

How Does the Affordable Care Act Support Children at Risk for or With Diabetes?

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The Affordable Care Act (ACA) brings our nation closer to the goals of universal, continuous, adequate, and affordable coverage for all children. This commentary discusses the expected outcomes and the potential challenges in the ACA legislation that affect access, coverage, and use of health care services by North Carolina children with diabetes.

Nearly 215,000 US children and adolescents <20 years of age have diabetes [1]. Today, more children and youth in North Carolina are at risk for developing diabetes than ever before, because of increasing rates of obesity, physical inactivity, and poor nutrition in children. Approximately 4,300 North Carolina public school students have received a diagnosis of diabetes [2]. As children at risk for and with diabetes grow and transition into adult systems of care, they are likely to experience a lower quality of life, poorer performance at school, and higher health care costs. In 2009, North Carolina hospitalizations primarily for diabetes, for children, totaled almost \$10 million (North Carolina State Center for Health Statistics, e-mail communication, July 20, 2011). It is concerning that >11% of North Carolina children were uninsured in 2009 [3], and one source reports that almost 40% of all North Carolina children did not have a medical home in 2007 [4].

The American Academy of Pediatrics defines a medical home as a team approach to providing preventive, acute, and chronic care for all children, especially children and youth with special health care needs (CYSHCN). National data show that children are more likely to receive preventive health care if they have a medical home and that more children have a medical home if they have insurance [5]. Access to health insurance, medical homes, and coordinated systems of care has a significant impact on improving health outcomes for CYSHCN. Prevention of chronic disease must also be supported through community partnerships, to address social, environmental, nutritional, and physical-activity policy changes.

Access and Coverage

By 2014, the Affordable Care Act (ACA) will require most children who are citizens and legal immigrants to have health insurance. If they are not covered, their families (and some employers) may be required to pay a federal tax. One

major goal of the ACA is to help children meet this insurance requirement by increasing access to health insurance coverage for more children, especially CYSHCN, who have not been able to access coverage in the past. Several public and private insurance reforms are offered by the ACA and are discussed below.

As a result of the ACA, more low-income children with diabetes will be eligible for Medicaid. The North Carolina Medicaid program has been very successful at using a medical home approach to treat children with diabetes, through Community Care of North Carolina, a primary care case management program. In 2014, the Medicaid eligibility expansion in the ACA will cover children in families with incomes up to 133% of the federal poverty level. This expansion will allow more adolescents aged 19-20 years who previously did not qualify for Medicaid because of the stringent income requirements to become eligible. The ACA will also increase outreach and enrollment for children who are eligible but not currently enrolled in Medicaid and North Carolina Health Choice. In addition, when Medicaid reimbursement for primary care procedures increases to 100% of Medicare rates, in 2013 and 2014, provider participation in Medicaid will likely increase. Undocumented immigrants with diabetes will continue to be ineligible for public insurance plans [6].

The system created by the ACA seeks to increase and improve insurance coverage for many children who have not been eligible for private insurance plans, including those with diabetes. Many key insurance reform provisions became effective for private health plans issued after September 23, 2010. Six ACA reforms are described here. First, insurers cannot deny, rescind, or discontinue coverage to children or adolescents <19 years of age with preexisting conditions, such as diabetes. Individuals ≥19 years of age can still be excluded from insurance coverage if they have diabetes. However, insurers may charge higher premiums to children and adolescents <19 years of age with diabetes if the diabetes qualifies as a preexisting condition [6].

Electronically published January 30, 2012.

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N C Med J. 2011;72(5):379-382. ©2012 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2011/72506

Second, insurers cannot drop coverage of people when they get sick [6]. This applies to children of all ages and will help children who develop diabetes and children who develop complications from diabetes. Third, insurers cannot impose lifetime limits or caps on the amount of money the insurers pay out for a child with diabetes during the child's lifetime. However, currently existing restricted annual limits or caps will not be phased out until 2014 [6]. Fourth, insurers must offer coverage for eligible young adults <26 years of age through their parents' health plans [6]. This may help older adolescents who previously lost their health insurance when they graduated from high school or college. This does not apply if an individual has access to an employer-based plan. Fifth, all new private plans must cover preventive services, including Bright Futures preventive pediatric health care recommendations, with no cost sharing. Grandfathered plans are exempt from the requirement to cover these preventive services until 2014. Grandfathered plans are any employer-based and individual insurance plans that existed before March 23, 2010 [6]. Sixth, North Carolina has a temporary federal high-risk-pool insurance option for children and adults with preexisting conditions, such as diabetes, in place until 2014. ACA funding requires a national high-risk-pool option for people who have been uninsured for at least 6 months [6]. North Carolina offers this option through its established state high-risk pool, Inclusive Health. The federal option offers less restrictive coverage and better rates, compared with the state option [7].

Additional ACA provisions will increase access to affordable private plan coverage by several methods. First, they will create more employer-based coverage insurance options. One option will be the requirement for insurers who offer qualified health plans in the health insurance exchange (HIE) to offer similar plans that cover only children, through "child-only" HIE plans. The HIE itself is a marketplace that will offer information and assistance to individuals and families about evaluation of, enrollment in, and purchase of private plans. Another option will be to offer catastrophic coverage to people <30 years of age [6]. Second, they will allow employers to offer insurance premium discounts for children who satisfy a health standard. For instance, a health standard for a child with diabetes could be to assure that the child has a medical home, to assist with diabetes management [8]. Third, they will assist some individuals and families with incomes <400% of the federal poverty level with insurance premium subsidies [6]. This will allow some children with diabetes to access individual plans that would have been unaffordable otherwise.

As more children and adults gain access to health insurance, the demands on the health care workforce and safety net systems will increase significantly. North Carolina already has secured millions of dollars in ACA funding to enhance the health care delivery infrastructure. North Carolina school health centers are important in the safety net system, to assist with meeting some health needs of

students with diabetes. Both school health centers and school nurses partner with medical homes to fulfill the state requirement for schools to implement guidelines and care plans to support students with diabetes at school; however, most North Carolina schools do not have school health centers. In addition, in some North Carolina counties, school nurses are responsible for providing care and other services to >3,000 students, including children with diabetes [2].

Benefits and Quality

Most children will be required to have health insurance that offers certain essential benefits; however, children may stay with the insurance plans they had on March 23, 2010, if families are satisfied with the benefits. The ACA requires most health plans to offer the following essential benefits: all Bright Futures preventive health recommendations for children <21 years of age, with no cost sharing; pediatric oral health, vision, and hearing services; vaccinations and other preventive services; ambulatory care; emergency services and other hospital care; prescription drugs; laboratory services; rehabilitative and habilitative services; and substance abuse and mental health services, in parity with other benefits [6].

The secretary of the US Department of Health and Human Services has the authority to develop the specific required package of essential health benefits that must be offered by public plans and most private plans. Grandfathered plans will not have to offer these essential benefits until 2014 [6]. Both North Carolina Medicaid and North Carolina Health Choice are already required to offer certain essential benefits and core services to children, including those with diabetes.

Optimal health for children is easier to achieve through prevention than through treatment and management of diabetes. The ACA's focus on the prevention of chronic diseases for children and the use of the medical home to deliver preventive health care is significant. Numerous funding provisions support research, implementation, evaluation, and dissemination of evidence-based prevention strategies and programs. Specific provisions address childhood obesity, healthy behaviors, chronic disease, and health disparities [9].

There are several funding provisions in the ACA that can improve the quality of care for children with diabetes. Some provisions seek to improve health systems and require public reporting of data and quality measures, including specific diabetes measures [10]. Others support quality care management through the following: (1) use of the medical home approach and supportive community-based interdisciplinary teams in Medicaid, (2) medication management services for treatment of chronic diseases such as diabetes, and (3) use of accountable care organizations for the management of population health [9]. These provisions build upon efforts by Medicaid, Community Care of North Carolina, and other private insurers to use medical home and additional case management strategies for North Carolina children

ENERGIZE! A Community-Based Lifestyle Intervention Targeting At-Risk, Overweight Children

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Twenty-eight percent of US adolescents are overweight or obese, and type 2 diabetes now accounts for >30% of all diabetes cases among adolescents. Although the Diabetes Prevention Program demonstrated that a healthy lifestyle could reduce the rate of progression to type 2 diabetes in adults, access to intensive yet affordable lifestyle intervention programs remains limited. To begin to address the epidemic of obesity in North Carolina children, WakeMed Health and Hospitals has developed ENERGIZE!, a healthy lifestyle intervention program targeting overweight children at greatest risk for type 2 diabetes.

The ENERGIZE! program was developed through a community collaboration of local physicians, fitness organizations, and WakeMed. The goals of the program are to (1) identify overweight children aged 6-18 years with prediabetes or metabolic syndrome, (2) provide access to an intensive community-based lifestyle program that targets the child and their family, and (3) prevent type 2 diabetes and other obesity-associated comorbidities through the adoption of a healthier lifestyle. Children are identified by their primary care professionals as high risk if they are overweight (defined as a body mass index [BMI] percentile of ≥ 85) and meet 2 of the following criteria: minority ethnicity and family history of type 2 diabetes, acanthosis, or hypertension. They are then referred to WakeMed for measurement of fasting glucose and lipid levels. If risk factors are present and results of laboratory tests lead to a diagnosis of metabolic syndrome, prediabetes, or type 2 diabetes, children are invited to participate in the program.

The ENERGIZE! program is an intensive community-based program held 3 days weekly over 12 weeks that is designed to educate families about healthy eating, physical activity, and behavior change. The program incorporates an interactive, age-appropriate curriculum to review healthy nutrition, physical activity, behavior change, positive body image, self-esteem, and role modeling. Each week, children engage in 3 hours of structured physical activity that incorporates progressive skill building with cooperative games. Families participate in a fun fitness activity each week to stress the importance of families being active together and to teach group game skills. After completion of the intervention phase of the program, participants proceed to a maintenance phase and are reevaluated every 6 months for 2 years. BMI, blood pressure, height, weight, fasting lipid levels, and fasting blood glucose level are assessed at baseline, 6 months, 12 months, 18 months, and 24 months. Fitness evaluations, including a flexibility test, an endurance test, and a muscular strength test, as well as health behavior questionnaires, are performed during follow-up.

Since 2005, 3,755 children have been screened for the program, and 1,386 (37%) have been shown to have prediabetes or metabolic syndrome. To date, in Wake County, 862 children have been enrolled, and 535 have completed the 12-

week intervention. The ethnic distribution of participants is 35% African American, 34% white, and 26% Hispanic. There is a slight predominance of female participants. Significant reductions in mean BMI percentile (97.7 vs 98.5; $P < .05$), total cholesterol level (163.8 mg/dL vs 173.5 mg/dL; $P < .05$), low-density lipoprotein level (102.1 mg/dL vs 106.9 mg/dL; $P < .05$), triglyceride level (120.6 mg/dL vs 143.0 mg/dL; $P < .05$), systolic blood pressure (112.7 mm Hg vs 116.9 mm Hg; $P < .05$), and diastolic blood pressure (63.1 mm Hg vs 70.2 mm Hg; $P < .05$) were observed at 6 months, compared with baseline levels. Significant reductions in fasting glucose level (98.6 mg/dL vs 103.8 mg/dL; $P < .0001$) were observed at 6 months for participants with an impaired fasting glucose level at baseline, and a trend toward increased high-density lipoprotein (HDL) level (31.7 mg/dL vs 30.5 mg/dL; $P = .23$) was observed for participants with an HDL level of < 35 mg/dL at baseline. Significant reductions in metabolic syndrome were observed at 6 months, compared with baseline levels (McNemar statistic, 15.70; degrees of freedom, 1; $P < .05$). Improvements in BMI, glucose level, lipid levels, and blood pressure were sustained at 12 months for participants who continued to participate in the program. ENERGIZE! program graduates demonstrated a 30% improvement in flexibility, an 84% improvement in muscular strength, and a 48% improvement in endurance. Children and families reported increased daily physical activity, decreased consumption of sweetened beverages, and decreased consumption of high-fat snacks.

Our results suggest that, by promoting healthy lifestyle changes, the ENERGIZE! program reduces prediabetes and metabolic syndrome in at-risk, overweight children and may prevent progression to type 2 diabetes. The program has been successfully replicated in 12 North Carolina counties through various health systems, including hospitals, outpatient clinics, and health departments. ENERGIZE! is currently implemented in Wake, Buncombe, Nash, Henderson, and Stanly counties. Further research is needed to assess the long-term effectiveness of the ENERGIZE! program. It will be important to demonstrate whether lifestyle intervention programs such as ENERGIZE! are effective in the long term, so that needed third-party-payer reimbursement can be secured and thereby improve access to such programs. NCMJ

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and adults with chronic health conditions. In addition, funding for comparative effectiveness research can help with the evaluation of medications, equipment, dietary regimens, and other treatments delivered to children with diabetes.

Summary and Challenges

The ACA is already increasing the number of North Carolina children at risk for or with diabetes who have access to private insurance coverage. The ACA will have an even greater impact during the next 3 years, by increasing access to Medicaid and private plans (especially for older adolescents), by improving benefits in private plans, and by lowering out-of-pocket costs for some families. Accessible, adequate, affordable, continuous insurance coverage could be in place for most children with diabetes by 2014.

As a result of the ACA, several challenges regarding the health care services, processes, and systems of care for children at risk for and with diabetes will remain. One key challenge is to ensure a medical home for all children with diabetes, despite primary care and specialty workforce shortages and the growing numbers of children with diabetes. Another challenge is to ensure that plan benefits are consistently adequate across all public and private plans. The scope of required essential benefits must be comprehensive and must include coverage for critical diabetes care services (ie, oral health, mental health, medical nutrition therapy, and certain supplies). Additional challenges are presented in the processes for the determination of plan eligibility and for enrollment. These processes should be automatic and seamless, to allow children to receive uninterrupted diabetes services regardless of insurance plan changes. It will be important to weigh in on state- and federal-level discussions about how to implement many ACA provisions.

The overall prevention of diabetes and the reduction of complications from diabetes can be supported by the ACA; however, a broad approach that addresses social determinants of health and health behavior change is required to effect real change. Social determinants that are key influences in diabetes prevalence are similar to those for other chronic diseases and include poverty, housing, educational and job opportunities, and social supports. Partnerships with families in care are critical. Resources must be devoted outside of health care settings, to assist with advancing diabetes prevention and management. For example, there is a critical need for increased capacity and funding to assist with the care of children with diabetes in schools. More

school health centers and school nurses can enhance medical home efforts and help address social determinants of health.

Enhancing the quality of data that measure the need for and quality of diabetes care in multiple settings is critical. Many more measures exist that monitor the quality of chronic care received by adults, compared with those for children. Moving forward, multiple payers and programs should require more child-specific diabetes measures. Improvements in data and performance measurement will allow us to assess improvements that result from the ACA and to assess remaining needs. It will be important to demonstrate how access to care, insurance coverage, families, and health service systems work together to support optimal health for children at risk for and with diabetes. **NCMJ**

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Acknowledgment

Potential conflicts of interest. G.L.M. has no relevant conflicts of interest.

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