

Addressing the Root Cause: Rising Health Care Costs and Social Determinants of Health

Melanie Bush

The United States is the only high-income country that does not have publicly-financed universal health care, yet it has one of the world’s highest public health care expenditures. This financial outlay is not bringing the desired result in health outcomes because the root cause is not being addressed: solving the systematic disparities and social determinants that lead to poor health and health inequities. Targeting resources for the most vulnerable populations and linking health care plans with community-based organizations to address social determinants of health at the outset is a cost-effective means of preventing expensive chronic illnesses and health inequities.

Despite overall slowing of expenditures in recent years, the United States spends more money on health care than other high-income countries, and yet has some of the poorest health outcomes [1]. Annual expenditures now exceed \$3 trillion a year, but the United States has the lowest life expectancy at birth, the highest infant mortality rate, and a higher prevalence of chronic diseases than its international peers [2]. And despite being the only high-income country without a publicly-financed universal health system, the United States spends more public dollars on health care than all but 2 of its peers, providing only 34% of its population public health care coverage through Medicare and Medicaid [2].

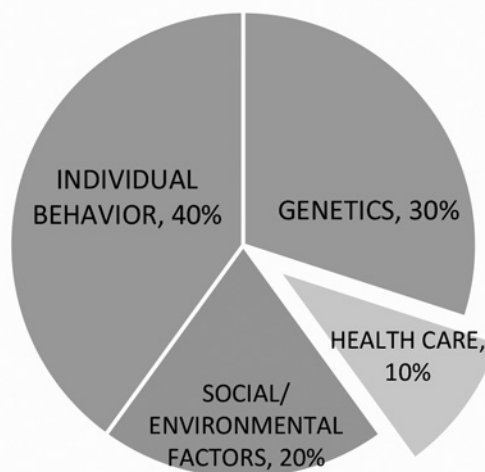
Higher pricing, higher out-of-pocket spending, and higher consumption of medical technology, imaging, and pharmaceuticals account for some of this disparity [2]. However, providers and insurers are beginning to address the root social determinants of health to improve health outcomes and slow the rise of health expenditures.

Defined as “the structural determinants and conditions in which people are born, grow, live, work, and age” [3], social determinants include whether you live in a safe neighborhood, whether you live in adequate housing, what you eat, and whether you have clean air to breathe and clean water to drink. They also include whether you have access to high-quality early education, whether you attend high performing schools, what your employment status is, whether you have access to health care, what your stress levels are, what your experience with racial or gender discrimination is, and whether you have social supports. These social and environ-

mental factors directly impact individual behaviors—how you manage your stress; how you manage chronic conditions; whether you smoke, use recreational drugs, or abuse alcohol; what you eat; whether you exercise; whether you go to the doctor or put off care; and how you sleep. These environmental factors and resulting individual behaviors affect whether you have access to health care and how healthy you are (see Figure 1).

While access to quality health care contributes to better health, the \$3 trillion US health system has only a small impact on factors related to premature death [1]. Ninety percent of these factors are outside the health delivery system, and 60% are influenced directly by social determinants. Yet, the United States spends a significantly lower percentage of its gross domestic product (GDP) on social services as compared to similar countries with better health outcomes (see Figure 2) [4]. Other nations do a far better job providing

FIGURE 1.
Impact of Factors on Premature Death

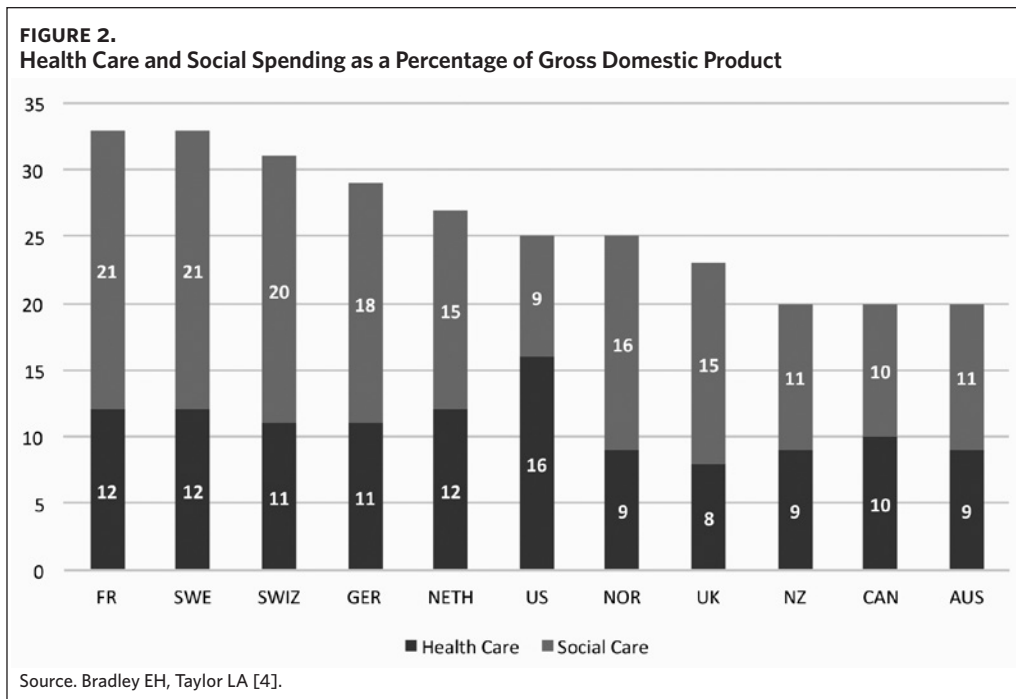


Source: Schroeder SA [1].

Electronically published February 5, 2018.

Address correspondence to Melanie Bush, Division of Medical Assistance, Department of Health and Human Services, 2501 Mail Service Center, Raleigh, NC 27699-2501 (melanie.bush@dhhs.nc.gov).

N C Med J. 2018;79(1):26-29. ©2018 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2018/79105



the social supports that prevent their citizens from becoming sick at the outset.

Health inequity between socioeconomic and racial groups will persist in absence of efforts to address the underlying root causes [5]. Since poor housing and lack of access to health care, employment, educational opportunities, and services disproportionately affect low-income Americans, the lower the socioeconomic status of an individual, the worse their health [3].

It is no surprise then that in North Carolina the counties with the worst overall rankings in health factors and outcomes closely mirror those counties with the highest concentrations of poverty. The Robert Wood Johnson Foundation annually ranks counties and considers the impacts of social and economic factors, such as prevalence of severe housing factors like inadequate plumbing, overcrowding, or exorbitant rent; injury deaths per 100,000 population; violent crime; prevalence of single parent households; the number of children in poverty; and unemployment rates (see Figure 3). All closely track to the overall health outcomes in a county [6].

Meanwhile, health programs that serve the sickest and the poorest are struggling to cover costs, provide quality care, and improve outcomes. Low-income Americans are eligible for publicly-financed health coverage through Medicaid and the Children's Health Insurance Program (CHIP), joint federal-state partnerships that provide health insurance to families with children, people with disabilities, and seniors who may also be enrolled in Medicare.

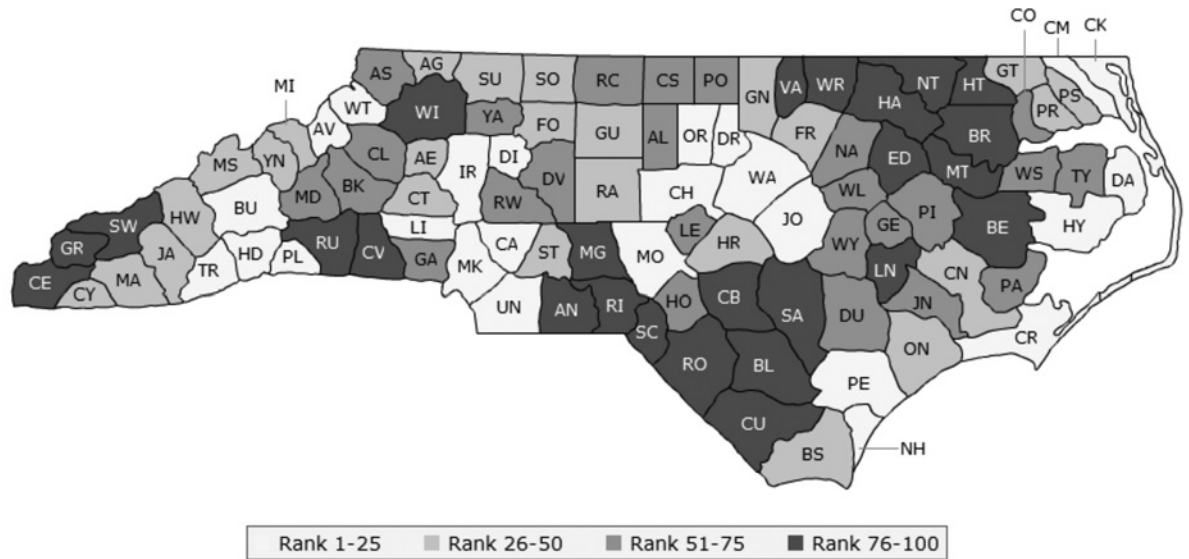
Medicaid is the largest health insurer nationwide and provides coverage to a disproportionate share of individuals with chronic illnesses, comorbidities, and physical and intellectual disabilities that require long-term services and

supports [7]. Many become eligible once their illnesses and medical expenses exceed certain dollar thresholds, once they are determined disabled, or once they become elderly—populations that have complex and high-cost health care needs. In North Carolina, seniors and individuals with disabilities account for only 19% of Medicaid beneficiaries but 61% of overall Medicaid health expenditures [8].

Because Medicaid is an entitlement program, individuals who are income or otherwise eligible are guaranteed coverage regardless of availability of funds. State legislatures wrestle annually with how to control costs and provide budget predictability for a program that is countercyclical in nature. In periods of economic downturn, people lose jobs and health care and enroll in Medicaid at precisely the same time state revenues fall, creating budget shortfalls. Traditionally, states have relied on service limitations, rate reductions, and prior approval requirements to curb ever-rising costs, but limiting access to treatment and discouraging providers from participation results in even poorer health outcomes. In State Fiscal Year (SFY) 2014, the amount states paid for Medicaid accounted for 15.3% of state budgets nationally [9]. For SFY 2018, the North Carolina Medicaid and CHIP programs account for 16% of total budget appropriations [10].

To ensure budget predictability, quality, patient satisfaction, and a sustainable delivery system, the North Carolina General Assembly passed Medicaid transformation legislation in 2015 [11]. Designed to convert North Carolina's fee-for-service Medicaid program into a managed care health delivery system, the General Assembly envisioned managed care organizations (MCOs) controlling costs by managing overall population health for beneficiaries through lump sum payments that provide a flat fee per beneficiary per month. MCOs have flexibility to provide various incentives to pro-

FIGURE 3.
2017 North Carolina Health Outcome Rankings by County



Source: Robert Wood Johnson Foundation [6].

viders or “in lieu of” services that may be less expensive than traditional medical services covered by Medicaid.

Medicaid transformation also provides an ideal opportunity to address social determinants to improve health equity and outcomes by targeting resources for the most vulnerable populations. It is a cost-saving lever that MCOs could employ to manage costs under a capitated payment structure and could potentially avoid more expensive treatment costs. For example, while a hospital may be effective at addressing an acute health care need, a patient’s health may deteriorate if that individual returns to an unhealthy housing environment with no air conditioning that may slow or hinder recuperation [12]. Buying a fan is much less expensive than hospital readmission. MCOs may also employ value-based payments based on positive health outcomes to incentivize providers to seek and refer patients to services that may ameliorate root causes of health conditions to improve outcomes rather than simply treat the presenting symptoms [13].

North Carolina also has an opportunity to link health care plans with community-based organizations that can address social determinants. Building on existing efforts, North Carolina will map community needs and resources at the county and zip code level and collect data on areas with the highest disparities to better target resources and enhancements [14]. Health plans will also link providers with community-based organizations, track referrals to community resources, and follow up to ensure unmet needs were addressed.

Finally, North Carolina wants to encourage community partners to test initiatives that address unmet needs with focused investments that will ultimately be wiser in the long run than ever-increasing health care costs. Referral and navigation services, co-located and embedded services, and

the use of flexible supports are some of the evidence-based interventions the North Carolina Department of Health and Human Services (NC DHHS) is prepared to support [14]. As NC DHHS Secretary Mandy Cohen explains, “We must look beyond what is typically thought of as ‘health care’ and invest more strategically in health” [15].

Low-income North Carolinians face more barriers to optimal health given where they live, the air they breathe, the water they drink, their educational and employment opportunities, and their access to quality health care. Targeting resources to address what actually makes them sick is a cost-effective means to address what may eventually develop into an expensive chronic illness and overall health inequity. While we have long understood that prevention is less expensive than treatment in the health delivery system, the same is true for the social and environmental factors that impact our health. Other high-income countries already understand the cause and effect. It’s time to address the root cause. *NCMJ*

Melanie Bush, MPAff deputy director, Clinical and Operations, Division of Medical Assistance, North Carolina Department of Health and Human Services, Raleigh, North Carolina.

Acknowledgments

Potential conflicts of interest. M.B. has no relevant conflicts of interest.

References

1. Schroeder SA. Shattuck lecture. We can do better—improving the health of the American people. *N Eng J Med*. 2007;357(12):1221-1228.
2. Squires D, Anderson C. *US Health Care from a Global Perspective: Spending, Use of Services, Prices and Health in 13 Countries*. New York, NY: The Commonwealth Fund; 2015. http://www.commonwealthfund.org/-/media/files/publications/issue-brief/2015/oct/1819_squires_us_hlt_care_global_perspective_oecd_intl_brief_v3.pdf. Accessed October 6, 2017.

3. Marmot M, Friel S, Bell R, Houweling TA, Taylor S; Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*. 2008;372(9650):1661-1669.
4. Bradley EH, Taylor LA. *The American Health Care Paradox: Why Spending More is Getting Us Less*. New York, NY: PublicAffairs; 2013.
5. Braveman P. What are health disparities and health equity? We need to be clear. *Public Health Rep*. 2014;129(Suppl 2):5-8.
6. Robert Wood Johnson Foundation. *County Health Rankings: North Carolina 2017*. County Health Rankings website. <http://www.countyhealthrankings.org/app/north-carolina/2017/rankings/factors/overall>. Accessed October 20, 2017.
7. The Henry J. Kaiser Family Foundation. *Medicaid pocket primer*. Kaiser Family Foundation website. <https://www.kff.org/medicaid/fact-sheet/medicaid-pocket-primer/>. Updated June 2017. Accessed October 7, 2017.
8. North Carolina Department of Health and Human Services, Division of Medical Assistance. *SFY 2016 Medicaid annual report tables*. North Carolina Division of Medical Assistance website. <https://dma.ncdhhs.gov/annual-reports-and-tables-0>. Accessed October 27, 2017.
9. Medicaid and CHIP Payment Access Commission (MACPAC). *Spending*. MACPAC website. <https://www.macpac.gov/medicaid-101/spending/>. Accessed October 27, 2017.
10. North Carolina General Assembly. *The Joint Conference Committee Report on the Base, Capital and Expansion Budgets*. Raleigh, NC: North Carolina General Assembly; 2017. http://www.ncleg.net/Sessions/2017/Budget/2017/conference_committee_report_2017_06_19.pdf. Accessed October 27, 2017.
11. 2015-245 NC Sess Laws, HB 372 (2015).
12. Lee J, Korba C. *Social determinants of health: how are hospitals and health systems investing in and addressing social needs?* Deloitte; 2017. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-addressing-social-determinants-of-health.pdf>. Accessed October 27, 2017.
13. Leddy T, McGinnis T, Howe G; Center for Health Care Strategies. *Value-Based Payments in Medicaid Managed Care: An Overview of State Approaches*. <https://www.chcs.org/resource/value-based-payments-in-medicaid-managed-care-an-overview-of-state-approaches/>. Published February 2016. Accessed October 27, 2017.
14. North Carolina Department of Health and Human Services. *North Carolina's Proposed Program Design for Medicaid Managed Care*. Raleigh, NC: North Carolina Department of Health and Human Services; 2017. https://files.nc.gov/ncdhhs/documents/files/MedicaidManagedCare_ProposedProgramDesign_REVFINAL_20170808.pdf. Accessed October 27, 2017.
15. Cohen M. *Buying health - not only health care*. *News and Observer*. <http://www.newsobserver.com/opinion/op-ed/article162767098.html>. Published July 20, 2017. Accessed October 27, 2017.