The health care and frontline essential workforces provide vital services and supports to North Carolinians before, during, and after public health emergencies and other times of crisis. When SARS-CoV-2 emerged in late 2019, long-standing vulnerabilities in the health care and frontline essential workforces were exposed, threatening the health, well-being, and safety of workers and further straining systems that ensure access to food, housing, health care, transportation, and education services.[1] The COVID-19 pandemic has also created new, unanticipated challenges, leading to exhaustion, burnout, and other harms to workers and to the sustainability of these workforces.

"The COVID-19 pandemic thrust health care workers across the nation into rapidly changing care environments without adequate support or sufficient training tools for most. The lack of a systematic approach to workforce planning necessary to optimally deploy health care human resources during the pandemic endangered these workers and their families as well as their communities, health care systems, and patients."[2] – Dodson, et al., *Health Care Workforce Playbooks and the COVID-19 Pandemic* (2021)

The high transmissibility of SARS-CoV-2 and other specific characteristics of the virus, along with the unpredictable course of the disease for people infected, strained the health care workforce early on in the pandemic. As SARS-CoV-2 spread rapidly and case rates increased, the demand for health care services increased in turn. At the same time, health care workers did not have adequate access to the personal protective equipment (PPE) and other supplies needed to protect themselves from exposure and infection. **Chapter 3** (Building a Resilient Supply Chain) provides additional information on PPE and other health care supply shortages, along with strategies recommended by the task force to ensure adequate access to needed supplies for North Carolina's health care and frontline essential workers. **Chapter 4** (Improving Infrastructure to Promote Health, Safety, and Well-Being) includes system-level strategies to reduce infectious disease transmission and improve health.

Surges in cases have the potential to substantially limit the capacity of workers and systems to care for patients with needs unrelated to COVID-19—for example, injuries sustained in motor vehicle accidents, heart attacks, and other health issues requiring emergency care—in addition to the needs of COVID-19 patients. In North Carolina and throughout the United States, high case rates have not only strained workers and health care systems in their capacity to deliver services in a variety of ways, but also caused many of them to feel endangered and demoralized.[2,3] Despite risking their own health, safety, and well-being to provide care, this hard work hasn't necessarily translated to different outcomes or health behaviors among patients and communities. As a result, health care workers have understandably reported high rates of burnout, exhaustion, and other mental and behavioral health challenges.

Surges that increase the demand for health care services can also force health care systems to make difficult decisions regarding the allocation of resources, such as ventilators, that may be scarce or in high demand. These decisions can lead to moral injury, which occurs when clinicians are "repeatedly expected, in the course of providing care, to make choices that transgress their long-standing, deeply held commitment to healing."[4,5] Moral injury can have far-reaching impacts on the health and well-being of clinicians and the health care workforce overall, and targeted strategies are needed to address it.

Throughout the COVID-19 pandemic, difficulties in implementing public health mitigation measures to limit or control the spread of the virus have also strained the health care workforce and the frontline essential workforce more broadly.[6–9] Resistance to wearing face masks and vaccine hesitancy among the general public have been significant barriers to reducing viral transmission, protecting health care and frontline essential workers, and ensuring the capacity of health care and other systems to care for those in need. These challenges have been substantially worsened by the spread of misinformation, which has proven difficult to combat and has been a factor in increasing threats, harassment, and other forms of violence directed toward workers on the front lines of the response to the COVID-19 pandemic.[10] The task force underscored that public health has become increasingly politicized, while also recognizing that increased awareness of public health represents an opportunity to achieve meaningful change for local, state, and national systems that have been chronically underfunded. **Chapter 6** (Data-Driven Decision-Making and Effective Communications with the Public) includes recommendations for supporting effective communications with the public in response to misinformation and eroding public trust in government entities, as well as recommendations to strengthen public health infrastructure and data systems.

"To stand a chance against a threat like COVID-19, the nation needs to sustain higher funding year to year and invest resources in planning, workforce, and infrastructure beforehand. Not doing so is akin to hiring firefighters and purchasing hoses and protective equipment amid a five-alarm fire."[11] – Trust for America's Health, *The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations, 2021.*

The challenges of the COVID-19 pandemic have reinforced the need for system-level changes that promote flexibility and adaptability in response to the evolving and fluctuating needs of populations served across the state.[2] In response, the task force has provided five recommendations that will ensure the development of effective solutions that address the needs of the health care and frontline essential workforces in particular, and the workers who comprise these workforces. The recommendations provided below, which include a number of actionable strategies to support the overarching goals described within each recommendation, are collectively intended to strengthen the health care and frontline essential workforces:

Recommendation 5.1
Develop and implement an action plan to respond to urgent and long-term health care workforce needs.

Recommendation 5.2
Assess workforce shortages and other needs of frontline essential workers to support continuity of operations planning.

Recommendation 5.3
Prioritize the health, well-being, and safety of the health care and frontline essential workforces.

Recommendation 5.4
Strengthen workforce recruitment and retention.

Recommendation 5.5
Provide flexibility to health care workers to increase surge capacity during public health emergencies.

The following organizations are responsible for implementing Recommendations 5.1–5.5:

State and Local Government

- North Carolina General Assembly (NCGA)
- North Carolina Department of Health and Human Services (NCDHHS)
- North Carolina Department of Public Instruction (NCDPI)
- North Carolina Department of Public Safety (NCDPS)
- Office of State Human Resources (OSHR)
- North Carolina Association of County Commissioners (NCACC) and county commissioners
- North Carolina League of Municipalities (NCLM)
- University of North Carolina School of Government (UNC SOG)

Health Care

- North Carolina Healthcare Association (NCHA)
- North Carolina Health Care Facilities Association (NCHCFA)
- Association for Home & Hospice Care of North Carolina (AHHS NC)
- North Carolina Medical Society (NCMS)
- Old North State Medical Society (ONSMS)
- North Carolina Nurses Association (NCNA)
- North Carolina Academy of Physician Assistants (NCAPA)
- North Carolina Association of Local Health Directors (NCALHD)
- North Carolina Institute for Public Health (NCIPH)
- North Carolina Public Health Association (NCPHA)
- North Carolina Area Health Education Centers (NCAHEC)
- North Carolina Medical Group Management Association (NCMGMA)
- Western North Carolina Medical Managers Association (WNCMMA)
- National Alliance of Mental Illness North Carolina (NAMI NC)
- Hospitals and health care systems

Business

- North Carolina Society for Human Resource Management (NCSHRM)
- North Carolina Department of Commerce (NC Commerce)
- Economic Development Partnership of North Carolina (EDPNC)
- North Carolina College Personnel Association (NCCPA)
- NC Chamber
- Employers

Education

- North Carolina Association of Educators (NCAE)
- Office of Human Resources for the University of North Carolina and community college systems
- North Carolina's independent colleges and universities

Other

- Philanthropic organizations
- Other education, health care, mental, and behavioral health professional and advocacy organizations, including the North Carolina Early Childhood Foundation

Although the task force also recognized the importance of other workers and workforces in building and sustaining a vibrant, robust economy for North Carolina, the state relies on health care and frontline essential workers to ensure ongoing access to critical services and supports for North Carolinians during times of crisis and beyond. Their work on the front lines of the current COVID-19 pandemic has put them at higher risk of exposure, infection, and among certain types of frontline essential workers, severe disease and death.[12] In addition, as these workers continued to provide essential services to the state, many needed additional supports, such as accessible child care, mental health services, and other resources. As a result, the recommendations and strategies for system-level change outlined in **Chapter 5** focus on protecting the health, safety, and well-being of health care and frontline essential workers to ensure the state's ability to resiliently respond to future surges of COVID-19 and other public health emergencies.

For the purposes of this chapter, *frontline essential workers* refers to workers in the following industries or sectors: critical manufacturing, education, essential goods, food and agriculture, government and community services, health care and public health, public safety, and transportation.[1,13–16] Within the frontline essential workforce, *health care workers* refers to workers directly or indirectly involved in the provision of health care services to individuals in settings such as hospitals, clinics, provider offices, outpatient surgery centers, emergency medical care, home health care, and long-term care (nursing homes, hospice, etc.).[17] Several strategies included in **Chapter 5** focus more specifically on public health, which includes workers in state and local health departments and their partners.

RECOMMENDATION 5.1

A robust, resilient, and qualified health care workforce is essential to ensuring access to services and supports for all North Carolinians before, during, and after public health emergencies. Workers must be appropriately trained, adequately onboarded, supported and protected in their roles, and provided with professional development and learning opportunities to promote the flexibility and adaptability of hospital and health care systems to meet both emergent and long-standing needs in the communities they serve.

The COVID-19 pandemic has exacerbated structural and systemic challenges that have existed for years, while also presenting new and unique challenges that have further strained an under-resourced and exhausted health care workforce in the state.[18] Maldistribution of the health care workforce across the state, shortages in certain categories of health care workers,[17] and disinvestment in public health and rural health care systems are among the structural and systemic factors that have most impacted access to care. Non-medical drivers of health, or *social determinants of health*, also contribute to a scarcity of available and accessible health care services and supports. **Chapter 8** (Ensuring the Availability of Health Care Services) and **Chapter 9** (Addressing Disparities to Promote Whole-Person Health and Economic Stability) address the impact of the non-medical drivers of health on access to and utilization of health care services and supports, and include recommendations from the task force to ensure access and promote health before, during, and after public health emergencies.

"[A]n alarming downward spiral highlighted the precariousness of the health care system: There was a chronic health care workforce shortage when the sector experienced an increase in pandemic-related needs and nonessential services were suspended to accommodate surges and safety practices. Organizations then experienced financial losses, requiring them to furlough or terminate staff, which worsened the health care workforce shortage and increased stress on remaining workers."[18] – North Carolina Area Health Education Centers, *Pandemic Health Care Workforce Study* (2021)

"As COVID-19 arrived in the United States, massive cancellations of elective and non-essential medical procedures further reduced revenues and created problems for rural hospitals, such as employee layoffs, increased case overloads, patient transfers from neighboring hospitals, and delays in receiving medicines and personal protection equipment (PPE). Health experts recently predicted that as rural hospitals try to prioritize needs to meet deficiencies, seasonal influenza and pneumonia spikes combined with a steady rise in COVID-19 will overwhelm rural health care systems."[19] – Kearney, et al., *Journal of Public Health Management and Practice* (2021)

Surges in COVID-19 cases have also increased the need for health care services, contributing to burnout among health care workers across the state and exacerbating long-standing workforce shortages that have disproportionately impacted rural and historically marginalized communities. Public health policies have also been highly politicized during the COVID-19 pandemic, which has led to polarization, conflict, and mistrust in public health authorities and the government at the local, state, and federal levels. In addition to burnout, the stress experienced by the health care workforce throughout the COVID-19 pandemic has led to new or worsening mental and behavioral health challenges, along with lower morale, job satisfaction, and retention.

What factors are driving health care workforce shortages?

Inadequate access to care and other services, particularly among rural and historically marginalized communities, has been influenced by workforce shortages that existed long before the COVID-19 pandemic.[20] Rural areas also experience unique challenges in recruiting and retaining qualified health care providers compared to urban and suburban areas. Despite having the ninth-largest population in the country with nearly 10.4 million residents, 78 out of North Carolina's 100 total counties are considered rural.[11] In March 2022, the North Carolina Office of Rural Health reported that 91 out of 100 counties in North Carolina have shortages in three provider categories: primary care, mental and behavioral health, and oral health.[21] **Table 1** provides information on counties in North Carolina designated as Health Professional Shortage Areas (HPSAs) by the U.S. Health Resources and Services Administration (HRSA) for each category.

Table 1 : North Carolina Counties Designated as Health Professional Shortage Areas (HPSAs) by Category

PRIMARY CARE[22]	**93**
MENTAL AND BEHAVIORAL HEALTH	**94**
ORAL HEALTH	**100**

Rural areas experience a number of challenges in terms of recruiting and retaining health professionals, including lack of training opportunities, heavy workload, and unique community characteristics.[25] North Carolina continues to struggle to produce and retain primary care physicians in particular, making recruitment to rural areas of the state more challenging.[25] Training opportunities for health care professionals are also more limited in rural areas, where academic medical training programs and graduate medical education programs are less common.[25] Community characteristics shape recruitment and retention in rural areas as well, with these areas of the state having fewer child care, education, and entertainment options (restaurants, theaters, concert venues, etc.) that can help attract new residents.[25]

In addition to recruitment challenges facing the health care workforce in North Carolina, the COVID-19 pandemic has also contributed to the "Great Resignation" and other socio-cultural changes that have shaped the health care workforce alongside many other sectors.[26] In a fall 2021 survey of health care facilities across the state, 62% of respondents (including acute care, primary care, behavioral health, and long-term care, among others) reported that COVID-19's impact on their workforce had worsened over the previous six months. By spring 2022, a follow-up survey showed improvement: 39% of respondents reported that COVID-19's impact had worsened, and more than a quarter of respondents reported that the impact had gotten better (4% much better; 25% slightly better).[27] However, the same spring 2022 findings showed more than half of respondents (51%) reporting that burnout among employees had gotten slightly or much worse. Worryingly, 42% of respondents reported that the impact of staff shortages on the facilities' ability to provide care had gotten worse.[27]

"As a result of forces gathering before the pandemic, an aging population, aging physicians and nurses, increasing clinical demands, greater emotional and physical stresses of practice, and epidemic clinical burnout, it is no wonder that many health care professionals have left practice, joining other workers from diverse areas of employment in what has been termed the 'Great Resignation.' However, not all have fully retired. In fact, the average age of nurses leaving the field is only 41 years. Many clinicians have 'repurposed' themselves, taking on new roles in health care or related fields (e.g., information technology, administration, teaching, and so on), pursuing additional education, or switching professions altogether in what Harvard Business School Professor Ranjay Gulati has termed the 'Great Rethink.'"[28,29] – Edward T.A. Fry, *Journal of the American College of Cardiology* (2022)

Who is most impacted by shortages and maldistribution of the workforce?

Prior to the COVID-19 pandemic, the development of North Carolina's health care workforce had been identified as a key priority by experts across the state. Inadequate access to primary care, dental care, and behavioral health care services had been a significant issue prior to the COVID-19 pandemic, especially for North Carolinians in rural and historically marginalized communities.[30] North Carolina's rural communities have also had long-standing needs for nurses, allied health professionals, pharmacists, and certain types of specialists, to ensure adequate access to care.[30–32] These shortages have contributed to lower health status among rural residents in the years preceding the emergence of SARS-CoV-2, increasing their risk of severe disease, hospitalization, and death from COVID-19 when the pandemic occurred. This ultimately translated to a higher rate of death among rural residents from COVID-19 during the first year of the pandemic.[33]

To address these structural and systemic factors, with the goal of improving the capacity and sustainability of the health care workforce to provide services and supports to North Carolinians during times of crisis and beyond, the task force recommends the following:

STRATEGIES 5.1a–5.1d

Establish and provide resources for the forthcoming Center on Workforce for Health to develop solutions to address workforce shortages.

Strategy 5.1a: The North Carolina General Assembly, North Carolina Department of Health and Human Services, and/or philanthropic organizations should provide sustained, ongoing funding to establish and resource the North Carolina Center on Workforce for Health. The work of the Center should include an assessment of staffing and resource allocation levels to understand workforce shortages, areas in which workload has exceeded capacity, and adequate staffing levels needed in the event of another COVID-19 surge or other public health emergency; and the identification and sharing of best practices to address these issues.

Strategy 5.1b: The Center on Workforce for Health should develop an action plan that focuses on: (1) recruitment and retention of the health care workforce, ensuring that provider and clinician perspectives are included in the development and implementation of this action plan; and (2) pathways into health professions and opportunities to strengthen the health care workforce pipeline.

Strategy 5.1c: The North Carolina Department of Health and Human Services should work with leadership of the forthcoming Center on Workforce for Health to identify areas of alignment between the Department's strategic plan and the research and analysis work of the Center.

Strategy 5.1d: The North Carolina Healthcare Association, North Carolina Healthcare Facilities Association, Association for Home & Hospice Care of North Carolina, North Carolina Medical Society, North Carolina Nurses Association, Old North State Medical Society, North Carolina Medical Group Management Association, and Western North Carolina Medical Managers Association should work with local coalitions and partners engaged in implementing the forthcoming Center on Workforce for Health to assess health care workforce shortages (including those facing hospitals, health systems, independent physician practices, long-term care, and other elements of the health care ecosystem in the state) and develop short, medium, and long-term solutions.

DESIRED RESULT

Improved coordination and multi-sector strategic planning among state stakeholders (including health system representatives, academic researchers, community members, and others) to meet the urgent and long-term needs of the health care workforce with the goal of promoting workforce sustainability and access to high-quality health care for all North Carolinians.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

The task force noted that efforts to strengthen the health care workforce have been disjointed and uncoordinated, despite increased awareness of the challenges caused or exacerbated by the COVID-19 pandemic and recent momentum to address these challenges. The forthcoming Center on Workforce for Health represents an opportunity to align and coordinate the activities of key perspectives and experts.

Past efforts to address challenges facing the health care workforce have not received sustained and collaborative funding, which the task force noted as a limitation to progress and long-lasting improvement. **Strategies 5.1a–5.1d** involve the establishment, funding, and core mission of the Center on Workforce for Health, and emphasize the need for partners involved in the work of the Center to meaningfully engage and include providers and clinicians who are ultimately responsible for delivering care to North Carolinians in need.

ADDITIONAL CONTEXT

The North Carolina General Assembly, North Carolina Department of Health and Human Services, and philanthropy organizations are the responsible organizations involved in **Strategy 5.1a**. Although the Center on Workforce for Health received seed funding in the summer of 2022, sustained funding will be needed to ensure the capacity of the Center to develop solutions to the complex challenges facing North Carolina's health care workforce. The absence of sustained funding to support collaborative efforts focused on strengthening the health care workforce was identified by the task force as a significant limitation to progress that **Strategy 5.1a** aims to prevent.

In alignment with the task force's focus on equity and achieving system-level change to address the disproportionate harms of the COVID-19 pandemic on historically marginalized and vulnerable communities, **Strategy 5.1b** also asks the forthcoming Center on Workforce for Health to prioritize the development of recruitment and retention strategies for North Carolina's health care workforce. **Strategy 5.1b** also underscores the importance of including provider and clinician perspectives—the perspectives of those who have served on the front lines of the COVID-19 pandemic and other public health emergencies—in the development and implementation of these strategies to maximize their impact.

Strategies 5.1c and **5.1d** are grounded in an understanding of the importance of multi-sector planning, coordination, and meaningful collaboration. The North Carolina Department of Health and Human Services' 2021–2023 Strategic Plan emphasizes the importance of the direct care workforce in particular, and calls for the development and implementation of a comprehensive plan to strengthen this workforce.[34] This represents an opportunity to leverage shared goals and expertise to develop effective solutions that meet the needs of communities. **Strategy 5.1d** underscores the importance of involving hospitals and health systems, including independent physician practices, as well as emphasizing the needs of the nursing workforce, in the work of the Center to ensure their perspectives are reflected in strategies to address workforce shortages and other needs.

It is also important to note that the North Carolina Institute of Medicine's Task Force on the Future of Local Public Health has developed a recommendation that aims to promote statewide coordination in support of the public health workforce with a number of partners involved, Please see Recommendation 4 and the full final report from the Task Force on the Future of Local Public Health for additional details and information at https://nciom.org/future-of-local-public-health-in-north-carolina/

RECOMMENDATION 5.2

Assess workforce shortages and other needs of frontline essential workers to support continuity-of-operations planning.

Strategy 5.2a: North Carolina county commissioners should conduct a study of the issues facing the frontline essential workforce to understand shortages and requirements for ensuring continuity of operations in North Carolina's cities and counties during public health emergencies. This study should focus on water and wastewater management, solid waste services, emergency medical services, public safety, and other community-specific areas of interest.

Strategy 5.2b: The North Carolina Association of County Commissioners should provide guidance and technical assistance to county commissioners in their efforts to study issues facing the frontline essential workforce described in Strategy 5.2a.

Strategy 5.2c: The Office of Human Resources for the University of North Carolina system, Office of Human Resources for the North Carolina community college system, and North Carolina's independent colleges and universities should conduct a study to ensure adequate staffing levels for essential personnel.

STRATEGY 5.2a–5.2b

Assess frontline essential workforce needs to ensure continuity of operations for critical services.

Strategy 5.2a: North Carolina county commissioners should conduct a study of the issues facing the frontline essential workforce to understand shortages and requirements for ensuring continuity of operations in North Carolina's cities and counties during public health emergencies. This study should focus on water and wastewater management, solid waste services, emergency medical services, public safety, and other community-specific areas of interest.

Strategy 5.2b: The North Carolina Association of County Commissioners should provide guidance and technical assistance to county commissioners in their efforts to study issues facing the frontline essential workforce described in Strategy 5.2a.

DESIRED RESULT

Better understanding of the shortages and needs facing the frontline essential workforce responsible for providing critical services to keep North Carolina's cities and counties functioning before, during, and after public health emergencies, and the use of this information in continuity-of-operations planning and resource allocation decisions.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

Water and wastewater management, solid waste services, emergency medical services, and public safety are among the most critical services in North Carolina's cities and counties. Understanding what is needed to ensure continuity of operations during public health emergencies is vital to preventing disruptions in service for North Carolinians. The frontline essential workforce must also be adequately resourced and supported to promote sustainability and retention over time. Continuity-of-operations planning should consider the funding needed to ensure the level of services required by cities and counties, along with personal protective equipment (PPE) and other supplies to adequately protect these workers from infection and injury.

ADDITIONAL CONTEXT

North Carolina county commissioners and the North Carolina Association of County Commissioners are the responsible entities involved in **Strategies 5.2a** and **5.2b. Strategy 5.2a** will help to ensure that shortages and other challenges encountered by the frontline essential workforce are understood and prioritized by county commissioners and other local leaders. **Strategy 5.2b** aims to build on existing work of the North Carolina Association of County Commissioners to support county commissioners in their decision-making to respond to local needs, including the needs of the frontline essential workforce to ensure continuity of operations in cities and counties during times of crisis. The North Carolina Association of County Commissioners is in the process of expanding its technical assistance function and has ongoing initiatives and training opportunities focused on supporting county commissioners in their emergency preparedness and readiness efforts.[35]

STRATEGY 5.2c

Ensure continuity in services and supports for students.

The Office of Human Resources for the University of North Carolina system, the Office of Human Resources for the North Carolina community college system, and North Carolina's independent colleges and universities should conduct a study to ensure adequate staffing levels for essential personnel.

DESIRED RESULT

An assessment of staffing levels of essential personnel at University of North Carolina system schools, North Carolina community colleges, and independent and private universities and colleges during the COVID-19 pandemic would provide essential information to improve services and supports for students' physical and mental health needs and prevent disruption in services during public health emergencies.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

In 2021, over half a million students were enrolled in University of North Carolina system schools and North Carolina community colleges[36,37] and these institutions generate billions in added state income and economic impact to the state annually.[38] In 2020 and 2021, university and college students had to manage abrupt shifts from in-person instruction to virtual learning and residence hall and dining facility closures.[38] This created significant challenges for all students, but was even more impactful for out-of-state students and students who rely on campus housing. Colleges and universities rely on a variety of essential employees to ensure the safety and well-being of students, including but not limited [37] to those employed in campus health, dining facilities, counseling services, residence halls, facilities services, and campus safety.[39] Given the high rate of attrition and turnover of employees in higher education,[40,41] a study should be conducted to ensure that university and college campuses are adequately staffed to provide services for students' safety and well-being while on campus, as well as for physical and mental health needs that may have been caused or exacerbated by the COVID-19 pandemic. Adequate staffing of these positions is critical to mitigate the spread of COVID-19 and future outbreaks of infectious disease and avoid subsequent disruption to in-person learning .

ADDITIONAL CONTEXT

Several states have passed or initiated legislation to address the impacts of the COVID-19 pandemic on higher education institutions, including:[42]

- Maryland HB 187— This legislation requires higher education institutions to submit an annual outbreak response plan, which must include processes around provision of college and university staff.
- Louisiana SB 481—This legislation requires all postsecondary education management boards to implement policies that address the negative impacts of a public health emergency, including impacts on faculty and other staff.

- Massachusetts HB 4730—This pending legislation would establish an Emergency Fund for Public Higher Education Institutions, which would include grant funding for higher education institutions to recoup revenue loss and other outbreak-associated expenses, including employees' lost wages and increased costs associated with employee sick leave.

RECOMMENDATION 5.3

The development, implementation, and evaluation of evidence-based strategies to address burnout, compassion fatigue, and other mental and behavioral health needs are critical to promoting the health and well-being of the health care and frontline essential workforces and ensuring access to high-quality services and supports for the communities they serve. While protecting the health care and frontline essential workforces against the threats, harassment, and other forms of violence they have endured during the COVID-19 pandemic is similarly critical to promoting their health, safety, and well-being, it is also a moral imperative to prevent these harms.

The Occupational Safety and Health Administration defines workplace violence as "any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site. It ranges from threats and verbal abuse to physical assaults and even homicide."[43]

During the pandemic, threats, harassment, and other forms of violence directed at various sectors of the workforce have increased. The U.S. Bureau of Labor Statistics reports that workplace violence had been increasing for health care workers prior to the pandemic; during the COVID-19 pandemic, nurses attributed workplace violence and harassment to COVID-19-related staffing shortages, changes in patient population, and frustration related to restrictions for visitors. Other workers reported experiencing harassment from people worried about infection from health care workers in public.[44,45] The American Hospital Association, on behalf of its members, has urged the U.S. Department of Justice to support legislation intended to enhance protections for health care workers subject to harassment and violence in the workplace.[46] Public health officials have also experienced increased harassment and violence. Many officials report that they have also felt that their expertise has been unappreciated and undermined during the pandemic, and that needed improvements to public health infrastructure and resources have contributed to strain and workforce limitations.[47]

Beyond the health care and public health sector, teachers and school staff have also experienced harassment and violence during the COVID-19 pandemic. According to a survey by a task force of the American Psychological Association in 2022 , approximately one-third of teachers reported that they had experienced at least one threat of violence or incident of verbal harassment from students during the pandemic. Nearly 50% reported that they had a desire or plan to quit their jobs or transfer to a new position.[48]

Other workers, in retail and other public-facing positions, have also experienced harassment and violence related to their role in enforcing COVID-19 mitigation strategies. The CDC recognized this issue early in the pandemic, acknowledging that workers may be targeted by violence by customers as businesses enforce mask requirements, request customers to follow social distancing rules, and limit number of customers, and recommending that workers not attempt to force individual customers—particularly those who appear upset or violent—to follow the prevention and mitigation strategies.[49]

In North Carolina and throughout the United States, high COVID-19 case rates have not only strained workers and health care systems in their capacity to deliver services in a variety of ways, but also caused many of them to feel endangered, unsupported, and demoralized.[50] In fact, nearly 30% of health care workers surveyed during the early 2021 surge in cases reported they were considering leaving the field due to the challenges presented by the COVID-19 pandemic.[51] In response, the task force recommends the following strategies to prioritize the health and well-being of health care and other frontline essential workers:

RECOMMENDATION 5.3

Prioritize the health, well-being, and safety of the health care and frontline essential workforces.

Strategy 5.3a: The following entities should continuously evaluate evidence-based strategies to address burnout, compassion fatigue, and other mental and behavioral health needs—including but not limited to existing peer-to-peer support programs, support lines, and incentives to increase mental and behavioral health services available to workers—and consider opportunities for expansion of these strategies (see Strategy 5.3a for additional information).

Strategy 5.3b: The North Carolina Society for Human Resource Management, North Carolina Office of State Human Resources, and employers should develop and update policies and procedures to: (1) establish clear expectations and channels of communication between employees, managers, and human resources; (2) provide employees with tools and resources to manage stress and conflict; and (3) increase employee awareness of the resources available to help manage stress and conflict.

Strategy 5.3c: The North Carolina General Assembly should amend relevant statutes to include an add-on criminal charge or other penalty for harassment of a health care worker and/or frontline essential worker in relation to action(s) undertaken in furtherance of implementing one or more policies related to a state of emergency declared pursuant to G.S. 166A-19.20.

Strategy 5.3d: The North Carolina Department of Health and Human Services should convene representatives from the North Carolina Healthcare Association, North Carolina Association of Local Health Directors, North Carolina Medical Society, Old North State Medical Society, North Carolina Nursing Association, North Carolina Association of Physician Assistants, North Carolina Health Care Facilities Association, NC Chamber, North Carolina Department of Commerce, North Carolina Department of Public Safety, and the North Carolina Medical Group Managers Association to develop and implement other strategies to protect health care and frontline essential workers from threats, harassment, and other forms of violence before, during, and after public health emergencies.

Strategy 5.3e: The UNC School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors should work together to address threats and harassment of the local public health workforce (see Strategy 5.3e for additional information).

STRATEGY 5.3a

Ensure access to evidence-based mental and behavioral health services and supports for workers.

The following entities should continuously evaluate evidence-based strategies to address burnout, compassion fatigue, and other mental and behavioral health needs—including but not limited to existing peer-to-peer support programs, support lines, and incentives to increase mental and behavioral health services available to workers—and consider opportunities for expansion of these strategies:

- The North Carolina Department of Commerce, NC Chamber, North Carolina Association of County Commissioners, North Carolina League of Municipalities
- The North Carolina Department of Public Instruction, North Carolina Association of Educators, North Carolina College Personnel Association, and other professional and advocacy organizations representing education
- The North Carolina Department of Health and Human Services, North Carolina Healthcare Facilities Association, and other professional and advocacy organizations representing health care
- The National Alliance of Mental Illness North Carolina and other professional and advocacy organizations representing mental and behavioral health

DESIRED RESULT

Increased understanding of the strategies to address burnout, compassion fatigue, and other mental and behavioral health needs that have been implemented by employers across the state, and the identification of opportunities to expand these strategies within and outside of these organizations with the goal of increasing access to the services and supports that meaningfully improve the health and well-being of health care and frontline essential workers.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

The task force recognized that burnout, compassion fatigue, and other mental and behavioral health concerns have been caused or exacerbated by the COVID-19 pandemic.[52–57] Over the past few years, workload has increased as the demand for many of the services provided by health care and frontline essential workers has intensified. At the same time, the risk of exposure and infection has also been higher for these workers, many of whom have been unable to work remotely. Health care providers, educators, workers in critical manufacturing, and others have been overwhelmed and overworked, while also burdened by the downstream effects of vaccine hesitancy; unwillingness to adopt other public health mitigation measures, such as masking, among the general public; and heightened threats and harassment. These factors have contributed to burnout and compassion fatigue, which can reduce job satisfaction, contribute to retention challenges and workforce shortages, and compromise the quality of patient care. **Strategy 5.3a** asks organizations representing a number of key sectors and industries to assess evidence-based strategies to address these challenges and consider opportunities to expand those that are found to be most effective.

ADDITIONAL CONTEXT

Strategy 5.3a leverages existing efforts by these organizations to support the health and well-being of health care and frontline essential workers across the state, while also incorporating a focus on the continuous evaluation of evidence-based strategies that have been implemented prior to or during the COVID-19 pandemic.

STRATEGY 5.3b

Promote health and well-being among workers by creating healthy, supportive workplaces.

The North Carolina Society for Human Resource Management, North Carolina Office of State Human Resources, and employers should develop and update policies and procedures to: (1) establish clear expectations and channels of communication between workers, managers, and human resources; (2) provide employees with tools and resources to manage stress and conflict; and (3) increase employee awareness of the resources available to help manage stress and conflict.

DESIRED RESULT

Accessible tools and resources to help workers manage stress and navigate conflict, along with clear channels of communication between workers, managers, and human resources staff to encourage workers to access tools and resources and ensure they have paths to address issues and challenges that may arise in the workplace. Prioritizing health and well-being will promote job satisfaction and retention of the current workforce, increase productivity among workers, and strengthen employer recruitment efforts by fostering workplace environments that are healthy and supportive.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Prior to the COVID-19 pandemic, many workers struggled to find tools, resources, and effective strategies for transitioning to remote working arrangements, managing stress, and navigating conflict in the workplace. The task force emphasized that these challenges were exacerbated during the pandemic. Some workers may not have had access to services and supports that could have helped them manage stress or awareness of available services and supports, while others may not have received an appropriate action or response from their employer when reporting an incident involving violence or conflict. **Strategy 5.3b** would provide workers with visible paths for accessing existing services and supports offered by employers, while also encouraging improved communication between workers, managers, and human resources to help workers feel supported in the workplace.

ADDITIONAL CONTEXT

The North Carolina Society for Human Resource Management, North Carolina Office of State Human Resources, and employers are the responsible entities involved in **Strategy 5.3b**. The COVID-19 pandemic has caused many workers, particularly health care and frontline essential workers, to feel overwhelmed and overworked.[58] Employers have struggled to navigate the many uncertainties of the COVID-19 pandemic itself and other societal and political pressures during the pandemic era.[59] The Great Resignation, heightened awareness of the multi-generational harms caused by structural racism, and the resulting momentum to improve workplace diversity, as well as other state, national, and global challenges over the past few years, have contributed to workplace environments where stress and conflict are more likely.[60] As a result, employers are faced with protecting the health, safety, and well-being of individual workers under added tension, while also promoting teamwork and organizational productivity. **Strategy 5.3b** calls on human resources professionals and employers across the state to work collaboratively to develop tools and resources for workers, ensure awareness of those tools and resources, and promote clear communication to help workers receive support from their employers.

STRATEGY 5.3c–5.4d

Protect health care and frontline essential workers from threats, harassment, and other forms of violence.

Strategy 5.3c: The North Carolina General Assembly should amend relevant statutes to include an add-on criminal charge or other penalty for harassment of a health care worker and/or frontline essential worker in relation to action(s) undertaken in furtherance of implementing one or more policies related to a state of emergency declared pursuant to G.S. 166A-19.20.[a]

Strategy 5.3d: The North Carolina Department of Health and Human Services should convene representatives from the North Carolina Healthcare Association, North Carolina Association of Local Health Directors, North Carolina Medical Society, Old North State Medical Society, North Carolina Nurses Association, North Carolina Association of Physician Assistants, North Carolina Health Care Facilities Association, NC Chamber, North Carolina Department of Commerce, North Carolina Department of Public Safety, and the North Carolina Medical Group Management Association to develop and implement other strategies to protect health care and frontline essential workers from threats, harassment, and other forms of violence before, during, and after public health emergencies.

DESIRED RESULT

Systems and processes that protect health care and frontline essential workers from threats, harassment, and other forms of violence in the workplace and recognize their role in supporting the implementation of public health policies.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

Threats, harassment, and other forms of violence against health care and frontline essential workers have increased during the COVID-19 pandemic, particularly in connection with the implementation of mask mandates, vaccine mandates and "passports," and other public health policies designed to mitigate the spread of SARS-CoV-2.[61–63] The task force stressed the importance of taking meaningful steps to protect health care and frontline essential workers, understanding that these workers are often responsible for ensuring compliance with these and other public health policies during declared emergencies. This may include requiring a face mask or respirator to enter a classroom or health care clinic,[64] asking for proof of vaccination to enter a crowded venue, establishing limits on the number of customers allowed in a retail establishment,[65] or enforcing restrictions for hospital or long-term-care facility visitors.[66] **Strategy 5.2d** reflects the need for concerted efforts to protect health care workers and frontline essential workers more broadly from violence, which had been on the rise for a decade prior to the COVID-19 pandemic.[66]

[a] *North Carolina Emergency Management Act, Chapter 166A https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/ByChapter/Chapter_166A.pdf*

"Workplace violence has severe consequences for the entire health care system. Not only does violence cause physical and psychological injury for health care workers, workplace violence and intimidation make it more difficult for nurses, doctors and other clinical staff to provide quality patient care. Nurses and physicians cannot provide attentive care when they are afraid for their personal safety, distracted by disruptive patients and family members, or traumatized from prior violent interactions. In addition, violent interactions at health care facilities tie up valuable resources and can delay urgently needed care for other patients. Studies show that workplace violence reduces patient satisfaction and employee productivity, and increases the potential for adverse medical events."[62] – American Hospital Association, Fact Sheet: *Workplace Violence and Intimidation, and the Need for a Federal Legislative Response* (2022)

ADDITIONAL CONTEXT

Strategy 5.3c involves modifying existing laws to include an add-on criminal charge or other penalty for harassment of a health care worker and/or frontline essential worker under specific circumstances during a time when a declaration of emergency has been made under NCGS Chapter 166A (Emergency Management Act).[b] This means that harassment directed toward a health care or frontline essential worker because they attempted to enforce a public health policy could lead to an additional charge or other penalty. **Strategy 5.2c** would represent a meaningful action to protect workers on the front lines during times of crisis, which not only increases their risk of exposure and infection or accidental injury, but also their risk of being subjected to threats, harassment, and other forms of violence due to their visibility or perceived level of involvement in the response. As an example of this increased risk, the well-known shortage of personal protective equipment caused people to feel wary of health care workers and their perceived ability to spread COVID-19, contributing to an increase in violence directed toward them.

"On the bus, while wearing a mask, the nurse coughed into the crook of her arm. Immediately, another passenger accused her of trying to infect him. She assured him that wasn't the case and apologized. But as he exited the bus, the man made a fist and punched her in the left eye.…'[I] think the concern is that any health care provider is contagious themselves,' the nurse said."[66] – Howard Larkin, *Journal of the American Medical Association (2021)*

The Task Force on the Future of Local Public Health developed a similar strategy focused on protecting public health workers from threats and harassment:[c]

STRATEGY 4e

The UNC School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors should work together to address threats and harassment of the local public health workforce by:

i. Raising local public health worker awareness of current laws to address threats and harassment and appropriate times to bring actions against perpetrators.
ii. Developing support tools for local health directors to understand rights and laws related to threats, harassment, public records requests, and access to health department property.
iii. Developing support tools or technical assistance to local health departments that have been named in lawsuits, have received large public records requests, or need other technical assistance regarding legal matters.

The full text of Strategy 4e and important details and context can be found in the final report from the Task Force on the Future of Local Public health, available here: https://nciom.org/future-of-local-public-health-in-north-carolina/

RECOMMENDATION 5.4

Developing and implementing strategies to strengthen workforce recruitment and retention reflects an investment in workers and their value, while also fostering workplace cultures that are supportive, healthy, and ultimately more productive. Strengthening workforce recruitment and retention also serves to protect organization productivity and North Carolina's economic stability before, during, and after times of crisis. The task force emphasized that access to guidelines, training tools, and other supports to promote the health, safety, and well-being of staff; ensure proper patient care; and encourage innovation are essential to ensuring the ability of hospitals and health care systems to meet the needs of the communities they serve during public health emergencies.[2] To improve the sustainability and capacity of the health care and frontline essential workforces with these goals in mind, the task force recommends:

RECOMMENDATION 5.4

Strengthen workforce recruitment and retention.

Strategies 5.4a–5.4d focus on retention and well-being of North Carolina's workforce across sectors and industries, while **Strategies 5.4e–5.4g** are designed to support recruitment of health care workers and pathways into the health care workforce in particular.

[b] *North Carolina Emergency Management Act, Chapter 166A https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/ByChapter/Chapter_166A.pdf*
[c] *Full report from the NCIOM Task Force on the Future of Local Public Health is available here: https://nciom.org/future-of-local-public-health-in-north-carolina/*

Strategy 5.4a: The North Carolina Department of Commerce, NC Chamber, North Carolina Society for Human Resource Management, the Office of State Human Resources, and Family Forward NC should work together to develop additional tools, resources, and guidance for employers on:

- Managing remote work and employees working remotely;
- Offering flexibility during public health emergencies and other crises, as well as developing strategies to improve employers' ability to offer flexibility to employees as a long-term strategy of promoting recruitment and retention; and
- Creating staff development and training opportunities that are accessible remotely, and strategies to support employers in pivoting to alternative methods of delivering staff development and training opportunities.

Strategy 5.4b: The North Carolina General Assembly should consider statewide approaches to paid sick leave to help workers maintain financial stability during public health emergencies, ensuring that paid sick leave can be used by workers when experiencing illness and when providing care to their loved ones.

Strategy 5.4c: The North Carolina Department of Commerce, NC Chamber, Economic Development Partnership of North Carolina, and other partners should study the potential impact of providing wage supports—such as retention bonuses, hazard pay, and other monetary rewards—to increase retention.

Strategy 5.4d: Hospitals across the state should establish policies and procedures to promote the inclusion of bedside clinicians and practitioners in decision-making processes.

Recruitment and Workforce Pathways

Strategy 5.4e: The North Carolina Department of Health and Human Services, in partnership with historically minority-serving institutions, should consider strategies to increase the accessibility and affordability of educational opportunities with the goal of improving diversity and economic stability across the health care workforce. Strategies should include (1) offering resources and supports for students applying to college who intend on taking health-related courses to advance their career or major in a health-related program, (2) expanding access to tuition assistance and paid internships, and (3) elevating existing opportunities focused on increasing diversity.

Strategy 5.4f: The North Carolina Area Health Education Centers should consider strategies to increase the accessibility and affordability of educational opportunities with the goal of improving diversity and economic stability across the health care workforce. Strategies should include promoting access to mentorship beginning in the middle grades.

Strategy 5.4g: University of North Carolina system schools, North Carolina's community colleges, and independent colleges and universities across the state should apply findings from **Recommendation 5.1** to the development of curricula, recruitment efforts, and other strategies of illuminating workforce pathways into health care.

STRATEGY 5.4a

Develop tools, guidance, and resources for employers to promote adaptability during times of crisis.

The North Carolina Department of Commerce, NC Chamber, North Carolina Society for Human Resource Management, the Office of State Human Resources, and Family Forward NC should work together to develop additional tools, resources, and guidance for employers on:

- Managing remote work and employees working remotely;
- Offering flexibility during public health emergencies and other crises, as well as developing strategies to improve employers' ability to offer flexibility to employees as a long-term strategy of promoting recruitment and retention; and
- Creating staff development and training opportunities that are accessible remotely, and strategies to support employers in pivoting to alternative methods of delivering staff development and training opportunities.

DESIRED RESULT

Workplace environments that provide added flexibility to workers during public health emergencies, while also considering opportunities to provide ongoing flexibility to workers as a strategy for promoting recruitment, retention, and overall health and well-being within the workforce.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Providing workers with the flexibility to work remotely, allowing non-traditional work hours to help manage needs such as child care, or implementing other strategies to support workers in navigating challenges that arise during public health emergencies can lead to safer, healthier workplace environments where the risk of exposure and infection to pathogens such as SARS-CoV-2 is lower. Providing ongoing flexibility beyond times of crisis can improve job satisfaction among workers, fostering healthy, supportive workplace cultures that improve retention and strengthen recruitment efforts. In the context of the COVID-19 pandemic and the "Great Resignation," employers that are able to retain their workforce by providing flexibility, offering support to improve work-life balance, and prioritizing overall health and well-being are better positioned to compete in a challenging market and strengthen North Carolina's economy. **Strategy 5.4a** also recognizes that added flexibility can support professional growth and development within the workforce, understanding that workers can learn in different ways and may need a variety of opportunities, formats, and structures to do so effectively.

ADDITIONAL CONTEXT

The North Carolina Department of Commerce, NC Chamber, North Carolina Society for Human Resource Management, the Office of State Human Resources, and Family Forward NC are the responsible organizations involved in **Strategy 5.4a. Strategy 5.4a** builds on existing work under the North Carolina Department of Commerce's Economic Development Plan for the State

of North Carolina, which includes a strategy for strengthening initiatives that foster high-quality, productive work environments; promote talent development; and enhance business growth,[67] with the goal of growing and attracting a talented workforce to support North Carolina's businesses. The North Carolina Early Childhood Foundation has also added COVID-19 return-to-work policies to the materials and resources available through the Family Forward NC program. Family Forward NC supports and assists businesses in developing and implementing flexible and family-friendly workplace policies that enhance economic, physical, and mental well-being for the workforce.[68]

NC Chamber, the North Carolina Society for Human Resource Management, and the Office of State Human Resources are also essential partners in this work given their efforts to support businesses and employers in managing workplace and workforce-related challenges during the COVID-19 pandemic.

STRATEGY 5.4b

Expand access to paid sick leave to promote the health, well-being, and financial stability of the frontline essential workforce.

The North Carolina General Assembly should consider statewide approaches to paid sick leave to help workers maintain financial stability during public health emergencies, ensuring that paid sick leave can be used by workers when experiencing illness and when providing care to their loved ones.

DESIRED RESULT

Improved access to paid sick leave to ensure that frontline essential workers experiencing illness, or caring for a loved one experiencing illness,[69] have the ability to take needed time off without compromising their financial stability. Paid sick leave would also promote health, safety, and well-being outside of public health emergencies by allowing employees to take time off for important medical needs, such as preventive care screenings and prenatal visits, or to attend to critical safety issues.[70]

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Paid sick leave has been shown to reduce the spread of infectious disease in communities by allowing workers to stay home to care for themselves or a loved one when illness occurs,[71] thereby reducing the risk of exposure and infection for coworkers and other people in the community who workers may come into contact with in the course of their work. Parents with paid sick leave are also less likely to send a child experiencing illness to child care or school, therefore helping to prevent the spread of infectious disease to students, teachers, and other child care and school system staff. By prioritizing health, safety, and well-being, paid sick leave can improve workforce retention and productivity,[72,73] reduce burnout and exhaustion among workers, lower health care costs,[74] and strengthen North Carolina's economy by ensuring that employers offer competitive benefits.

The task force also recognized that people of color and members of historically marginalized communities are disproportionately represented[75,76,77] among the frontline essential workforce, and have also been disproportionately harmed by exposure, infection, and severe outcomes of COVID-19.[72] Statewide approaches that expand access to paid sick leave can support efforts to mitigate these harms,[72] which is especially important in anticipation of future surges of COVID-19 and other public health emergencies.

ADDITIONAL CONTEXT

The United States is the only highly developed nation[71,78] without a federal law that ensures workers receive pay while taking time to care for themselves or a loved one.[79] The Family and Medical Leave Act, signed into law by President Clinton in 1993,[d] requires employers with more than 50 workers to provide protected leave under certain circumstances, but does not require employers to compensate workers during their time away, nor does it address short-term sick leave and preventive care.[79] The Family Medical Leave Modernization Act[e] would have expanded who is permitted to take qualifying family and medical leave and provided additional leave for parents and family caregivers, but it has not been moved forward since it was introduced in April 2021. In North Carolina, the Paid Family Leave Insurance Act (Senate Bill 564) was introduced in April 2021 with similar provisions, but it has not moved forward since it was referred to the Committee on Rules and Operations.[80] The North Carolina Healthy Families & Workplaces/Paid Sick Days Act (Senate Bill 457) was introduced during the same session, but this legislation was not referred to a committee.[81] Despite challenges in achieving legislative change in North Carolina and in many other states,[82] paid sick leave has been extensively studied and widely supported by the general public[83–85] as well as leading organizations such as the American Medical Association[79] and the American Public Health Association.[86]

STRATEGY 5.4c

Consider opportunities to provide wage supports for the frontline essential workforce.

The North Carolina Department of Commerce, NC Chamber, Economic Development Partnership of North Carolina, and other partners should study the potential impact of providing wage supports, such as retention bonuses, hazard pay, and other monetary rewards, to increase retention.

DESIRED RESULT

An assessment of the potential impact of providing wage supports on the financial stability and overall retention of the frontline essential workforce, and the translation of study findings into effective strategies to support the financial stability and retention of frontline essential workers.

[d] *H.R.1 - Family and Medical Leave Act of 1993, https://www.congress.gov/bill/103rd-congress/house-bill/1*

[e] *H.R.2589 - Family Medical Leave Modernization Act, https://www.congress.gov/bill/117th-congress/house-bill/2589/titles*

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Ensuring the financial stability and retention of frontline essential workers is vital to protecting access to critical services and resources for North Carolinians and keeping North Carolina's businesses and economy intact during public health emergencies. Throughout the COVID-19 pandemic, frontline essential workers have been at higher risk of exposure, infection, and severe outcomes as a result of their close contact with the public or other aspects of their work that increase their vulnerability.[87] The heightened risk of exposure, infection, severe outcomes, and of infecting their loved ones in turn, are among the factors that have contributed to lower retention of workers in roles that are critical to ensuring continuity of operations in cities, counties, and across the state.

ADDITIONAL CONTEXT

The North Carolina Department of Commerce, NC Chamber, and the Economic Development Partnership of North Carolina are the organizations and entities involved in **Strategy 5.4c**.

At the beginning of the COVID-19 pandemic, the federal government attempted to create a hazard pay fund for frontline essential workers, which would have been particularly beneficial for low-wage workers without paid sick leave and other economic supports.[87]

STRATEGY 5.4d

Expand professional growth and development opportunities for bedside clinicians.

Hospitals across the state should establish policies and procedures to promote the inclusion of bedside clinicians and practitioners in decision-making processes.

DESIRED RESULT

Increased awareness of the expertise and perspectives of bedside clinicians and practitioners and greater inclusion of these providers in decision-making processes to promote their professional growth and development, improve retention of workers with essential skills and knowledge, and ensure high-quality health care for patients.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Strategy 5.4d focuses on the establishment of policies and procedures to elevate bedside clinicians and practitioners in decision-making processes that are both related and unrelated to patient care. The task force underscored that these workers have invaluable technical and interpersonal skills that enable them to form trusting relationships with patients and their loved ones, which was particularly important in the context of the early stages of the COVID-19 pandemic, during which patients were often unable to receive visitors due to restrictions designed to limit the spread of the virus in communities. Without the ability to oversee the provision of care and services in person, families and friends needed to be able to trust in health care providers. Since bedside providers often spend significant time with patients relative to other hospital staff and see fewer patients overall, they may have a greater understanding of each patient's medical history, health status, and the questions and concerns that have been raised by the patient or their family and friends. Their ability to advocate for patients based on this understanding can promote trust in health care providers and the health care system itself, which can help to increase individual patients' and communities' connections to care before, during, and after public health emergencies.

The inclusion of bedside clinicians and practitioners in decision-making processes also leverages the institutional knowledge that these workers hold, which can ensure systems and policies that are feasible and reflect the provision of care and services to patients by all levels of staff within a hospital or health system. The institutional knowledge, technical expertise, and interpersonal skills that these workers have are not easily found or replaced and should be retained, especially in light of shortages facing the health care workforce. Ensuring the inclusion of bedside clinicians in decision-making processes can strengthen teamwork between these workers, physicians, and other hospital staff involved in patient care, yielding benefits that could reduce strain on hospitals and health systems during times of crisis.

ADDITIONAL CONTEXT

Ensuring the inclusion of bedside clinicians and practitioners as described in **Strategy 5.4d** would also support efforts by the forthcoming Center on Workforce for Health to create new opportunities for professional growth and development and illuminate pathways into health care. These opportunities or pathways may emerge from improved coordination within and across teams that includes cross-training or knowledge-sharing across domains, along with greater exposure to other roles and responsibilities within the health care workforce.

STRATEGY 5.4d

Improve diversity and economic stability across the health care workforce by increasing access to educational opportunities.

Strategy 5.4e: The North Carolina Department of Health and Human Services, in partnership with historically minority-serving institutions across the state, should consider strategies to increase the accessibility and affordability of educational opportunities with the goal of improving diversity and economic stability across the health care workforce. Strategies should include (1) offering resources and supports for applying to college for students who intend on taking health-related courses to advance their career or major in a health-related program, (2) expanding access to tuition assistance and paid internships, and (3) elevating existing opportunities focused on increasing diversity.

Strategy 5.4f: The North Carolina Area Health Education Centers should consider strategies to increase the accessibility and affordability of educational opportunities with the goal of improving diversity and economic stability across the health care workforce. Strategies should include promoting access to mentorship beginning in middle grades.

DESIRED RESULT

Sustainably funded strategies designed to increase access to educational opportunities that lead into the health care workforce, contributing to the development of a workforce that is racially, ethnically, and culturally representative of communities across the state. Improved economic stability of the current and future health care workforce by providing educational opportunities that are fairly compensated.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

The task force identified the need to build and maintain a diverse health care workforce,[88,89] and emphasized that this diversity is critical to building trust within communities served, ensuring the availability of culturally appropriate and tailored services, and increasing the utilization of services and supports to improve health and well-being among North Carolinians. **Strategy 5.4e** aims to strengthen the partnership between the North Carolina Department of Health and Human Services and historically minority-serving institutions across the state to support the development of effective strategies that increase the accessibility and affordability of educational opportunities. Partnering with historically minority-serving institutions will also increase awareness of existing opportunities.

Strategy 5.4f similarly aims to support the development of strategies that increase the accessibility and affordability of educational opportunities, while building on North Carolina Area Health Education Centers' ongoing work to improve pathways into the health care workforce to include an expanded focus on mentorship opportunities for students in middle grades.

ADDITIONAL CONTEXT

The North Carolina Department of Health and Human Services, historically minority-serving institutions, and the North Carolina Area Health Education Centers are the entities involved in **Strategies 5.4e and 5.4f**. Workforce development efforts often center on engaging students and early-career professionals to increase awareness of training and professional development opportunities, with many training opportunities focusing on undergraduates. The North Carolina Institute of Medicine Task Force on the Future of Local Public Health has also developed strategies for improving pathways into the public health workforce:[f]

RECOMMENDATION 5:

BUILD LOCAL PUBLIC HEALTH'S FUTURE CAPACITY TO SERVE THE COMMUNITY BY GROWING A DIVERSE AND SKILLED WORKFORCE

Four strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of a strong and representative local public health workforce:

Strategy 5a – DEVELOP A NETWORK OF PUBLIC HEALTH PROGRAMS: The Gillings School of Global Public Health at the University of North Carolina at Chapel Hill should convene a Network for North Carolina Programs of Public Health to: 1) support academic partnerships with local public health agencies; 2) identify opportunities for collaboration with other academic programs that train professionals in emerging fields relevant to local public health; and 3) advocate for tuition payment or loan forgiveness for those who commit to serving in local public health.

Strategy 5b – FUND INTERNSHIP OPPORTUNITIES: North Carolina Public Health philanthropies, the North Carolina Association of Local Health Directors, the North Carolina Department of Health and Human Services, and other relevant stakeholders should work together to support sustainably funded internship opportunities to develop a public health workforce that: 1) is racially and ethnically representative of communities served; 2) serves rural communities; and 2) includes professions that are less represented in local public health (e.g., data science, communications).

Strategy 5c – RAISE AWARENESS OF PUBLIC HEALTH CAREERS: The North Carolina Public Health Association should work with local health departments and community partners to identify opportunities to introduce careers in local public health to students at middle and high school levels to begin developing the workforce pipeline.

Strategy 5d – SUPPORT NEW TO PUBLIC HEALTH TRAINING: The Division of Public Health should support training for new public health professionals to improve understanding of roles, strengths, and challenges of local public health (e.g., New to Public Health Program through University of Wisconsin-Madison) and encourage local health departments to enroll staff new to public health for participation.

[f] *Full text of Recommendation 5, along with important details and context, can be found in the final report from the NCIOM Task Force on the Future of Local Public Health, available here: https://nciom.org/future-of-local-public-health-in-north-carolina/*

STRATEGY 5.4g

Translate study findings into effective strategies to strengthen workforce pathways into health care.

The University of North Carolina system, North Carolina's community colleges, and independent colleges and universities across the state should apply findings from Recommendation 5.1 to the development of curricula, recruitment efforts, and other strategies to illuminate workforce pathways into health care.

DESIRED RESULT

Thoughtfully developed and implemented curricula, recruitment plans, and other strategies to better illuminate pathways into the health care workforce among students in North Carolina's colleges and universities.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

Strategy 5.4g recognizes that achieving a sustainable, qualified health care workforce requires educational institutions to help students and workers at all career stages seamlessly transition into the health care workforce. The task force identified the need for curricula, concerted recruitment efforts, and other strategies to facilitate this seamless transition for future health care workers, while also underscoring the forthcoming Center on Workforce for Health as an invaluable opportunity to conduct research and analysis, along with other key functions, that can be applied by educational institutions in the development of strategies to illuminate pathways into the health care workforce.

ADDITIONAL CONTEXT

The University of North Carolina system, North Carolina's community colleges, and independent colleges and universities are the organizations involved in **Strategy 5.4g.**

RECOMMENDATION 5.5

Provide flexibility to health care workers to increase surge capacity during public health emergencies.

Strategy 5.5a: The North Carolina Medical Board, North Carolina Board of Nursing, North Carolina Healthcare Association, North Carolina Medical Society, North Carolina Nurses Association, Old North State Medical Society, North Carolina Medical Group Management Association, Western Medical Group Managers Association, and others should work together to (1) identify potential areas of flexibility for health care providers during declared public health emergencies and (2) consider criteria that must be met before flexibilities can be used by providers during declared public health emergencies.

Strategy 5.5b: The North Carolina General Assembly and/or Executive Order from the Governor should provide immunity from medical malpractice liability[12] and address other vulnerabilities associated with practicing under unusual circumstances to encourage providers who have met the criteria identified as part of **Strategy 5.5a** to exercise their flexibilities with the goal of increasing surge capacity.

DESIRED RESULT

Flexibility for qualified health care providers to increase their capacity to provide surge support during declared public health emergencies, and systems and policies that offer protection when these workers are called upon to provide surge support.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

The task force identified insufficient health care workforce surge capacity as a significant issue during the COVID-19 pandemic, and emphasized that the temporary expansion of scope-of-practice regulations helped health systems to better manage heavy caseloads, reduce the severity of burnout and exhaustion among workers, and promote access to care for North Carolinians in need. **Strategy 5.5a** encourages key organizations to thoughtfully consider the outcomes associated with expanded flexibility—and which aspects were most effective without significantly compromising the quality of care delivered to patients—while also encouraging these organizations to collaboratively identify criteria that can be applied in order to expand flexibility during declared public health emergencies. **Strategy 5.5b** aims to ensure providers that are temporarily operating under expanded scope-of-practice authority are not unduly penalized for providing surge support in situations that may increase the risk of adverse outcomes or medical errors.

ADDITIONAL CONTEXT

During the COVID-19 pandemic, the North Carolina Medical Board amended licensing rules for several health professions, including physicians, physician assistants, anesthesiologists, and perfusionists, for the duration of the public health emergency. The changes allowed a limited emergency license during states of emergency and other disaster situations.[91]

The North Carolina Board of Nursing also issued changes to licensing rules during the pandemic in order to help alleviate staffing shortages and ensure adequate care for patients. Under these changes, nurse practitioners could be reassigned to a new practice area within the same health care facility, "without regard to their academic preparation and national certification and without updating his or her supervisory arrangements, so long as the nurse practitioner is reassigned to perform only those medical duties which the nurse practitioner is competent and qualified to do; and the nurse practitioner has reasonable and immediate access to a physician, either in person or electronically, should medical issues arise." These changes expired on June 30, 2022.[92]

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