

**North Carolina Institute of Medicine
2014 Task Force on Rural Health
2018 Update on Priority Strategies**

Introduction

Approximately one-in-five North Carolinians, almost 2.2 million people, live in a rural county (non-metropolitan statistical area). North Carolinians living in rural areas are less likely to have access to health services, are more likely to engage in risky health behaviors, and have a higher mortality rate than North Carolinians living in non-rural states. The health disparities between urban and rural residents are due to a number of factors including: differences in demographic and socioeconomic factors, health behaviors, and access to and availability of health care services.

North Carolina's rural communities face many challenges, but they are also quite resilient. There is a strong sense of place and an understanding of community assets. Rural people know the needs of their community. They know what strategies to improve health and well-being will not work. They are also open to learning from others. While rural communities are often under-resourced, there is an innate sense of commitment to the community and to each other. And because of this, rural communities are often able to accomplish a great deal with limited resources.

In 2014, the North Carolina Institute of Medicine (NCIOM) in partnership with the Office of Rural Health and Community Care (ORHCC) within the North Carolina Department of Health and Human Services (NC DHHS), and the Kate B. Reynolds Charitable Trust convened a Task Force on Rural Health. The overall goal of the Task Force on Rural Health was to develop a North Carolina Rural Health Action Plan that included workable strategies to improve rural health outcomes that were actionable over the next three to five years. The Action Plan provided policy makers, funders, and stakeholder organizations with a common vision and set of action steps to improve rural health.

The Task Force was chaired by Chris Collins, MSW, then Director of the Office of Rural Health and Community Care; Paul Cunningham, MD, dean emeritus of Brody School of Medicine, East Carolina University; and Donna Tipton-Rodgers, EdD, President of Tri-County Community College. In addition to the co-chairs, the Task Force had 46 members including representatives of state and local policy making agencies, funders, health care professionals, community agencies and nonprofits, and other interested individuals. Approximately half of the Task Force members were from rural communities and the other half were from statewide organizations with a mission to serve rural communities.

The Task Force met ten times between March 2013 and May 2014. In this time, Task Force members examined data that focused on major health problems facing rural communities and identified potential strategies to address those problems and held eight community forums in the following rural counties: Beaufort, Bladen, Halifax, Jackson, McDowell, Montgomery, Rockingham, and Wilkes. After synthesizing results from the examined data and community forums, the Task Force finalized the six priority areas discussed in the final report.

This document details the progress, or lack thereof, North Carolina has made regarding the six priority areas discussed in the Rural Health Action Plan. Progress has been made in each of the six priority areas.

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Total Recommendations: 6

Fully Implemented: 1

Partially Implemented: 5

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Recommendation 1: Invest in small businesses and entrepreneurship to grow local and regional industries (PARTIALLY IMPLEMENTED)

a) The Department of Commerce (DOC) and rural funders should:

- 1) Create a dedicated funding stream for rural communities to further investments in infrastructure, regional industry, manufacturing, and workforce development.**

The Department of Commerce (DOC) has continued supporting funding streams and initiatives through the Rural Development Division. As mentioned in the Action Plan, this division houses the following programs: The Community Development Block Grant program, the Building Reuse Program and the Economic Infrastructure Program, and the Appalachian Regional Commission. Funding has remained steady for these programs. The NC Broadband Program was relocated to the Department of Information Technology.

ApprenticeshipNC, an apprenticeship program previously housed at the North Carolina Rural Center, is now housed within the North Carolina Community College system (NC CC).

- 2) Work with local and regional offices of economic development to invest in economic development activities that capitalize on local strengths and resources.**

The DOC has continued working with local and regional offices of economic development to invest in economic development activities that capitalize on local strengths and resources. In 2014, NCGA legislation created 8 Prosperity Zones with the goal of enhancing collaboration and cooperation between State agencies, local governmental agencies, and other regional entities to facilitate administrative efficiencies within State government. Teams serving each prosperity zone are supported and coordinated by the NC Department of Environmental Quality, Department of Transportation, Community College Customized Training, and Department of Commerce. Planners meet quarterly, if not more frequently, to work on regional projects.

East Carolina University's Rural Prosperity Initiative was created with the goal of using multidisciplinary programs to address social, health, and economic disparities between rural and urban parts of the state to improve the life, health, education, and employment of eastern NC. Through leveraging university resources, ECU plans to develop partnerships with government, industry, and community groups to develop tools and approaches to address the goals listed above.

- 3) Work with rural businesses and community organizations to enhance broadband access (particularly "last-mile" access) and infrastructure for rural communities.**

Through Session Law 2018-5, the NCGA established the Growing Rural Economies with Access to Technology (GREAT) program which facilitates the deployment of broadband to unserved areas of the state with a speed of 25:3 Mbps or greater. This incentive program sets aside \$10 million in grant money for providers and cooperatives to deliver broadband to underserved areas. This grant will be housed in the Department of Information Technology.

4) Fund or provide support to local entrepreneurs to develop high quality jobs and businesses that build on local resources to grow regional industries.

The Business Link North Carolina (BLNC), operated by the Economic Development Partnership of North Carolina, offers free one-on-one phone consultations to people interested in starting a small business, small business owners in need of general support, and entrepreneurs interested in moving to North Carolina. They assist with any questions and help navigate topics such as regulatory requirements, licensing stipulations, small-business trainings, and more.

The DOC works closely works with the Small business and Technology Development Center (SBTDC). The SBTDC provides management counseling and educational services to small and midsize businesses to build and grow successful businesses that will positively impact North Carolina's economy. Most services are free of charge and are confidential.

The North Carolina Rural Center also provides microloans to fund, mentor, and connect new small businesses. Thread Capital, a new nonprofit subsidiary of the Rural Center launched in May 2018, provides loans of up to \$50,000 to entrepreneurs in all 100 counties.

5) Develop a system of incentives and grants to encourage high value-added manufacturing and agriculture industries including farming, fishing, and forestry and to make investments in rural areas.

The Industrial Development Fund provides incentive industrial financing grants and loans available to local municipal or county government applicants located in the 80 most economically distressed counties in the State.

The Food Manufacturing Initiative, housed at NC State and in collaboration with the North Carolina Department of Agriculture and Consumer Services, the Economic Development Partnership of North Carolina, and other agricultural and food industry leaders, have worked to develop new manufacturing jobs in rural areas. This initiative does so through expertise on food, bioprocessing, and nutrition sciences to help homegrown food manufacturers process and package a food and beverage supply.

b) To promote local agriculture and the sale of agricultural produce to local businesses, schools, and other government agencies, as well as directly to consumers:

1) The North Carolina Farm Bureau and other agricultural support organizations and agencies should provide technical assistance to small farmers to help minimize costs and support GAPs certification

Agricultural organizations like the Carolina Farm Stewardship Association (CFSA) have been helping small to mid-scale growers with food safety practices throughout NC. In 2015, CFSA partnered with NC State to host GAP (Good Agricultural Practices for Small Diversified Farms) workshops to help growers implement food safety programs. CFSA also worked with state auditors to make it feasible for small growers to pass a GAP audit without large investments in infrastructure improvements and major changes to their growing practices. CFSA also offers GAP consulting. These consultations include conducting risk assessments, conducting mock audits, food safety plan reviews, on-site food safety trainings, and audit support.

CFSA hired two full-time employees in October 2017 to increase its capacity for food safety education. As time has progressed, the demand for GAP certification has greatly increased. CFSA has already assisted 58 growers in developing and implementing a food safety program like GAP in 2018. They will also be offering 10 GAP workshops throughout NC and SC this year. At the moment, CFSA is the only entity in NC offering GAP workshops.

2) The North Carolina Department of Agriculture and Consumer Services, DOC, and the Division of Public Health within the North Carolina Department of Health and Human Services should review and revise, as necessary, existing regulations related to local farm rules in order to remove barriers to farm-to-table initiatives while still protecting public health.

There is currently a farm to school coalition, which the North Carolina Division of Public Health (DPH) is a member, that works to bring local schools and state agencies together with local farmers to supply healthy, nutritious food to schools. There are also various programs run through by DPH that attempt to connect local produce and farmers to local populations through funding and technical assistance.

However, NC Department of Agriculture and Consumer Services, DOC, and DPH have not reviewed or revised existing regulations related to local farm rules to remove farm-to-table barriers.

3) Rural funders should consider investing in projects that support local food programs, especially those that focus on marketing directly to consumers (particularly those with low-income), and improving consumer access, as

these programs may be financially feasible and improve rural health outcomes.

The North Carolina Division of Public Health sponsors and administers various programs with the goal of increasing access to local, healthy foods. The following is a summary of these programs:

- Healthy Corner Stores: Connect convenience stores, or other smaller stores, with local produce and farmers to better access to locally sourced produce
- Catalyst for Health Eating and Active Living: program funded through the Kate B. Reynold's Charitable Trust in some counties to build collaboration among local, regional and state organizations to link resources and strengthen community involvement around local foods; funding will end in 2018
- Obesity, Diabetes, Heart Disease and Stroke Prevention (ODHDSP) program: funding to support implementation of population wide approaches to prevent obesity, diabetes, heart disease and stroke, and the reduction of related health disparities by supporting healthy small food stores and healthy food retail designation; funding will end in 2018
- Healthy Communities Program: program provides funding for 82 of the 84 health departments to develop and implement community-based initiatives to address risk factors of physical inactivity, poor nutrition, tobacco use, violence and unintentional injury. Nutrition-related strategies are accomplished through by increasing access to healthy foods through community venues (e.g. farmers' markets, community gardens) and access to healthy foods in retail venues (e.g. healthy small food stores, mobile markets)
- North Carolina Fruit and Vegetable Outlet Inventory: this is a statewide inventory of direct farmer-to-consumer fruit and vegetable outlets was last updated in 2017; all information gathered from the inventory is in a directory available to the public
- Farm to CACFP – Funding from USDA to NC DHHS, Division of Public Health, Nutrition Services Branch, Child and Adult Care Food Program (CACFP). Farm to CACFP includes any facility that incorporates local foods through meals and snacks, lessons, taste tests, farmer and farm stand visits, and/or community and parent involvement.
- WIC Farmers Market Nutrition Program – Funding from USDA to NC DHHS, Division of Public Health, Nutrition Services Branch, State WIC program. Coupons are available for WIC-eligible pregnant, postpartum, partially-breastfeeding and breastfeeding women and children 2 to 4 years old to obtain fresh fruits and vegetables at local farmers' markets.
- Senior Farmers Market Nutrition Program – Funding from USDA to states – NC DHHS, Division of Aging, provide low-income seniors with coupons that can be exchanged for eligible foods (fruits, vegetables, honey, and fresh-cut herbs) at farmers' markets, roadside stands, and community supported agriculture programs.

- c) The North Carolina General Assembly and Department of Revenue should continue to encourage investments in renewable energy development through tax and other incentives.**

There has been little progress in using tax incentives to encourage investments in renewable energy development. However, the North Carolina General Assembly passed Session Law 2017-192 in 2017 that launched the following programs: Competitive Procurement of Renewable Energy, Green Source Rider, Solar Rebates, Community Solar, and Solar Leasing. These programs were created to reduce some of the financial barriers consumers face when seeking solar powered energy; this law also places an 18-month moratorium on wind energy.

- d) Rural funders, the Office of Rural Health and Community Care, and the DOC should invest in rural health care, including recruitment and retention of providers to rural communities (discussed in Recommendation 6), and support for rural clinics and other rural health care institutions.**

In 2016, the North Carolina General Assembly allocated \$8 million in the yearly budget for the Mountain Area Health Education Center (MAHEC) for a new building and \$3 million for administration, faculty, and programs. These funds are meant to focus on OB/GYN providers, general surgeons, and psychiatrists to cover the gap of these providers in Western North Carolina.

The North Carolina Medical Society continues to support providers and address provider retention through the Community Practitioner Program. The program's funds are completely discretionary and is not tied to HPSA requirements like the National Health Service Corps (NHSC) or the State Loan Repayment Program.

In October 2015, the Division of Mental Health, Developmental Disabilities and Substance Abuse Services and the Division of Medical Assistance was awarded the Community Behavioral Health Clinic Planning Grant from SAMHSA. This grant aided Medicaid beneficiaries in obtaining integrated behavioral health and physical health care from qualified providers.

Starting in 2015, the Office of Rural Health also received funding to assist with the recruitment of advanced practice behavioral health providers.

- e) The North Carolina Community College System and Local Educational Agencies should continue to partner with small businesses, rural entrepreneurs, and local economic development offices to develop the rural workforce.**

The NC Community College System serves current and aspiring entrepreneurs through Small Business Centers at each of the state's 58 community colleges. Services include confidential and free business counseling and low-cost business seminars and workshops. Entrepreneurship education/assistance are especially important in rural NC, where employment options tend to be more limited.

Businesses in manufacturing/certain other industries qualify for free Customized Training to help create or add jobs, make technology investments, or increase worker productivity.

Biotechnology/ life sciences businesses are supported by BioNetwork, which offers training in biomanufacturing, pharmaceuticals, food, beverage, and natural products, as well as offering STEM engagement activities for middle and high school students to build awareness of bioscience-related careers

Across industries and different types of community college programs, there are business/community college partnerships via curriculum advisory committees, that direct feedback from businesses (individually or groups of businesses) to community colleges about the education/training they need

To serve businesses, the Community College System and individual community colleges often collaborate extensively with education, workforce development and economic development partners. A few examples are listed below:

- Locally-led partnerships with economic development and – at least at one college – leadership *of* the local/regional economic development function. Tri-County Community College was asked to carry out the economic development function in the area, so it currently leads overall economic development activities in Cherokee and Clay counties as well as offering education and training.
- NCWorks – a partnership that began in 2014 among the Department of Commerce/local Workforce Development Boards and Career Centers, Community College System, NC Public Schools, DHHS, and other workforce development entities. NCWorks Certified Career Pathways have been developed among workforce/education (K-16)/business partners to build a pipeline to meet industry needs, including the healthcare industry. Efforts are underway to develop a sector partnership initiative.
- NGA Policy Academies – the National Governors Association has engaged with the Governor's Office, Department of Commerce, Community College System and Department of Public Instruction to address System Alignment issues (2014-17) and Work-based Learning (2017-19).

1) The North Carolina Community College System should enhance programs that offer college transfer credit to high school students proficient in college subjects.

Over the past several years, the NC Community College System (NCCCS) has continued to expand college credit earning opportunities for high school students under the umbrella program established by the General Assembly in 2011, Career and College Promise provide three pathways to do so:

- College Transfer Pathway (for those ultimately seeking to earn an associate degree and/or bachelor's degree). Fall enrollment for the Associate in Science college transfer pathway (P1042C) increased from 2,658 students in 2014 to 6,674 students in 2017.
- Career Technical Education Pathway (tuition-free community college credits for those on a technical career pathway; can result in a job credential, certificate, or diploma in a technical career or pave the way for further education). There are more than 1,200 CTE pathways available within the NCCCS.
- Cooperative Innovative High Schools (include Early College high schools, middle college high schools, etc. Early College High Schools are especially prevalent and enable students in grades 9-12 to attend school on a college campus and earn both a high school diploma and a tuition-free two-year associate degree or two years of credit that can be transferred to community colleges or universities within a 4-5-year period.)

Helping high school students earn college credit has become a major part of what individual community colleges across the state offer. Enrollment in Career and College Promise has grown from 20,351 in fall semester 2012 to 44,156 in fall semester 2017.

In recent years, there has been a great deal of work to create transfer pathways to ensure that high school students will have their credits honored when they transfer to a community college and/or university. College transfer pathways approved in 2016 and 2017 include the CCP Transfer Pathways leading to the 1) Associate in Science/STEM or a technical university major; 2) Associate in Arts/non-STEM university major; 3) AAS in Nursing/bachelor's in nursing; 4) Associate in Engineering/STEM or technical university major; and 5) Associate and/or bachelor's degree in fine arts-Visual Arts.

In September 2015, the General Assembly passed a provision authorizing the NCCCS to implement the NCWorks Career Coach program. This program places community college career coaches in high schools (working in tandem with high school career development coordinators and school counselors) to help students determine career goals and help them identify postsecondary programs to help them reach their goals. Career Coaches enable students to receive more career/postsecondary guidance, especially those who may be interested in community college offerings, which tend to be less understood by the general public than

university programs. In 2015-17, 14 community colleges collectively received \$1M to support a total of 28 career coaches in area high schools. Twelve of the 14 colleges serve exclusively “rural” counties. Roughly \$2M of state funding has been awarded by the State Board to 15 colleges to support a total of 26 coaches for the next two years (2017-19). Eleven of these 15 colleges exclusively serve rural counties.

- 2) Community colleges should offer career readiness certificates for job skills commensurate with the education of students in the community college and the needs of community businesses and industries. These career readiness certificates should be focused on the industries local to a community college and developed in partnership with local industries.**

Career Readiness Certificates were a priority of the NC Community College System prior to 2014 and continue to be supported, with leadership from individual community colleges. The Career Readiness Certificate is a national certification developed and maintained by ACT to measure applied math, workplace documents, and graphic literacy. Its focus is the skill set of fundamentals needed by most employers, so there is not an industry-specific Career Readiness Certificate (CRC). That said, many community colleges package employability training and CRC assessment with industry-specific job training.

At least one college has made the CRC a major focus of its broader academic improvement efforts through its Quality Enhancement Plan for postsecondary accreditation. The Career KEYS quality enhancement plan (QEP) at Tri-County Community College integrates specific career readiness elements into a cross-section of classes to offer students effective and practical career preparation. The Career KEYS process starts early in a student’s college experience with career inventories conducted during a College Student Success course to help students determine a future career path. Toward the end of a program of study, students will have the opportunity to take the CRC assessment.

An initiative that has incentivized some counties, community colleges, public school systems and workforce development boards to promote the CRC is the Work Ready Communities Program. Developed and piloted in NC by a partnership including CFED, the Rural Center, Eastern Region, Eastern Carolina Workforce Development Board, numerous community colleges, public school systems, and counties, the program was implemented on a full scale with DPI, Community College System, Dept. of Commerce and NC Chamber collaboration, and the NC Chamber serves as the certifying body. ACT tracks Work Ready Community counties and (as of 7/2018) lists 37 NC counties as Work Ready Communities, all certified between 2015 and May 2018.

- f) Rural funders should focus on supporting the recruitment and development of local, talented leaders. Funders should provide scholarship opportunities to talented youth leaders who agree to return, or relocate, to live and work in rural communities in exchange for scholarship funding.**

While launched prior to the Rural Health Action Plan, Healthy Places NC funded by the Kate B. Reynolds foundation has been assisting with the development of local, talented leaders. This place-based initiative takes a longitudinal approach to health and focus on developing infrastructure, capacity building and leadership development. Leadership development has focused primarily on marginalized communities.

Recommendation 2: Ensure that all childhood settings (ages 0-8), including child care, home, and other environments, provide a high quality and nurturing environment, and promote parenting supports that improve school readiness and long-term educational success. (PARTIALLY IMPLEMENTED)

This recommendation was replicated and further specified in the recommendations on the Task Force on Essentials for Childhood. Since 2016, NCIOM has served as the backbone organization for the implementation of the Task Force on Essentials for Childhood recommendations under the direction of a statewide steering committee. NCIOM staff also provides guidance and support to the steering committee, working groups, and additional partners to ensure alignment with and support for the Essentials for Childhood goals. Of the 15 recommendations the Task Force developed, 12 have been partially or fully implemented. These recommendations will also inform priority strategies for the Early Childhood Action Plan. This Action Plan outlines three categories, Safety, Health and Development, and Education, and what a child needs at every stage of early life to be successful.

- a) **The North Carolina Division of Child Development and Early Education should re-evaluate its star rating system to identify high quality child care facilities based on updated evidence and best practices. The rating system should specifically include criteria that consider the program’s focus on learning that supports children’s social and emotional development, executive function, language skills, and health.**

The North Carolina Division of Child Development and Early Education (NCDCDEE) has been working closely with a think tank through the BUILD Foundation, to understand what the foundational principles of the quality rating improvement system (QRIS) are in order to know what and how to implement new best practices into this system. This activity will be completed in July 2018. After the completion of the project, an examination of next steps will be determined including the process for involving the NC Child Care Commission related to any rule changes.

Language in the 2018 state budget directed the division to consider developing a separate rated license for infants and toddlers that would include staff qualification, educational outcomes, and continuity of care and to release a report on findings. A team will convene to work on this report that will be submitted to the General Assembly in November of 2018.

- b) **The North Carolina General Assembly should enhance child care subsidies to facilities that receive the highest star ratings by the North Carolina Division of Child Development and Early Education. Given the rural/urban disparity in both the quality and quantity of regulated child care, the Division should consider adjustments to its funding formula to incentivize quality care in rural counties.**

There have been increases made in subsidy reimbursement rates in the last three budget cycles. The first cycle saw an increased reimbursement rate to the 75th percentile of the 2015 market rate study in tier 1 and 2 counties (mostly rural counties) for infants and toddlers. The following year, subsidies were increased for children ages 3-5 in tier 1 and 2 counties; there was also an increase for infants and toddlers in tier 3 counties to the 75th percentile of the 2015 market rate study. The 2018-19 budget raised reimbursement rates again for children 0-5 in tier 1 and 2 counties to the 100th percentile of the 2015 market rate study; reimbursement rates also increased for children 3-5 in tier 3 counties to the 75th percentile of the 2015 market study. Only facilities with a three-star rating or higher are eligible for child care subsidies.

- c) The North Carolina Division of Public Health should seek additional funding from multiple sources, including North Carolina and national foundations to support more evidence-based parenting programs in rural communities such as Nurse-Family Partnership, Child FIRST, and Triple P to enhance school readiness and improve long-term educational success.**

In 2014, Triple P had 16 individual sites. At the moment, all counties in North Carolina have a Triple P site. The Duke Endowment funds infrastructure support for Triple P; implementation is being funded by DPH, DSS, and Smart Start. In addition, in July 2018, Cumberland County Department of Health received \$290,000 to lead an 18-county regional Triple P program.

Child FIRST has been implemented in the Trillium Health Resources LME/MCO area. In collaboration with Trillium, the program began seeing families in March 2016 and there are now 26 counties where Child FIRST services are available. To date, 708 children have been served.

The Duke Endowment's Health Care and Child Care program areas have partnered with the Kate B. Reynolds Charitable Trust, NC DHHS (DPH), BCBSNC Foundation, and NC Partnership for Children to expand the Nurse Family Partnership Program in North Carolina. NFP is currently available in 25 counties.

In July 2018, NC Medicaid launched two pilot home visiting initiatives in Cleveland and Johnston counties. The pilots use Medicaid funds to pay for home visiting programs; the Cleveland County pilot will use the Nurse Family Partnership model, and Johnston County will use a hybrid model focused on high-risk pregnancies. DHHS has estimated the per-visit cost to Medicaid at \$83.72, for a total projected expense in Cleveland County of \$251,160, and \$92,090 in Johnston County.

Durham Connects has also provided a model of home visiting programs that has been expanded throughout the state. Using registered nurses to provide in home health assessments of new

mothers and newborns as well as connect families to community parenting resources, Durham Connects has showed positive impacts on parenting behaviors, father involvement, and infant hospitalization. Other counties have implemented the model based on Durham's experience, including Beaufort, Bertie, Chowan, Hyde, Forsyth, and Guilford (with funding contributed from Race to the Top Early Learning Challenge, Duke Endowment, Smart Start, and Kate B. Reynolds Charitable Trust).

- d) The North Carolina Division of Child Development and Early Education, in partnership with community stakeholders including child care resource and referral agencies, community colleges, Smart Start partnerships, and child care providers should continue to work toward adequate wages and/or wage support, benefits (especially health insurance), education and training, and career advancement opportunities to continue to grow a high quality and well-trained early care and education workforce.**

The NCDCDEE continues to contract and collaborate with various stakeholders to improve wages, benefits, education and training, and career advancement. This is done through T.E.A.C.H. Early Childhood ® Scholarship Program administered by Child Care Services Association (CCSA). It also supports the Child Care WAGE\$® Program, which is administered by Child Care Services Association in collaboration with local Smart Start partnerships across the state.

The WAGE\$ program has received steady funding over the last few years, with a slight increase in the number of participating counties for the 2018-19 funding cycle. Currently there are more than 50 counties participating in the WAGE\$ program. Funding is a collaboration with local Smart Start partnerships and the NC Division of Child Development and Early Education. This year in a variation of WAGE\$, NC DCDEE will be adding new federal infant/toddler quality dollars to provide supplements for infant and toddler teachers with at least an Associate Degree in Early Childhood Education or its equivalent. These supplements help to address the known compensation gap and give infant-toddler teachers a greater opportunity to stay in the field and to grow their own skills and knowledge. CCSA will administer the new Infant Toddler Educator AWARDS\$ program. The T.E.A.C.H. Early Childhood scholarship program is administered by the Child Care Services Association and provides educational scholarship for the early childhood workforce to earn college degrees at the Associate, Bachelor and Master level.

The National Governors Association, in partnership with the Council of Chief State School Officers, announced that North Carolina was one of the six recipients for a grant that will support the development of a policy agenda to strengthen the compensation of the state's early care and education workforce. Meetings to develop this policy agenda will begin later in the year.

- e) **Local Smart Start partnerships, in conjunction with the North Carolina Partnership for Children, the North Carolina Division of Child Development and Early Education, child care resource and referral agencies, the North Carolina Department of Public Instruction, local education agencies, and local businesses should choose from and implement a range of evidence-based and best practices strategies for improving school readiness and long-term educational success. These agencies should involve parent coalitions in the selection and implementation of strategies in local communities.**

Local Smart Start partnerships are required by law to implement evidence-based programs and strategies. Local partnerships choose strategies from a published guide containing evidence-based programs. Community needs and assets are considered when selecting programs from the dedicated guide. Interventions and programs in the guide will be updated by the end of July 2018. Parent coalitions, or parent involvement more broadly, varies from partnership to partnership. Partnerships typically engage parents through the professional community, focus groups, interviews, and board participation.

North Carolina lawmakers allocated \$3.5 million in 2017 and \$7 million in 2018 for the Dolly Parton Imagination Library. The Dolly Parton Imagination Library is a program shown to improve school readiness and educational success by mailing free books to children beginning at birth until they are school aged. Eighteen Smart Start local partnerships also received funding to provide or expand Reach out and Read to 35 pediatric clinics in their coverage area. This was part of an award of \$405,000 to partnerships across North Carolina. This program trains pediatric providers to support and engage parents about the importance of reading aloud and to prescribe books to children at wellness check-ups from birth to five years of age, with a special focus on children growing up in poverty.

Recommendation 3: In order to promote these types of evidence-based and evidence-informed strategies to support healthy eating and active living, the NCIOM Rural Health Task Force recommends: (PARTIALLY IMPLEMENTED)

- a) The North Carolina Division of Child Development and Early Education, in collaboration with the Partnership for Children, local Smart Start partnerships, North Carolina foundations, and other collaborating partners, should implement evidence-based and evidence-informed strategies to promote and support healthy eating, increased physical activity, reduced screen time, and active learning environments in licensed child care settings. Such strategies should include, but not be limited to, implementation of SHAPE NC.**

Advocates have worked hard to improve nutrition and increase physical activity in early care settings. Due to their efforts, in October of 2017, North Carolina adopted nutrition, physical activity, and screen time standards for both center and home-based early care and education providers. These new standards meet the requirements of the recommendations from the Task Force on Early Childhood Obesity Prevention. The NC Division of Child Development and Early Education (DCDEE) has created online training modules, and made them available to child care providers, DCDEE staff, and partnering agencies to support implementation of the new standards.

Integrating Healthy Opportunities for Play and Eating (I-HOPE), with members from NC DCDEE, NC DPH, UNC, BCBSNC Foundation, and other stakeholders, was created with a mission of engaging early childhood and health professionals to inform, promote and implement sustainable policies, evidence-based/informed strategies, family engagement, and environmental approaches to focus on healthy eating and movement in early care and education settings for children (0-5). This committee, initiated in 2014, has looked at issues of health and pay of child care workers and how that interfaces with children and made recommendations surrounding the Child and Adult Care Food Program (CACFP).

In addition to providing some training online and through workshops directly, DCDEE has partnerships with many groups to provide training and assistance to child care providers. For example, Shape NC has worked with more than 213 child care and early education sites to implement evidence-based programs that promote best practices in nutrition and active play, impacting more than 10,000 children across the state. Centers that work with ShapeNC have seen significant improvements on healthy eating and physical activity measure. Be Active Kids has trained more than 7,500 child care providers on their evidence-based curriculum to increase physical activity, resulting in reaching 65,000 children across North Carolina. NAP SACC has online tools to help child care providers build healthy eating and physical activity habits in children.

SHAPE NC is currently in its 8th year of funding from the Blue Cross Blue Shield of North Carolina Foundation. It also receives federal dollars from the Social Innovation. With this federal funding, SHAPE NC will expand and add 100 new sites to the current 220 participating sites. These funds also require a rigorous evaluation and will provide valuable insights to the program.

The North Carolina Center for Afterschool Programs, the NC Alliance of YMCAs, and NC DPH launched the “Healthy Out-of-School Time” (HOST) recognition program in 2016. This voluntary program recognizes out-of-school time programs that meet a subset of the National Afterschool Association’s Health Eating and Physical Activity (HEPA) standards. The goal of this recognition program is to help parents select after school programs that encourage healthy eating and active living.

- b) The State Board of Education (SBE) should develop a model local wellness policy that includes evidence-based or evidence-informed age appropriate strategies to reduce overweight and obesity among school aged children. The SBE should promote the use of this model policy by all local education agencies. The policy should include, but not be limited to:**

The State Board of Education has developed an outline of a local wellness policy that explicitly directs Local Education Agencies (LEAs) to apply appropriate, evidence-based goals for nutrition promotion, nutrition education, physical activity and other school-based activities to promote student wellness, reduce childhood obesity and address child hunger. The NC Healthy Schools Section at NC DPI provides technical assistance and training for LEAs regarding the development and implementation of these local wellness policies to adhere to the Healthy Active Children Policy annually to all 115 LEAs.

- 1) A requirement that all food and beverages served during and after school hours comports with the nutritional content required in the National School Breakfast Program and the National School Lunch Program; and**

All participants of the USDA’s National School Lunch Program require local school districts to establish a local wellness policy consistent with the requirements of Federal Regulation (7 CFR 210). Failure to meet these requirements can threaten a districts receipt of federal dollars to supplement the school meals program.

Food and beverages served in vending machines in middle and high schools must meet certain requirements by law. They comply with the National School Breakfast and Lunch programs, however, food and beverages sold on school groups during after school hours are not required to comply with the National School Breakfast and Lunch programs.

- 2) At least 2.5 hours (for elementary students) and 3.75 hours (for middle and high school students) per week of physical education.**

Current SBE policy expresses under Section 4 that elementary and middle schools should move towards having 150 minutes (2.5 hours) and 225 minutes (3.75 hours) of quality physical education per week, respectively. However, most schools do not meet this goal. Schools not offering daily PE must provide a minimum of 30 minutes daily of moderate to vigorous physical activity, which can be met through recess, classroom energizers or other activities. There are currently no minimums or requirements for high school students outlined in the Healthy Active Children Policy.

- c) The State Board of Education should require that:**
 - 1) Schools implement evidence-based educational curricula that are woven through different courses that teach students about healthy weight, good nutrition, and the importance of physical activity; and give students the skills to make healthy choices. Such curricula could include, but not be limited to, MATCH or CATCH.**

The State Board of Education encourages integration, however as written, it does not mandate schools to integrate these concepts into different courses.

- 2) The Healthful Living curriculum be updated to include evidence-based information about healthy weight, nutrition, and physical activity; and to teach students skills to make healthy choices.**

The Healthful Living curriculum has not been updated since the creation of the Rural Health Action Plan. However, they are likely to update it in 2 years as they return to a rotational update protocol.

- d) North Carolina private foundations, the faith community, community-based organizations, and other agencies that work with rural communities should continue to partner and support:**
 - 1) Opportunities for healthy eating and active living (e.g. farmers markets, community supported agriculture, and green spaces for play/exercise); and**
 - 2) Implementation of evidence-based or evidence-informed strategies that have been shown to improve healthy eating and active living among different rural populations. Such strategies may include, but not be limited to, implementation of Faithful Families, Living Healthy, and other promising practices.**

The Duke Endowment currently funds an initiative called “Healthy People, Healthy Carolinas” with the goal of addressing rates of diabetes, heart disease, and unhealthy weight throughout the Carolinas. Through the 10 coalitions they fund, with a mix of non-traditional partners (e.g. YMCA’s, city and county government, employers, faith, etc.), they work on a variety of healthy living interventions. Each coalition has the autonomy to select an evidence-informed intervention to address the conditions mentioned above.

Healthy Places NC, an initiative of the Kate B. Reynolds Charitable Trust, is a place-based initiative working to improve the health and overall quality of life for people in rural North Carolina. With a plan to invest up to \$100 million over ten years to improve the health of residents in partner counties, they have been able to zero in on zip codes. At first, much of the funding went towards green ways and walking trails. As time progressed though, Healthy Places NC began to shift their focus and hone in on social determinants of health.

Communities are increasing opportunities for healthy eating and active living in a variety of ways, often with support from philanthropy, including working on transportation, built environment, school policies, food deserts, and other strategies to improve nutrition and increase physical activity. Blue Cross Blue Shield NC Foundation, The Duke Endowment, and Kate B Reynold Charitable Trust Communities have all invested significant funding to help address healthy eating and active living in communities across the state through evidence-based programs, investing in opportunities for recreation, supporting local health collaboratives and other efforts.

Recommendation 4: Use primary care and public health settings to screen for and treat people with mental health and substance abuse issues in the context of increasingly integrated primary and behavioral health care. (PARTIALLY IMPLEMENTED)

- a) **Community Care of North Carolina, the Division of Medical Assistance, and private payers should provide incentives to encourage primary care medical homes to screen patients during wellness visits for mental health symptoms and substance abuse using validated screening tools. As part of the incentives, practices should be required to offer treatment or referral resources for patients that screen positive and express interest in addressing symptoms.**

The Medicare Access and CHIP Reauthorization Act of 2015 requires CMS to implement a quality payment incentive program, referred to as the Quality Payment Program, which rewards value and outcomes through the Merit-based Incentive Payment System (MIPS) and Advanced Alternative Payment Models (APMs). Participating clinicians must choose from available quality measures to determine payment adjustments. Of all the quality measures, 25 are for mental and behavioral health (e.g. coordination of care of patients with specific comorbid conditions, suicide risk assessments, antidepressant medication management, etc.).

Community Care of North Carolina (CCNC) has created toolkits to inform providers on the screening and billing process for mild to moderate behavioral health conditions. CCNC has also been promoting the implementation of evidence-based models of integrated care, including the Collaborate Care Model, which systematically screens and treats for depression in the primary care setting with support from a consulting psychiatrist.

- b) **The North Carolina Center of Excellence for Integrated Care, Community Care of North Carolina, North Carolina Pediatric Society, North Carolina Academy of Family Physicians, the Division of Public Health, and other appropriate partners should continue to provide technical assistance to increase both the level of integrated care and the amount of integrated care available in all practice settings, including but not limited to, private primary care practices, health department primary care clinics, FQHCs, rural health centers, and health systems. Practices should be offered technical assistance to help with culture change, the right mix of providers, overcoming billing issues, and financial strategies for success.**
 - 1) **The Division of Medical Assistance and private payers should evaluate payment policies to promote integrated primary care and behavioral health practices. This would include, but not be limited to, facilitating and allowing behavioral health and primary care providers to both bill for services provided to the same patient on the same day and incentivizing**

implementation of integrated care through quality initiatives and Medicaid reform.

The Blue Quality Physician Program, housed within Blue Cross Blue Shield of NC, incentivizes the integration of primary care and behavioral health through a double-digit fee increase on practices Evaluation and Management (E&M) and Preventive E&M codes. In order to be recognized by the program, a practice must be a primary care medical home (as recognized by NCQA, JCAHO, or URAC). These recognitions often have a mental and behavioral health aspect. For example, NCQA has a distinction in behavioral health integration that can accompany PCMH recognition.

Under Medicaid transformation, Medicaid beneficiaries with lower intensity behavioral health and intellectual and developmental disabilities will receive integrated coverage for behavioral health and physical health services. PHPs will also have to identify individuals with significant behavioral health needs as a priority population for care management. NC DHHS will also work with the General Assembly to permit PHPs to offer tailored plans for individuals with significant behavioral health (BH) disorders, intellectual and developmental disabilities (I/DD), and traumatic brain injury. Tailored plans would include coverage for common services for individuals with mild to moderate BH or I/DD needs (e.g. outpatient behavioral health services)

- 2) The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, Community Care of North Carolina, the North Carolina Pediatric Society, the North Carolina Academy of Family Physicians, and the North Carolina Foundation for Advanced Health Programs should develop a working group to best support integrated care under Medicaid reform.**

Many groups exist seeking to address integrated care under Medicaid transformation. One group, Community Care of North Carolina (CCNC), has been meeting monthly with the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, NC Pediatric Society, NC Academy of Family Physicians, and the NC Carolina Foundation for Advanced Health Programs to ensure integrated care be a part of Medicaid transformation.

- 3) Toward Accountable Care Consortium (a program of the North Carolina Medical Society) should work with Accountable Care Organizations and other shared savings delivery models to identify and implement best practices for integrated care to improve quality and decrease cost given the ample evidence that well integrated care does both.**

Toward Accountable Care (TAC) Consortium created “The Accountable Care Guide for Child Psychiatry” in 2014. This guide highly recommends Accountable Care Initiatives to integrate

physical health and mental health for children. TAC also created “The Accountable Care Guide for Psychiatry” in 2013. This guide provides examples on how psychiatrists can be involved in ACOs--most often through a collaborative care model.

- 4) Health systems and primary care providers should work to develop increasingly integrated care. This should be done working with technical assistance providers and in the context of current payment systems to maximize sustainability of integrated care, but also with attention to evolving payment reform.**

The Center of Excellence for Integrated Care, housed within the Foundation for Health Leadership and Innovation, and CCNC provide technical assistance to providers. Both work with providers to assist and develop colocation and integrated/consultative models and support integration via protocol and site evaluation. Community Care of North Carolina (CCNC) provides technical assistance to practices interested in expanding their provision of integrated care. This is done a variety of ways. CCNC may assist with strengthening referral pathways, encouraging and building primary care providers capacity to treat mild to moderate behavioral conditions, working with integrated practices to improve efficiency and effectiveness. Within the various CCNC networks, behavioral health teams have become trained to provide intensive technical assistance for integrated care. CCNC’s Practice Transformation Network (PTN) has heavily supported the expansion of knowledge and provision of technical assistance for behavioral health integration. The Center of Excellence assists health systems, both small and large, in integrating behavioral healthcare. Technical assistance provided by the Center of Excellence includes, but not limited to, the facilitation of a site evaluation, development of goals for integration based on the evaluation, lunch and learn workshops, coaching/observation of the team providing care, as well as the provision of online learning options.

- c) The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, Community Care of North Carolina, and state mental health and substance abuse prevention and treatment organizations (North Carolina chapter of the National Alliance on Mental Illness, Alcoholics Anonymous /Narcotics Anonymous) should develop local resources and capacity for evidence-based and evidence-informed strategies to identify, support, and treat people with mental health symptoms and substance abuse issues, including psychological first aid, peer support, lay health workers, 12 step programs, and faith-based services.**

CCNC networks have worked closely with stakeholders in their communities, to promote resiliency/trauma informed care. Additionally, many networks are creatively incorporating support from peer specialists. For example, the Northwest Community Care Network has a peer specialist that connects frequent ER visitors to community resources as an alternative to visiting

the ER. Finally, CCNC requires all members of the care management team to be trained in Mental Health First Aid.

The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services has sponsored many Mental Health First Aid (MHFA) trainings. This 8-hour evidence-based program has held 18 instructor trainings for youth and adults since 2014 and distributed 42,000+ manuals since 2015. As of November 2017, North Carolina has over 46,000 Mental Health First Aiders. There is a total of 588 certified instructors with 148 of them being dually certified to teach both adult and youth curricula. However, funding for MHFA trainings ceased in 2017.

The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services has also worked with UNC to continue training peer support specialists. Now, there 3,242 NC certified Peer Support Specialists.

There has been an increase in LCASs (Licensed Clinical Addiction Specialists) from 2014 to 2018. At the moment there are 2,466 LCAS. The number of CSACs (Certified Substance Abuse Counselors) have remained constant from 2014 to 2018.

Recommendation 5: Educate and engage people in rural communities about new and emerging health insurance options available under the Affordable Care Act as well as existing safety net resources. (FULLY IMPLEMENTED)

The NC Rural Health Leadership Alliance, housed within the Foundation for Health Leadership and Innovation, formed a working group called “Health Insurance and Safety Net Resources” around this priority. The working group has developed one pagers discussing the contours of safety nets and social determinants. The working group has also engaged with legislators through Safety Net Day.

- a) **Existing navigator entities, certified application counselors, hospitals, departments of social services, health departments, local government, safety net organizations, businesses, the faith community, and other nonprofits, should continue to work together collaboratively at the local level to coordinate education, outreach, and enrollment efforts, and to identify gaps in necessary resources.**

Enroll America NC, which closed its doors in 2017, was the leader in outreach and education around the Affordable Care Act in North Carolina. Enroll America educated consumers, trained navigators and in-person assisters, and aided communities and organizations throughout the state working on outreach and enrollment. Organizations have continued working together at state and local levels to coordinate education, outreach, and enrollment efforts to identify gaps in necessary resources. NC Get Covered is one of these collaboratives that works at a state level to organize such efforts. Under the Trump administration, navigator entities have seen a reduction in funding. Just this year, it was announced that navigator funding would be reduced from \$3.4 million received last year to just \$500,000 allocated for North Carolina for the 6th year of the Marketplace. Over the past four years numerous organizations throughout the state have worked to educate and enroll North Carolinians, leading North Carolina to have the third largest enrollment among the 38 states using the federal exchange. More than 500,000 North Carolinians have enrolled in private plans through the federal exchange.

- b) **North Carolina foundations should support local education, outreach, and enrollment activities by targeting rural communities with high unmet needs. High unmet needs should be demonstrated by having large numbers or a large percentage of uninsured, with few navigators, CACs, or other enrollment specialists. Funding should be targeted first to those communities that have a coordinated effort in place to examine the need; identify existing resources and gaps in resources; and develop a plan to outreach to hard to reach rural populations.**

Foundations like The Duke Endowment, Kate B. Reynolds Charitable Trust, and BCBS of NC Foundation are funding technical assistance organizations and local collaborative efforts like the

Enroll America NC, Care Share Health Alliance, NC Navigator Consortium and others working on education, outreach, and enrollment.

The Care Share Health Alliance “Collaborative Network” is comprised of local partners who integrate medical, preventative, community, social, and economic resources to achieve collective outcomes through a coordinated system of care. Networks typically provide eligibility screening and enrollment services, social resources, and other medical services.

In 2014, Kate B. Reynolds Charitable Trust supported the creation of NC Get Covered. NC Get Covered, housed administratively within the Care Share Health Alliance, was able hire two full-time staff to connect and convene organizations affected by or interested in the implementation of the ACA. Partners include CBOs, in-person assisters, health insurance carriers, agents and brokers, health care providers, hospitals, faith-based organizations, community health centers, and many more.

- c) The North Carolina General Assembly and North Carolina Department of Health and Human Services should examine the potential impact of any changes to Medicaid payment and delivery models on rural communities before implementing major system reforms.**

The NC Department of Health and Human Services (DHHS) analyzes the potential impact of Medicaid payment and delivery reform on various populations in North Carolina. The impact of changes on rural areas are considered. Between the General Assembly’s interest in health care delivery in rural areas and of the Office of Rural Health within DHHS, impact on rural communities is carefully considered.

- d) The North Carolina Institute of Medicine should work with United Way’s 211 line to transition the maintenance of www.nchealthcarehelp.org to www.nc211.org to better promote the availability of safety net resources across the state. North Carolina foundations should encourage that safety net grantees review and update information on the site at least once annually.**

The North Carolina Institute of Medicine worked with United Way’s 211 line to transition maintenance to United Way. NC 211 is an information and referral service provided by United Way of North Carolina. Their robust database has information on thousands of programs and services in NC to meet specific health and human service needs including food, shelter, energy assistance, housing, parenting resources, health care, substance abuse, and specific resources for persons with disabilities. Information in 211 is updated regularly.

Recommendation 6: Ensure adequate incentives and other support to cultivate, recruit, and retain health professionals to underserved areas of the state. (PARTIALLY IMPLEMENTED)

- a) The North Carolina Community College System should identify, disseminate, and expand successful strategies to help recruit and retain health professional students into two-year and four-year degrees on or near the community college campus. Such models could include, or be modeled after, other successful initiatives, including but not limited to:**

The NC Community College System and UNC System collaborated to develop the Uniform Articulation Agreement between the University of North Carolina RN to BSN Programs and the NC Community College Associate Degree Nursing Programs. The articulation agreement provides a seamless progression plan that includes required general education and nursing prerequisite courses that are acceptable to all state funded RN to BSN programs. Students who follow the progression degree plan will meet the entrance requirements at all of the North Carolina public RN to BSN programs. Nurses may then apply to any of these programs without taking additional and sometimes duplicative courses. The articulation agreement ensures that Associate Degree Nursing graduates at NC Community Colleges meeting GPA requirements and with unrestricted RN license in North Carolina could transfer their credits to all 11 UNC System universities with RN to BSN programs. (Due to the competitiveness of nursing programs, community college transfer students that meet the standards are guaranteed admission to a UNC System university, but not necessarily the one of their choice.)

In February 2018, the Registered Nurse to Bachelor of Science in Nursing Articulation Agreement (RN to BSN AA) between the State Board of Community Colleges and the nine signatory North Carolina Independent Colleges and Universities (NCICU) RN to BSN programs was signed. The articulation agreement provides the same seamless progression plan as the one with the public universities.

- 1) RIBN program**

In 2010, Asheville-Buncombe Technical and Community College and Western Carolina University admitted the first cohort of dually enrolled RIBN students. RIBN has expanded to include eight regional collaborative partnerships composed of twenty-eight community colleges, two private universities/colleges and six public universities. In 2016-17, there were 275 students dually enrolled in the RIBN programs across the state, and seventy-four graduated with their baccalaureate.

- 2) 2+2 programs**

Beyond the system-wide articulation agreements, individual community colleges have bilateral agreements with individual universities to carry out 2+2 programs. Examples are described below.

- Neurodiagnostics and Sleep Science: UNC Charlotte + five community colleges (four rural) This program is a 2+2 program, meaning that students are admitted to the University with an associate degree, and students complete the last two years of the bachelor's degree (online) through this program. The emphasis of the curriculum is to enhance and advance a student's professional career in neurodiagnostics and sleep science, with additional education in advanced practice, administration, education, research, and leadership.
- Respiratory Therapy: UNC Charlotte + 14 community colleges (12 rural) The Bachelor of Science in Respiratory Therapy degree enhances an individual's professional career in Respiratory Therapy with additional education in administration, research, and critical care. This program is a 2+2 program, meaning that you are admitted to the University with an associate degree and complete the last two years of the bachelor's degree through this program (in this case, online).

b) North Carolina academic health education programs supported by North Carolina general funds should place a priority during the admissions process, on students who grew up in, and/or have a desire to practice in, health professional shortage areas. The North Carolina General Assembly should consider different methods of incentivizing North Carolina health professional schools and community clinical practice sites to produce the mix of health professionals needed to address the unmet health needs of the state. Priority should be given to programs and community clinical practice sites that increase the number of health professionals who set up and maintain practices in rural and underserved areas.

East Carolina University Brody School of Medicine, Campbell University School of Osteopathic Medicine, and UNC School of Medicine consider the geographic origins of applicants during the admissions process.

UNC School of Medicine has also begun considering geographic origins in pipeline programs, like MED, to incentivize rural applicants to apply to medical school.

The Kenan Primary Care Medical Scholars Program at UNC School of Medicine, a program meant to inspire students to pursue rural, underserved patient practice in NC in primary care specialists, has been steadily growing. UNC School of Medicine also created the Office of Rural Initiatives in 2017 to align related education, training, and retention of primary care physicians to rural and underserved areas of North Carolina. The Office currently houses the Kenan Primary Care Medical Scholars Program, the Rural Interprofessional Health Initiative, Rural Primary

Care Fellowship program, and the Rural Medicine Project Undergraduate cohort program that is in partnership with the Office of Scholarships and Student Aid at UNC-Chapel Hill.

The Rural Interprofessional Health Initiative out of UNC's Office of Rural Initiatives is a three-year pilot program that provides students in health fields to serve and learn in underserved rural clinic settings. The goal of this initiative is to establish interprofessional clinical experiences in collaboration with other health professions schools at UNC. They collaborate with the School of Public Health, Pharmacy, Dentistry, Nursing, Social Work, and Department of Allied Health Sciences.

Cape Fear Valley Health was reclassified as a rural hospital in 2016 to begin its residency program in collaboration with Campbell University's medical school. This program is expected to grow to host more than 150 residents in a few years. Given that residents typically practice within a specific radius of where they completed their residency program, this could be a huge boon to eastern North Carolina. Cape Fear offers residency tracks in Emergency Medicine, General Surgery, Internal Medicine, and Obstetrics and Gynecology.

In 2016, the North Carolina General Assembly allocated \$8 million in the yearly budget for the Mountain Area Health Education Center (MAHEC) for a new building and \$3 million for administration, faculty, and programs. These funds are ultimately meant to support 50 residents in OB/GYN, general surgery, and psychiatrists to address the provider gap in western North Carolina.

c) The North Carolina Area Health Education Centers Program, in conjunction with North Carolina academic health education programs, should identify best practices for rural clinical placement opportunities and help to disseminate those models across the state. Such models may include, but not be limited to:

1) Stipends to rural health care professionals to pay for clinical supervision.

NC AHEC provides stipends for each teaching hospital across the state, including rural and underserved areas of the state, to operate their residency programs for primary and community care (e.g. family medicine, pediatrics, internal medicine, general surgery, and obstetrics and gynecology).

UNC School of Medicine pays a nominal fee to teach the medical students. This is run through the office of medical education.

2) Development of rural longitudinal placement rotations

UNC School of Medicine currently houses the Primary Care and Population Health Scholars. This program is a longitudinal program for medical students interested in primary care and public health concepts. The School of Medicine also has a longitudinal integrated curriculum that allows students to be in all clerkships (e.g. family medicine, psychiatry, neurology, internal medicine, pediatrics, and OBGYN). This curriculum is offered at the Asheville and Charlotte Campus. The Community Based Longitudinal Care Course, another longitudinal placement program offered through UNC, provides a 16-week longitudinal experience in either family medicine or internal medicine at select clinic sites. Sites include Carrboro, Moncure, Burlington, Wilmington, Wake County, and Greensboro.

3) Expansion of the number of rural residency programs for primary care. For each new slot created, the North Carolina General Assembly should appropriate \$75,000 to \$100,000 per resident per year.

Session Law 2018-88 (HB 998) directs the Department of Health and Human Services to study and report recommendations to create incentives for medical education in rural areas and to assist rural hospitals in becoming a designated teaching facility. These recommendations and the technical assistance provided by DHHS are likely to lead to an increased number of rural primary care residency programs; however, it is important to note that no money will be allocated until the study has been conducted by DHHS.

In central North Carolina, Piedmont Health, in collaboration with UNC School of Medicine, is planning to expand the Family Medicine Residency Program at the Prospect Hill Community Health Center.

4) Provide support for primary care health care professionals to improve quality of care and implement new models of care.

NC AHEC provides on-site coaching services to continue supporting high-quality care, on-site quality improvement consulting, workshops, trainings, webinars, peer-to-peer learning events and group collaboratives to better enhance care and improve patient and care team satisfaction. NC AHEC, in collaboration with Alliant Quality, also provides support to small practices throughout North Carolina to successfully participate in the CMS Quality Payment Program Merit-based Incentive Program. Quality improvement programs through NC AHEC, and regional AHECs, are meant to prepare providers for value-based payment initiatives (e.g. EHR Meaningful Use).

Within each CCNC network, there is at least one designated clinical director who takes the lead in spreading quality improvement initiatives. In conjunction, each network designates QI teams,

with a lead QI coordinator, to employ the model of rapid cycle quality improvement developed by the Institute for Healthcare Improvement (IHI). Typical improvement projects include process improvement, EHR optimization, and data analytic services.

d) The North Carolina General Assembly should appropriate \$2.0 million in recurring funds to the Office of Rural Health and Community Care to:

- 1) Support additional staff with responsibility to designate areas of the state as geographic, population, or facility-based Health Professional Shortage Areas (HPSAs) to support the recruitment of primary care, mental health, and dental health care providers.**

The North Carolina General Assembly has not allocated funds for additional support staff.

- 2) Expand efforts and resources necessary to enhance recruitment and retention of primary care, general surgeons, behavioral health, and dental health professionals into HPSAs.**

The North Carolina General Assembly has not appropriated recurring funds to the Office of Rural Health and Community Care to expand efforts and resources necessary to recruit and retain primary care, general surgeons, behavioral health, and dental health professionals into HPSAs. However, Session Law 2018-88 (HB 998) directs NC DHHS to identify and make recommendations to address the need for dentists in rural areas.

- 3) Expand the availability of state loan repayment or other incentive payments to recruit primary care, general surgeons, behavioral health, and dental health professionals into HPSAs. The Office should maximize National Health Service Corps resources first before using the state appropriations.**

Session Law 2018-88 (HB 998) directs the Office of Rural Health to coordinate with the National Health Service Corps and Federal Loan Repayment programs, and any publicly or privately funded programs (e.g. North Carolina Medical Society Community Practitioner Program) to maximize funding in order to increase the number of health care providers in rural areas. Session Law 2018-88 also suggests collaborating with NC AHEC to understand funding options to create incentives for attracting residents and students to rural areas of the State.

State loan repayment is now available to general surgeons working at critical access hospitals and small rural hospitals. Behavioral health providers now qualify for the North Carolina State Loan Repayment Program, which helps mental health professionals provide primary and psychiatric care to people in rural and underserved areas.

- e) **The Office of Rural Health and Community Care, in conjunction with the North Carolina Medical Society Foundation, should:**
- 1) Identify and disseminate model recruitment strategies, including strategies that have been successful in matching potential recruits and their families with the broader community.**
 - 2) Record and review individual provider retention assessments, aggregate state data to determine best retention practices, and disseminate these models across the state.**

The Office of Rural Health (ORH) has developed more robust data analysis capabilities since the plan was established. These capabilities allow the ORH to understand the causes of persisted failed recruitment and retention. These data capabilities will shape future policies and strategies as they move forward in identifying best strategies to recruiting and retaining providers and how to best administer loan repayments. The ORH, in collaboration with the Sheps Center, aggregate and de-identify data to delve into best practices to maximize provider retention. The Sheps Center is also a part of a collaborate with other states to gather and share best practices with provider retention.