

Insights

North Carolina's Strategy to Address Social Determinants of Health

Health is about more than health care. Social and economic factors, the physical environment, and behaviors, like diet and exercise, account for [80 percent](#) of the factors that influence our overall health. Access to quality clinical care? That's the remaining 20 percent. And while still critically important, quality health care is not the only lever for changing health outcomes.

One example of how social determinants of health can adversely affect children's health outcomes

Adverse experiences stemming from poverty, discrimination, exposure to violence, and other social factors all have the potential to lead to toxic stress, which can have devastating effects on children. Toxic stress [disrupts early brain architecture](#), adversely affecting learning, memory, and social-emotional development; can make children more susceptible to [infections and chronic disease](#); and, perhaps most troubling, it can [affect how a gene is expressed](#), which can then be passed on to future generations. *Therefore, eliminating adverse experiences that lead to toxic stress has a multigenerational impact.*

That's why North Carolina is developing a system that connects individuals with resources to address social, economic and environmental barriers to their health—such as housing, food insecurity, and transportation. By putting funding and policy efforts into addressing social determinants of health, North Carolina is building a system that can improve health outcomes for children and families across the state.

"We realized there was a mismatch in what we were trying to buy versus where we are putting our money," says Marian Earls, MD, MTS, FAAP, Deputy Chief Medical Officer, Community Care of North Carolina Earls. "Even though we wanted to buy health instead of health care, we were still putting most of our funding toward direct care when, in actuality, the social drivers of health make up a much bigger piece of the pie. So, as a state, we decided we really needed to address that."

North Carolina's Department of Health and Human Services (NCDHHS), along with multiple statewide partners, came together to develop a plan to screen for social determinants adversely affecting health outcomes in their state, and build a system that could respond to the needs the screenings identified. These efforts were led by pediatrician Betsey Cuervo Tilson, MD, who is the State Health Director and the Chief Medical Officer for the NC DHHS.

Ultimately, the plan in three key system changes:

- Integrating social determinants of health screening into their system of care
- Building the capacity of resources across the state (such as food banks and housing support)
- Setting up a system for connecting families with resources and tracking referrals



Earls is the Impact Chair and a faculty expert on the NICHQ-led Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network ([ECCS CoIIN](#)), funded by the Health Resources and Services Administration (HRSA). At a recent learning session, Earls presented North Carolina's framework to the 12 participating state teams and communities working to implement policies that better support early childhood health and development. Over the coming months, the CoIIN teams will develop and begin to implement action plans to address social determinants in their states, leveraging the lessons learned from North Carolina. Below, we expand on the three system changes Earls described, so that states and communities across the country can learn from North Carolina's innovative model.

Screening for social determinants of health:

North Carolina set out to identify a series of validated screening questions and a protocol for implementing the screening into their system of care. North Carolina DHHS gathered key influencers from across the state—e.g., clinicians, community-based organizations, Medicaid employees—for a convening to develop a standard state-wide screening tool. They reviewed state data about barriers families face, analyzed North Carolina's key indicators of health, and examined more than 20 validated screening tools. Together, they developed a screening tool with 12 questions covering food, housing, utilities, transportation, interpersonal safety, and how

urgently support was needed.

“We wanted something that came out of validated screening tools, covered the needs of our state, and was brief enough that it would actually happen,” says Earls. “We also recognized that different regions have different needs. We know that doctors may tweak or add to the screening slightly based on their population, and that is completely fine—this screen is a standard, agreed-upon place to start.”

Now, Medicaid managed care plan enrollment staff and, in time, all primary care clinicians are working to integrate screenings into their health systems. Managed care plan staff complete the screening during initial enrollment, and then, based on families’ responses, connect them with resources or care managers in their area. Similarly, providers will be integrating screenings into child and annual wellness visits. By providing multiple touchpoints for engaging families, including one that directly targets low-income families, North Carolina can help ensure more families receive the resources and referrals that can support their overall health.

“We’re thinking of this as more than screening for social determinants of health,” says Earls. “It’s really screening and supporting *opportunities for health*.”

Making sure resources existed for referral:

“If we are going to ask these questions, we need to be prepared to support the needs we uncover,” explains Earls. “That’s why NC developed a hotspot map for social determinants of health; it helps us identify and look for areas that have tremendous resource need.”

The interactive map, developed by NCDHHS, shows social conditions in different regions across the state, so the state can provide targeted capacity building that maximizes state and regional resources. With metrics on poverty, insurance status, access to healthy foods, and housing conditions, among other social determinants of health, the map can help guide policy and funding decisions; and encourage collaboration between the state department, community-based organizations and health providers, as they all work together to address local needs.

Closing the loop on referrals: NCCARE360

Screenings are only valuable if families who are screened can actually access the appropriate resources. That’s why NCDHHS partnered with Unite Us and a private foundation to fund NCCARE360, a statewide coordinated network and referral platform that provides a system for feedback on whether families receive the support they need.

The platform, which launched at the start of 2019, gives providers, community partners, and service and resource providers access to:

- **A statewide resource directory** that includes a call center with navigators and text and chat options
- **A data repository** that collects data from resource directories across the state. The repository provides statewide data on availability of resources so that capacity needs are identified and addressed
- **A referral and outcomes platform** so that health care and human service providers can send, coordinate, and track referrals, allowing for a clear feedback loop.

- **A community engagement team** that works to onboard all community providers and partners to the platform, including food banks, domestic violence support centers, early interventions services, public housing, and health care providers.

“With NCCARE360, we’re creating a coordinated system that encourages a ‘no wrong door’ approach to health,” says Earls. “If a family needs housing and employment support, they’ll receive the right referrals immediately, and we will be able to track and close the feedback loop on each of those referrals.”

North Carolina’s work is an important example for the ECCS ColIN states as they develop policies that support early childhood health and well-being, one of the initiative’s five primary drivers for change. Learn more about the project [here](#), or [sign up for the mailing list](#) to receive resources and insights that promote early childhood health.