In 2019, the National Academy of Medicine (NAM) turned to the all-important state level to draw insights on the status of health and health care within the context of the NAM Vital Directions for Health and Health Care initiative. The NAM held a two-day symposium in the Research Triangle to bring together various stakeholders to better understand actions that states and localities are taking to achieve—and the barriers they face in pursuing—more affordable, value-driven quality care and health outcomes. The NAM purposefully chose to pivot to the state level with North Carolina given that it has been at the forefront of health care transformation and illustrates the promise but also the challenges facing US health and health care nationally. A 19-member planning committee, cochaired by NAM President Victor Dzau and Secretary Mandy Cohen of the North Carolina Department of Health and Human Services, selected topics that resonate with the state’s activities within the context of the Vital Directions framework, ranging from empowering people and connecting care through the integration of social, physical, and behavioral health to payer alignment though the advancement of new payment models (Figure 1). The priorities discussed during the symposium continue to be central to health reform in North Carolina and are further explored in the commentaries in this issue.

Note from authors: The World Health Organization declared COVID-19 a global pandemic on March 11, 2020, while this issue was undergoing preparations for publication. The issues covered in the symposium that inspired the papers that compose this issue are not only relevant in the context of the COVID-19 pandemic—they become even more critical. Identifying and addressing health disparities are critical aspects of combating the pandemic, as evidence emerges that black and Latinx communities have significantly higher case fatality rates than their white peers. Integrating physical, behavioral, and social health becomes vital as lower-income individuals are more likely to be “essential” workers who are more frequently exposed to COVID-19 than those individuals who are able to work from home and shelter in place. Emerging evidence also supports that many Americans are suffering from mental health distress during the pandemic, and mental health access was challenging to access for many individuals even before COVID-19. Data sharing has never been more vital. We are completely dependent upon our 21st century health workforce, members of which are working tirelessly under extreme conditions to care for those who are ill. Vital directions for health and health care were critical prior to the pandemic—COVID-19 has put our health system under additional burden, and needed reforms have never been more apparent.

In 2015, in anticipation of the 2016 presidential election, the National Academy of Medicine (NAM) launched the Vital Directions for Health and Health Care initiative, which aimed to provide the next presidential administration, as well as other policymakers, opinion leaders, and the public, with trusted, nonpartisan, evidence-based analysis of the most compelling opportunities and priorities in health and health care. Given the NAM’s mandate to serve as advisor to the nation, the NAM committed to using its trusted, independent, and objective status to: 1) call attention to the highest-priority issues in American health and health care; 2) compile expert, evidence-based insights and recommendations for policy and practice around each issue; and 3) strengthen bridges among policymakers and health experts to share information, foster consensus, and guide policy. Overall, the key aim of the initiative was to draw attention to and stimulate action on issues that matter most to improving health.

Co-chaired by NAM President Victor J. Dzau and Mark McClellan, director of the Duke-Margolis Center for Health Policy, and guided by an 18-member bipartisan steering committee, the initiative drew upon more than 150 leading researchers, scientists, and policymakers to provide expert guidance on 19 priority issues for US health policy. The initiative presents recommendations for an optimized health system, along with a streamlined framework toward achieving three core goals for the nation: better health and well-being, high-value health care, and strong science and technology. It also identifies eight cross-cutting areas for particular priority, centered on four action priorities and four essential aspects of combating the pandemic, as evidenced by the United States' experience.
The US health system continues to face persistent challenges related to health care access, quality, and affordability. The passage of the Patient Protection and Affordable Care Act (ACA) led to unprecedented gains in health insurance coverage, however, political debate at the national and state levels has resulted in some reversals. For the second year in a row, the number of uninsured people has increased. In 2018, 27.9 million Americans were uninsured, as compared to 26.7 million in 2016 [1]. Furthermore, the US health system continues to be strained by increasing demand and unsustainable costs. In 2018, US health care spending reached $3.6 trillion, or 17.7% of GDP [2]. National health care expenditures are projected to grow at an average annual rate of 5.4% for 2019-2028 and will represent 19.7% of GDP by the end of this period [3].

These trends are of particular concern as health spending exerts downward pressure on other parts of the national budget, including public health and prevention, biomedical research and development, education, infrastructure, and social services. A growing body of literature suggests that upstream factors, such as access to safe and stable housing, nutritious food, and reliable transportation, play a key role in shaping health outcomes [4, 5, 6]. In aggregate, US spending on health care and social services is comparable to that of other OECD countries. However, the United States faces worse health outcomes than almost all other industrialized nations. Scholars have noted that other industrialized nations spend a larger proportion on social services relative to medical services, and their residents experience better health outcomes. In contrast, the United States spends more on health care services relative to social services (nearly two times what we spend on social services), yet has worse outcomes [7].

At the individual level, rising out-of-pocket health care costs are placing a steep financial burden on Americans. Polls have shown that Americans, including those with health insurance, have chosen to forego medical treatment due to cost concerns [8]. Alarming increases in insurance premiums have outpaced wages: from 2008 to 2018, average family health insurance premiums increased by 55%, growing twice as fast as workers’ earnings (26%) [9]. A growing aging population and rising burden of noncommunicable diseases—such as cardiovascular disease, obesity, diabetes, and cancer—are likely to exacerbate these challenges. The US health system is at a critical inflection point. Transformation is needed to address challenges related to access, quality, and affordability.

Centrality of State Leadership

Vital Directions has been instrumental in offering guidance to Congress and the Presidential Administration on health and health care priorities. These recommendations provided key areas for consideration during the 2017 congressional debate on health care reform and the future of the ACA. However, while national policies can have great influence on care delivery and outcomes, progress also depends on, and can be further propelled by, actions at the state and local level. Given the vast geographic variation of the US health system, states are well-positioned to advance health care reform. State-level officials understand the needs of their populations. They can design reforms that are best suited to the particular size and demographic characteristics of their own state as well as the structure of their state’s health system and insurance markets. States administer federal programs, such as Medicaid and the Children’s Health Insurance Program (CHIP) as well as state employee health plans, and certain states run health insurance exchanges.

Already, many states are innovating and seeing positive results. In particular, many states’ Medicaid programs are implementing innovative delivery and payment models under Section 1115 of the Social Security Act, which gives states considerable flexibility in operating Medicaid programs. For example, Oregon has established accountable care organizations (ACOs) to integrate hospital-based services with primary and behavioral health care, as well as other social services. With the introduction of these ACOs, there has been a considerable reduction in Medicaid spend-
ing [10]. Similarly, Arkansas has reduced overall spending through its Arkansas Health Care Payment Improvement Initiative (AHCPII), which is a mvpayer model centered on a value-based payment structure rather than fee for service. In 2015, the patient-centered medical home (PCMH) program model resulted in reductions in Medicaid hospitalizations and emergency room visits, and overall saved Arkansas’s Medicaid program more than $35 million [11]. Furthermore, in light of the nation’s opioid epidemic, many states have expanded their Medicaid programs to cover a range of services for opioid and other substance use disorders (SUD). Since Medicaid’s inception, federal law has generally prohibited states from using Medicaid funds for services provided to nonelderly adults in “institutions for mental disease” (IMDs). However, CMS has been inviting states to apply for Section 1115 IMD SUD waivers, with guidance released in 2015 and revised in 2017 [12]. These waivers allow states to test using federal Medicaid funds to provide short-term inpatient and residential SUD treatment services in IMDs. As of November 2019, 26 states have a Section 1115 waiver to use Medicaid funds for IMD SUD services [13].

Despite partisan gridlock and further health reform at the federal level, it is clear that innovative reforms at the state level have continued.

The North Carolina Experience

In 2019, the NAM turned to the all-important state level to draw insights on the status of health and health care within the context of the NAM Vital Directions initiative with a two-day symposium in the Research Triangle, bringing together various stakeholders to better understand actions and barriers to pursuing more affordable, value-driven quality care and health outcomes. The NAM chose to pivot to the state level with North Carolina because it has been at the forefront of health care transformation and illustrates the promise as well as the challenges facing health care nationally.

North Carolina has some of the premier health systems and health care innovators capable of delivering state-of-the-art care, as well as health care providers and community organizations developing and implementing new population health innovations [14-16]. North Carolina’s vision of health is centered on “buying health” to ensure that all North Carolinians have an opportunity for better and equitable health and well-being [17]. Several sectors are aligned in implementing new payment models and addressing social drivers of health through a coordinated system of care, thus improving quality and outcomes while decreasing total medical costs. It is this alignment of sectors that serves as a model in particular for other states on the path toward health care transformation. Yet, North Carolina also faces pressing health challenges, including rising population mortality rates and substantial health disparities. As of 2018, North Carolina ranked 33rd in overall health. Approximately 37% of North Carolinians live at or below 200% of the federal poverty level, which is directly linked to poor health outcomes [18]. North Carolina ranks 44th among states in the rate of those uninsured, with approximately 13% of the population under the age of 65 living without health insurance [18].

To further explore these challenges and to highlight opportunities for health reform and innovation across the state, a 19-member planning committee—chaired by NAM President Victor Dzau and North Carolina Department of Health and Human Services Secretary Mandy Cohen—selected topics that resonate with the state’s activities within the context of the Vital Directions framework. These topics range from empowering people and connecting care through the integration of social, physical, and behavioral health to payer alignment through the advancement of new payment models.

Comments from the Front Lines

In the course of the meeting, a number of participants with experience on the front lines of community health change offered presentations and comments. Central to the symposium was North Carolina’s role as a beacon for health reform, and the ways in which the state is addressing the social determinants of health and health equity, as well as the importance of public-private partnerships and multisector collaboration. The commentaries in this issue feature several symposium speakers who further explore these important themes, and share lessons learned and best practices that could be transformative for other states and at the national level as well.

In her commentary in this issue of the journal, Sharrelle Barber highlights the national and state context of health care disparities and why place matters in health [19]. “Place” is fundamental to how we understand health and health inequities, and cannot be understood outside of race. In our dialogue from the national level to the neighborhood level on health disparities and health outcomes, we cannot be ahistorical. In order to address these differences, we must also address health equity.

In order to address disparate health outcomes across the state, a number of stakeholders are actively working and collaborating to address many of the health and health care priorities recommended in the streamlined Vital Directions framework.

Betsey Tilson and the authors of “Investing in Whole Person Health: Working Toward an Integration of Physical, Behavioral, and Social Health” highlight how the North Carolina Department of Health and Human Services is uniting health care and human services agencies to identify and address upstream drivers in order to buy health, not just health care [20]. The authors share examples of best practice models that inform integration of services and demonstrate how engaging communities is central to moving toward value-based care. At the state level, North Carolina is transitioning its Medicaid and NC Health Choice programs.
from predominantly fee-for-service to Medicaid managed care, as enacted by the North Carolina General Assembly in 2015. The vision for Medicaid transformation is to improve the health of North Carolinians through an innovative, whole person-centered and well-coordinated system of care that addresses medical and non-medical drivers of health. Furthermore, the state is implementing reforms to address non-medical drivers of health, including coverage of evidence-based interventions targeting four key areas (housing stability, food security, transportation access, and interpersonal safety) through the state’s Healthy Opportunity Pilots in North Carolina’s 1115 Demonstration Waiver.

In order to successfully shift toward health reform, it is imperative to also consider how to streamline technology and data information needs. In “Toward a Health Data Strategy for North Carolina,” authors Aaron McKethan and Annette DuBard identify key information-sharing challenges that impact patients, clinicians, health systems, and providers [21]. While short-term innovation is underway, this commentary suggests that longer-term data strategies and leadership are needed to successfully address information gaps and ensure efficient flows of health data information. Implementing seamless digital interfaces contributes to better health, lower costs, and better patient experiences.

Moving toward coordinated care and seamless information flow and transitioning to different models of care have important implications for the health care workforce. The authors of the commentary, “Developing a Workforce for Health in North Carolina: Planning for the Future,” explain that in the transition to value-based care, there is the need to develop a “workforce for health” and to expand the definition of who makes up the health workforce [22]. A population-based and patient-centered approach to health requires new approaches to training and education. Christine Petrin and Karen DeSalvo further highlight how the physician workforce can address social drivers of health in particular, and note that interdisciplinary teamwork is the most impactful approach to providing social care as part of care delivery [23].

“North Carolina’s Health Care Transformation to Value - Progress to Date and Further Steps Needed” highlights North Carolina’s rapid movement toward value-based payment, and shares best practices for shifting health financing toward value and population health [24]. Cross-sector collaboration is key to advancing payment reform and shifting to value-based care. The authors share the following foundational elements: leadership and governance; shared technology infrastructure and data sharing; greater payment reform implementation and alignment; and supporting policies. This framework can be used as a model for other states on a path toward care delivery system reform.

Integrating whole person health into care delivery, payment reform, developing a new workforce, and interoperability are all integral to health care transformation. However, these reforms cannot be fully successful without authentic community engagement. The authors of “Engaging the Power of Communities for Better Health” provide several examples of community engagement in which the community is integral to decision-making and embedded in implementation from the start, ranging from the Cottage Grove Community in Greensboro, North Carolina, to Health Equity Zones in Rhode Island [25]. Community-led governance and community-directed investments are key to bringing community members to the table in order to design and lead health and health care reform initiatives informed by their lived experiences.

Calls to Action

The last section of this issue of the journal highlights five “calls to action” from five leaders across the state representing the following diverse perspectives: advocacy, medical education, business, legislature, and philanthropy. During the symposium, these speakers were asked to share priorities for achieving better health and well-being and how to implement that vision, given rapid health care transformation in the state. In addition, these leaders were asked to share lessons learned for the future of progress in North Carolina and beyond. Nicole Dozier and William Munn of the North Carolina Justice Center examine the history of slavery in North Carolina and its lasting impacts on socio-health outcomes [26]. They note that we must acknowledge these connections to address health disparities, and the authors suggest restorative public policy as a starting point.

Julie Freischlag and Katherine Files of the Wake Forest School of Medicine note that addressing social drivers of health and connecting care starts with students and medical education [27].

Gary Salamido of the North Carolina Chamber of Commerce notes the importance of employers engaging in health care transformation and addressing health care cost challenges by prioritizing the shift to value-based care [28]. Employers across the state who purchase health care for their employees are impacted by rising costs and it’s imperative that they join collectively in this conversation toward health reform.

As a member of the North Carolina General Assembly, Representative Josh Dobson identifies three primary legislative priorities for improving the health of North Carolinians: access to care in underserved regions, expansion of broadband access, and closing the health care coverage gap [29]. While North Carolina cannot currently proceed with closing these gaps without an approved budget, previous bipartisan support for a Medicaid transition in 2015 demonstrates the ability of the state to collaborate and work together.

Lin Hollowell of the Duke Endowment describes the role and contributions of philanthropy in health care reform [30]. Philanthropic organizations have the unique ability to take risks and test innovative practices, and thus can evaluate what does or doesn’t work and share their learnings.
Through these efforts, North Carolina has the opportunity to serve as a model for the nation, paving the way forward to overcome some of the most pressing health and health care challenges and working toward better health for all.

From the State to the Federal: Next Steps

We are at a critical inflection point for health care reform in the United States. North Carolina’s experience offers important insights on the development and implementation of innovative shifts to new payment models and addressing the social determinants of health through integrated and connected care. While challenges of political uncertainty remain, collaboration across multiple sectors in the state demonstrates key lessons and best practices for “buying health.”

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