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## A CULTURE OF HEALTH FOR EVERYONE:

### A research review on how we invest in public health and who benefits

By SYDNEY IDZIKOWSKI, RESEARCH ASSISTANT

#### Greater public investments translate to better health outcomes

A healthy population is vital to achieving economic prosperity in North Carolina. Good health allows for stronger communities, greater work productivity, and higher capacities for learning. When individuals and families have the resources necessary for a well-balanced diet, safe and accessible recreational spaces, and affordable and quality health care, all North Carolinians experience an enhanced quality of life and have stronger capabilities to achieve their full potential. Healthier North Carolinians also means greater protection against chronic health conditions, fewer preventable visits to the emergency room, and lower overall health costs for everyone.<sup>1</sup>

**However, the opportunities and systems that support the health of North Carolinians have not been distributed equitably.** Discriminatory systems and policies—such as unequal distribution of wealth, housing segregation, jobs that don't pay wages that allow families to afford the basics, and the placement of harmful chemical plants in communities of color or in areas with concentrated poverty—have made strong, long term health largely out of reach for far too many North Carolinians.

These health inequities result in greater obstacles to achieving good health across racial and economic groups. In North Carolina, and nationwide, people of color and people living with low incomes typically have worse health than their white and/or wealthier counterparts. **A history of public policies designed to sustain health inequities have essentially equated health with wealth.** Existing systems quarantine the opportunity to achieve the highest level of health to those who can afford it. Poverty, in and of itself, can be considered a predictor for poor health. For example, not knowing if you will be able to afford housing, groceries, medicine, or transportation causes constant stress, which negatively impacts both mental and physical health. Additionally, households that are financially insecure typically have fewer healthy births, less access to medical care, and higher death rates.<sup>2</sup>

Nearly half of North Carolina’s children live in households with low incomes, placing significant barriers to their success and long term health. Any efforts to improve health for all North Carolinians must recognize the role wealth plays in health and work to build more equitable systems to address these differences in outcomes.

**As the state continues to grow, North Carolina cannot afford to leave behind the health of entire communities.**

By means of the state budget, North Carolina has the tools to invest equitably in systems that ensure all North Carolinians can achieve the highest level of health and wellbeing. Addressing health equity through public investments means focusing spending efforts on communities that face the most significant barriers to achieving good health. The state can support a comprehensive set of investments that serve as the foundation for healthy communities.

It is well-documented that adequate public investments in health play an important role in improving health and wellbeing. To date, “health spending” is often narrowly considered spending on health coverage or access, alone. However, the health of North Carolinians actually begins where we live, learn, work, and play. North Carolina’s health status is determined by the social policies that shape the world around us, through housing quality, proximity to parks and grocery stores, clean air and water, educational attainment, and a living wage, among others. Health truly transcends the boundaries that have been built to separate departments, agencies, and systems. Thus, factors beyond health coverage and access must be considered when talking about investments that advance health equity. Sufficient spending in education, housing, social services, infrastructure, environmental quality and other areas are essential to improving health and wellbeing in the Tarheel State.

**FIGURE 1: The Culture of Health Framework**

*Developed by the Robert Wood Johnson Foundation, The Culture of Health Framework describes the steps necessary to create the desired outcomes: improved population health, well-being, and equity.*

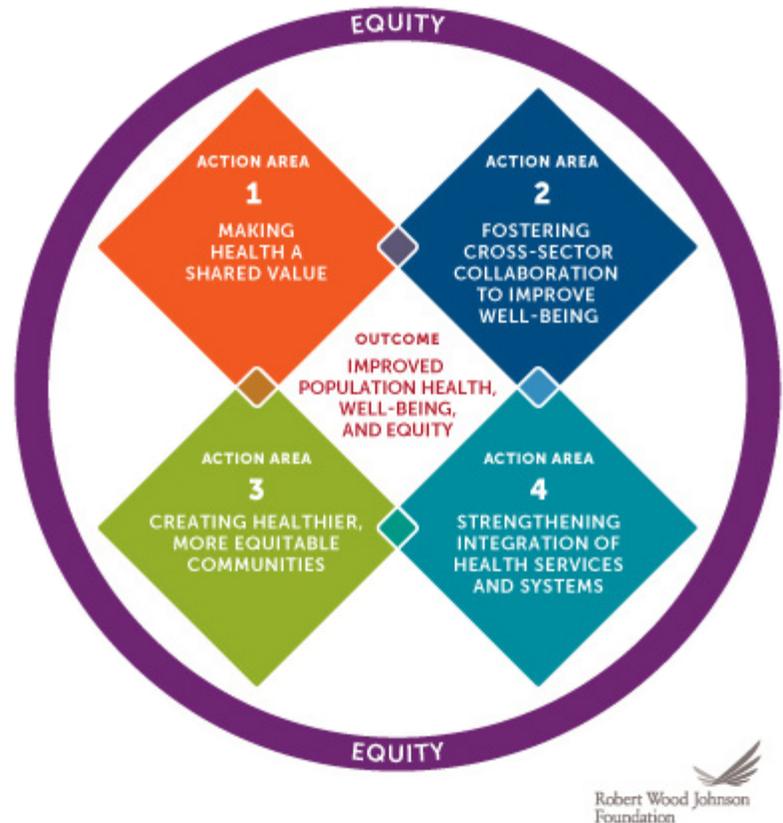
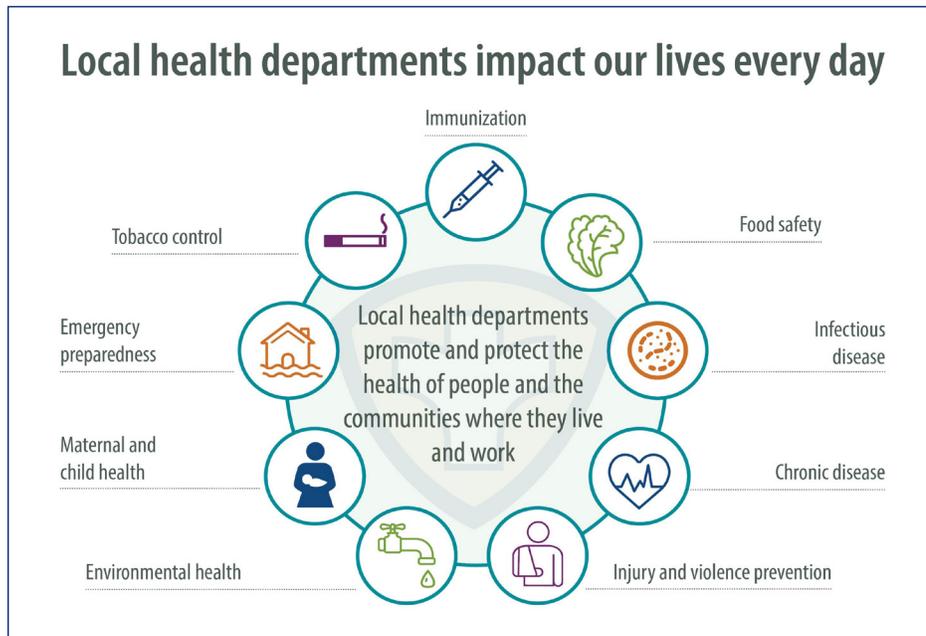


FIGURE 2: Key Functions of Local Health Departments



Source: National Association of County Health Officials

■ **Good health requires a strong infrastructure of direct health care services**

**The foundation for a strong culture of health in North Carolina starts with investments in equitable health infrastructure.** Increased funding for local health departments, in particular, has been shown to significantly increase life expectancy.<sup>3</sup> Greater financial and staffing capacity means that local health departments can provide more comprehensive

services to a larger number of individuals. Research has associated higher investments in local health departments with improved health of those communities served by the health departments.<sup>4</sup> Increased public health spending can also reduce death rates. Death rates associated with preventative causes, such as heart disease, infant death, and diabetes, fell significantly for each 10 percent increase in local public health spending, according to one 2011 observational study.<sup>5</sup> Unsurprisingly, larger investments resulted in greater reductions in deaths associated with preventable causes. This relationship between larger investments in local health departments and improved health remained strong and consistent even after accounting for community differences in demographics, socioeconomic characteristics and medical resources.<sup>6</sup> North Carolina would need to invest \$15.5 million dollars to increase public health spending by 10 percent<sup>7</sup>, a mere 2 percent of the \$900 million North Carolina is set to lose by 2019 from tax cuts.<sup>8</sup> Sufficient financial resources allow public health departments to perform more effectively and provide community-based services that play an important role in achieving meaningful health improvements.

■ **Spending on social services also plays a significant role in improving health**

As mentioned previously, health extends beyond direct health care services. Social, economic, and environmental factors play a huge role in the health of a community. One study found that states with higher levels of spending on social services such as nutrition, housing, and income support resulted in significant health improvements in adult obesity, asthma, mentally unhealthy days, days with activity limitations, heart disease, and diabetes.<sup>9</sup> Another study concluded that jurisdictions ranking highest in the nation among various health

indicators spent more on community health care and public health, parks and recreation, sewage, fire protection, and libraries.<sup>10</sup>

Higher investments in housing, education, and environmental quality have also been correlated with lower death rates, especially among working age men.<sup>11</sup> In some cases, health and hospital spending alone had little to no effect on

improvements in death rates, mirroring weak relationships between health spending and life expectancy in international comparisons.<sup>12, 13</sup> Since health is derived from where we live, work, learn and play, **investments in social, economic, and environmental services are vital to achieving a strong and sustainable health status in North Carolina.**

**FIGURE 3: Social, economic, and environmental factors that impact health**



Source: Community Powered Change

■ **Achieving economic equity significantly improves health**

Multiple studies have found income inequality to be the strongest indicator associated with higher death rates, particularly among preventable or immediate deaths.<sup>14, 15, 16</sup> Using the Gini Coefficient as a measure of income inequality, the studies noted that a one point increase in the Gini Coefficient (or greater income inequality) translated to significantly higher death rates. These findings underscore the benefit wealth has on health and imply that overall economic well-being commands other factors related to positive health outcomes, such as access to health insurance, educational attainment, stable housing, and a nutritious diet. An additional study suggests that public expenditures would more effectively improve health if funding priorities proportionately reflected social change efforts that advanced health equity.<sup>17</sup> The study estimates that eliminating disparities in education could save eight times more lives than advances in medical technology. This cumulative research speaks to the notion that any significant and sustainable progress in health requires making headway on eliminating income inequality.

**Any investments that aim to reduce income inequality must also work to eliminate barriers to health that affect some racial and ethnic groups more than others.** Unfortunately, these income and opportunity gaps cannot be solved by simply investing more in public health.<sup>18</sup> Reducing inequality across racial, ethnic, and economic groups requires the state to invest

in a robust set of policies that allow all North Carolinians to lead healthy, prosperous lives. Economic and tax policies, in particular, can be leveraged to create more equitable societies, such as reinstating the state Earned Income Tax Credit, implementing universal early childhood education, and raising the state's minimum wage to ensure all North Carolinians can afford the basics. North Carolina must take steps to reduce inequality in order to truly begin to improve health.

### ■ *Improving health requires a holistic approach*

Perhaps the most important point to make is that in all of the literature reviewing investments and health outcomes, **no single funding category was responsible for improvements in every measure of improved health.** In one study, the funding streams only made a significant impact on health when combined.<sup>19</sup> These data provide empirical support for a multisector and holistic approach to advance health in North Carolina.<sup>20</sup> Solutions that support long term health require adequate investments throughout multiple sectors. The state cannot sustain health and wellbeing by simply shifting spending patterns to improve one area at the expense of funding decreases in others.<sup>21</sup> **While investing in health is critical, investing in areas that influence education, housing, safe neighborhoods, and income equality has a stronger correlation with improved health than spending on health alone.**

### ■ *Investments to improve health must be intentional and community-centered*

Further evidence suggests that increased financial resources are only part of the solution to improving public health. While more research in this area is needed, the pathways through which available funds are allocated may be a key factor in enhancing the health of a community, especially when those funding pathways are distributed equitably.<sup>22,23</sup> There is some evidence to suggest that public health service delivery is more efficient when local health departments target spending towards services that meet pressing health needs unique to a community.<sup>24</sup>

For example, in North Carolina, and nationwide, Black mothers die at a much higher rate than white mothers do, so the state has targeted Medicaid and public health dollars to provide care coordination services to mitigate risks related to pregnancy and childbirth. The care coordination services ensure mothers have access to prescribed medications, healthy foods, safe housing, and childcare.<sup>25</sup> Through targeting spending on specific care coordination services, North Carolina was able to prevent pre-term births and reduce maternal deaths, especially among Black mothers.<sup>26</sup> Health and social services need adequate financial resources to function; however, targeted investments may be able to better respond to the needs of the community while more effectively advancing health equity. By focusing resources in areas that would most benefit from high quality health and social services, North Carolina can better support long term improvements in health and wellbeing.<sup>27</sup>

■ **Improved public health in North Carolina requires a comprehensive and integrated approach that prioritizes equity**

Public health encompasses factors beyond direct health services including quality housing, educational attainment, access to healthy foods, and equitable distribution of wealth. As North Carolina looks to improve public health, the state should invest in a diverse and comprehensive array of services that prioritize health equity and economic wellbeing. As evidence shows, no single funding source is sufficient to improve all health measures. Therefore, health and social systems that are well-coordinated and integrated will better address all aspects of public health. Public investments in health should reflect the complex and multifaceted factors influencing health and support solutions that involve multiple sectors.

Building strong partnerships across a diverse set of sectors is critical to achieving comprehensive solutions to health and wellbeing. Addressing health equity is too big for any one agency to solve alone. Since health is derived from policies that govern where we live, work, learn, and play, all sectors have a role in improving health and reducing health inequities in North Carolina.

**Several strategies exist to help North Carolina better support collaborations that work to integrate health and social, economic, and environmental factors.** Data sources such as County

## STEPS TO HEALTH IN ALL POLICIES:

### 1. Convene and collaborate

- a) Cultivate interdepartmental partnerships and relationships
- b) Establish a Health in All Policies Task Force
- c) Develop shared understanding of how all departments impact health

### 2. Engage and Envision

- a) Seek feedback from community members on pressing health and social needs that should be included in a strategic plan
- b) Collect data and develop a baseline assessment
- c) Incorporate ongoing pathways for community input

### 3. Make a Plan

- a) Verbalize goals and activities in a report or strategic plan
- b) Use strategies that can be quantified to measure success and maintain accountability

### 4. Invest in Change

- a) Build staff capacity for the initiative
- b) Identify funding sources and include Health in All Policies as a specific line item in the budget
- c) Develop tools to apply a health equity lens analysis to policies, practices, and programs and the budget
- d) Share existing resources to reach the common goal of health and wellness

### 5. Track Progress

- a) Release annual reports to inform the community of progress and to keep agencies accountable.

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Health Rankings and Roadmaps, City Health Dashboard, and the National Equity Atlas, can be used to establish a shared understanding across sectors of how North Carolina’s health compares to the health of other states. State and national data can inform cross sector priorities as well as identify opportunities for integrated solutions.

Additionally, **by implementing a Health in All Policies framework,<sup>28</sup> North Carolina can begin to systematically examine how health plays a role in public policies and expenditures.** Health in All Policies is a guide for governments to formally commit to a culture of health, equity, and sustainability. To achieve this goal, Health in All Policies emphasizes intentional, multisector collaborations, ongoing community engagement, and detailed strategic planning. Through this framework, government agencies work together to advance health equity, build healthier communities, and make more informed decisions on policies and programs that support health. As its name suggests, Health in All Policies ensures policy and spending decisions consistently consider all aspects of health over the long term. In North Carolina, state leaders can use Health in All Policies to consider how budget and tax policies play a role in allowing all residents to achieve the highest level of health.

Long term health requires long term solutions. The state must take steps to fully invest social, economic, and environmental factors that impact health. **With the right investments, North Carolina has the tools to allow everyone to reach their highest level of health and prosperity.** ●

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## Endnotes

1. Patterson, S.M., Rabin, D., Phillips, R.L., Basemore, A.W., & Doodoo, M.S. (2009). Having a usual source of care reduces ED visits. *American Family Physician*, 79(2), 94. Retrieved from <https://www.aafp.org/afp/2009/0115/p94.html>
2. NC Child, North Carolina Institute of Medicine. (2018). North Carolina child health report card, 2018 [Data report]. Retrieved from <http://www.ncchild.org/wp-content/uploads/2018/02/2018-CHRC-007-FINAL.pdf>
3. Singh S.R. (2014). Public health spending and population health: a systematic review. *American Journal of Preventative Medicine*, 47(5): 634–40. doi: <https://doi.org/10.1016/j.amepre.2014.05.017>
4. Ibid.
5. Mays G.P., Smith S.A. (2011). Evidence links increases in public health spending to declines in preventable deaths. *Health Affairs (Millwood)*, 30(8): 1585–93. doi: 10.1377/hlthaff.2011.0196
6. Mays G.P., Smith S.A. (2011). Evidence links increases in public health spending to declines in preventable deaths. *Health Affairs (Millwood)*, 30(8): 1585–93. doi: 10.1377/hlthaff.2011.0196
7. BTC calculation on 2018 OSBM data
8. Johnson, C. (2017). Costly tax cuts in new state budget continue precarious road ahead for North Carolina. North Carolina Budget and Tax Center. Retrieved from <http://www.ncjustice.org/sites/default/files/BTC%20BRIEF%20-%20tax%20plan%202017.pdf>
9. Bradley, E.H., Canavan, M., Rogan, E., Talkbert-Slagle, K., Ndumele, C., Taylor, L., & Curry, L.A. (2016). Variation in health outcomes: The role of spending on social services, public health, and health care, 2000-09, *Health Affairs*, 35(5), 760-768. doi: 0.1377/hlthaff.2015.0814
10. McCullough, J.M., & Leider, J.P. (2016). Government spending in health and nonhealth sectors associated with improvement in county health ranking. *Health Affairs*, 35(11), pp. 2037-2043. doi: 10.1377/hlthaff.2016.0708

11. Dunn, J.R., Burgess, B., & Ross, N. (2005). Income distribution, public services expenditures, and all cause mortality in US states. *Journal of Epidemiology and Community Health*, 59(9): 768-774. doi: <https://dx.doi.org/10.1136%2Fjech.2004.030361>
12. Ibid
13. Kim, A-S., & Jennings, E.T. Jr. (2009). Effects of U.S. states' social welfare systems on population health. *Policy Studies Journal*, 37(4):745–67. doi: <https://doi.org/10.1111/j.1541-0072.2009.00333.x>
14. Ronzio, C.R., Pamuk, E., & Squires G.D. (2004). The politics of preventable deaths: local spending, income inequality, and premature mortality in US cities. *Journal of Epidemiology and Community Health*, 58(3):175–9. doi: <http://dx.doi.org/10.1136/jech.2003.008672>
15. Dunn, J.R., Burgess, B., & Ross, N. (2005). Income distribution, public services expenditures, and all cause mortality in US states. *Journal of Epidemiology and Community Health*, 59(9): 768-774. doi: <https://dx.doi.org/10.1136%2Fjech.2004.030361>
16. Kim, A-S., & Jennings, E.T. Jr. (2009). Effects of U.S. states' social welfare systems on population health. *Policy Studies Journal*, 37(4):745–67. doi: <https://doi.org/10.1111/j.1541-0072.2009.00333.x>
17. Woolf, S.H., Johnson, R. E., Phillips, R. L., & Philipsen, M. (2007). Giving everyone the health of the educated: An examination of whether social change would save more lives than medical advances. *American Journal of Public Health*, 97 (4), pp. 679-683. doi: 10.2105/AJPH.2005.084848
18. Ronzio, C.R., Pamuk, E., & Squires G.D. (2004). The politics of preventable deaths: local spending, income inequality, and premature mortality in US cities. *Journal of Epidemiology and Community Health*, 58(3):175–9. doi: <http://dx.doi.org/10.1136/jech.2003.008672>
19. Ibid.
20. McCullough, J.M., & Leider, J.P. (2016). Government spending in health and nonhealth sectors associated with improvement in county health ranking. *Health Affairs*, 35(11), pp. 2037-2043. doi: 10.1377/hlthaff.2016.0708
21. Ibid.
22. Singh S.R. (2014). Public health spending and population health: a systematic review. *American Journal of Preventative Medicine*, 47(5): 634–40. doi: <https://doi.org/10.1016/j.amepre.2014.05.017>
23. Dunn, J.R., Burgess, B., & Ross, N. (2005). Income distribution, public services expenditures, and all cause mortality in US states. *Journal of Epidemiology and Community Health*, 59(9): 768-774. doi: <https://dx.doi.org/10.1136%2Fjech.2004.030361>
24. Singh S.R. (2014). Public health spending and population health: a systematic review. *American Journal of Preventative Medicine*, 47(5): 634–40. doi: <https://doi.org/10.1016/j.amepre.2014.05.017>
25. Community Care of North Carolina. Pregnancy care medical home. Retrieved from <https://www.communitycarenc.org/media/related-downloads/pregnancy-medical-home-brochure.pdf>
26. Belluz, J. (2017). Black moms die in childbirth 3 times as often as white moms. Except in North Carolina. Vox. Retrieved from <https://www.vox.com/health-care/2017/7/3/15886892/black-white-moms-die-childbirth-north-carolina-less>
27. Singh S.R. (2014). Public health spending and population health: a systematic review. *American Journal of Preventative Medicine*, 47(5): 634–40. doi: <https://doi.org/10.1016/j.amepre.2014.05.017>
28. ChangeLab Solutions. From start to finish: How to permanently improve government through Health in All Policies. Retrieved from [https://changelabsolutions.org/sites/default/files/From-Start-to-Finish\\_HIAP\\_Guide-FINAL-20150729\\_1\\_0.pdf](https://changelabsolutions.org/sites/default/files/From-Start-to-Finish_HIAP_Guide-FINAL-20150729_1_0.pdf)