COMMENTARY

Graduate Medical Education in Indian Country: Addressing Workforce Shortages and Improving Health Outcomes

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Introduction

The federal government established the Indian Health Service (IHS) in 1955 to manage the delivery of health care to members of federally recognized American Indian and Alaska Native (AIAN) Tribes living on or near AIAN land. Today, the IHS serves 1.7 million people across 43 hospitals and 383 clinics—but it continues to experience substantial physician shortages (Assistant Secretary for Planning and Evaluation, 2022). The US Department of Health and Human Services (HHS) published a 2018 report on the topic of the IHS physician supply that documented an average IHS medical officer vacancy rate of 26 percent, with some regions having higher vacancies, such as the Bemidji Area (Illinois, Indiana, Michigan, Minnesota, and Wisconsin) with a rate of 60 percent (Government Accountability Office, 2018). Such shortages limit care access and worsen health outcomes in AIAN communities, where chronic diseases such as heart disease, cancer, and diabetes are prevalent, and life expectancy is just 64 years—over a decade shorter than the US average of 75 years (Maxmen, 2025). Staff shortages have, at times, forced facility closures, such as a 2014 suspension of obstetric services in Crownpoint, New Mexico, or a 2015 emergency room closure in Rosebud, South Dakota (Fonseca, 2015; Office of Inspector General, 2019). High-quality care remains a challenge; for instance, in 2021, the single lowest rate of patient satisfaction with physician communication among 4,000 US hospitals was recorded at an IHS hospital in Montana, for which only 41 percent of discharged inpatients agreed that physicians always communicated well, compared with 80 percent nationally (Centers for Medicare & Medicaid Services, 2022).

The IHS's physician workforce challenges, though long-standing and pervasive, are amenable to a straightforward solution: establishment of a graduate medical education (GME) program specific to IHS. Residency programs are an evidence-based strategy to recruit physicians to rural settings and a mainstay of physician recruitment in other US health systems (Ogden et al., 2020; Tobey et al., 2022). Moreover, proof-of-concept models in IHS are now widespread, with 20 active academic programs, including eight residencies, six fellowships, and six academic faculty staffing programs (Tobey et al., in press). That said, for GME to achieve its promise, the IHS will need to address key deficiencies in its infrastructure, including how it collects physician workforce data and its approach to physician recruitment and retention. Moreover, to build a physician workforce that represents the population it serves, IHS should accompany these changes with efforts to increase AIAN representation in medical education. Such an approach aligns with past national recommendations to build a more geographically and racially diverse supply of physicians through GME and represents a novel

approach to address gaps in the IHS physician supply (Lipstein et al., 2016; NASEM, 2021).

The members and supporters of the American Indian Medical Education Strategies (AIMES) Alliance believe that it is time for experts, stakeholders, and policy makers to convene to discuss the path to these solutions. And although this commentary focuses on the physician workforce, similar attention is owed to many other professions for which the IHS experiences workforce shortages.

Data Deficiencies

The IHS is structurally divided into three components: federal IHS facilities, Tribally operated IHS facilities, and the Urban Indian Health Program. These components are evolving to address health service needs. Tribal operation of IHS facilities was authorized by the 1975 Indian Self-Determination and Education Assistance Act, and Tribes now operate 22 hospitals and 331 clinics through that authority (IHS, 2024). Urban Indian Health Programs deliver clinical and social services in over 80 urban locations, as authorized by the 1978 Indian Health Care Improvement Act (IHS, 2025).

Data regarding physician shortages in AIAN communities are limited, hampering efforts to address and monitor health care status for AIAN peoples. Both the Veterans Health Administration (VHA) and the Health Resources and Services Administration (HRSA), the latter of which will soon be consolidated into a new HHS agency, maintain workforce dashboards that include the size and distribution of their associated physician workforces, including trends and retention (US Department of Veterans Affairs, 2025; HRSA, 2024a; HRSA, 2024b). The IHS lacks such a dashboard. The most recent report on the topic, from 2018, relied on unverified data from IHS (Government Accountability Office, 2018). Notably, the HRSA dashboard includes the subset of IHS physicians who are HRSA scholarship and loan repayment recipients.

Policy makers should request robust federal reporting on physician vacancies across IHS, Tribal, and Urban Indian Health Program facilities. Reporting methodology should consider several factors. First, it should examine the real-world mix of staffing arrangements used in IHS, including federal employment, staffing contracts (including locum tenens arrangements), Public Health Service Commission Corps staff, and academic partnerships. Among federally employed physicians, tracking should include which physicians are receiving IHS and National Health Service Corps (NHSC) support. Among academic physicians, reporting should include whether they are directly hired, on contract, or engaged through Intergovernmental Personnel Act agreements—which allow the federal government and teaching institutions to share faculty. Second, it should define full staffing at each site by a 10- or 20-year benchmark to avoid fluctuations in reporting. Third, it should track full-time residency and fellowship programs operating in AIAN health systems, including resident and fellow placements after graduation. Fourth, it should include physician retention metrics. Fifth, it should collect similarly robust data across federal, Tribally operated, and Urban Indian Health sites. Finally, it is suggested to include the number of physicians with Tribal ties or who identify as AIAN.

Such reporting would better define variability in the physician supply across IHS, which could inform efforts to support the physician workforce at high-need sites, as well as efforts to learn from and strengthen success at other sites.

Recruitment, Retention, and Graduate Medical Education

Health systems in AIAN communities have remarkable strengths that can be leveraged to recruit and retain physicians. Each of the nation's 574 federally recognized Tribes have unique cultural, linguistic, and historical backgrounds that will challenge and reward professionals who respectfully engage with local communities. Recruiting and retaining IHS physicians involves barriers, often including remote locations, lower pay, and limited career incentives. Efforts to improve recruitment and retention include loan

repayment and scholarship programs at IHS and NHSC. However, the impact of these efforts has been limited in certain regions, with, for instance, zero NHSC physicians serving in South Dakota or North Dakota at the time of this commentary (HRSA, 2024b). Persistent systemtic barriers include a lack of local infrastructure and amenities, such as physician housing, childcare services, and access to healthy foods. Policy makers should consider investments in commonsense amenities on and around IHS campuses, especially at those service units experiencing substantial physician shortages. Such initiatives would not only strengthen the IHS health workforce but also represent meaningful investments in communities.

Physicians often practice where they train, with the site of residency training linked to the eventual site of practice (Ogden et al., 2020). Rural residencies have proven a bipartisan issue for the past decade, with federal funding driving the implementation of 47 newly accredited rural residency programs and the placement of 460 active rural residents (HRSA, 2025). Similarly, the VHA utilizes nearly $2 billion in physician training, much of it devoted to GME, which serves as a cornerstone of its attempts to recruit and retain physicians (Byrne et al., 2024). In comparison, the IHS has a striking lack of targeted GME support.

For IHS GME programs and residency rotation sites to achieve and maintain Accreditation Council on Graduate Medical Education (ACGME) standards, IHS can work with and learn from the experience at existing rural, VHA, and IHS GME programs, which collectively have broad experience and expertise. The ACGME has implemented a Medically Underserved Areas/Populations initiative that is working with and supporting such programs, including at IHS.

Implementation of GME programs in the IHS will offer opportunities for curricular innovation. These curricula should focus on AIAN health issues, integrating trauma-informed care, cultural humility, and applications of traditional Indigenous medicines and practices. Successful approaches, like those developed by Lewis, Kennedy, and Calac, offer models to replicate (Lewis and Prunuske, 2017; Kennedy et al., 2022; Calac et al., 2025). Community engagement, mentorship, and partnerships between medical schools and Tribal facilities may also boost resident well-being and retention, as emphasized in recent Tribal listening sessions hosted by several of the authors through the AIMES Alliance, which also highlighted the importance of improving support structures and respecting traditional knowledge. Training programs should also work to build shared communities of practice among early-career physicians. Six IHS-based fellowships together operate the "Rural Equity, Leadership, Advocacy eXchange," or RELAX, curriculum to create shared purpose and to help early-career physicians tackle common challenges, such as pursuing professional growth in remote settings, managing burnout, and developing a sense of belonging. As another example of community development, an academic partnership program based in Rosebud, South Dakota, has established a vibrant group chat that frequently includes posts about clinical workflows, local news, and events like the group's monthly film club. However, despite these examples, there remains a paucity of curricula integrated into learning settings across the United States that address the health status and health needs of AIAN peoples.

Graduate Medical Education Funding Barriers

Funding for GME is a major obstacle for the IHS, which lacks a dedicated GME funding stream. Many IHS, Tribally operated, and Urban Indian Health Program facilities that have implemented physician residencies have done so through reallocation of non-GME funding or with limited HRSA GME grant funding, neither of which provides stable, predictable financing. Post-residency fellowship programs in the IHS have relied on philanthropic and institutional intramural funding, which has limited opportunities to expand and threatens the long-term sustainability of these programs.

Tribes face several barriers when attempting to access Medicaid funding to support a new or exist-

ing GME program. These challenges stem from a combination of structural, financial, regulatory, and systemic issues inherent in the interplay between Tribal sovereignty, federal policies, and state-administered Medicaid programs. Barriers include inadequate baseline funding, reliance on state discretion, financial and workforce limitations, regulatory hurdles, and geographic isolation. These barriers require policy changes. Dedicated GME funding, coupled with greater Tribal control over GME models, would greatly expand GME uptake. Congress should consult with Tribes to develop an all-of-government approach to coordinate and allocate specific GME slots and associated indirect GME funding to IHS, Tribal, and Urban Indian Health Program facilities and partnered academic medical centers. Expanding the scope and number of IHS scholarships, increasing state Medicaid program funding, and providing support for infrastructure, such as building housing for residents, would further address barriers.

Summary

Physician shortages in Tribal communities hinder health care access and quality of care for a population with already poor health outcomes. A full-strength physician workforce is an achievable goal for IHS, but achieving and maintaining it will require improved data, enhanced physician recruitment and retention efforts, and, most importantly, the development of IHS-specific GME. Strong partnerships and curricula linking academic institutions, Tribes and Tribal organizations, and federal agencies will be fundamental to progress. Finally, investments in medical education pathways for AIAN students will help ensure the future physician workforce reflects the aspirations of AIAN communities, which, in turn, will help inspire future generations of physicians.

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