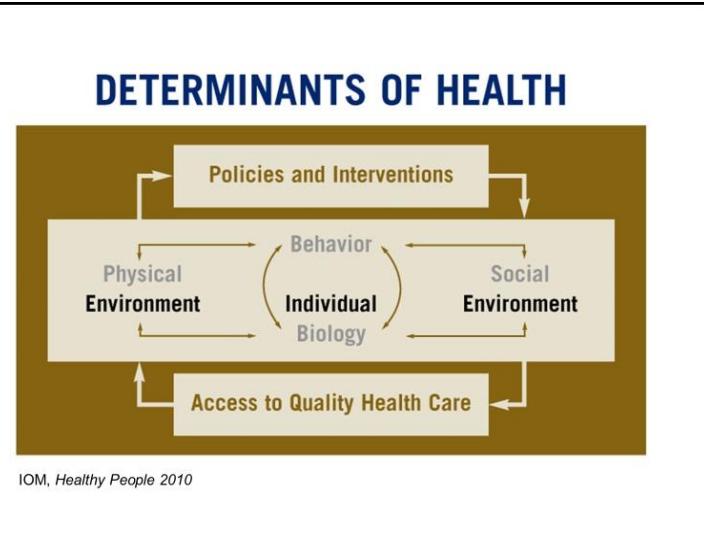


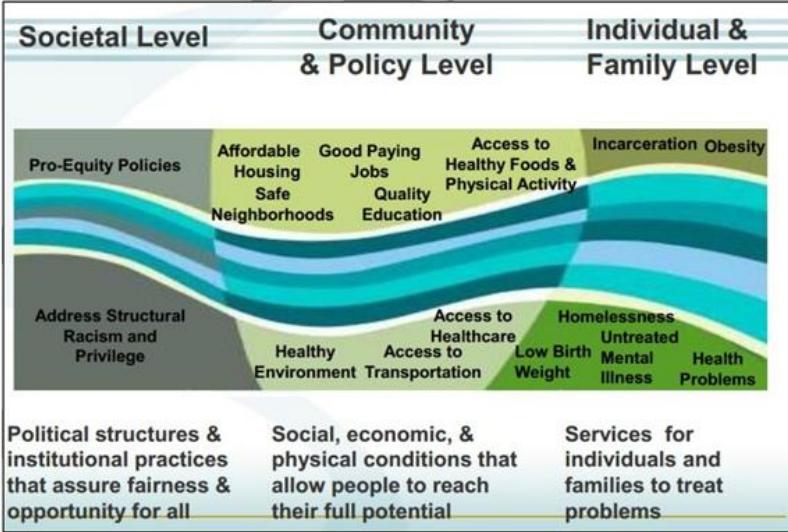
North Carolina Vision for Buying Health

**(Aka: Determinants of Health,
Social Determinants of Health,
Social and Structural Determinants of Health,
Health-Related Resource Needs)**

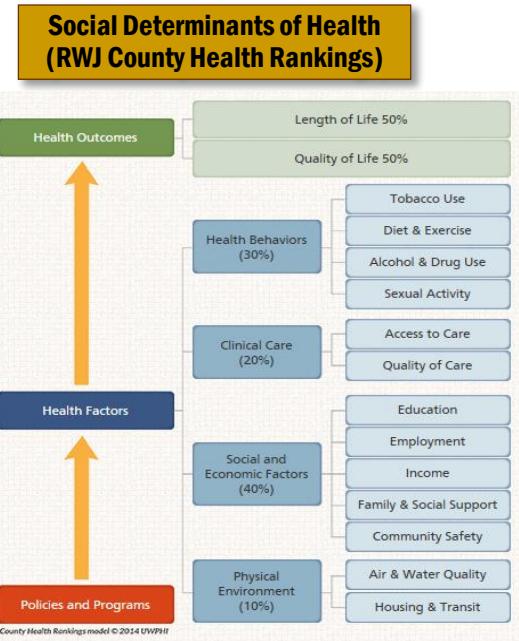
Developmental Disability Consortium in NC
Feb 12th 2018



Social and Structural Determinants of Health



<http://www.dph.illinois.gov/topics-services/life-stages-populations/infant-mortality/toolkit/understanding-sdoh>



Abraham Flexner:
A Medical Education in the United States and Canada 1910

The physician has a duty to promote social conditions that conduce to physical well-being.

Social Determinants of Health

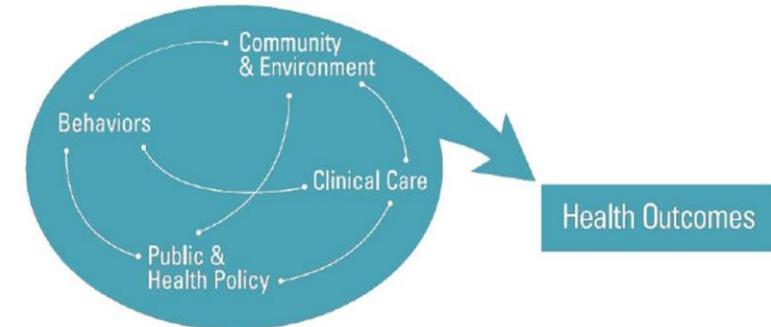
- Conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels and are mostly responsible for health inequities.

20

World Health Organization

Healthcare in the 21st Century: Age of the New Morbidities

Components of Health

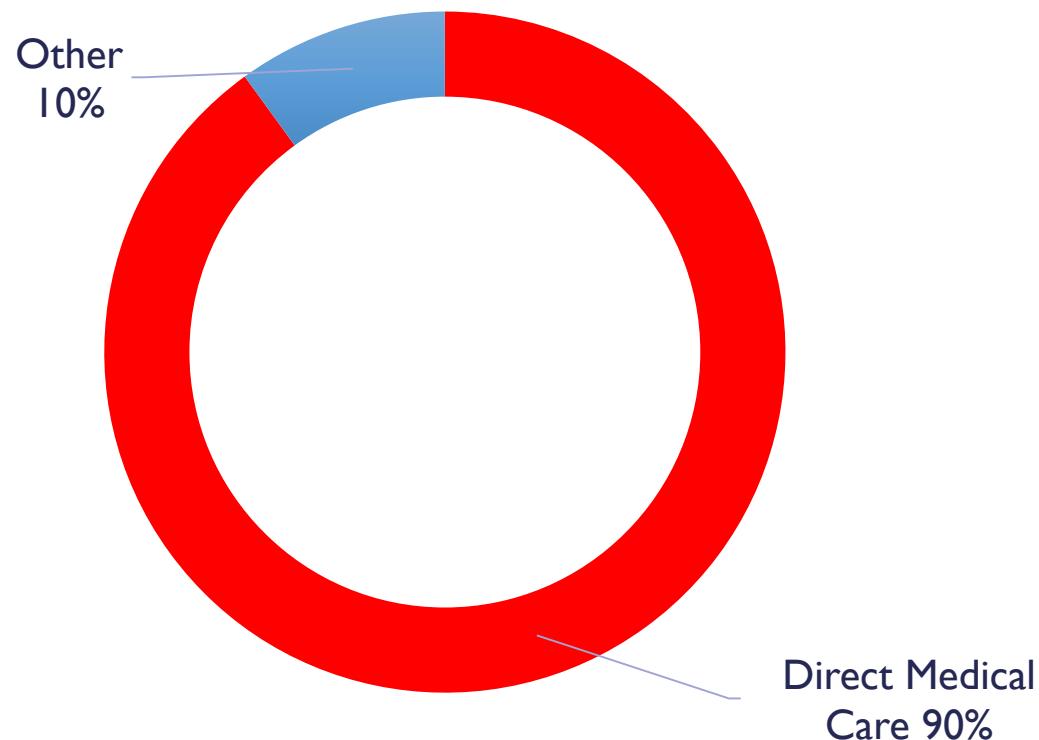


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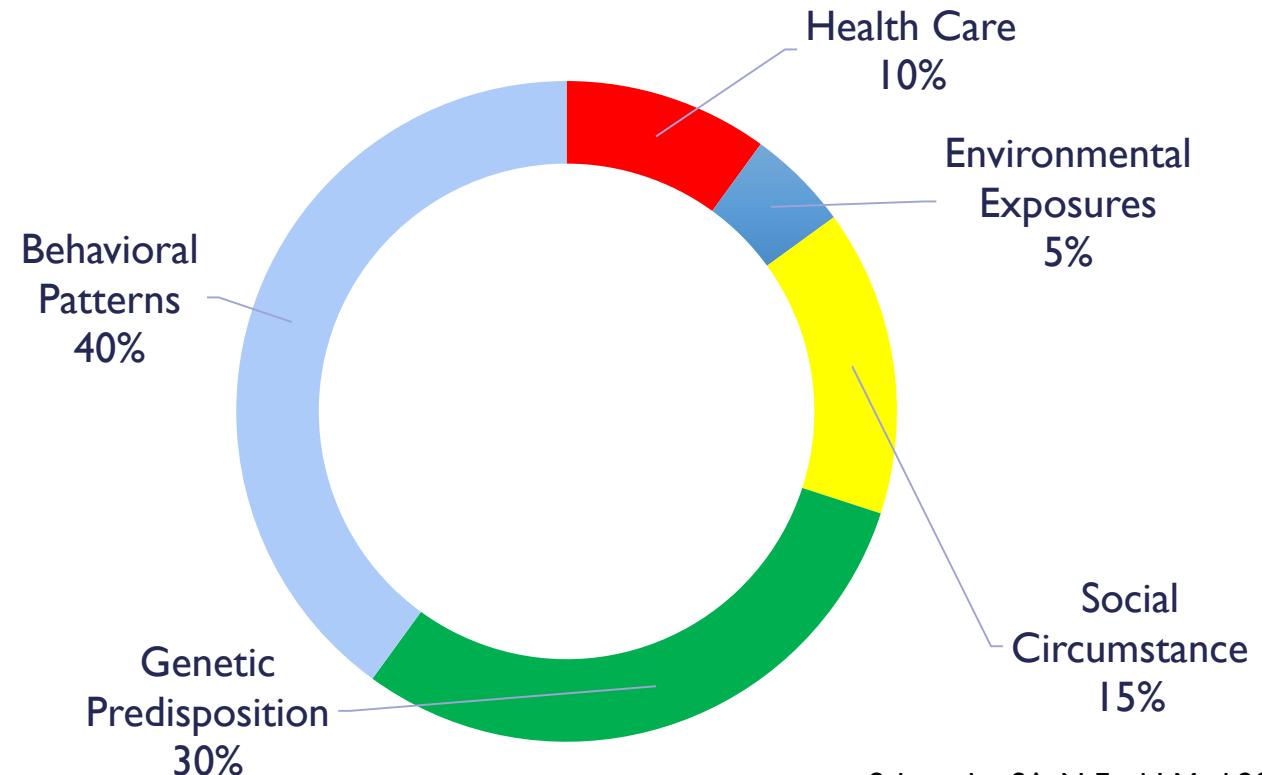
Joseph L. Wright, MD, MPH. DC Baltimore Research Center on Child Health Disparities

Buying Health

Health Care Spending

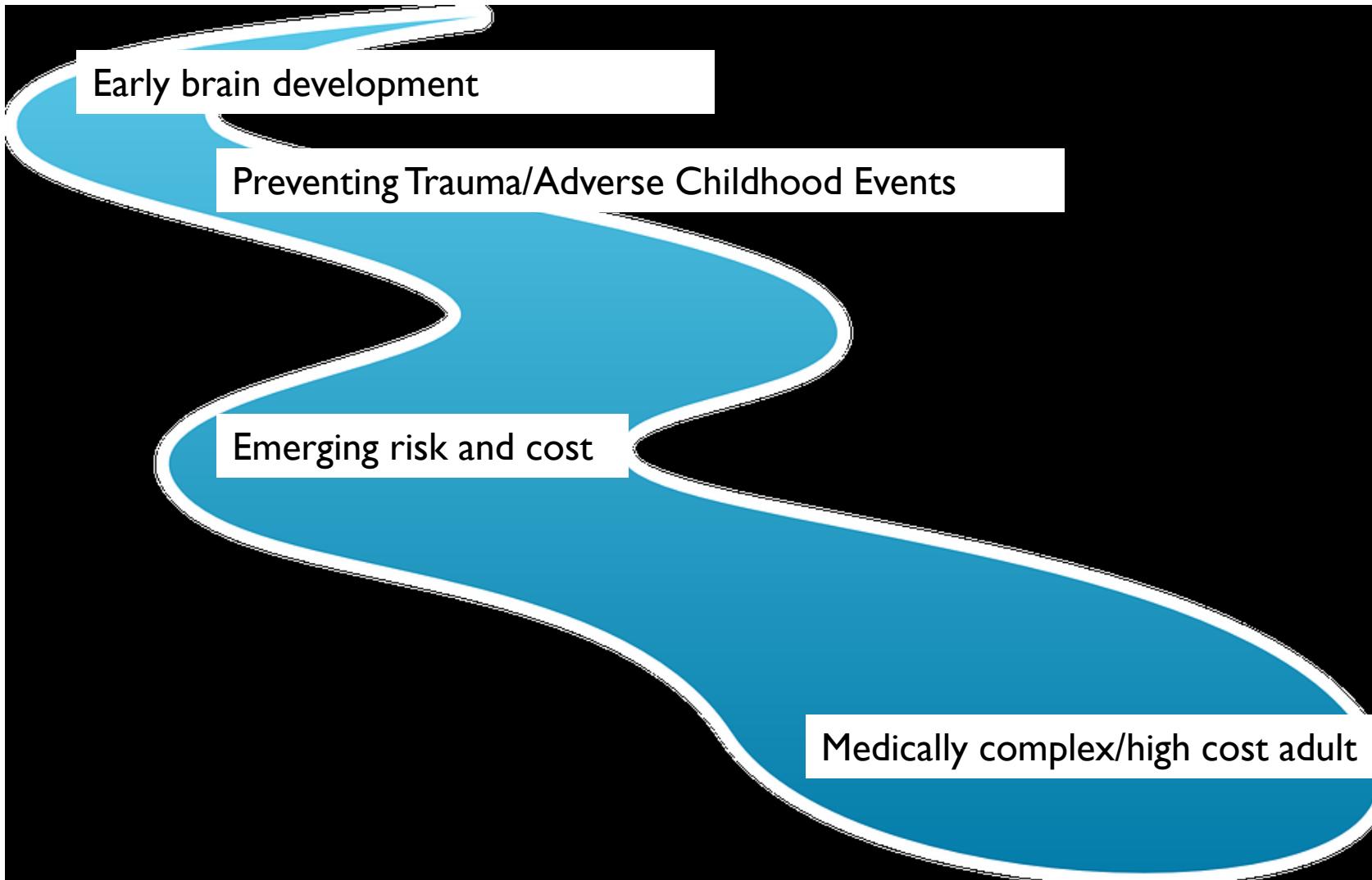


Drivers of Health



The opportunity to improve health lies in addressing a person's unmet health-related resource needs

Go as far upstream as we can



Considerations

- Ultimate goal is to have this be baked into how North Carolina addresses health going forward.
 - Intentional, step-wise, additive
 - Sustainable, practical, meaningful, doable
- Medicaid Transformation a big part of this, but not all of it
- Be informed by and build on existing work, efforts, resources
 - May fill a void, augment a project, or be in tension with some elements
- Balance of pragmatic and aspirational
- What language do we use to communicate these elements?

Multi-layered Approach for Addressing Health-Related Resource Needs

- Mapping of Social Determinants Indicators
- Statewide Resource Database
- Standardized screening for unmet resource needs
- Medicaid Managed Care – 1115 Innovation Waiver
- Work force
- Re-aligning or connecting existing resources where possible

Statewide mapping of SDOH indicators

- Statewide, but able to drill down to a region and to local/census tract level
- Identify and codify areas of disparity to inform and evaluate program planning and investment
- Inform Community Needs Assessments
- Facilitate integration and enhance partnerships between healthcare systems and community organizations

State Center for Health Statistics

- GIS/ESRI Story mapping of 12 SDOH indicators with a summary statistic
 - Social and Neighborhood (% < HS Diploma, % Households with Limited English, % Single Parent Households, Low Access to Healthy Foods, Food Deserts)
 - Economic (Household Income, % Poverty, Concentrated Poverty, % Unemployed, % Uninsured)
 - Housing and Transportation (% Living in Rental Housing, % Paying > 30% of Income on Rent, % Crowded Households, % Households without a Vehicle)
- Current Data Sources
 - American Community Survey five-year estimates
 - U.S. Department of Agriculture
- Completed map for New Hanover Medical Center
 - <http://nc.maps.arcgis.com/apps/MapJournal/index.html?appid=c2ff664f23b7416bb32e615d9d18d9ad>
 - Will use updated December data to complete statewide one – expected end of February
 - Work with UNC Institute of Public Health via AHEC support to refine indicators for mapping

New Hanover Regional Medical Center

Social and Neighborhood

People with higher incomes, more years of education, and who live in a safe environment have better health outcomes and generally have longer life expectancies (1). Persons without a high school diploma, non-English speaking households, single-parent households and limited access to healthy food are key social and neighborhood indicators.

[Percent with Less Than High School Diploma](#)

[Percent Households Speaking Limited English](#)

[Percent Single Parent Households](#)

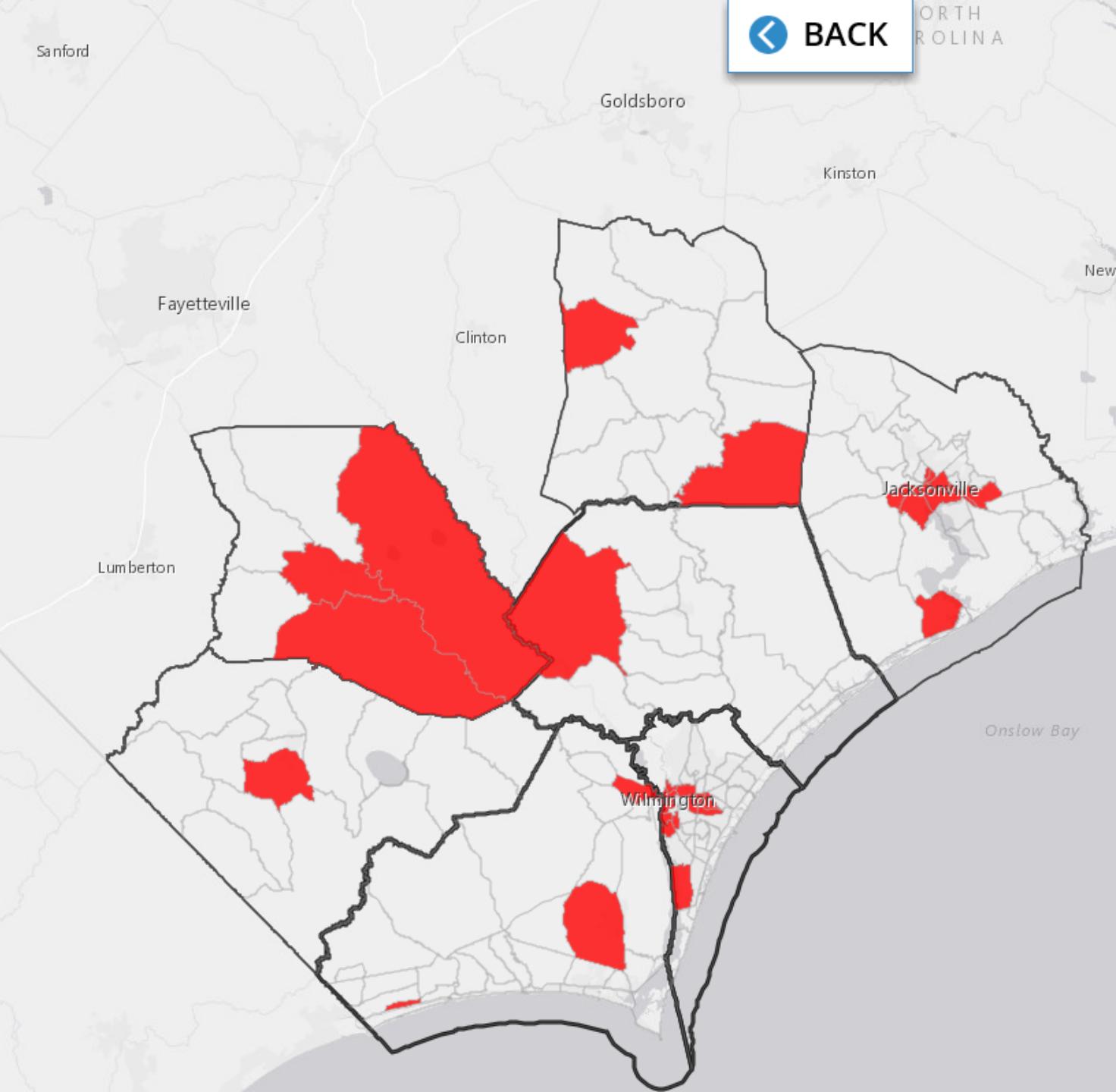
[Low Access to Healthy Foods](#)

[Food Deserts](#)

[Turn All Layers Off](#)

[Education](#)

An estimated 73,426 (13.1%) adult residents over the age of 18 did not have a high school diploma in the service region. There are great differences between



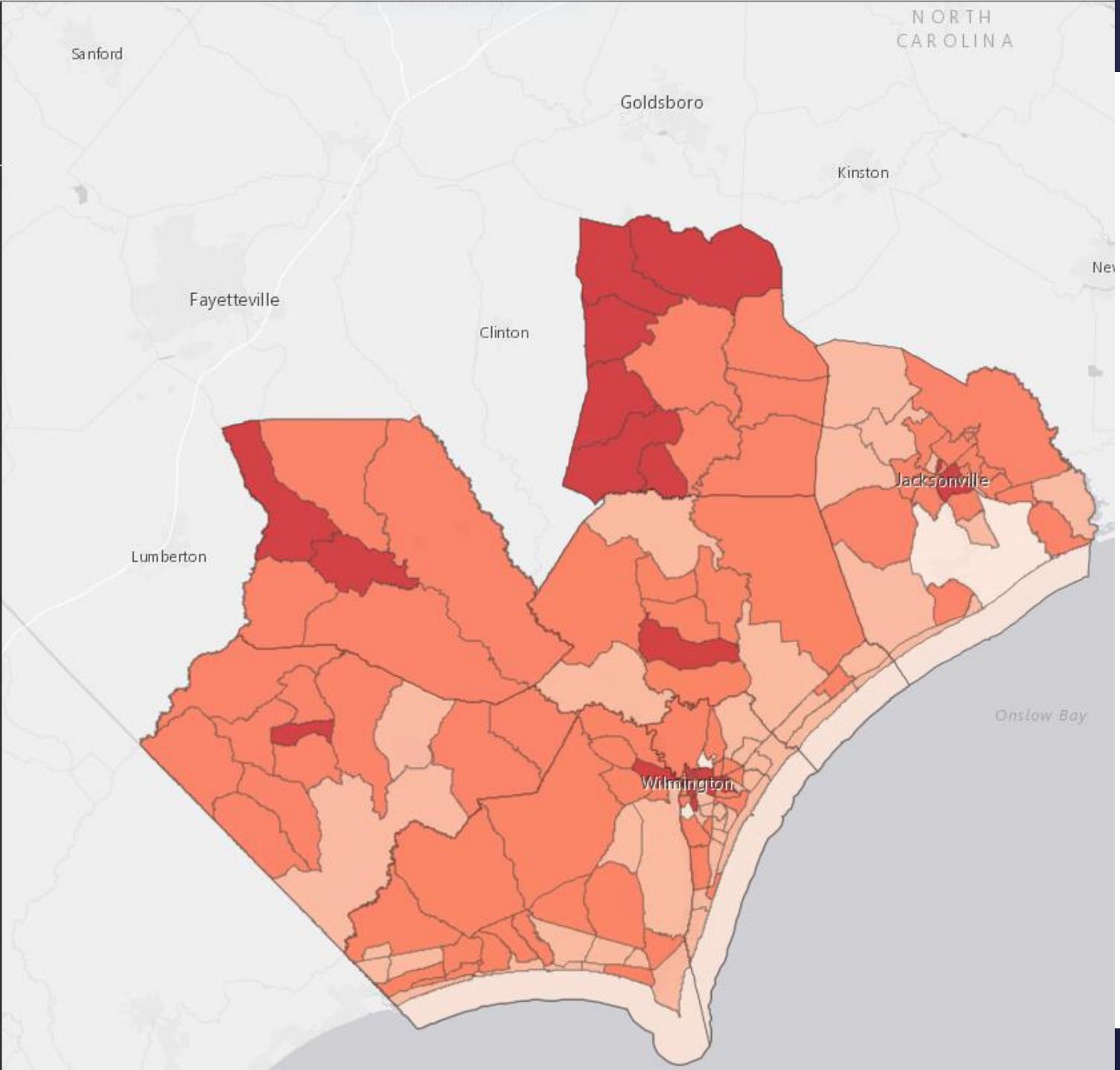
Putting it Together

Looking at 12 different maps of the Social Determinants of Health (SDOH) at the same time can be hard. By using an index, the maps can be combined into one map in order to view the indicators together. The SDOH index combines the indicators within the three domains: Social & Neighborhood, Economic, and Housing & Transportation. The overall index is an average of the three domains.



- Z-scores were used to create the index, which allows for standardization among all of the variables. A z-score is a measure of how many standard deviations above or below an estimate is from an overall mean. So, the index is a metric of whether the SDOH in a census tract are above or below the regional average and by how much. High values indicate tracts with the highest disparities among the social determinants of health.

(1) NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011.



Statewide Resource Database and Community Service Provider Integration

- Up-to-date resource of community services
- Open to anyone, searchable on-line or by a Call Center component for “warmer” help
- Capacity to do referrals, track the outcome of referrals, and connect local community service providers
- Analytic functions to assess demand, need, timeliness of referrals
- Integration and interface capabilities with EHRs, existing local/regional/agency data bases

Standardized Screening

- Statewide, standardized screening to consistently identify possible unmet health-related resource needs
- Convened a Technical Advisory Group of stakeholders
- Screening domains
 - Housing instability
 - Food insecurity
 - Transportation access
 - Interpersonal safety (ACEs)
- Design Principles
 - Derived from other validated tools (e.g. Health Leads, PRAPARE, Hunger Vital Sign, PMH)
 - Simple & streamlined to be accessible to broadest audience/ settings
 - Consistent to help with data collection, community investment, risk-adjustment
- Implementation Considerations
 - Phased in – Piloting first in ready settings
 - PHPs at launch of managed care
 - AMH with advancing capabilities

Medicaid Transformation

- **Care management**
 - Training on Trauma Informed Care, Resource Navigation
 - Standardized screen as part of initial care needs assessment upon enrollment into plan
 - Those with unmet resource needs → care management/patient navigation/community health worker to navigate to resources
 - PHP share specific patient data with PCPs and aggregate with state (e.g. % of enrollees screened, % with unmet needs)
- The State's **Quality Strategy** encourages PHPs to focus on their effectiveness in screening for and addressing social issues;
- **Withhold-based** incentives to encourage plans to conduct SDOH required screenings and follow up
- **Use of in lieu of services and value-based payments** offer tools and strategies to PHPs for financing health-related services
- **Investment requirements or rewards** to PHPs to make some level of investment in community-based resources
- **Evolving role of AMH and care management platform** in screening and linking to resources
- Possible **risk-adjustment** on social risk in futures

Public-Private Pilots Projects

- Investment to test, scale, strengthen and sustain evidence-based, public-private initiatives in ~3 regions to more closely link the healthcare and social services systems
- Asking for CMS expenditure authority of ~\$350- \$700 of Medicaid/Medicaid match dollars to support pilots in amended 1115 waiver application
- Combination of DHHS (Medicaid), philanthropic, PHP, health system, county (DSS, LHD, community organization), and other investment and participation
- Regions reflect geographic diversity of state (rural/urban)
- Design, evaluation, stakeholder engagement expertise
- Focus on evaluation and ability to move forward evidence base to sustainable financing

Demonstration Target Population

Target Population

- Demonstration projects must target individuals with complex health and social needs¹ and/or children and families experiencing or at risk of significant and multiple adverse childhood experiences.
 - Populations that may meet the definition include, but are not limited to:
 - Children and adults with poorly controlled chronic conditions (e.g., diabetes, asthma)
 - Children and adults who are homeless, at risk of being homeless, living in unsafe/unhealthy housing conditions or energy insecure
 - Children and adults who are food insecure
 - Children who have experienced or are experiencing multiple adverse childhood experiences and/or toxic stress
 - Pregnant women with complex social needs such as housing, food and interpersonal violence
 - Adults with repeated incidents of avoidable ER use, hospital admissions or nursing facility placement
 - Elderly and disabled experiencing or at risk of social isolation
 - Children, pregnant women and adults with mental health or substance use disorders
- Demonstration applicants must identify proposed target population(s) and provide rationale on how the population(s) complies with the State's parameters.
 - Demonstration applications must also demonstrate the capacity to identify individuals who meet their target population criteria.

¹Defined as: "Patients with complex health and social needs experience poor outcomes despite extreme patterns of hospitalizations or emergency care. Although significant health care resources are spent on these patients, the care they receive has not made them healthy or well."

Example Interventions

SDOH Domain	Example Interventions
Housing	<ul style="list-style-type: none">• Housing transition services, such as:<ul style="list-style-type: none">◦ Tenant screening/housing assessment◦ Development of a housing support plan◦ Assistance with housing search, application and choosing process◦ Ensuring living environment is not adversely affecting occupants' health by assessing potential health risks◦ Move-in services include arranging the actual move, ensuring the unit and individual are ready for move-in, and helping beneficiaries adjust to the new home and neighborhood.◦ Assistance with one-time move-in expenses, such as security deposit; arranging for details of the move; and development of a crisis plan that includes prevention and early intervention services when housing is jeopardized.◦ Assistance with completing reasonable accommodation requests as needed to obtain housing◦ Linkages to recovery oriented supportive housing• Housing and tenancy support and sustaining services, such as:<ul style="list-style-type: none">◦ Education and training on tenants' and landlords' role, rights, and responsibilities◦ Assistance in resolving disputes with landlords and neighbors to reduce the risk of eviction◦ Assistance with housing recertification process◦ Assistance with communication skills, financial management, budgeting, securing benefits, developing meal preparation skills, utility management, and public transportation skills◦ Assistance with addressing behaviors that put housing at risk• Housing quality and safety improvement services, such as:<ul style="list-style-type: none">◦ Repairs for issues such as mold, pest infestation, or malfunctioning heating or air conditioning systems◦ Modifications to improve accessibility of housing (e.g., ramps, rails) and safety (e.g., grip bars in bathtubs)• Medical Legal Partnership to provide assistance with housing issues, such as assistance if past criminal record poses barrier to securing housing or breaking lease due to unhealthy living conditions• First month's rent consistent with 1915(c)• Short-term recuperative care after hospitalization with linkages to permanent housing

Food	<ul style="list-style-type: none">• Connecting individuals to food supports, such as:<ul style="list-style-type: none">◦ Assistance with applications for SNAP and WIC◦ Locating and referral to food banks or community-based summer and after-school food programs• Targeted nutritious food or meal delivery services for individuals with medical or special dietary needs• Co-locating food pantries in health care settings• Nutrition counseling and education
Transportation	<ul style="list-style-type: none">• Transportation services to health-related and social services, including pharmacies, grocery stores, farmers' markets, employment assistance sites, social engagement activities such as church, parks and social service agencies, and community engagement activities.

Interpersonal Safety/Toxic Stress

- Evidence-based home visiting programs and parent support (e.g., Parents as Teacher, Nurse Family Partnership, Child Parent Psychotherapy, and Child First)
- Screening procedures to identify interpersonal violence (IPV) for EDs, hospitals, primary care offices, and OB providers and linkages to community-based social service agencies and mental health agencies
- Linkages to increase access to HIV/STI testing or incorporating HIV/STD testing within Domestic Violence Service Agencies
- Targeted training for clinicians and therapists in IPV intervention, promotion of resilience in children with ACEs, and trauma-informed care
- Community-based prevention and interventions, including linkages to schools and programs such as Reach Out and Read
- Dyadic treatment for families
- Linkages to programs that increase adults' capacity to participate in community engagement activities
- Transportation needs to domestic violence service providers and services listed in transportation domain, as victims transition out of a traumatic situation

Workforce

- Develop, train and strengthen workforce needed to support SDOH initiatives/Trauma Informed Care
- Community health workers, case managers, staff of AMHs, etc.

Re-aligning or connecting existing resources

- Opportunities – e.g. Of the 57,650 births in which NC Medicaid paid for prenatal care and delivery in 2016, 28.8% of women (17,000) did not have prenatal WIC.
- Examine ways to better align existing resources
 - Medicaid, WIC, Head Start, Pre-K, SNAP, Low Income Heat and Energy Assistance Program
 - Joint enrollment?