

In addition to gathering data from providers and the public, the Gestational Diabetes Project team has made good use of opportunities to educate and inform the public, often by piggybacking onto other initiatives. "We took advantage of other media campaigns," says Shellhaas. Case in point: During the national American Diabetes Month, sponsored by the American Diabetes Association, the programs partnered to raise awareness through public service announcements, newspaper ads, a diabetes newsletter article, and social media messages. Shellhaas explains that the project team has "learned a lot about social media" through dissemination strategies that utilized Twitter and Facebook.

As part of the project, the ODH partnered with a national text-messaging program Text4Baby, which includes gestational diabetes messages with other free text messages for enrolled women. The newspaper campaign reached a combined circulation of 500,000 people, and radio ads reached approximately 2.8 million listeners between 18 and 34 years of age. Ohio enrollment in Text4Baby increased during the campaign, which took place between March 7 and April 4, 2011, from 54 individuals in the 4-week period preceding the campaign to 137 enrollees in April 2011.

The ODH team also works closely with other programs and organizations. In 2010, the Diabetes Prevention and Control Program partnered with the National Diabetes Education Program to develop and disseminate a gestational diabetes poster to more than 1,500 partners and healthcare providers. WIC Directors also received the posters and posted them in WIC clinics throughout Ohio. Working with WIC and Medicaid is critical since those programs work directly with the target audience of women and children.

Moving Forward: Addressing Challenges and Identifying New Opportunities for Integration

Although the initial one-year collaboration has officially ended, the project is really just getting started. "We have a lot of momentum and a lot of good information in the background," Shellhaas says. "Now we're ready for the fun part," which includes developing programs and interventions.

Shellhaas anticipates challenges as they move from data gathering and analysis to program development and implementation: "Behavior change is a slow process and it's hard. It's often something you don't have a lot of control over." In addition to the challenges of changing lifestyles and behaviors, Shellhaas also says that deeply ingrained cultural beliefs about the role of healthcare can thwart success.

"The culture of only going to the doctor when there's a problem," as she calls it, is a widely-held notion that challenges prevention-based public health strategies.

Looking ahead, the ODH team already has their sights on their next opportunity for collaboration. Migliozzi says that various health programs can form "natural relationships" around other topics that are top priorities like gestational diabetes, such as physical activity and nutrition. "The whole area of physical activity and nutrition is vitally important to both programs and is really a logical area to continue a close relationship," she says. Migliozzi expects that the gestational diabetes project will encourage future work between the two program areas: "It has been a great model for us to learn from and replicate."

For more information on Ohio's Chronic Disease and MCH Integrationand related initiatives:

Ohio Department of Health
http://www.odh.ohio.gov/

The Office of Healthy Ohio
http://www.healthyohioprogram.org/

The Ohio Gestational Diabetes Mellitus (GDM) Collaboration
http://www.odh.ohio.gov/ASSETS/C934B8A082B341DAB8A986BF94460F8D/Ohio%20GDM%20collaborative%20one-pager%203-3-11%20FINAL%20APPROVED%20BY%20PA%20(2).pdf

Ohio Gestational Diabetes Web Page
http://www.odh.ohio.gov/features/odhfeatures/gestationaldiabetes.aspx

ODH Gestational Diabetes Project (newsletter article)
http://www.odh.ohio.gov/ASSETS/829E17A613504363832741EB41D91D5D/odpcfall10.pdf

Women's Health Update, July 2011, Update Focus: Women and Gestational Diabetes
http://www.odh.ohio.gov/ASSETS/1D99B6C7F27443E0862DD2BDD817403D/Womens%20Update-July11.pdf