Collaborating to Change Arkansas' Health Trajectory

"*Reducing the burden of chronic disease is a task of such magnitude that only a combined effort of many organizations and individuals will result in success."*

—*Changing the Culture of Health in Arkansas*, 2005

Chronic diseases are taking a significant toll on the health and well-being of Arkansas residents. "The chronic disease burden in Arkansas is immense," writes state Chronic Disease Director Namvar Zohoori, MD, in the 2011 *Arkansas Chronic Disease Framework for Action*. "…[C]hronic diseases and their complications take their toll in draining our state's resources even further, both economically and in human terms." Compared to the rest of the United States, Arkansas has higher rates of diabetes, heart, and cardiovascular disease, as well as higher incidence of chronic disease risk factors, including obesity and tobacco use.

While the chronic disease burden is a statewide problem, it is especially pronounced in some of the state's poorest communities. Residents of the hardest-hit counties along the Mississippi Delta not only struggle with poverty and lack of access to medical care, they also endure some of the highest rates of chronic disease in the nation. "In some communities, the doctor's office is 10 miles down the road," says Alysia Cover, associate chief of the Chronic Disease Branch. "The drive might as well be a hundred miles for residents who do not have a car or the resources to cover the cost of transportation and medical care." In addition to worse health outcomes, Arkansas' 19 hardest-hit counties have higher infant mortality rates and shorter life expectancies than other Arkansas residents. People living in these counties (referred to as "red counties" in recent Arkansas legislation) can expect to live six to 10 fewer years than the rest of the state.

Despite the uphill battle, the Arkansas Department of Health (ADH) has seized an important opportunity to engage public and private stakeholders to change the health trajectory for Arkansans. "In the face of this challenge," Zohoori writes in the 2011 publication, "it is only through collaborative action and focused attention that we can address the tasks ahead." To that end, ADH programs are coordinating resources to reduce health disparities and improve health outcomes throughout the state, especially in the state's hardest-hit communities.

Integrating Chronic Disease Initiatives at State and Local Level

According to the 2005 report *Changing the Culture of Health in Arkansas,* addressing Arkansas' disproportionately high chronic disease burden demanded a comprehensive plan: "Reducing the burden of chronic disease is a task of such magnitude that only a combined effort of many organizations and individuals will result in success." While coordinating chronic disease resources provides important benefits such as leveraging limited public and private resources for optimal impact, it is only a means to the most important end: improving the health of all Arkansans.

In 2005, the ADH launched the Chronic Disease Forum to engage a broad-based group of stakeholders and increase awareness and collaboration around chronic disease issues. Since its first meeting in 2005, the ADH has convened annual Forum meetings that bring together interested individuals and organizations who share the Forum's mission of "increas[ing] the quality and years of healthy life for all

Arkansans by reducing the burden of chronic disease through collaborative action aimed at education, prevention and treatment." The Forum developed six overarching goals:

- Increase the percentage of Arkansans of all ages who engage in regular physical activity.
- Promote tobacco cessation among Arkansans of all ages.
- Improve access to screening and health care services for all chronic diseases in rural and underserved areas.
- Educate and inform the public on health issues related to community partnerships, prevention, screening, treatment, outreach, and control of chronic diseases.
- Develop and implement a legislative agenda to support the policy and fiscal needs of chronic disease activities.
- Support the development of communities that promote life-long physical activity, healthy nutrition, and tobacco free environments.

In 2008, ADH program managers and chairs of the Forum's various coalitions formed the Chronic Disease Coordinating Council to oversee progress toward achieving the Forum's goals and objectives, including the chronic disease objectives outlined in the Arkansas's Healthy People 2020 *Chronic Disease Framework for Action*. According to Cover, the Forum has "put chronic disease on the map." In addition to increasing public awareness about chronic disease, the Forum's active coalitions continue to engage stakeholders in an ongoing pursuit to improve health outcomes.

The ADH also invests resources to integrate chronic disease resources at the local and clinic level. Through its Chronic Illness Collaborative, the Chronic Disease Branch provides support and technical assistance for participating clinics and community health centers. Currently, six clinics participate in the collaborative, for which they receive a scholarship of $9,500 annually and support for implementing systems changes and evidence-based strategies to improve health outcomes for patients with diabetes and cardiovascular disease. State epidemiologists help clinics implement clinical information systems that support quality care. According to Joyce Biddle, epidemiologist for the Diabetes Program, "Seeing the data helps [providers] realize what they're *not* doing." After giving a diagnosis, for example, some doctors realized that they did not perform recommended follow-up treatment because their information systems did not generate automated reminders and follow-up-care guidelines. According to Bonnie Bradley, Diabetes Section chief, integrating systems changes helped providers deliver better care: "Before, they were just providing a service. They didn't have a plan for providing care, they just saw patients episodically."

Since the collaborative began in 2001, approximately 100 clinics have participated, according to Linda Faulkner, who heads the Heart Disease and Stroke Prevention Section. In addition to integrating evidence-based guidelines into practice, linking with community partners allows the ADH to provide evidence-based leadership and support to local healthcare providers, who in turn deliver direct services to the local community. "The Health Department provides very few direct services now, it's mainly technical assistance and guidance [to local health agencies and providers]," Bradley says. As a result, maintaining strong local ties is critical. With a staff of four, "covering the state with the problems we have would be overwhelmingly daunting," Bradley says. "So it's important to link with as many like partners as you can."

Integrating Chronic Disease Prevention for Women and Children

Arkansas' chronic disease integration efforts have advanced on a fast track, while integration between chronic disease and maternal and child health programs is just beginning. While the chronic disease integration strategies benefit the maternal and child population—for example, through breastfeeding promotion and childhood obesity prevention programs—program-level collaboration is just getting started. "We're in the early stages," says Barbara Henderson, northwest region nurse practitioner coordinator. "We're looking at where we intersect and we're just starting to ask questions of each other."

Diabetes and Nutrition. In northwest Arkansas, necessity is the mother of invention. There is a disproportionately high concentration of ADH maternity clients who have high rates of gestational diabetes and inadequate access to medical nutritional therapy, which is an important tool for preventing and managing gestational and Type 2 diabetes. The challenge called for a collaborative solution involving public health officials representing three programs: MCH-funded nurse practitioners, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) registered dieticians, and the state Diabetes Prevention and Control Program. "We could see the bigger picture," Henderson says. "We met and talked about where people were falling between the cracks and what we could do to make it better." Although nurse practitioners provide a wide range of health promotion guidance for pregnant women, they lacked nutritional therapy training—an area of expertise for WIC registered dieticians. "We knew that nurse practitioners needed to be better trained in medical nutrition therapy," Henderson says. "We all recognize that we need to do more with less."

As a result of what started as an informal conversation, the programs now collaborate to deliver coordinated nutrition and gestational diabetes training to nurse practitioners and registered dieticians throughout the state. "It sounds ridiculous that we hadn't brought nurse practitioners and nutritionists together before," Henderson says, "but this was the first time that we brought everyone together with the same education and the same focus."

Currently, the Diabetes, WIC, and MCH programs are traveling the state to convene registered dieticians and nurse practitioners to share information about reducing the prevalence and burden of gestational diabetes. "Now we're all focused on medical nutrition therapy, so we're all saying the same thing," Henderson says.

This small step has paved the way for more collaboration. When the ADH updated its *Policy and Procedures Manual for Women's Health* in 2010, Henderson called on her partners in WIC and the Diabetes Program to include medical nutrition therapy and pregnancy care for women at risk for hypertension and gestational diabetes. According to Henderson, the collaboration was a first: "I had never sent the nurse practitioner protocol over to chronic diseases [for their input] before." Because of the success of the WIC and nurse practitioner collaboration, it's opened doors for additional partnerships. "We've taken this one thing [the WIC, MCH, and Diabetes project] and seen it through over the past year," Henderson says.

Breastfeeding and Obesity Prevention. The Chronic Disease Forum provides an important opportunity for collaboration with the MCH program around breastfeeding promotion. Bradley participates in the

Arkansas Coalition for Obesity Prevention—one of the Forum's coalitions—to promote breastfeeding and healthy weight in women and children.

Moving Forward: Pursuing an Alternate Path in Arkansas

The combination of limited resources and immense unmet need have created a sense of urgency around collaboration. According to Bradley, the early successes between the MCH and Chronic Disease programs are opening doors for ongoing collaboration: "We're trying to leverage resources. You can't do it alone anymore."

The ADH continues its relentless push to integrate programs and resources for maximum gain. With a *Chronic Disease Framework for Action* and Chronic Disease Forum to guide the way, the ADH and its partners are developing strategies for changing the health trajectory in Arkansas. In its Community Transformation Grant application, the ADH proposed to restructure the Chronic Disease Branch to further invest resources into Arkansas' 19 highest-need counties. "We're targeting those communities that desperately need the help," Cover says.

Moving forward, Arkansas will benefit from elevated awareness of chronic disease, as well as stakeholder engagement to reduce the chronic disease burden in the state. "We've brought so many communities and providers together to fight the cause. It's only going to grow and gain momentum," Cover says.

For more information on Arkansas' chronic disease and MCH integration and related initiatives:

Arkansas Department of Health
http://www.healthy.arkansas.gov/Pages/default.aspx

ADH Chronic Disease Branch
http://www.healthy.arkansas.gov/programsServices/chronicDisease/Pages/default.aspx

Chronic Disease Initiatives, including Chronic Disease Forum and Chronic Illness Collaborative
http://www.healthy.arkansas.gov/programsServices/chronicDisease/Initiatives/Pages/default.aspx

"Holding the Line on the Burden of Diabetes in Pregnancy, Postpartum and the Reproductive Years," a 2011 presentation at the CDC Diabetes Translation Meeting
https://custom.cvent.com/ADE0EB81B3184D618E2FB8340F1EC28E/files/d49e76ac61d84a7d8f95f69b779cccaa.pdf

Diabetes Prevention and Control Program
http://www.healthy.arkansas.gov/programsServices/chronicDisease/diabetesPreventionControl/Pages/default.aspx

Arkansas Coalition for Obesity Prevention
http://www.arkansasobesity.org/

Arkansas Chronic Disease State Plan, "Changing the Culture of Health in Arkansas: A Coordinated Approach to Health Promotion and Prevention of Chronic Diseases and Related Complications" http://www.healthy.arkansas.gov/programsServices/healthStatistics/Brfss/Documents/publications/Other/chronic_disease_plan2006.pdf

"The Burden of Chronic Disease, Health Disparity, and Low Health Literacy in Arkansas," a presentation by Namvar Zohoori, MD, chronic disease director, Arkansas Department of Health http://familymedicine.uams.edu/upload/docs/CME/10%20ACIC%20LS%20I/23-Namvar%20Zohooir%20-%20NaCDz%20Burden%20Arkansas%20Zohoori%20Handout.pdf

Arkansas State Act 790 of 2011, an act to define "Red Counties" and establish a reporting system http://www.arkleg.state.ar.us/assembly/2011/2011R/Pages/BillInformation.aspx?measureno=SB459