National Indian Health Board

TESTIMONY OF THE NATIONAL INDIAN HEALTH BOARD
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HOUSE NATURAL RESOURCES COMMITTEE - SUBCOMMITTEE ON INDIAN, INSULAR AND ALASKA NATIVE AFFAIRS
TESTIMONY ON IMPROVING AND EXPANDING INFRASTRUCTURE IN TRIBAL AND INSULAR COMMUNITIES
MARCH 9, 2017

Chairman LaMalfa, Ranking Member Torres and Members of the subcommittee, thank you for the opportunity to offer this testimony on "Improving and Expanding Infrastructure in Tribal and Insular Communities." On behalf of the National Indian Health Board (NIHB) and the 567 Tribal Nations we serve, I submit this testimony on FY 2018 budget for the Department of Health and Human Services (HHS).

The federal promise to provide Indian health services was made long ago. Since the earliest days of the Republic, all branches of the federal government have acknowledged the nation's obligations to the Tribes and the special trust relationship between the United States and Tribes. The United States assumed this responsibility through a series of treaties with Tribes, exchanging compensation and benefits for Tribal land and peace.[1] In 2010, as part of the Indian Health Care Improvement Act, Congress reaffirmed the duty of the federal government to American Indians and Alaska Natives (AI/ANs), declaring that "it is the policy of this Nation, in fulfillment of its special trust responsibilities and legal obligations to Indians – to ensure the highest possible health status for Indians and urban Indians and to provide all resources necessary to effect that policy." [2]

Yet, when it comes to facilities and infrastructure in Indian health, the federal government has not lived up to its responsibility. The Indian Health Service (IHS) was founded in 1955 to help the federal government fulfill the trust responsibility for health. As part of the Indian health system, more than 650 IHS and Tribal facilities operate across the country to serve about 2.2 million AI/ANs.

Yet, Congress has never provided IHS with enough funding to meet the needs of Indian Country, and the infrastructure budget is no different. Federally operated IHS hospitals range in size from 4 to 133 beds and are open 24 hours a day for emergency care needs. IHS facilities offer a range of care, including primary care services, pharmacy, laboratory, and x-ray services. Therefore, IHS facilities infrastructure is directly tied to improved quality of healthcare for AI/ANs. With a life expectancy of 4.5 years less (and in some states more than 20 years) AI/ANs continue to lag behind the rest of the country when it comes to access to health services. It is clearly time to do something about health facilities and infrastructure for Indian Country.

[1] The Snyder Act of 1921 (25 U.S.C. 13) legislatively affirmed this trust responsibility.
[2] 25 U.S.C. 1602

The following testimony will focus on ways that Congress can improve health in AI/AN communities through infrastructure improvements. This includes not only construction and maintenance of brick and mortar facilities but investments in the Health IT infrastructure which will make meaningful progress toward improving patient care, and health outcomes while serving the dual purpose of providing Congress with more information about what care looks like at IHS.

Importance of Strong Infrastructure

The Indian Health Service health infrastructure is comprised of 45 hosptials (26 IHS operated, 19 Tribal) and 529 outpatient facilities (125 IHS operated, 411 Tribal). At these facilities in 2016, there were an estimated 39,300 inpatient admission as 13.7 million outpatient visits.

	Hospitals	Health Centers	Alaska Village Clinics	Health Stations
IHS	26	51	N/A	32
Tribal	19	287	163	79

On average, IHS hospitals are 40 years of age, which is almost four times as old as other U.S. hospitals with an average age of 10.6 years.[3] A 40 year old facility is about 26 percent more expensive to maintain than a 10-year facility. The facilities are grossly undersized – about 52% of need – for the identified user populations, which has created crowded, even unsafe, conditions among staff, patients, and visitors. In many cases, the management of existing facilities has relocated ancillary services outside the main health facility; often times to modular office units, to provide additional space for primary health care services. Such displacement of programs and services creates difficulties for staff and patients, increases wait times, and create numerous inefficiencies within the health care system. Furthermore, these aging facilities are largely based on simplistic, and outdated design which makes it difficult for the agency to deliver modern services.[4] Improving healthcare facilities is essential for:

- Eliminating health disparities
- Increasing Access
- Improving patient outcomes
- Reducing operating and maintenance costs
- Improving staff satisfaction, morale, recruitment and retention
- Reducing medical errors and facility-acquired infection rates
- Improving staff and operational efficiency
- Increasing patient and staff safety

[3] *Almanac of hospital financial & operating indicators: a comprehensive benchmark of the nation's hospitals* (2015 ed., pp. 176-179): https://aharesourcecenter.wordpress.com/2011/10/20/average-age-of-plant-about-10-years/

[4] *The 2016 Indian Health Service and Tribal Health Care Facilities' Needs Assessment Report to Congress*. Indian Health Service. July 6, 2016. Accessed at https://www.ihs.gov/newsroom/includes/themes/newihstheme/display_objects/documents/RepCong_2016/IHSRTC_on_FacilitiesNeedsAssessmentReport.pdf on November 7, 2016. p. 12

The absence of adequate facilities frequently results in either treatment not being sought; or sought later, prompted by worsening symptoms; and/or referral of patients to outside communities. This significantly increases the cost of patient care and causes travel hardships for many patients and their families. The amount of aging infrastructure escalates maintenance and repair costs, risks code noncompliance, lowers productivity, and compromises service delivery. AI/AN populations have substantially increased in recent years resulting in severely undersized facility capacity relative to the larger actual population, especially the capacity to provide contemporary levels of outpatient services. Consequently, the older facility is incapable of handling the needed levels of services even if staffing levels are adequate.

Over the last several years, investigators at the Centers for Medicare and Medicaid Services (CMS) and the HHS Office of the Inspector General (OIG) have cited outdated facilities as direct threats to patient care. For example, in more than half of the hospitals surveyed by the OIG in 2016, administrators reported that old or inadequate physical environments challenged their ability to provide quality care and maintain compliance" with the Medicare Hospital Conditions of Participation (CoPs).[5] "Further, according to administrators at most IHS hospitals (22 of 28), maintaining aging buildings and equipment is a major challenge because of limited resources. In FY 2013, funding limitations for essential maintenance, alterations, and repairs resulted in backlogs totaling approximately $166 million."[6] In fact, over one third of all IHS hosptials' deficiencies have been found to be related to facilities with some failing on infection control criteria and others having malfunctioning exit doors. Other facilities are just not designed to be hospitals, and IHS has had to work around historical buildings which are not equipped for a modern medical environment.[7]

For many AI/AN communities, these outdated and inefficient facilities are the only option that patients have. Tribal communities are often located in remote, rural locations, and patients do not have access to other forms of health insurance to treat them elsewhere.

IHS Facilities Construction

From 2010 to 2016, IHS facilities infrastructure construction budget has been about $76 million annually. At that rate, a new facility built today would not be replaced for another 400 years![8] Currently, IHS uses its Health Care Facility Construction (HCFC) appropriations to fund projects off the "grandfathered" HCFC priority list until it is fully funded. This priority system was developed in the late 1980s at the direction of Congress. The original priority list was developed in the early 1990s with 27 projects on the list. There are 13 remaining projects on this "grandfathered" list which is currently estimated to cost $2.1 billion. Once those 13 projects are funded, the remaining $8 billion can be funded with a revised priority system that will periodically generate updated lists.

[5] Indian Health Service Hospitals: Longstanding Challenges Warrant Focused Attention to Support Quality Care. Department of Health and Human Services, Office of the Inspector General. October 2016. OEI-06-14-00011.

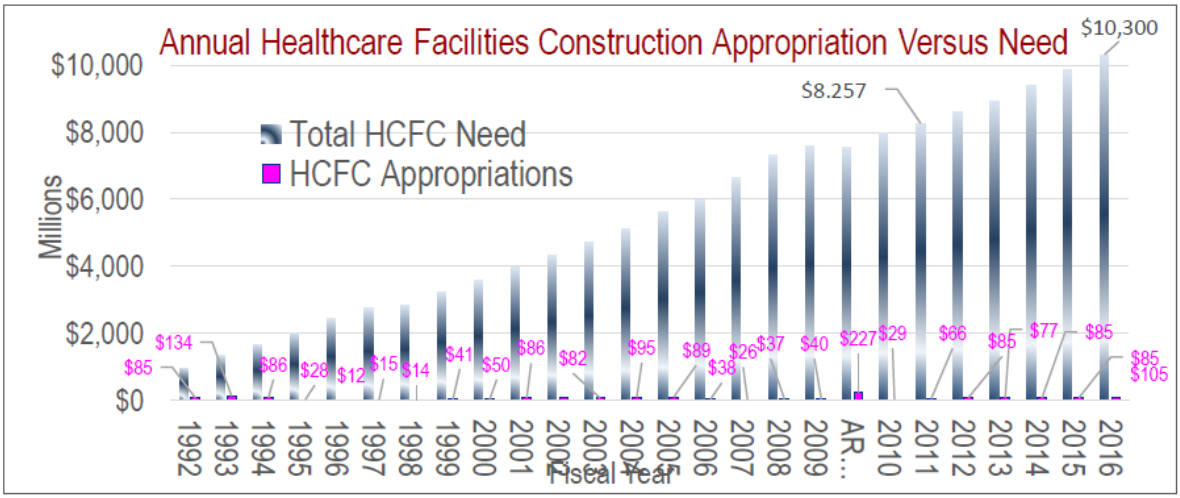
[6] *Ibid, p. 14.*

[7] *Ibid, 15.*

[8] *"Federal Indian Trust Responsibility: The Quest for Equitable and Quality Indian Healthcare - The National Tribal Budget Formulation Workgroup's Recommendations on the Indian Health Service Fiscal Year 2018 Budget."* June 2016. P. 64.

The appropriations provided to Congress are the primary source for new or replacement healthcare facilities. Because of the shortage of appropriations, IHS funds multiple projects over several fiscal years which allows projects to move forward simultaneously and helps distribute the funds geographically benefiting more than one service area. Importantly, the IHS development process ensures that the newly designed facilities are culturally appropriate, and are done in consultation with the Tribes they serve.

As Congress looks to create infrastructure investments, it should turn to IHS which has a list of projects in line for development. The need is there, and IHS could easily be ready to expend these funds if they were to be available. We request that IHS construction projects be given priority in any infrastructure investments, as these projects are directly correlated with safer patient care, meaning improved health outcomes for AI/ANs, even saved lives.



Maintenance and Improvement

As noted above, deteriorating maintenance of facilities in the IHS system poses a huge challenge for health administrators. Maintenance is necessary to comply with hosptials and facility accreditation standards and meet basic safety codes, but since 2011, the agency has not received enough appropriations to keep up with need resulting in a $500 million backlog that will only increase the longer it is not addressed. By 2015, appropriations were only about 80% sufficient to cover the costs. Currently, Maintenance and Improvement is funded at $73.6 million.

According to OIG, some facilities have been cited for sewage leaking into an operating room and equipment that is no longer suited for a modern medical environment.[9] America is too great a nation to allow health facilities to languish in this condition. Congress must invest in keeping up with aging IHS facilities to ensure that our patients have basic, and safe delivery services.

Equipment

[9] Indian Health Service Hospitals: Longstanding Challenges Warrant Focused Attention to Support Quality Care. Department of Health and Human Services, Office of the Inspector General. October 2016. OEI-06-14-00011, p.14-15.

Hand in hand with deferred construction and maintenance is the aging equipment at IHS health facilities. Up-to-date equipment is necessary to ensure effective mental diagnosis, treatment and for recruiting medical staff. Medical and laboratory equipment has a useful life of 6 years, but in IHS facilities it is used twice as long.[10] However, aging or outdated equipment plagues facilities throughout the IHS. In November 2015, for example, CMS surveyed the Rosebud Indian Hospital located in the Great Plains Region of the IHS. Among the many findings in their report, they found that the sterilization machine had been broken and medical staff were washing surgical instruments by hand; an exam table had exposed foam rendering it unable to be sanitized; and that dental x-ray equipment had not been installed for several years because of inadequate wiring.

Again, critical investments in equipment for IHS are critical to ensuring patient safety and ensuring that IHS can function as a 21st Century healthcare delivery system.

Sanitation Facilities and Construction

Since 1959, IHS has used Sanitation Facilities Construction to as an "integral component of IHS disease prevention activities" which has decreased mortality rates from environmentally related diseases by 80% since 1973.[11] "However, as of the end of FY 2015 about 24,200, or 6 percent of all AI/AN homes were without access to adequate sanitation facilities; and, about 188,228 or approximately 47 percent of AI/AN homes were in need of some form of sanitation facilities improvements." [12]

Currently, IHS estimates the backlog for sanitation facilities at $2.5 billion. IHS maintains a priority system for construction projects known as the Sanitation Deficiency System (SDS). Project selection is driven by objective evaluation criteria including health impact, existing deficiency level, adequacy of previous service, capital cost, local Tribal priority, operations and maintenance capacity of the receiving entity, availability of contributions from non-IHS sources, and other conditions that are locally determined. ***Congress should also make considerable investments in sanitation infrastructure to ensure that the health of AI/ANs is not jeopardized by substandard sanitation facilities.***

Housing for Medical Professionals

As a rural healthcare provider, IHS currently has over 1,550 vacancies for medical staff across the system, which impacts the direct delivery of healthcare. IHS has many challenges to recruit and retain medical professionals including competition from other providers; lack of opportunities for families in rural areas; and a low number of AI/ANs going to medical school. However, we have long heard from healthcare professionals on isolated reservations that a lack of housing and quality education are barriers to long-term tenure at Indian health facilities. To rectify this, there will need to be further collaboration among the Tribes, government agencies such as HHS and the U.S. Department of Housing and Urban Development (HUD), and Congress to make investments in housing so that people working in IHS facilities have adequate

[10] "The 2016 Indian Health Service and Tribal Health Care Facilities' Needs Assessment Report to Congress," p 10.

[11] IHS FY 2017 Congressional Budget Justification, CJ 168.

[12] Ibid, CJ 169.

living quarters available. It is also critical to provide support for schools so that the families of medical providers will have access to adequate educational opportunities.

Congress should provide a separate stream of funding as part of infrastructure reform to make major investments in staff quarters on Tribal lands for not only medical staff but other professionals like teachers as well.

Health IT

In addition to basic infrastructure needs, it is critical that Congress provide resources necessary for the IHS and other federal health providers like the Department of Defense (DoD) and Veterans' Administration (VA) to make serious upgrades to their health information technology system. Failure to do puts patients at risk and will leave IHS behind unequipped for the 21st Century healthcare environment. ***When investing in infrastructure projects, Congress should prioritize Health IT needs for health facilities in Indian Country. This includes allocating $3.5 billion to replace the current Health Information System, and other investments to increase network bandwidth.***

The biggest barrier to achieving this has been the lack of dedicated and sustainable funding to adequately support health information technology infrastructure, including full deployment and support for Electronic Health Record (EHR). Resources, including workforce and training, have been inadequate to sustain clinical quality data and business applications necessary to provide safe quality health services to the 2.2 million AI/ANs. The IHS/Tribal/Urban health delivery system represents some of the most remote locations in the United States and many reservations and villages are further isolated by lack of roads and public utilities.

Telecommunications Infrastructure

A robust telecommunications infrastructure is critical to a modern health care delivery system, not just for providers but for patients and their families as well. The vast majority of IHS and Tribal health care facilities are in rural locations with connectivity that is much slower and less reliable than that available in urban settings. Capabilities such as telehealth, patient access to records, staff and patient education, clinical decision support, and transmission of medical data and images, are severely hampered by bandwidth insufficiency. Upgrading bandwidth can be extremely costly and often must be paid from the facility's health care operations budget. In some cases, local telecommunications providers are simply unable to provide the upgrades needed for the health care facilities. An unacceptable proportion of network IT equipment at IHS facilities has exceeded reliable operating lifespan and vendor support, but insufficient funds exist to upgrade this equipment.

Network bandwidth is a key requirement to successfully provide health care services. Many IHS sites are experiencing challenges to fund the cost of the necessary bandwidth upgrades to make telehealth services successful. Approximately 75% of IHS sites are located in areas defined as 'rural' by the Federal Communications Commission (FCC). These rural sites pay a higher percentage of their operating budget than urban locations on monthly circuit costs. When bandwidth upgrades are required, rural IHS sites are frequently asked to fund the capital costs of these upgrades. These projects can range from tens of thousands to over a million dollars in cost,

and can take years to complete. In some cases, telecommunication providers are not able to offer any upgrade options for IHS locations.

At rural IHS sites, circuit outages and restoration times are above industry averages, due to outdated equipment and small regional telecommunication providers covering large geographical areas with long travel times and limited staff. This creates challenges and risks in relying on network connectivity to provide clinical services. During 2016, IHS upgraded network bandwidth at over 50 locations. Furthermore, IHS is moving away from slow speed circuits such as T1 lines (1.5Mbits) to Ethernet circuits which offer bandwidth in the 10 to 100Mbits range. To help fund the monthly recurring circuit costs associated with these upgrades, IHS is increasingly leveraging the financial support provided by the Healthcare Connect Fund (HCF). The HCF is an FCC program to provide rural healthcare providers with financial support for bandwidth charges.

However, large numbers of IHS facilities do not currently have sufficient bandwidth to offer telehealth and related services. Approximately 50% of the IHS sites are still depending on circuit connections based on one or two T1 lines (3Mbits). Their circuits are constantly saturated with staff experiencing slow response times when using traditional IT applications. The addition of telehealth and mobile health services is not an option at these locations. Services like this are critical in rural communities where recruitment and retention of medical professionals is continually a challenge.

Telehealth

The successful utilization of a variety of telehealth technologies and services in Indian country is well documented. However, these successes were achieved on a largely regional basis, driven by visionary leaders, with various and not reliably sustainable funding sources. The IHS has not yet been resourced to establish either a sustainable telehealth infrastructure or governance program that would prioritize resources in accordance with identified need, establish and promote best practices, and formally evaluate and report on successes and issues. The IHS recently awarded a large contract for tele-emergency and other specialty telehealth services in the Great Plains Area, but the costs for this have been imposed on already underfunded Service Units, and again without any program structure that will ensure success and apply lessons learned to future telehealth initiatives. While we applaud this necessary investment to address urgent quality of care issues brought through Congressional oversight, we must urge that equal investments be made in the rest of Indian country who suffer similar issues of poorly resourced facilities and lack of capacity to bring up standards of care to minimal level of safety, much less to meet national accreditation standards.

It is our understanding that the IHS estimates a fully operational enterprise telehealth program could be supported at a cost of $75 million annually. These would have to be new resources, as the agency has no capacity to transfer dollars from other programs to support telehealth. Operational costs would be augmented by third party revenues generated from telehealth encounters, but these revenues will not be sufficient to enable the telehealth program to exist without additional appropriations.

Biomedical equipment

As noted above, medical equipment at IHS facilities is far older than the average for the rest of the country. The current inventory of biomedical equipment at IHS facilities is valued at approximately $500 million. This does not include equipment located at Tribally-operated facilities, which are far more numerous. According to the American Hospital Association, medical equipment has a typical lifespan of five to six years. This means that the IHS should budget $90 million annually for biomedical equipment upgrades and replacement at federal facilities. However, for most of the past decade and more, the IHS has funded only about a quarter of the level of need. This limited funding has only been able to replace the very oldest equipment. As a result, most IHS facilities continue to use outdated health technology with unacceptable probability for failure and consequent risks to patient safety.

With the evolving state of the art in biomedical technology, the majority of medical devices are embedded with microprocessors that connect to the hospital or clinic network via Bluetooth, wireless or Ethernet connections. The cybersecurity risks these devices pose both to the facility and the connected enterprise are substantial. Government organizations including the IHS are obligated to ensure compliance with applicable statutes and regulations (Clinger-Cohen, FISMA, FITARA, etc.) in order to minimize these risks. The Congress must take this additional layer of acquisition planning and governance into consideration with all funding decisions.

Health Information Systems

The information systems that support quality health care delivery are critical elements of the operational infrastructure of hospitals and clinics. The current IHS health information system is called the Resource and Patient Management System (RPMS), and is a comprehensive suite of applications that supports virtually all clinical and business operations at IHS and most tribal facilities, from patient registration to billing. The IHS remains the only federal agency to have successfully certified its electronic health record (EHR) product according to criteria published by the Office of the National Coordinator for Health Information Technology (ONC).

The explosion of Health Information Technology (HIT) capabilities in recent years, driven in large part by federal regulation, has caused the IHS health information system to outgrow the agency's capacity to maintain, support and enhance it. The IHS was fortunate to receive Recovery Act dollars and benefit from incentives available through the HITECH Act, and used these dollars to grow RPMS in response to the new regulatory requirements. However, those funds are no longer available, and no new funds have been appropriated to support operations and maintenance for the certified RPMS suite. This has resulted in a mass exodus of Self Governance Tribes who have opted to withdraw their IT shares to seek other commercial HIT solutions which promise to more readily address their needs; and, in fact, this has caused a domino effect in that the IHS agency technology budget is decreasing more rapidly because of the withdrawal of these IT shares. For example, one large Tribe recently withdrew its shares, resulting in a -$2.5 million impact (-3.7%) on the Headquarters IT budget. This is a harbinger of the vicious cycle that will result if the IHS cannot sustain the RPMS and related systems. Tribal programs, concluding that IHS solutions no longer support the best quality of care and patient safety, will be forced to adopt commercial solutions at considerable expense. They should not have to do this because HIT is among the programs and services that the federal government has historically provided for the Tribes. But, without a realistic investment in RPMS, they will have no choice if they are to fulfill their responsibilities to their people, and the resulting diminution

of resources retained with the IHS will further injure both the direct service tribes and those self-governance Tribes continuing to rely on IHS HIT.

There is no question that the IHS electronic health record and other health information systems need to be further modernized to build on the growth in recent years. The agency just awarded a new development contract that, if sufficiently funded going forward, will go far in addressing this need, and will enhance the RPMS as a public utility that serves both Indian country and any other health care entity that chooses to adopt it. Failure to sufficiently fund RPMS modernization by at least doubling the IHS HIT budget, will not only hasten but ensure the collapse of the HIT infrastructure in Indian country.

If the joint Tribal-IHS decision is for replacement of RPMS as the IT-solution, there is an urgency to expedite the decision-making process to allow time to acquire the software and ensure a smooth transition. It will take a minimum of a year to select a replacement and a couple of years beyond that for a complete transition to be planned and implemented. The operating system that RPMS currently runs on is a ticking time bomb, and needs immediate investment to modernize it. Microsoft is expected to put it on an end of life schedule in the near future. Its predecessor, Server 2008, which was released a year prior to 2008 R2 has already been put on an end of life schedule. This creates urgency for strategic decisions which must be made now.

To further illustrate the urgency to act now, there is a cautionary tale of a medium-sized city that similarly failed to upgrade their enterprise software. Opting instead to forgo their annual maintenance, they supported the application in house. When Microsoft ended support for Windows XP, the enterprise software needed to be upgraded. The resulting replacement budget cost the city approximately $45 million. In contrast, the maintenance contract that would have allowed the city to keep up with upgrades only cost $750,000. There's a real lesson to be gathered here about not forgoing maintenance and acting with a sense of urgency in imperative for cost controls. We are quickly moving past the point of no return.

Some may be tempted to quickly suggest that the best answer is to that IHS should follow the lead of the Department of Defense (and possibly the Department of Veterans Affairs at some point) in adopting commercial HIT solutions. It is critical to understand that, while this might be a desirable and perceived easy solution, such an approach is not possible without a massive allocation of new funding. The IHS estimates that it could cost up to $3.5 billion, over 2-3 years to transition the agency from RPMS to a full commercial suite of comparable capability (the entire annual budget of the IHS is under $5 billion). ***As Congress invests in infrastructure improvements it should certainly include the replacement of RPMS as one of the top priorities by adding supplemental appropriations of $3.5 billion to purchase or develop a new HIT system for the I/T/U system.*** Any such investment must be preceded and informed by an independent expert and thorough analysis of alternatives, with full consultation and collaboration by the Tribes.

Conclusion

Clearly the needs for improved facilities maintenance and construction across the Indian Health system is a critical need. Facilities improvements are critical to ensuring that the health of

American Indians and Alaska Natives is able to reach the highest possible levels. For too long, appropriations have not met up with the demand for improved IHS facilities, which in some cases are among the most outdated in the United States. As Congress considers infrastructure improvements it should ensure that Indian health receives critical investments. IHS already maintains a priority list of projects ready for funding so actual construction would be able to begin in a relatively expedient manner. Furthermore, investments in staff housing will have major impacts for Indian Country who are trying to attract needed health and other professionals.

Additionally, in order for the I/T/U system to function in the 21st Century, it is essential that major investments are made in the Health IT infrastructure in order to ensure that I/T/U facilities are safe and efficient places to receive care. This means, a major financial investment to improve HIT also network improvements. Because IHS provides services in mainly rural and remote areas, there is much to be gained by embracing new methods of care like telehealth. But there are few areas where this capability is possible due to network constraints and a lack of IHS-wide infrastructure to support such a program. Congress should not hesitate to supplement additional funding to make these needed upgrades so the health of AI/ANs can improve.