Meeting Minutes
National Advisory Council on the National Health Service Corps
March 19–20, 2024

Council Members
Charmaine Chan, DO, Chair
Aaron Anderson, DO
Andrea Anderson, MD, MEd, FAAFP
Tara Brandner, DNP, FNP-C
Sheri-Ann Daniels, EdD
Jihan Doss, DMD, MPH
Debbian Fletcher-Blake, APRN, FNP
Sandra Garbely-Kerkovich, DMD
Deborah Gracia, DO
Kareem Khozaim, MD, FACOG
LuVerda Martin, DNP, CNM, APNP
Shawn McMillen, MPA, ASUDC
Edward Sheen, MD, MPH, MBA
Elias Villarreal, Jr., DMSc, MPAS, PA-C, DFAAPA
Abby Walenciak, MA, PHR, LPC, LADC

Health Resources and Services Administration Staff Present
Diane Fabiyi-King, Designated Federal Official
Keisha Robinson, Management Analyst, Division of National Health Service Corps
Zuleika Bouzeid, Management Analyst, Advisory Council Office
Janet Robinson, Management Analyst, Advisory Council Office
Kim Huffman, Director, Advisory Council Operations

Overview
The National Advisory Council on the National Health Service Corps (NACNHSC, or Council) met March 19–20, 2024, via teleconference. The NACNHSC is a group of health care providers
and administrators who are experts in the issues faced by communities with a shortage of primary care health professionals. The Council serves as a key source of information to the National Health Service Corps (NHSC) senior management, the Secretary of the U.S. Department of Health and Human Services (HHS) and, by designation, the Administrator of the Health Resources and Services Administration (HRSA). The NACNHSC was established under 42 USC 254j (Section 337 of the Public Health Service Act), as amended by Section 10501 of the Affordable Care Act. The Council is governed by provisions of Public Law 92-463 (5 USC App.2), which sets forth standards for the formation and use of advisory committees. NACNHSC responsibilities are specified under Subpart II, Part D, of Title III of the Public Health Service Act.

DAY 1

Opening and Welcome Remarks
Designated Federal Official (DFO) Diane Fabiyi-King opened the meeting at 10:05 a.m., Eastern time, and called the roll. HRSA staff member Janet Robinson provided instructions for meeting participation.

Council Chair Charmaine Chan, DO, welcomed the participants. She read aloud the poem, “When Giving Is All We Have,” by Alberto Rios, and appreciated the Council members for giving their time and energy to improve access to health care in underserved areas around the country. As Dr. Chan gave an overview of the agenda, she pointed out that several presentations touch on climate change and health equity—a pressing and timely issue.

Dr. Chan welcomed new Council members LuVerda Martin, DNP, CNM, APNP, and Abby Walenciak, MA, PHR, LPC, LADC. Council members introduced themselves. Dr. Chan invited members to suggest topics for Council consideration using the chat box throughout the meeting. Ms. Fabiyi-King reminded the group that the NHSC partnered with the Association of Clinicians for the Underserved and Abt Associates to create the Empowering Clinicians for Resiliency and Transformative Care initiative. It provides webinars, online materials, and other tools to promote clinician well-being and organizational and individual resiliency. The initiative is always seeking presenters. HRSA staff can provide templates that presenters can adapt to their settings.
Presentation: NHSC Update

Israil Ali, MPA

Director, Division of National Health Service Corps, Bureau of Health Workforce (BHW), HRSA, HHS

Israil Ali, MPA, thanked the Council members for providing their expertise to the program. The NHSC program is a catalyst for building healthy communities. At present, more than 18,000 NHSC participants are providing care to more than 19 million people in underserved communities. More than 80 percent of NHSC participants continue to practice in the community where they completed their NHSC service after they have met their obligations.

The NHSC program received limited reauthorization that extends through calendar year 2024. It was appropriated $325 million for mandatory programs through fiscal year (FY) 2024 and $87 million for the first quarter of FY 2025. BHW is still awaiting full appropriation for discretionary programs. HRSA is taking applications for upcoming NHSC programs now because the agency is confident that funding will be available by the time awards are made.

Mr. Ali explained that the NHSC made initial awards to states for state loan repayment programs (SLRPs) in 2022 and continues to work closely with states to strategize how to increase their local health care workforce numbers. Other programs underway include NHSC scholarships and the various loan repayment programs (LRPs), including Students to Service. This year, for the first time, NHSC will offer an increased award of up to $75,000 for those who complete their obligations in a primary care medical Health Professional Shortage Area (HPSA). In addition, to boost linguistic competence among providers, NHSC will offer an additional $5,000 to participants who demonstrate that they can speak fluent Spanish in the context of providing care. The NHSC continues to support improved maternal health care with a $10,000 per year enhancement to Students to Service loan repayment awards for those pursuing maternal health training who agree to serve in high-need Maternity Care Health Professional Target Areas (MCTAs).
As mentioned earlier, the Empowering Clinicians for Resiliency and Transformative Care initiative provides training and support for NHSC participants. Among its main goals is to recognize burnout and encourage resiliency so that sites and providers can offer optimal care. The initiative provides NHSC participants a platform for networking and mentoring.

As part of its commitment to optimize data collection and use, BHW has made a lot of NHSC data available online for stakeholders. BHW recently modernized its postgraduate training data collection to simplify the process of uploading residency and fellowship information for verification. The change speeds up the verification process and allows HRSA to see how NHSC participation links with other BHW training programs. These data help HRSA demonstrate how its investments support health care workforce education, training, and service. Staff are also evaluating application data to learn more about the applicant pool.

On the basis of stakeholder input, the NHSC and Nurse Corps have created a continuously open application cycle to decrease the burden of application deadlines. Both programs also now offer a preapplication portal that allow users to check whether they are eligible for the programs before they submit a detailed application. Mr. Ali anticipated that preapplication would also expedite the review process for those who apply. The preapplication portal will also give insights on who is interested in BHW programs, which can inform outreach.

Discussion
Kareem Khozaim, MD, FACOG, asked whether the additional funding for service in a primary care medical HPSA and for Spanish fluency were driven by legislation or other considerations. Mr. Ali responded that HRSA created both awards based on evidence indicating that targeted financial incentives have been effective. He noted that the spike in NHSC participation driven by pandemic-related funding did not result in a proportional increase in the number of primary care medical providers in the program.

Sandra Garbely-Kerkovich, DMD, pointed out that the loan repayment amount available for those who serve in dental HPSAs ($50,000) is only a fraction of the average student debt for dental training of $350,000 to $500,000. As a result, the LRP is not as strong a recruitment tool
for dental providers as it used to be. Mr. Ali recognized the issue, saying that the program is always trying to balance competing priorities. The increased incentive will give BHW insight on how well the approach works to increase the number of primary care medical providers.

Debbian Fletcher-Blake, APRN, FNP, asked Mr. Ali to elaborate on his expectations for the maternal health incentive. He responded that the goal is to drive providers to the highest need MCTAs. Based on past participation, BHW projects that only about 25 people will be eligible for the incentive.

Ms. Fletcher-Blake asked whether BHW has considered offering incentives for psychiatrists as a way to expand the pool of mental health providers. Mr. Ali said BHW supports clinical psychiatry through mechanisms outside of the NHSC program. He pointed out that psychiatrists often serve as contractors rather than employees of community health centers, which is not supported through the NHSC program. Andrea Anderson, MD, MEd, FAAFP, said the salary difference between private practice and community health centers for psychiatrists is substantial and acts as a barrier. She added that primary care providers supply 80 percent of mental health treatment. Dr. Andrea Anderson proposed that NHSC consider supporting additional mental health training for primary care providers, such as mental health care fellowships, which prepare providers to treat more specialized conditions. Mr. Ali noted that NHSC seeks to support primary health services, and specialized training may go beyond its authority. However, the program has evolved over its 50-plus years to reflect current medical practice and is always looking for ways to expand. Shawn McMillen, MPA, ASUDC, said that community health centers often use psychiatrists on a contract basis because there are so few available, and the arrangements across organizations can be complicated. Mr. Ali noted that a psychiatrist seeing patients at multiple sites that operate under one organizational umbrella might be eligible, but those who work less than full time for a given community health center are not.

Dr. Andrea Anderson said that co-locating mental health and primary care services is one approach that encourages an interdisciplinary team approach to patient health and contributes to better outcomes in physical health, such as hypertension and diabetes. It also minimizes the
stigma of seeking mental health care and increases the likelihood that patients will follow up with referred services.

Mr. McMillen asked that Mr. Ali expand on the LRP for those training to treat substance use disorders (SUDs). Mr. Ali explained that BHW partnered with HRSA’s Office of Rural Health Policy, which funds the Rural Communities Opioid Response Program, to mobilize the SUD workforce. The NHSC SUD Workforce LRP offers up to $100,000 in loan repayment. The NHSC program has expanded eligible sites to include community and office-based opioid treatment programs. Mr. Ali reported that the NHSC and the Office of Rural Health Policy programs are in their fifth year and have been widely successful.

Aaron Anderson, DO, asked how the NHSC defines successful retention, especially for rural communities. Mr. Ali reiterated that the overall NHSC retention rate is higher than 80 percent, although he has not seen the data stratified by urban and rural settings. He noted that there has been high interest in the rural LRP over the past 5 years. It is open to a broader range of health care providers than the traditional LRP, including registered nurses, pharmacists, and certified nurse-anesthetists. Mr. Ali said his staff would determine whether the data on retention rates can be categorized according to urban or rural locations.

Dr. Aaron Anderson appreciated BHW’s Empowering Clinicians initiative and asked how it links current NHSC participants with alumni to foster networking. Mr. Ali said many of the initiative’s webinars are facilitated by NHSC alumni. He added that the NHSC is working to strengthen connections among participants and alumni.

Edward Sheen, MD, MPH, MBA, explained that the Council is considering a recommendation that the NHSC broaden its definition of retention to include alumni who are no longer providing direct patient care but are serving in public health, government, academic, and administrative positions that further the goals of expanding equitable access to health care. A broader definition would assist with recruitment by showing that NHSC alumni have a wide range of career options; it would also demonstrate to legislators that the NHSC has an impact across the spectrum of health care. Mr. Ali said current measures align with the program’s legislative
mandate, but he looked forward to the Council’s recommendations. Dr. Andrea Anderson said that fewer people are going into primary care in every discipline, which decreases the pool from which the NHSC can recruit. Alumni are key to recruitment, she noted, and Mr. Ali agreed.

Dr. Chan pointed out that it is difficult for obstetrician-gynecologists to practice in areas of high need, including MCTAs, that do not have hospitals with labor and delivery units. Mr. Ali said the NHSC has not looked specifically at how the increase in closures of such units have affected obstetric services in rural areas, but he would consider doing so at the end of this fiscal year. Data are needed to make the case for changing policy, as was done for increasing the primary care medical provider award.

Dr. Chan said the Council’s Site Recruitment and Retention Workgroup has heard that some SLRPs believe they are in competition with the NHSC for the same people. Mr. Ali said his office works closely with SLRP grantees toward the goal of using funding strategically to mobilize the health care workforce in a complementary way. The American Rescue Plan Act gave SLRPs $100 million to recruit for the local health care workforce, providing a huge opportunity for states to boost their workforce. Mr. Ali recognized the perception that the programs are competing; his office responds by seeking more discussion with state programs about how to increase the workforce.

**Presentation: NHSC Policy Update**

*Sean Smith, Senior Policy Analyst, Division of Policy and Shortage Designation, BHW, HRSA, HHS*

Sean Smith explained that the President’s proposed budget for FY 2025 requests $961 million for the NHSC, a significant increase over previous years. The request would extend mandatory funding that expired in FY 2023 for 3 years to support the health care workforce in high-need communities through scholarships and LRPs. Mr. Smith acknowledged the NHSC program’s outstanding retention rate. He noted that the NHSC has good resources available online that can be used by the public, legislators, the media, and others.
Although Congress did not pass legislation reauthorizing the NHSC program at the end of FY 2023, it recently passed a consolidated appropriations act that extended funding for the NHSC through December 31, 2024. The NHSC enjoys strong bipartisan support in both chambers of Congress, Mr. Smith stated, and the extension buys time for HRSA to advocate for full reauthorization.

Mr. Smith summarized the traditional budget process. The FY 2025 budget negotiations were kicked off by the President’s budget proposal, but the FY 2024 budget is not yet final.

**Discussion**

Dr. Andrea Anderson questioned whether Congress fully appreciates the crisis in the primary care workforce. Mr. Smith said that HRSA Administrator Carole Johnson testified before Congress several times about reauthorization proposals, and he believes there is real interest. Bipartisan support is rare, especially in the current political climate, but legislators regularly express interest in protecting the NHSC program. Mr. Smith noted that both parties support NHSC reauthorization but differ on the amount of funding to provide.

Dr. Andrea Anderson asked whether it would be useful for alumni or current NHSC participants to advocate for the program. Mr. Smith said Congress members and their staff always appreciate personal stories and anecdotal evidence that back up the data. Dr. Garbely-Kerkovich asked how to target advocacy efforts in a meaningful way. Mr. Smith said he could not advise on advocacy but pointed out that members who serve on House and Senate appropriations committees, especially the Labor and Health and Human Services subcommittees, have substantial influence; the makeup of those committees is readily available online.

Dr. Aaron Anderson asked whether the President’s budget accounts for the rising number of immigrants, many of whom receive care at NHSC sites. Mr. Smith said that BHW tracks the numbers of patients served by NHSC sites, and he expected that figure to increase as more people immigrate. He encouraged Council members to review the President’s FY 2025 proposed budget.
Presentation: Climate Change and Health Equity: How HHS is Making the Connection

John Balbus, MD, MPH
Director, Office of Climate Change and Health Equity
Office of the Assistant Secretary for Health, HHS

John Balbus, MD, MPH, outlined how climate change is affecting health care and particularly health equity. For example, in 2023, the United States experienced the highest levels of smoke exposure in decades because of wildfires, a devastating heat wave, and a continuing El Niño weather system that suggests another very hot summer this year. Mortality and morbidity rates related to high heat are increasing dramatically, as is the number of natural disasters annually causing $1 billion or more in damages, demonstrating how the scale of the impact of climate change is ratcheting upward. The social disparities of health that increase health care risks—such as low income and insufficient housing—also increase vulnerability to the health effects of climate change, such as heat-related illness and respiratory disease. HHS seeks to protect health and well-being, and it recognizes the need to address these disparities.

The health sector makes up about one fifth of the U.S. economy and is a big contributor to greenhouse gases. Climate change also affects mental health, which further translates into physical health effects and influences community well-being. Environmental health inequity and injustice compounds all of the upstream social factors affecting health, including systemic and structural racism, as demonstrated by the fact that low-income and underrepresented groups have been pushed to areas with less green space and more pollution as a result of zoning. The COVID-19 pandemic highlighted these inequities.

The Biden-Harris Administration created the HHS Office of Climate Change and Health Equity (OCCHE) in August 2021. It focuses on the interactions between climate, the health sector, and health effects. OCCHE has ambitious goals and a broad agenda but no funding, so it partners with federal agencies within and outside of HHS as well as the private sector and communities at risk. In 2022, HHS and the White House brought private-sector organizations together around a pledge to reduce organizational emissions by 50 percent by 2030 and achieve net-zero by 2050. In the nearly 2 years since, 133 organizations have taken the pledge, including about 15 percent
of all U.S. private and public health centers and hospitals, as well as a number of pharmaceutical companies and other large health-sector companies.

The HHS–White House convening also called for a climate resilience plan that anticipates the needs of those at disproportionate risk of climate-related harm. HHS published its Climate Change and Health Equity Strategy Supplement in December 2023, which spells out commitments from all HHS operating divisions, including specific actions for the near future. Dr. Balbus said a great deal of work is underway to develop metrics and indicators to measure progress. In addition, HRSA and the Centers for Medicare and Medicaid Services (CMS) are providing technical assistance to health organizations on increasing resilience and sustainability—such as installing battery-powered backup generators and solar panels. The strategy also addresses how to practice medicine in more efficient, sustainable ways. The Inflation Reduction Act provided funding to support sustainability and resilience in health care.

Dr. Balbus pointed to other federal efforts to boost resilience in the health sector, particularly in the context of national health security and emergency preparedness. New guidance and funding are now available to encourage more cooperation between hospitals and public health departments. The OCCHE is working with private and public entities to ensure climate change is recognized in preparedness planning. Communities are combining funding sources to create climate resilience hubs that offer community services such as meal support and afterschool programs year-round and are prepared to act as shelters and service providers during emergencies. HRSA’s National Training and Technical Assistance Partnerships are helping communities access Inflation Reduction Act funds for workforce training, sustainable energy, climate-related hazard protection, and safety net services within climate resilience hubs. The Agency for Healthcare Research and Quality offers resources on decarbonization. The OCCHE is updating a guide on health care resilience in partnership with the HHS’ Administration for Strategic Preparedness and Response. More information about these and other initiatives can be found on the OCCHE Resource Hub.

The OCCHE’s Catalytic program seeks to help agencies determine how they can use Inflation Reduction Act funds to address energy efficiency, renewable energy, and climate resilience
priorities and partner with nonfederal organizations to create sustainable solutions. OCCHЕ introduced the Climate and Health Outlook, an interactive online map that links long-term weather forecasts to potential health hazards to help organizations prepare for weather-related health emergencies. HHS is updating policies to support health organizations, such as revising emergency preparedness guidelines to allow for solar-powered backup systems. A new initiative from the HHS Secretary will offer more guidance on caring for migrant and seasonal workers. Dr. Balbus emphasized that the NHSC can leverage its position to train providers who care for those at highest risk for climate-related health conditions.

Discussion
Dr. Chan proposed that Dr. Balbus’ office reach out to NHSC sites to build support for community climate resilience hubs.

Dr. Aaron Anderson said he wrestled with the fact that protective measures suggested (e.g., for seasonal farmworkers) are not feasible for low-income people who cannot afford to stay home or find other jobs when environmental conditions are dangerous. He asked for advice on how health care providers can help people with limited resources. Dr. Balbus replied that many steps do not require a lot of money or political will. He noted that the Biden-Harris Administration just announced a low-income household energy assistance program, and HHS recently launched a program to help individuals and health care systems lower their energy expenditures. Although such steps do not address all of the need, Dr. Balbus believes health care providers can connect patients with available resources. Moreover, providers can help individual patients—for example, by anticipating which patients may need to adjust their activities or medications in anticipation of extreme weather. Dr. Balbus said the country cannot afford to wait for perfect solutions or to put off action until larger problems are fixed.

Dr. Sheen appreciated that HHS is encouraging health care systems to increase sustainability. He described a student-led project at Stanford University that found that laundering medical gowns achieves the same cleanliness and sterility at a lower cost than using disposable gowns. Dr. Balbus said the example underscores the impact of climate change on institutional morale as well as the promise of unleashing the creativity and intelligence of the health care workforce to
increase efficiency. He pointed to another initiative that combines a food-as-medicine approach with food procurement that emphasizes sustainable, local agriculture and prioritized farmers who are Black, Indigenous, and people of color.

Dr. Sheen asked whether cyberattacks were considered among the threats to the health sector. Dr. Balbus said his group did not address cyberattacks specifically but HHS is working toward an all-hazards approach that recognizes cyberthreats, which affect vital infrastructure.

Ms. Walenciak pointed out that standardizing telehealth practices would go a long way toward decarbonization and cut down on the time and costs of transportation to patients. The lack of public transportation is already a significant barrier for many, she said, and Dr. Balbus agreed.

Dr. Sheen asked how OCCHE interacts with legislators who are skeptical about the causes of climate change. Dr. Balbus said he does not have a lot of contact with legislators, but he pointed to the increasing trend of attaching stigma to words that impede the discussion. On the other hand, he said, lawmakers across the United States are feeling the effects of extreme weather on their health care systems and recognizing the need for resilience. Dr. Balbus expressed frustration about expensive initiatives that focus on a narrow topic in the short term rather than broader issues that would have larger impact. He hopes to draw attention to the connections between climate change and a raft of challenges facing the health care system.

Dr. Balbus said the Catalytic program ends soon, but his office plans to package it into a resource for others and could customize the materials as needed. Dr. Chan suggested the resources may be of interest for the Empowering Clinicians initiative.

**Presentation: Rural Health Research Resources**

*Mark Holmes, PhD*

*Director of the Cecil G. Sheps Center for Health Services Research*

*University of North Carolina at Chapel Hill*

Dr. Holmes described how to use the 2023 [Rural Population Health in the United States: A Chartbook](#), which he said better stratifies rural data than many other national data chartbooks.
Compared with other resources that do focus on rural data, the Chartbook provides significant county-level data that shows variations within states and enables users to compare information among counties in different states and across all U.S. counties. The data offer not just averages but distributions and ranges to give a better sense of the impact of various indicators. The Chartbook can highlight rural counties that have worse outcomes than urban counties in the same state—a useful tool for educating legislators about rural needs. It also can illustrate regional patterns, such as problems that affect one portion of the state more than others or that affect counties bordering neighboring states. The information comes from public data sources that capture county-level metrics. “Rural” is defined as a non-metropolitan area.

Dr. Holmes summarized the mechanisms used to present the data, each of which offers ways to identify key information quickly. For example, box plots allow users to see a county’s most pressing issues, while a map rapidly reveals the geographic distribution of an indicator in relation to other counties.

Dr. Holmes outlined current and emerging health problems affecting the rural United States, pointing out that rural communities have higher mortality rates than others and that disparity is growing. He focused on several financial issues driving this finding:

- Rural hospital closures, including instances in which a health care system closes down a site but continues to offer care many miles away, which is not counted as a closure by the system but is experienced by the community as such.
- Long-term unprofitability of rural health care sites, which persists, even though some sites benefited from federal assistance as a result of the COVID-19 pandemic. Two fifths of health care systems are losing money.
- Trends in declining profitability from patient care, which disproportionally affects rural hospitals that provide more outpatient care than urban hospitals.

The data suggest that rural counties would benefit from a health care model that revolves around outpatient and emergency care. CMS established the rural emergency hospital designation in late 2020. So far, 19 hospitals have converted to rural emergency hospitals in areas that might
otherwise have lost hospitals. Dr. Holmes appreciated that Congress recognized the need for a new model of rural care, although it has pros and cons.

The COVID-19 pandemic demonstrated the importance—and fragility—of the health care workforce. To respond to some of the challenges, HRSA recently announced the Rural Residency Planning and Development program, signaling its openness to innovative models of staffing and reimbursement.

Dr. Holmes highlighted additional rural health resources, such as the Rural Health Research Gateway, supported by HRSA funding; HRSA technical assistance centers for graduate medical education; the National Advisory Committee on Rural Health and Human Services; the Provider Retention Information and System Management collaboration, which tracks provider experience in NHSC and SLRPs; and the Sheps Center for Health Services Research.

**Discussion**

Elias Villarreal, Jr., DMSc, MPAS, PA-C, DFAAPA, asked how the Chartbook compares with other resources, such as the University of California, San Francisco’s Health Atlas. Dr. Holmes said the Chartbook is similar but tends to focus on individual states.

Dr. Aaron Anderson asked how to assess nuances around quality of care, such as whether closing rural maternity services leads to women and infants getting higher quality care at larger hospitals. Dr. Holmes said the University of Minnesota’s Rural Health Research Center looks closely at that topic. He acknowledged the need to assess the availability and quality of prenatal and long-term postnatal care in rural communities.

Dr. Aaron Anderson asked whether Dr. Holmes has talked with organizations about the importance of available housing in recruiting and retaining a rural health care workforce. Dr. Holmes said that housing commonly comes up as a barrier, and housing is expensive even in some rural areas. He recommended looking at the Rural Graduate Medical Education portal for more information.
Mr. McMillen wondered why there were so few hospital closures in the Intermountain West. Dr. Holmes proposed that hospitals in that region tend to capture a large market share and may be in a stronger financial position than hospitals in other rural regions. He also said incomes may be higher in the area and payment policies may be more generous.

Dr. Martin asked whether any data address the effects of out-of-hospital births (e.g., births at home or in a birthing center) on maternal health in rural areas. Dr. Holmes said that freestanding birth centers are reluctant to operate without the backup of a hospital. He did not have any home birth data.

Public Comment
Ms. Fabiyi-King read aloud a comment submitted by Adam Forker, MPH, executive director of the DuPage County (IL) Health Department. Mr. Forker asked that (1) the federal definition of underserved HPSAs be expanded to include certified local public health departments that have more than 50 percent of their clients funded by Medicaid and (2) federal student LRPs be expanded to accommodate more allied health professional workers, including social workers, community health workers, and mental health professionals, among others. (See the appendix for the full written comment.)

Discussion
Dr. Garbely-Kerkovich and Dr. Villarreal said the comment might be considered by the Expansion of Funding Workgroup.

**Action Item:** HRSA staff will seek insights on the policies governing expansion of HPSAs and HPSA services.

Discussion, Recap of Day 1, and Plan for Day 2
**Charmaine Chan, DO, Chair, NACNHSC**
Dr. Chan asked the new Council members to consider which workgroups they would like to join. She summarized the agenda for day 2. The meeting recessed for the day at 3:50 p.m.
DAY 2

Opening and Charge of the Day
Ms. Fabiyi-King, DFO, opened the meeting at 10:02 a.m., Eastern time, and called the roll. Council Chair Dr. Chan read a portion of the poem “On the Pulse of Morning,” by Maya Angelou in honor of Women’s History Month. She invited Tara Brandner, DNP, FNP-C, whose term ends in June, to reflect on her tenure on the Council. Dr. Brandner said the Council’s meetings have been highly engaging and its work powerful. She was especially pleased that she was able to represent the needs of rural communities. Dr. Brandner said serving on the Council has reinforced her commitment to advocacy. Dr. Chan thanked Dr. Brandner for her leadership. She then summarized the agenda for the day.

Reports from BHW Council Meetings
Dr. Chan explained that the Council is increasing communication across HRSA’s five BHW advisory groups in an effort to find opportunities for collaboration:

- NACNHSC
- Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL)
- Advisory Committee on Training in Primary Care Medicine and Dentistry
- Council on Graduate Medical Education
- National Advisory Council on Nursing Education and Practice

Dr. Doss and Mr. McMillen attended the January ACIBCL meeting. They reported that the Committee talked about ways to address health care provider burnout through training and potentially through artificial intelligence (which would require developing ethical standards for artificial intelligence). Discussion also addressed bolstering the health care workforce pipeline by reaching out to students as early as middle school. The Committee also focused on the needs of people entering the behavioral health workforce, observing that some lack resilience and emotional preparedness for their work. The issue of resilience and emotional preparedness, other ACICBL members noted, is as well observed among other new entrants to the broader health care workforce. The ACICBL is writing a report that addresses professional identity and co-curricular training, among other topics, to improve new providers’ performance. It also discussed improving NHSC site recruitment to tackle the workforce shortage.
Discussion
Ms. Fletcher-Blake asked whether the ACICBL looked at data demonstrating a lack of resilience among new providers. Mr. McMillen said the observation was based on anecdotal data, mostly from Committee members who oversee training programs and expressed that some young people entering the workforce appear to lack the resilience and emotional maturity needed for the job.

Panel: Climate Change and Health Equity
Kealoha Fox, PhD
President, Institute for Climate and Peace (IPC); Head of Social Health Integration,
AlohaCare
Wynne Armand, MD
Associate Director, Massachusetts General Hospital Center for the Environment and Health
Kealoha Fox, PhD, said the health care sector is lagging in the application of science to combat the effects of climate change. It is not too late to address climate change; there is a wealth of scientific data, but the world needs solutions and leadership. There is clear evidence of racial disparities around the effects of climate change. With the information and models available, there is an opportunity to prepare and build readiness for future threats. The American Public Health Association’s Center for Climate Health and Equity and the Medical Society Consortium on Climate and Health have tools to help clinicians counsel patients, talk to colleagues, and incorporate interventions.

Dr. Fox also serves as technical advisor to the U.S. Global Change Research Program, which produces the congressionally mandated National Climate Assessment (NCA). The NCA describes the evidence on social vulnerability and climate-related hazards. Such indices help identify inequities and losses, information that can translate into interventions and programs created in participation with the community. The NCA also provides a cross-sectional analysis of hazards and intergenerational inequity, which will be exacerbated by climate change for years to come unless action is taken. Dr. Fox said Hawaii is on the front line of the climate crisis.
The NCA, along with Forging Climate Solutions and other papers from the American Academy of Arts and Sciences, offers recommendations, vetted by experts from diverse backgrounds, that cut across polarized politics and can be used to inform and advocate in communities, the private sector, nonprofits, and elsewhere. The National Oceanic and Atmospheric Administration’s Pacific Research on Island Solutions for Adaptation project works to gather information from across the U.S.-affiliated Pacific region to contribute to the understanding of climate change.

Dr. Fox’s work with IPC seeks to put community first, elevating girls, women, and indigenous elders. For example, IPC connects girls with local indigenous women to ask big questions about the long-term effects of climate change and to come up with possible solutions. IPC provides tools to help address climate grief. It also seeks to bridge the divide between indigenous and academic knowledge. IPC’s work builds a network of women and girls who create solutions at the local level; they are not waiting on government action, said Dr. Fox. Climate change, health, and equity are top-of-mind in Hawaii, as illustrated by the recent devastating wildfires in Maui. IPC is encouraging girls to lead the way toward a better future for everyone.

Like Dr. Fox, Wynne Armand, MD, also wears two hats—working at a community health center near Boston as well as Mass General’s Center for the Environment and Health, which fosters research and advocacy for communities disproportionately affected by climate change. She cited the following statement, written by a group of health and medical journal editors from around the world and published in more than 200 journals: “The greatest threat to global public health is the continued failure of world leaders to keep global temperature rise below 1.5°C and to restore nature.” Dr. Armand emphasized that everyone has a role, not just global leaders. Burning fossil fuels causes climate change, which affects morbidity and mortality, and contributes directly to air pollution, compounding the effects. Dr. Armand said human exposure to heat and air pollution varies depending on local infrastructure, location, health systems, individual health, and access to housing and health care, among other factors. The impact of climate change is manifested in increased flooding and drought, longer and more severe pollen seasons, increased vectors for infectious disease, and migration and political conflict. Dr. Armand outlined many of the health conditions attributable to heat and air pollution and the related disparities, underscoring the need for better reporting to capture the real impact of climate change.
California study determined that extreme temperatures and air pollution together generate a 21-percent increase in mortality. Heat and wildfire smoke also work synergistically, increasing the risk to individuals.

Dr. Armand encouraged providers to assess individual patients’ sensitivity to environmental exposure. For example, people taking medications that affect thermoregulation should be counseled to increase hydration. Providers can ask about a patient’s location of housing and work to assess for potential exposure to hazardous conditions or extreme weather. They can ask whether a patient’s home has air conditioning or adequate ventilation, whether the home is reasonably accessible, and whether the individual lives alone or cares for someone else—all of which affect resilience. Dr. Armand said the approach involves taking a more detailed history, but two questions are key:

- Do you have a way to stay cool on hot days and warm on cold days?
- What is the environment at your job?

Dr. Armand noted that the built environment contributes to heat islands, and many people affected by poverty live in such areas. In 2020, with the rise of COVID-19, it was finally recognized that there is no federal or state monitoring of air quality. Exposure to indoor air pollution can be modified with ventilation, air purifiers, and air conditioning. Where exposure is unavoidable, respirators can help. Dr. Armand cited a number of resources, such as Americares’ Climate Resilience for Frontline Clinics, which offers a toolkit for patients, providers, and administrators. Patient tools include apps that provide early warnings and community information resources. For patients without access to electricity, OCCHE has funds for weatherization. Medical–legal partnerships are available to help patients with poor living conditions who face higher risk. Dr. Armand said providers can get information and resources to people in need by collaborating with community health workers, advanced practitioners, and community organizations and using mobile health vans. Providers can advocate for incorporating environmental health into training programs. Inflation Reduction Act funds are available to help. Dr. Armand encouraged the Council members to support policies that protect patients.

Discussion
Dr. Sheen asked how Dr. Armand is incorporating information into training in-house staff and what NHSC can incorporate in training. Dr. Armand responded that Climate Resources for Health Education is a joint effort with multiple academic institutions that has created a curriculum that anyone can use. It can be incorporated into medical, nursing, and other postgraduate training and applies to various specialties. Dr. Armand said trainees are often the people advocating for such information, recognizing the lack of time and attention paid to climate-related health issues in residency training. Dr. Armand said interest is growing among medical schools, but she hoped that more program leaders would integrate training into curricula.

Dr. Chan asked how health care providers who come from outside of a community can learn about the historic trauma unique to the community they serve. Dr. Fox suggested acknowledging the land that one works and lives in; cultural humility starts with remembering and celebrating a community’s uniqueness, not sanitizing its history. Early training should incorporate cultural awareness. Dr. Fox hoped more providers would spend time volunteering or otherwise begin more involved in the communities they serve.

Dr. Garbely-Kerkovich pointed out that the effects of climate change on agriculture affects access to and costs of fresh, healthy, nutritional food, which in turn affects health. Dr. Fox said AlohaCare relies on Medicare and Medicaid funds to offers nutrition support at no cost to ensure access. It is the first managed care organization in the United States to have a CMS-authorized nutrition program that is tailored to the pallet of the community, linking people to produce native to the area. Despite the agricultural industry in the region, Hawaii imports 90 percent of its food, which Dr. Fox considered a social determinant of health that should be addressed through collaboration between health care and agriculture. Dr. Armand added the need to think more broadly about agriculture, such as better using available land and making sensible decisions about which crops to grow.

Dr. Garbely-Kerkovich asked whether AlohaCare offers nutritionists. Dr. Fox said that all 17 of the organization’s community health centers use a patient-centered medical home model that includes nutrition and dietary expertise. All the Federally Qualified Health Centers in Hawaii have funding for dietary expertise.
Dr. Aaron Anderson asked for more suggestions on how to counsel patients for whom exposure to high temperatures or other climate risks are unavoidable. Dr. Armand acknowledged that there are no good answers; masks help to limit some exposure but are not easy to wear all day. She suggested advocating for the patient when possible (e.g., providing a letter asking the patient’s employer to provide time off in light of health conditions), but recognized that some workers cannot afford not to work. Dr. Armand pointed out the need to address the root causes. Dr. Fox recommended that Council members seek out resources for providers on counseling patients and for employers. She recommended viewing the recorded panel on global warming and health from the American Academy of Arts and Sciences’ 2024 annual meeting. Dr. Fox added that Jason Glaser, CEO of La Isla Network, is bridging health economics and social science and may have insights for employers struggling to change their standard procedures.

Ms. Fletcher-Blake said educating children is crucial to making significant, lasting change. NHSC sites in school-based clinics are one opportunity to reach children. Ms. Fletcher-Blake asked for strategies that NHSC providers could use to engage students and their parents, especially those with limited resources. Dr. Fox said young people already understand the basics of climate change, but schools lack the tools and experts to expand that knowledge. Youth are the best gateway to reaching families and offer the best opportunity for prevention, so health care providers should consider participating in school activities and working with local organizations. Dr. Fox said organizations in Hawaii have invested in experiential, place-based, project-based learning through age 20, with government resources; she suggested promoting that approach more. Via chat, Dr. Fox also recommended the American Public Health Association’s Climate and Health Youth Education Toolkit, which provides supporting materials for public health professionals to give guest lectures to high school students.

Dr. Khozaim pointed out that little discussion on climate change in health care acknowledges how much the medical industry contributes to climate change. He called on individuals to advocate locally for reducing their own organizations’ carbon footprint. He asked for examples of clinical sites that have succeeded in reducing environmental impact. Dr. Armand said that health care pollution ranks alongside medical errors in its contribution to poor health. Her
hospital has worked to improve sustainability; one project focusing on anesthetic gases successfully reduced greenhouse gases by 80 percent in 1 year. It is also educating faculty about the greenhouse gases associated with metered dose inhalers for asthma. Incorporating quality measures on sustainability that link to physician payment has also been effective, said Dr. Armand. Dr. Fox added that health care systems are inundated with patients as a result of natural disasters; organizations must invest in their own infrastructure to meet the demands, and sustainable, green practices can be part of that (e.g., battery-powered backup generators).

Public Comment
No comments were offered.

Presentation: Travel Procedures
Janet Robinson
Advisory Council Operations, BHW, HRSA, HHS
In anticipation of the in-person Council meeting in June 2024, Janet Robinson described the procedures for members to reserve travel and receive reimbursement. HRSA staff will send detailed information to Council members explaining procedures and policies. Ms. Robinson responded to numerous questions about specific situations related to travel.

NACNHSC Workgroup Updates
Each workgroup presented its draft recommendations and rationales for input from Council members.

Expansion of Funding to Additional Specialties Workgroup
Dr. Garbely-Kerkovich presented the draft introductory text, which explains that the concept of primary care has expanded since the NHSC was created, and a more integrated approach to patient care is needed. As a first step, the workgroup’s recommendations focus on increasing access to nutrition services, in keeping with the White House National Strategy on Hunger, Nutrition, and Health, which highlights the relationship between healthy eating and diet-related diseases. The workgroup believes that HRSA should assess the current availability of nutrition services through the NHSC site application and recertification processes to measure progress
toward the National Strategy’s goals and evaluate the gaps in NHSC site services. HRSA should also promote existing programs, tools, and resources on preventive care for nutrition, diabetes, and obesity. The workgroup sought Council input on its draft recommendations for the NHSC:

**Recommendation 1:** Advance interdisciplinary and collaborative practice by setting aside funding for NHSC participants to get additional training or certification on preventive care principles, such as nutrition counseling.

**Recommendation 2:** Support integrated health care by funding pilot programs that bring nutritionists or other allied health providers to NHSC sites to address obesity, diabetes, and nutrition. Create an LRP for nutritionists.

**Recommendation 3:** Implement clinical quality measures that promote interdisciplinary care and incentivize sites to improve collaboration among providers to enhance patient care.

**Discussion**

Dr. Gracia said that the American College of Lifestyle Medicine maintains that 80 percent of chronic disease could be prevented through nutrition and lifestyle measures. However, health care providers already have a lot of issues to tackle, so one approach is to educate more people to develop nutrition expertise and work with patients as part of the health care team. Dr. Garbely-Kerkovich said the workgroup believes an interdisciplinary approach is needed and asked for input on how to incorporate issues around climate change into its recommendations. Dr. Aaron Anderson suggested there may be other sources that would pay for nutrition training; in some settings, Medicare and Medicaid pay for nutrition services. Dr. Gracia said that payment varies by state; she would like to see more emphasis on nutrition counseling as a prevention measure. She added that nutritionists often must have a master’s degree to practice, so they seek higher-paying positions to offset their student debt, rather than working in community health centers.

Dr. Chan recommended bolstering the case in support of nutrition counseling for prevention—for example, by including the costs of obesity to public and private insurers and highlighting that low-income populations may not have access to new weight-loss drugs.
Dr. Gracia and Dr. Garbely-Kerkovich stated that having clinical measures acts as an incentive to improve care, and providers should be encouraged not just to refer patients for nutritional counseling but also to follow up on referrals.

**Site Recruitment and Retention Workgroup**

Dr. Villarreal said the workgroup sought data from HRSA staff about best practices, gaps, and needs around site recruitment and retention. Some site challenges are beyond the scope of the NHSC program, but the workgroup can highlight gaps and barriers and suggest approaches to address them.

Dr. Villarreal presented the workgroup’s draft introductory statement, which outlines challenges to increasing the number of rural sites participating in the NHSC program and the perception that some SLRPs are competing with the NHSC. HRSA staff identified the biggest barrier to site participation as the required use of a sliding fee scale and the prohibition against using asset testing to determine whether clients have alternative sources of income or assets that would disqualify them for free services and against requiring clients to enroll in Medicaid as a condition of providing care. The workgroup’s recommendations address the NHSC site dropout rate, but it is awaiting additional data from HRSA that will inform its recommendation. Dr. Villarreal presented the workgroup’s draft recommendations:

**Recommendation 1:** Increase participation of sites in rural HPSAs in NHSC through the following:

- Invest in more personnel to engage in outreach and provide technical assistance to potential sites.
- Expand methods of communication and engagement with potential sites.
- Increase the frequency of communication and improve the consistency of outreach with potential sites.
- Encourage sites to keep points of contact up to date.
- For existing and potential sites, reach out to lower-level staff who are more involved in day-to-day operations rather than focusing exclusively on leadership.
- Emphasize the benefits of a collaborative approach to LRPs.
• Continue engaging with the Indian Health Service to encourage rural sites to participate in the NHSC program.

**Recommendation 2:** HRSA should consider how to mitigate the barriers posed by the requirement that NHSC sites offer a sliding fee scale but not use asset testing.

**Recommendation 3:** HRSA should evaluate the reasons for the high dropout rates among correctional institutions and mental health clinics and take actions to mitigate them through Division of Regional Operations technical assistance.

**Discussion**

Dr. Villarreal said the workgroup is looking at models and best practices for ensuring the accuracy of HPSA scores and for addressing competition. Several members expressed that they would like to see advanced practice providers (e.g., nurse practitioners, certified nurse-midwives, and physician assistants) and other allied health providers (e.g., dental therapists and mental health providers) included in the calculation of HPSA scores.

Ms. Fletcher-Blake pointed out that the sliding fee scale is required (and asset testing prohibited) for all types of NHSC sites, so HRSA should offer more clarity and a less punitive approach. Ms. Fletcher-Blake said HRSA should better define “nominal fees” and consider establishing a formula to determine the nominal fee annually in accordance with annual cost-of-living adjustments.

**Scholar Recruitment and Retention Workgroup**

Dr. Khozaim said the group recognizes that recruitment and retention are strongly linked and can strengthen each other. The NHSC has taken many steps already, and the most recent numbers show an uptick in applicants. Although the NHSC has a high retention rate, the rate could be higher if HRSA accounted for alumni who no longer provide direct patient care. Dr. Khozaim noted that although the workgroup’s recommendations specify NHSC scholars, they are applicable to those in the LRP. Recommendations are categorized as short- and long-term:
**Short-Term Recommendation 1:** HRSA should revise its definition of NHSC retention to include alumni who no longer provide direct clinical care but otherwise advance the mission of the NHSC by staying within a medically underserved community and through administrative and academic work.

**Short-Term Recommendation 2:** NHSC should analyze the demographic makeup data of NHSC participants to strengthen recruitment and retention efforts. This analysis could be stratified by year, by provider discipline (physician, physician assistant, nurse practitioner, etc.), or by specialty (internal medicine, pediatrics, family medicine, obstetrics and gynecology, psychiatry, etc.). One strategy would be to assess whether there are characteristics of participants that predict retention, and prioritize those characteristics in the recruitment process.

**Short-Term Recommendation 3:** HRSA’s Division of External Affairs should create an Instagram account to expand its social media outreach to young people.

**Long-Term Recommendation 1:** NHSC sites should look for federal funding sources to support retention of NHSC participants after completion of services—e.g., for retention bonuses—particularly at rural sites.

**Long-Term Recommendation 2:** The NHSC should create a database of NHSC participants and alumni as a first step toward creating a networking program.

**Recommendation 2.1:** Create a system for linking applicants with participants and alumni, whether through social media or other mechanisms, to increase mentorship and build community. A searchable database of participants and alumni would be a good starting point. It might include, for example, descriptions of current location and position, date and place of NHSC service, and current areas of interest. Individuals could choose whether to be included in the database, which would be used by potential applicants who want more information.

**Recommendation 2.2:** Create a process for alumni to reach out to current participants before they complete their service to offer insights or advice on next steps. Develop guidance for mentorship that sets expectations and provides mentors with advice on how to be effective.

**Long-Term Recommendation 3:** In order to effectively recruit clinicians to medically underserved areas, especially those that continue to struggle to find applicants, the NHSC
should partner with sites to invest in onsite, short-term housing for clinicians (e.g., medical students, residents, and new clinicians). Some options to explore include the following:

- Link NHSC sites with area universities or Area Health Education Centers that offer rotations and that may be able to collaborate on housing.
- Provide grants to NHSC sites to invest in housing.
- Provide funding that enable sites to offer stipends to local residents for housing NHSC participants.

Discussion

Dr. Khozaim said that the goal of revising the definition of retention is to understand the characteristics of those who are still contributing in a way that reflects the NHSC program’s principles and to incorporate that understanding into recruitment. Dr. Chan suggested recommending that HRSA evaluate the language needs of NHSC sites. The award for Spanish-speaking providers could be expanded to include providers who speak other languages where needed. Dr. Andrea Anderson suggested evaluating the success of the new award to determine whether it acts as an incentive and lends itself to expansion.

Dr. Chan asked whether the workgroup has recommendations to reach a more diverse pool of potential applicants earlier so that they are aware of opportunities to offset the high cost of medical school. Dr. Khozaim said some recommendations address medical students and residents, but the workgroup is open to more ideas for reaching undergraduates.

Council members offered specific suggestions for raising awareness about the NHSC, recognizing that HRSA has limited capacity for outreach. Some discussion centered on the need for HRSA to make it easier for alumni who want to give back and promote the NHSC program. Ms. Fletcher-Blake pointed out that mentorship is great for recruitment; she suggested that sites be required to provide NHSC participants with time and opportunities to mentor others and engage with the community.
Mr. McMillen reminded the Council that people with lived experience of homelessness, substance abuse, and mental health conditions should be considered as potential NHSC applicants. Dr. Sheen said the workgroup could explore the issue, noting that a challenging background should not be considered a barrier to service.

Dr. Khozaim pointed out that executives from several NHSC sites reported to the Council at a previous meeting that public institutions bear the bulk of provider training costs, while private hospitals offer higher salaries and bonuses to already trained providers. The executives called for public institutions to develop innovative pay models to keep providers in their health centers. The workgroup’s recommendation for financial incentives for retention is one such model. Dr. Sheen said the recommendation would be more likely to be supported if it included evidence on the return on investment and the costs of attrition, burnout, absenteeism, and understaffing. Some discussion centered on the logistics of a retention bonus and how it could be fairly implemented, with recognition that bonuses pose a challenge to salary parity.

Dr. Chan suggested the workgroup focus on how the NHSC program could support sites in setting up alumni networking and mentorship programs locally. She also suggested that HRSA could work with sites that already have an alumni database to connect alumni with new NHSC participants. Ms. Fletcher-Blake pointed out that mentorship can be bidirectional; new scholars can take on projects in addition to seeing patients, such as mentoring an undergraduate or high school student or working in the community.

Several members strongly supported the need for housing and the concept of rotations. Dr. Villarreal noted that accreditation dictates the scope of rotations and should be considered.

**Closing Remarks and Next Steps**

*Charmaine Chan, DO, Chair, NACNHSC*

Dr. Chan invited Dr. Andrea Anderson, whose term ends in June, to reflect on her tenure with the Council. Dr. Andrea Anderson described how her NHSC scholarship guided her whole career. She urged Council members to continue to use their voices to fight for the underserved
and advance the mission of the NHSC. Dr. Chan noted that Dr. Andrea Anderson has been an insightful voice and strong contributor to the Council and thanked her for her service.

Dr. Chan appreciated the Council members’ engagement throughout the 2 days of meeting. She thanked all of the HRSA support staff for their excellent work organizing and hosting the meeting and adjourned the meeting at 3:42 p.m.
Appendix: Public Comment

February 16, 2024

Diane Fabiyi-King
Designated Federal Official
Division of National Health Service Corps, HRSA
5600 Fishers Lane, Rockville, Maryland 20857
Telephone (301) 443-3609

Emailed to: NHSCAdvisoryCouncil@hrsa.gov

Re: Written Comments Submitted to the National Advisory Council on the National Health Service Corps for the March 19/20, 2024 Meeting, Document No. 2023-27604, Expansion of Definition of Health Professional Shortage Areas and Expansion of Eligible Positions for Student Loan Reimbursement Programs

Dear Council Members,

Thank you for the opportunity to submit these comments for your consideration. We are a local public health department that provides a variety of public health services including environmental, primary care, dental health, substance use and mental health services to residents that reside in our county. We and our clients, like many other health care providers, have been negatively impacted by the public health workforce shortage.

To help remedy this problem, we respectfully request that the federal definition of underserved health professional shortage areas (HPSA) be expanded to include certified local public health departments that have more than 50% of their clients funded by Medicaid to help ensure the DuPage County Health Department is included in primary care, dental health, and mental health HPSAs. This is expected to help us better recruit for public health staff that may benefit from federal or state student loan reimbursement programs.

Secondly, we further request that the federal student loan reimbursement program requirements be expanded to include the following additional positions/employee job titles:

- Registered nurses,
- Licensed social workers,
- Licensed professional counselors,
- Community health workers,
- These staff positions credentialed by state Medicaid programs:
  - Mental Health Professionals,
  - Qualified Mental Health Professionals,
  - Rehabilitative Services Associates, and
  - Licensed Practitioners of the Healing Arts.

Sincerely,

Adam Forker, MPH
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