



August 2018

INDIAN HEALTH SERVICE

Agency Faces Ongoing Challenges Filling Provider Vacancies

Accessible Version

GAO Highlights

Highlights of [GAO-18-580](#), a report to congressional requesters

Why GAO Did This Study

IHS is charged with providing health care to AI/AN people who are members or descendants of 573 tribes. According to IHS, AI/AN people born today have a life expectancy that is 5.5 years less than all races in the United States, and they die at higher rates than other Americans from preventable causes. The ability to recruit and retain a stable clinical workforce capable of providing quality and timely care is critical for IHS. GAO was asked to review provider vacancies at IHS.

This report examines (1) IHS provider vacancies and challenges filling them; (2) strategies IHS has used to recruit and retain providers; and (3) strategies IHS has used to mitigate the negative effects of provider vacancies. GAO reviewed IHS human resources data for the provider positions that the agency tracks. GAO also reviewed policies, federal internal control standards, and legal authorities related to providers in federally operated IHS facilities. GAO interviewed IHS officials at the headquarters and area level and at selected facilities. GAO selected facilities based on variation in their number of direct care outpatient visits and inpatient hospital beds in 2014.

What GAO Recommends

GAO recommends that IHS obtain, on an agency-wide basis, information on temporary provider contractors, including their associated cost and number of full-time equivalents, and use this information to inform decisions about resource allocation and provider staffing.

IHS concurred with GAO's recommendation.

View [GAO-18-580](#). For more information, contact Jessica Farb at (202) 512-7114 or farbj@gao.gov.

August 2018

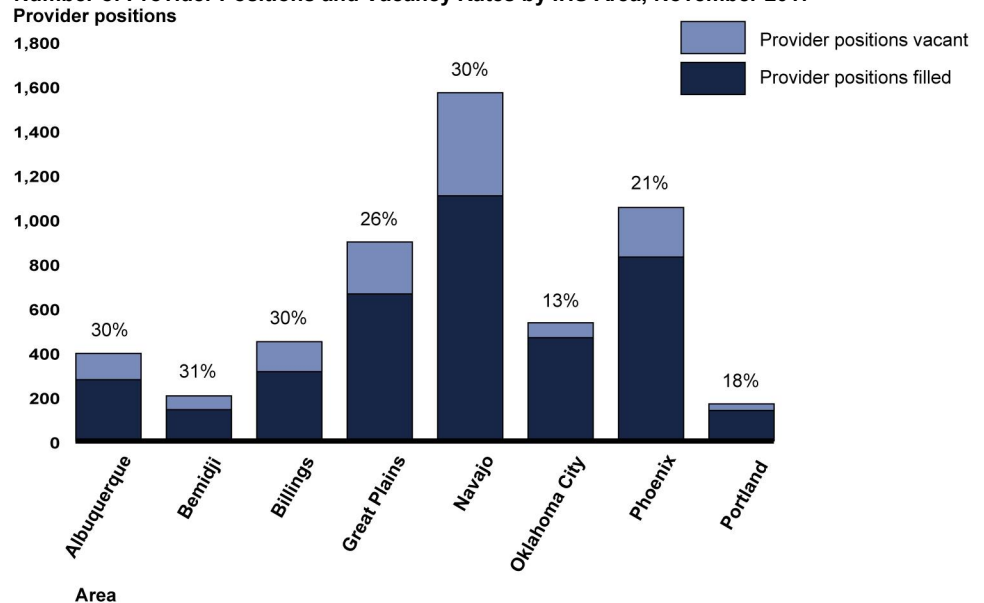
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Agency Faces Ongoing Challenges Filling Provider Vacancies

What GAO Found

Indian Health Service (IHS) data show sizeable vacancy rates for clinical care providers in the eight IHS geographic areas where the agency provides substantial direct care to American Indian/Alaska Native (AI/AN) people. The overall vacancy rate for providers—physicians, nurses, nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, physician assistants, dentists, and pharmacists—was 25 percent, ranging from 13 to 31 percent across the areas.

Number of Provider Positions and Vacancy Rates by IHS Area, November 2017



Source: GAO analysis of Indian Health Service (IHS) data. | GAO-18-580

IHS officials told GAO that challenges to filling these vacancies include the rural location of many IHS facilities and insufficient housing for providers. Officials said long-standing vacancies have a negative effect on patient access, quality of care, and employee morale.

IHS uses multiple strategies to recruit and retain providers, including offering increased salaries for certain positions, but it still faces challenges matching local market salaries. IHS also offers other financial incentives, and has made some housing available when possible. In addition, IHS uses strategies, such as contracting with temporary providers, to maintain patient access to services and reduce provider burnout. Officials said these temporary providers are more costly than salaried employees and can interrupt patients' continuity of care. However, IHS lacks agency-wide information on the costs and number of temporary providers used at its facilities, which impedes IHS officials' ability to target its resources to address gaps in provider staffing and ensure access to health services across IHS facilities.

Contents

Letter	1
Background	5
IHS Data Show Sizeable Provider Vacancies and Officials Identified Various Challenges to Filling Them	9
IHS Uses Multiple Strategies to Recruit and Retain Providers	18
IHS Uses Strategies to Maintain Patient Access to Services and Reduce Provider Burnout When Positions Are Vacant, But Lacks Agency-wide Data on Use of Temporary Providers	29
Conclusions	34
Recommendation for Executive Action	35
Agency Comments	35
Appendix I: Provider Vacancies with the Indian Health Service (IHS)	37
Appendix II: Tribal Strategies of Housing Units and Physician Residency Programs to Recruit and Retain Healthcare Providers	44
Appendix III: Comments from the Department of Health and Human Services	47
Appendix IV: GAO Contact and Staff Acknowledgments	49
Appendix V: Accessible Data	50
Data Tables	50
Agency Comment Letter	51
Tables	
Table 1: Number of Total and Vacant Positions for Certified Nurse Midwives with the Indian Health Service (IHS), November 2017	39
Table 2: Number of Total and Vacant Positions for Physician Assistants with the Indian Health Service (IHS), November 2017	43
Accessible Table for Number of Provider Positions and Vacancy Rates by IHS Area, November 2017	50

Accessible Table for Figure 5: Composition of the Indian Health Service (IHS) Provider Positions by IHS Area, November 201750

Figures

Figure 1: Health Care Responsibilities of Indian Health Service (IHS) Headquarters, Area Offices, and Federally Operated Facilities	6
Figure 2: Overall Vacancy Rates for Providers in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	10
Figure 3: Physician Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	12
Figure 4: Nurse Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	14
Figure 5: Composition of the Indian Health Service (IHS) Provider Positions by IHS Area, November 2017	16
Figure 6: Examples of Government-Subsidized Provider Housing Near Indian Health Service (IHS) Facilities	25
Figure 7: Telehealth Equipment in the Rosebud Hospital Emergency Department	31
Figure 8: Nurse Practitioner Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	38
Figure 9: Dentist Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	40
Figure 10: Pharmacist Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017	42
Figure 11: Examples of Multiroom Houses for Choctaw Nation Providers	45

Abbreviations

AI/AN	American Indian/Alaska Native
COSTEP	Commissioned Officer Student Training and Extern Program
CRNA	Certified registered nurse anesthetist
GME	graduate medical education
HHS	Department of Health and Human Services
HRSA	Health Resources and Services Administration
ISOHAR	isolated hardship
IHS	Indian Health Service
IHS-JVN	IHS Joslin Vision Network
OPM	Office of Personnel Management
VHA	Veterans Health Administration

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August 15, 2018

The Honorable John Hoeven
Chairman
The Honorable Tom Udall
Vice Chairman
Committee on Indian Affairs
United States Senate

The Honorable John Barrasso, M.D.
United States Senate

The Honorable Jon Tester
United States Senate

The Indian Health Service (IHS), an agency within the Department of Health and Human Services (HHS), is charged with providing health care services to the approximately 2.2 million American Indian and Alaska Native (AI/AN) people who are members or descendants of 573 federally recognized tribes. According to IHS, its agency-wide goal is to ensure comprehensive, culturally acceptable personal and public health services are available and accessible to AI/AN people. One of the agency's priorities is to recruit, develop, and retain a dedicated, competent workforce that provides health care services in IHS's 12 geographic areas either directly through a system of federally operated IHS facilities or through facilities that are operated by tribes or others.¹ Federally operated IHS facilities are located in ten of these geographic areas, which are mostly in rural areas, and are overseen by IHS area offices. In the

¹In addition to federally operated IHS facilities, some federally recognized tribes choose to operate their own health care facilities and receive IHS funding. Other operations include 34 non-profit 501 (c)(3) programs nationwide, through which AI/AN people may receive care in certain urban areas funded through grants and contracts from IHS under Title V of the Indian Health Care Improvement Act, as amended, Pub. L. No. 94-437, 90 Stat. 1400 (1976). As of May 2018, AI/AN tribes operated 579 facilities with IHS funding—19 hospitals, 284 health centers, 163 Alaska Village Clinics, 79 health stations, and 34 urban programs.

remaining two geographic areas, all facilities are tribally operated.² According to IHS, AI/AN people born today have a life expectancy that is 5.5 years less than all races in the United States, and they die at higher rates than other Americans from many preventable causes, including diabetes, suicide, chronic liver disease and cirrhosis, and chronic lower respiratory diseases. Such health outcomes underscore the importance of a strong clinical workforce capable of providing quality and timely health care for AI/AN people.

Over the past several years, we and others have expressed concern about IHS's ability to ensure it has the appropriate clinical workforce to meet the current and future needs of AI/AN people. In 2016, we reported that, according to IHS, an insufficient workforce was the biggest impediment to ensuring patients' access to timely primary care.³ In addition, that same year, HHS's Office of Inspector General reported that vacancies at IHS, as well as the agency's use of acting positions, sometimes limited the availability of services and decreased continuity of care.⁴ According to Healthy People 2020—HHS's 10-year national objectives for improving the health of Americans—improving access to health care services depends in part on ensuring people have a usual and ongoing source of care, and people with a usual source of care experience better health outcomes and fewer disparities.⁵

You asked us to review IHS staffing issues. This report examines

²IHS oversees its health care facilities through a decentralized system of area offices, which are led by area directors and located in each of the 12 IHS areas. The ten IHS areas with federally operated IHS facilities are Albuquerque, Bemidji, Billings, California, Great Plains, Nashville, Navajo, Oklahoma City, Phoenix, and Portland. For the two other IHS areas—Alaska and Tucson—all facilities are tribally operated under the Indian Self-Determination and Education Assistance Act, as amended, Pub. L. No. 93-638, 88 Stat. 2203 (1975).

³GAO, *Indian Health Service: Actions Needed to Improve Oversight of Patient Wait Times*, [GAO-16-333](#) (Washington, D.C.: Mar. 29, 2016).

⁴See Department of Health and Human Services Office of Inspector General, *Indian Health Service Hospitals: Longstanding Challenges Warrant Focused Attention to Support Quality Care*, OEI-06-14-00011 (Washington, D.C.: October 2016).

⁵According to Healthy People 2020, having a primary care provider who serves as the usual source of care is associated with greater patient trust in the provider, better patient-provider communication, increased likelihood that patients will receive appropriate care, and lower mortality from all causes. See U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, *Healthy People 2020, Access to Health Services*, (Washington, D.C.), accessed June 2, 2018, <http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>.

1. IHS provider vacancies and challenges filling them;
2. strategies IHS has used to recruit and retain providers; and
3. strategies IHS has used to mitigate the negative effects of provider vacancies.

To examine employee vacancies for provider positions at IHS and challenges in filling those vacancies, we analyzed data collected by IHS as of November 2017, on the eight provider positions that the agency tracks—physicians, nurses, dentists, pharmacists, nurse practitioners, certified registered nurse anesthetists (CRNA), certified nurse midwives, and physician assistants. These data include the number of positions for each of these types of providers in federally operated IHS facilities, the number of those positions that were vacant, and the number that were filled by either civilians or Public Health Service Commissioned Corps officers—referred to throughout this report as Commissioned Corps officers—who have taken permanent positions with IHS.⁶ We interviewed IHS officials about these data and conducted manual and electronic tests to identify any data anomalies. We did not independently verify the number of reported positions or whether they were filled, nor did we assess IHS’s method for calculating the total number of positions. We determined these point-in-time data were sufficiently reliable for our purposes. Through our initial analysis, we determined that 4 of the 12 IHS areas had relatively few positions for these provider types—30 or fewer in total, compared to 166 to 1,567 in the other 8 areas.⁷ We therefore limited our analyses of vacancies to the 8 IHS areas where IHS has substantial direct care responsibilities—Albuquerque, Bemidji, Billings, Great Plains, Navajo, Oklahoma City, Phoenix, and Portland.⁸ In addition, we interviewed officials from IHS headquarters and all 12 area offices about

⁶The Commissioned Corps comprises more than 6,700 full-time public health professionals dedicated to delivering the nation’s public health promotion and disease prevention programs and advancing public health science. Commissioned Corps officers may apply to a variety of positions throughout HHS, including at the IHS, and certain non-HHS federal agencies and programs that offer professional opportunities in the areas of disease control and prevention; biomedical research; regulation of food, drugs, and medical devices; mental health and drug abuse; and health care delivery.

⁷Specifically, the total number of positions for these providers was low in Alaska (0), California (14), Nashville (30), and Tucson (1)—areas in which IHS has few or no direct care responsibilities, but instead helps to support health care services provided by tribes or tribal organizations.

⁸We excluded positions in IHS’s headquarters office because providers in these administrative positions do not provide substantial direct patient care.

the causes of IHS provider vacancies and the challenges associated with filling these positions.

To examine steps IHS has taken to recruit and retain providers and to mitigate the negative effects of provider vacancies, we reviewed federal laws, the Indian Health Manual, IHS guidance, prior GAO reports, and documentation of area governing board meetings.⁹ We also interviewed officials from IHS headquarters—including officials from IHS’s Office of Human Resources—and senior officials from all 12 area offices and all 5 regional human resources offices, who assist the area offices in recruiting and hiring providers. We asked these officials about how the agency has assessed its vacancy rates, and steps it has taken at the headquarters, area, and facility-levels to recruit and retain providers. In addition, we visited 7 federally operated facilities in three different IHS areas and interviewed staff about steps taken to address provider vacancies.¹⁰ In addition to geographic diversity, we selected these facilities based on variation in their number of direct care outpatient visits and inpatient hospital beds in 2014, the most recent data available. We evaluated steps taken to address IHS provider vacancies against relevant standards for internal control in the federal government.¹¹ In addition, we interviewed officials from three facilities operated by the Veterans Health Administration (VHA) and officials from three tribes—entities that also provide direct health care services—that are located near our selected IHS facilities to obtain information on strategies they use to fill selected clinical positions.¹² Our findings are not generalizable to other IHS, VHA,

⁹The Indian Health Manual is a reference manual for IHS employees that includes IHS-specific policy and procedural instructions.

¹⁰We visited Sioux San Hospital, Pine Ridge Hospital, and Rosebud Hospital in the Great Plains area; Shiprock-Northern Navajo Medical Center, Chinle Comprehensive Health Care Facility, and Kayenta Health Center in the Navajo area; and Wewoka Indian Health Center in the Oklahoma City area.

¹¹Internal control is a process effected by an entity’s oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved. See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

¹²We interviewed officials from the following three VHA facilities: VHA’s Black Hills Health Care System near IHS’s Great Plains area, VHA’s Prescott Medical Center near the IHS Navajo Nation area, and VHA’s Oklahoma City Medical Center in the Oklahoma area. We also interviewed officials from three tribal facilities: the Navajo Nation Department of Health, the Chickasaw Nation Medical Center, and the Choctaw Nation Talihina Health Care Center in the Oklahoma City area. However, because the Navajo Nation contracts out its tribal health care delivery to various service delivery providers, we did not collect any information on strategies to address vacancies.

or tribal facilities. We also interviewed officials from groups representing AI/AN tribes and their members about strategies used by tribally operated facilities to recruit and retain providers.

We conducted this performance audit from January 2017 through August 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions on our audit objectives.

Background

Indian Health Service

IHS was established within the Public Health Service in 1955 to provide health services to members of AI/AN tribes, primarily in rural areas on or near reservations. IHS provides these services directly through a network of hospitals, clinics and health stations, while also providing funds to tribally operated facilities. These federally and tribally operated facilities are located primarily in service areas that are rural, isolated, and underserved.¹³ In fiscal year 2017, IHS allocated about \$1.9 billion for health services provided by federally and tribally operated facilities.¹⁴ Federally operated IHS facilities, which received over 5.2 million outpatient visits and over 15,000 inpatient admissions in 2016, provide mostly primary and emergency care, as well as some ancillary and specialty services in 26 hospitals, 55 health centers, and 21 health stations. According to IHS, federally operated IHS hospitals range in size

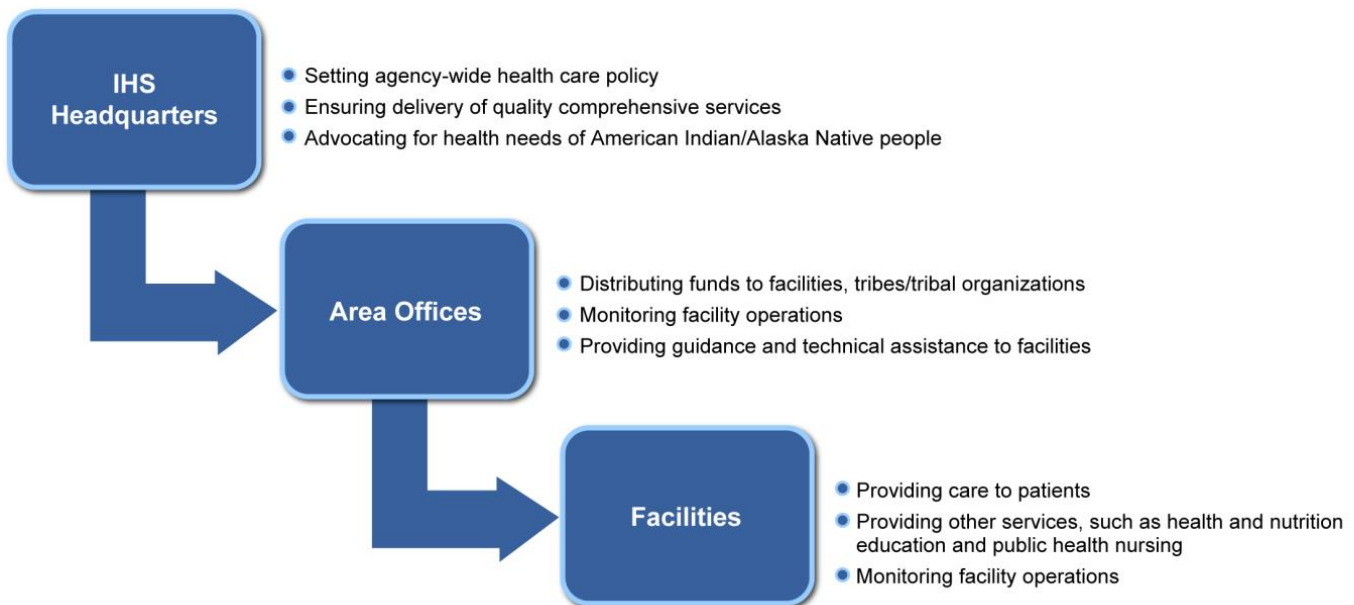
¹³When health care services at federally operated or tribally operated IHS facilities are not available, care may be obtained in certain circumstances from external providers and paid through IHS's Purchased/Referred Care program. IHS also provides funding to nonprofit, urban Native American organizations through the Urban Indian Health program to provide health care services to AI/AN people living in urban areas.

¹⁴IHS's estimated budget authority for fiscal year 2018 is over \$5.6 billion, which IHS includes the amounts enacted for Indian Health Services and Indian Health Facilities by the Consolidated Appropriations Act, 2018, plus an estimate for Contract Support Costs from the President's fiscal year 2019 budget justification, for which IHS receives an annual indefinite appropriation of "such sums as may be necessary." See Pub. L. No. 115-141, div. G, tit. III, 132 Stat. 348, 677-679 (2018). "Budget authority" refers to authority provided by federal law to enter into contracts or other financial obligations that will result in immediate or future expenditures (or outlays) involving federal government funds.

from 4 to 133 beds and generally are open 24 hours a day for emergency care needs; health centers offer a range of care, including primary care services and some ancillary services, such as pharmacy, laboratory, and X-ray services, and are open for at least 40 hours a week; and health stations offer only primary care services on a regularly scheduled basis and are open fewer than 40 hours a week.

The 12 IHS area offices are responsible for distributing funds to the facilities in their areas, monitoring their operation, and providing guidance and technical assistance (see fig. 1). In addition, five human resources regional offices assist the area offices in the recruitment and hiring of providers.¹⁵

Figure 1: Health Care Responsibilities of Indian Health Service (IHS) Headquarters, Area Offices, and Federally Operated Facilities



Source: GAO. | GAO-18-580

¹⁵In February 2017, we placed IHS on our high risk list due to concerns about the management of federal programs that serve tribes and their members. See GAO, *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, [GAO-17-317](#) (Washington, D.C.: Feb. 15, 2017). In addition to IHS, GAO also included the Department of the Interior because we previously identified problems in the management and oversight of Indian education and energy resources.

IHS federally operated facilities employ both federal civil service personnel and Commissioned Corps officers. IHS may pay higher salaries for certain federal civil service providers through the development and implementation of special pay tables, which specify the ranges of salaries that these certain providers can receive. According to IHS officials, the Commissioned Corps officers follow the same process for applying for positions at IHS as federal civil service employees. However, the Commissioned Corps officers are uniformed health professionals whose pay and allowances are different. IHS also supplements its workforce capacity with both temporary and long-term contracts with individual physicians or a medical staffing company.¹⁶

IHS downloads information on all funded and active positions from the Capital Human Resource Management System, an HHS data system used for personnel and payment transactions that IHS began using in 2016 to track all employee vacancies. According to IHS officials, the accuracy of the data is verified quarterly by regional human resources officers.¹⁷ As the IHS health care workforce also includes Commissioned Corps officers—who have a separate personnel system—the information on Commissioned Corps officers assigned to IHS are entered into the Capital Human Resource Management System manually, according to IHS officials.

Rural Health Care Delivery Challenges

According to the National Rural Health Association, the challenges of rural health care delivery are different than those in urban areas. These challenges include those related to more complex patient health status and poorer socioeconomic conditions, as well as physician workforce shortages. According to the Agency for Healthcare Research and Quality, compared with their urban counterparts, residents of rural counties are

¹⁶IHS also develops national and regional contracts at headquarters for specific geographic use by areas or specific federally operated facilities. For example, in September 2016, the agency announced a \$6.8 million contract to an entity to provide telemedicine services in a specific geographic area for 1 year, with the option to extend the services for up to 5 years in total.

¹⁷Officials from one area office told us that they compare the vacancy report, facility operating plan, and facility organizational charts, and explained that these three documents should reconcile closely with each other.

older, poorer, more likely to be overweight or obese, and sicker.¹⁸ Those living in rural areas also have greater transportation difficulties reaching health care providers, often traveling great distances to reach a doctor or hospital. Exacerbating these challenges is a relative scarcity of medical providers in rural areas compared to urban areas. For example, the National Center for Health Statistics reported the primary care physician-to-patient ratio in rural areas in 2012 was 39.8 physicians per 100,000 people, compared to 53.3 physicians per 100,000 in urban areas.¹⁹

¹⁸*National Healthcare Quality and Disparities Report Chartbook on Rural Health Care*, AHRQ Pub. No. 17(18)-0001-2-EF (Rockville, Md.: Agency for Healthcare Research and Quality, October 2017).

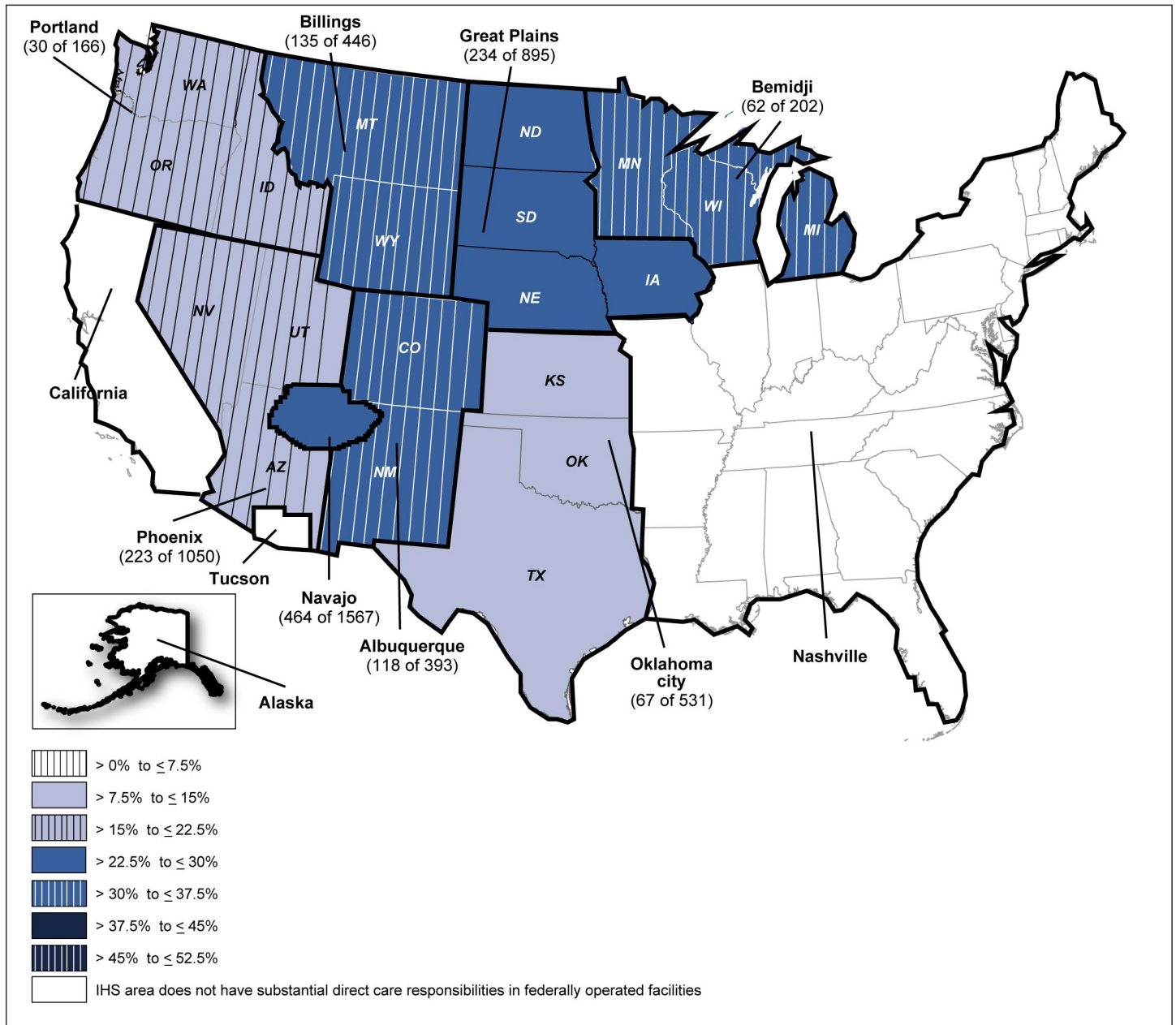
¹⁹E. Hing, C.J. Hsiao, *State Variability in Supply of Office-Based Primary Care Providers: United States, 2012*, NCHS data brief, no 151 (Hyattsville, Md.: National Center for Health Statistics, 2014).

IHS Data Show Sizeable Provider Vacancies and Officials Identified Various Challenges to Filling Them

IHS Data Demonstrate Sizeable Provider Vacancies

IHS data demonstrate large percentages of vacancies for providers in the 8 areas in which IHS has substantial direct care responsibilities. As of November 2017, the overall percentage of vacancies for physicians, nurses, nurse practitioners, CRNAs, certified nurse midwives, physician assistants, dentists, and pharmacists in these areas was 25 percent, ranging from 13 to 31 percent across the areas. (See fig. 2)

Figure 2: Overall Vacancy Rates for Providers in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



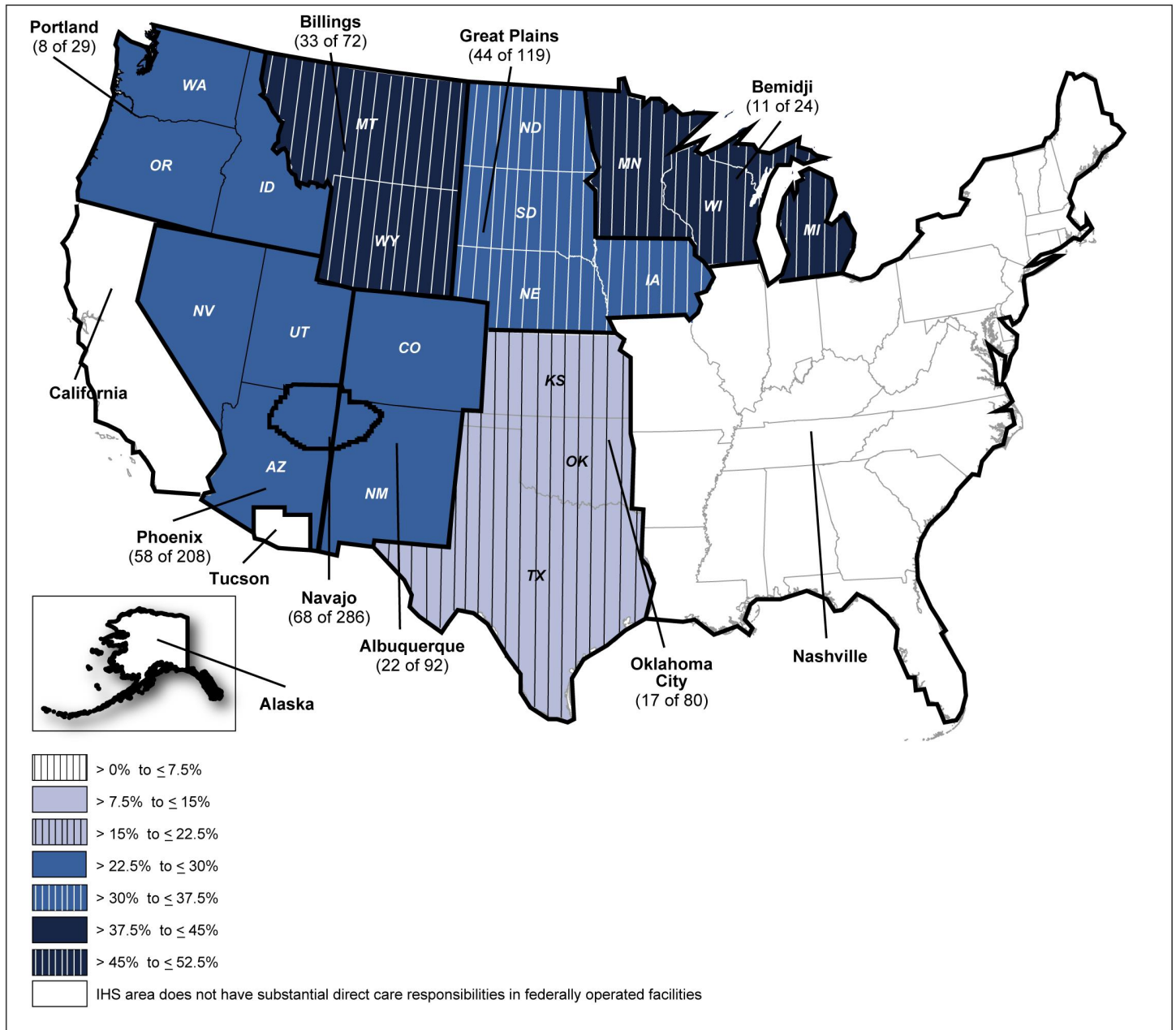
Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

Note: The eight provider types include physicians, nurses, nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, physician assistants, dentists, and pharmacists. For the four areas in which IHS does not have substantial direct care responsibilities, the total numbers of

positions for these providers were: Alaska (0), California (14, with 2 vacancies), Nashville (30, with 7 vacancies), and Tucson (1, with 0 vacancies). IHS does not operate any federal health care facilities in Hawaii.

However, variation in vacancy rates existed among provider types across IHS areas. For example, while the overall percentage of vacancies for physicians, nurses, nurse practitioners, dentists, and physician assistants each exceeded 25 percent, the vacancy rate for pharmacists was less than 25 percent. In addition, for certain provider types in some areas, more than one-third of the positions were vacant. For example, although 29 percent of the total positions for physicians across these 8 areas were vacant, the vacancy rate ranged from 21 percent in the Oklahoma City area to 46 percent in the Bemidji and Billings areas. (See fig. 3.)

Figure 3: Physician Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



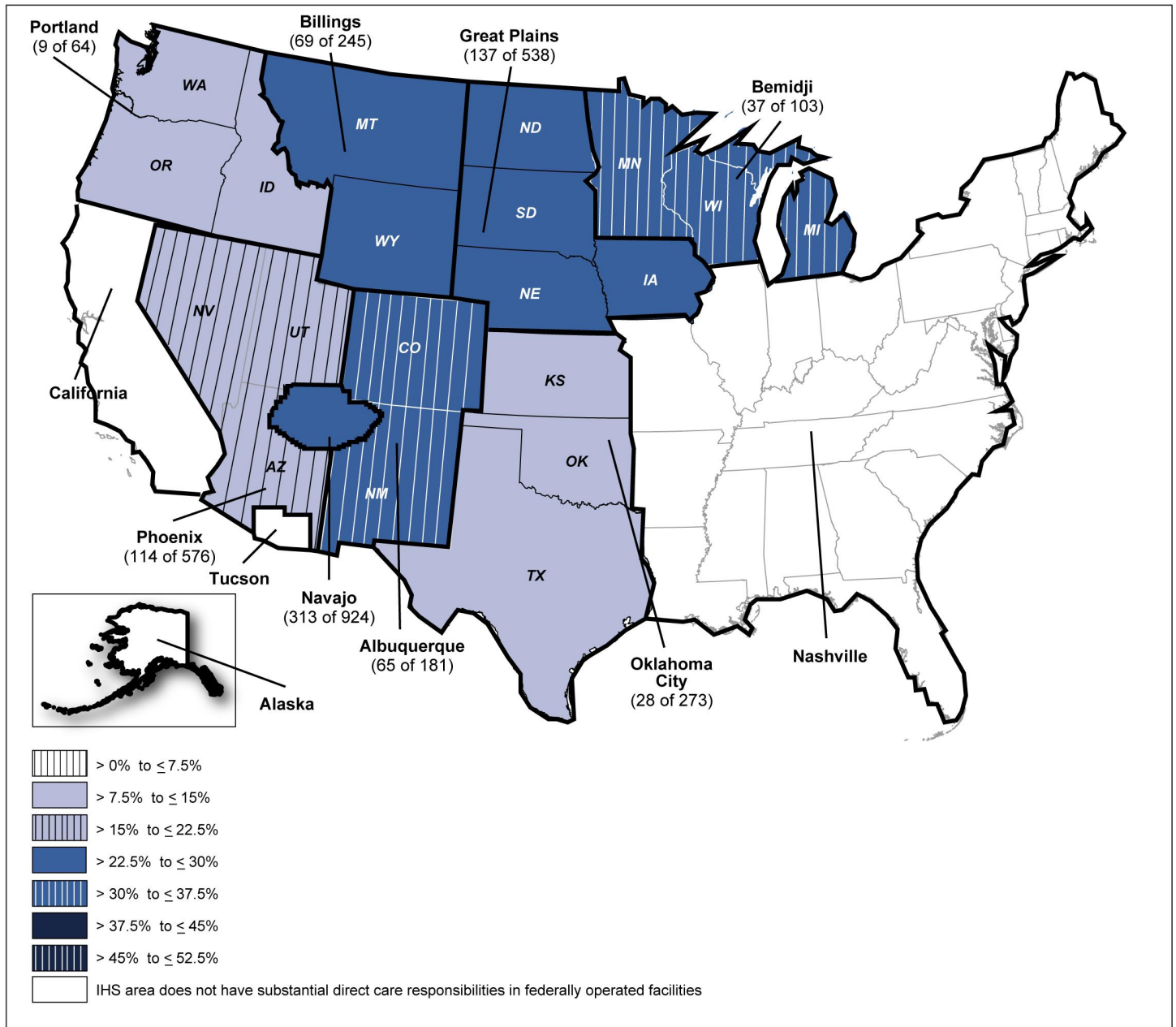
Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

Note: For the four areas in which IHS does not have substantial direct care responsibilities, the total number of positions for physicians were low: Alaska area (0), California area (2, with 0 vacancies),

Nashville area (9, with 2 vacancies), and Tucson area (1, with 0 vacancies). IHS does not operate any federal health care facilities in Hawaii.

As another example, although 27 percent of the total positions for nurses across these 8 areas were vacant, the vacancy rate ranged from 10 percent in the Oklahoma City area to 36 percent in the Albuquerque and Bemidji areas. (See fig. 4.)

Figure 4: Nurse Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

Note: For the four areas in which IHS does not have substantial direct care responsibilities, the total number of positions for nurses were low: Alaska area (0), California area (7, with 2 vacancies),

Nashville area (13, with 3 vacancies), and Tucson area (0). IHS does not operate any federal health care facilities in Hawaii.

Similarly, across these 8 areas

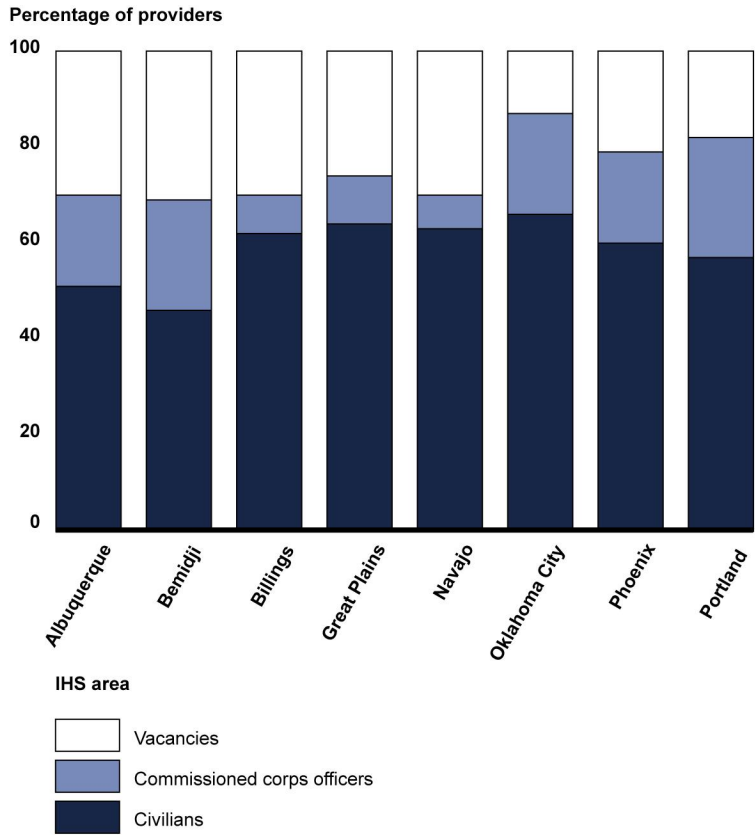
- 32 percent of the total positions for nurse practitioners were vacant, ranging from 12 percent in the Oklahoma City area to 47 percent in the Albuquerque area;
- 27 percent of the total positions for dentists were vacant, ranging from 14 percent in the Phoenix area to 39 percent in the Bemidji area; and
- 30 percent of the total positions for physician assistants were vacant, and although 4 of the areas had few such positions (the Albuquerque, Bemidji, Oklahoma City, and Portland areas each had 7 or fewer positions), the percentage of vacancies in the 4 areas with 15 or more such positions ranged from 21 percent in the Phoenix area to 40 percent in the Billings area.²⁰

In contrast, 13 percent of the total positions for pharmacists were vacant, ranging from 3 percent in the Bemidji area to 17 percent in the Albuquerque area. For more information about the vacancies for specific clinical positions, see appendix I.

While sizeable vacancies existed across provider types and areas, the majority of positions in all eight areas were occupied by civilians, and about 13 percent were filled by Commissioned Corps officers who are fulfilling assignments with a minimum 2-year term. The percentages of positions by IHS area that were vacant, filled by civilians, and filled by Commissioned Corps officers as of November 2017 are shown in figure 5.

²⁰ Two categories of providers had relatively few positions across the eight areas: a total of 32 positions for nurse anesthetists, ranging from 0 to 10 positions, and a total of 55 certified nurse midwives, ranging from 0 to 28 positions (with only one area—Navajo—having positions for more than 10 certified nurse midwives).

Figure 5: Composition of the Indian Health Service (IHS) Provider Positions by IHS Area, November 2017



Source: GAO analysis of IHS data. | GAO-18-580

Note: Providers include physicians, nurses, nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, physician assistants, dentists, and pharmacists. The Commissioned Corps officers included in these data were in permanent positions with the IHS (rather than serving in temporary roles). IHS does not have substantial direct care responsibilities in 4 of its 12 areas—Alaska, California, Nashville, and Tucson—which are therefore excluded from this figure.

IHS Officials Identified Challenges to Filling Provider Vacancies, As Well As Negative Effects of Vacancies on Patient Care and Provider Satisfaction

IHS officials told us they have experienced considerable challenges in filling vacancies for providers—as well as negative effects on patient care and provider satisfaction when positions are vacant. According to IHS officials, the rural locations and geographic isolation of some IHS facilities create recruitment and retention difficulties. IHS data indicate that 36 of the 102 IHS facilities, including four hospitals, are identified as isolated hardship (ISOHAR) posts.²¹ Agency documentation describes ISOHAR posts as “unusually difficult, which may present moderate to severe physical hardships for individuals assigned to that geographic location,” and states that physical hardships may include crime or violence, pollution, isolation, a harsh climate, scarcity of goods on the local market, and other problems.²² In addition, IHS has reported that insufficient housing, substandard schools, lack of entertainment opportunities, and shopping centers located more than three hours away are all typical not only of ISOHAR posts, but also of many other IHS facility locations. Officials stated that, especially for job candidates and employees with families, these can be critical factors in choosing whether or not to accept or stay in a position. For example, officials from the Portland Area office told us the Colville Service Unit has experienced challenges recruiting physicians because the service unit is 110 miles away from Spokane, and many of the smaller towns nearby have limited amenities—including limited employment opportunities for spouses and school systems that may not meet the expectations of some prospective employees.

In addition to hardships generally associated with rural locations, IHS facilities can experience additional challenges specific to recruiting and retaining providers for facilities on tribal lands. For example, Navajo area officials told us that providers who are non-native or are not married to a tribal member generally must go off the reservation to find housing if it is

²¹The criteria used in determining an ISOHAR duty site for Commissioned Corps officers is defined in an HHS personnel policy memorandum. See U.S. Department of Health and Human Services, U.S. Public Health Service, *Service Awards – Isolated/Hardship Sites*, Personnel Policy Memorandum 06-006 (September 2016).

²²In 2016, we reported that residents of tribal lands often lack basic infrastructure, such as water and sewer systems, and telecommunications services. See *Telecommunications: Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands*, [GAO-16-222](#) (Washington, D.C. Feb. 3, 2016.)

not provided by IHS. According to IHS, the Navajo Nation is one of the largest Indian reservations in the United States, consisting of more than 25,000 contiguous square miles and three satellite communities, and extending into portions of Arizona, New Mexico, and Utah. Living off the reservation can result in long commutes, contributing to a difficult work-life balance. Furthermore, IHS officials noted, public transportation such as buses or trains do not exist in proximity to most IHS facilities.

IHS facility staff told us long-standing vacancies have a direct negative effect on patient access to quality health care, as well as employee morale. Officials from multiple facilities we visited told us they have had to cut certain patient services due to ongoing provider vacancies. For example, officials from the Phoenix Area office told us the Nevada Skies Youth Wellness Center, an adolescent substance abuse treatment center, decreased the number of beds available due to staffing vacancies. Similarly, officials from the Rosebud Hospital stated the facility has diverted obstetrics patients to other facilities since July 2016 due to a shortage of physicians, nurses, and nurse anesthetists. During the diversion, those patients were referred to other hospitals in Valentine, Nebraska, and Winner, South Dakota—about 45 miles away. An official from the Sioux San Hospital said that because of vacancies in the diagnostic testing laboratory, the hospital stopped conducting Chlamydia tests in-house and instead sends specimens out to another laboratory for testing. As a result, the official stated it takes about a week longer to get the test results, which can delay treatment. In addition facility staff we interviewed told us the increased stress and fatigue of providers working to make up for staffing shortages results in decreased employee morale. These staff stated that, in some cases, this stress and fatigue has caused providers to leave IHS. One doctor we spoke with described this dynamic of vacancies begetting additional vacancies as a “never-ending cycle” for the facility.

IHS Uses Multiple Strategies to Recruit and Retain Providers

In an effort to recruit and retain permanent employees, IHS has used strategies that are similar to strategies used by VHA and tribal facilities in our review. Specifically, IHS has provided financial incentives, professional development opportunities, and some access to housing. The agency has also taken steps to recruit students and connect with potential applicants through webinars, career fairs, and conferences.

Salaries and Other Financial Incentives

IHS offers increased special salary rates for certain health care positions, as well as other financial incentives, such as recruitment and retention bonuses. IHS also offers student loan repayments, in return for health professionals' commitment to work at IHS for a specified period of time.

- **Special salary rates.** IHS offers special higher salary rates for physicians, dentists, nurses, CRNAs, certified nurse midwives, nurse practitioners, optometrists, pharmacists, and physician assistants.²³ IHS officials stated that special salary rates are an important recruitment and retention tool for providers, and that without them, federally operated IHS facilities would be at a competitive disadvantage with the private sector, VHA, and tribally operated facilities. In 2015 IHS reported that recruiting and retaining CRNAs was “an ongoing problem for IHS—mostly due to pay,” and the agency rarely had “a sufficient applicant pool.” IHS reported “CRNA services were integral to IHS operations” and without the ability to recruit and retain these providers, IHS was “at risk of having to curtail services to clients.”²⁴ As a result, according to IHS officials, the agency developed special salary rates for CRNAs, which became effective on December 31, 2015. As of November 2017, IHS had no CRNA vacancies.

However, according to IHS officials, the agency has only developed seven national special pay tables and two local special pay tables for Alaska, as of January 2018, due to a lack of human resources personnel trained in this process. Officials told us only one human resources staff person at IHS is experienced with developing special pay tables, which takes a substantial amount of work. However, they stated that this task is only one of her job responsibilities, and she can complete about one

²³To implement special salary rates, IHS must develop salary tables by provider type, which set forth the range of salaries available for that position. IHS has developed special pay tables at the national level for nurses, optometrists, pharmacists, physician assistants, CRNAs, certified nurse midwives, and nurse practitioners. According to IHS officials, IHS uses special salary tables created and used by the VHA for physicians and dentists at the national level. There are also two additional Alaska-only pay tables covering nurses and physician assistants. IHS may seek HHS approval to institute new or increase current special pay tables.

²⁴IHS reported that this had already occurred—in February 2015—when the IHS facility in Crownpoint, New Mexico, temporarily closed obstetric services for lack of a CRNA or anesthesiologist.

special pay table each year. In comparison, according to an official, VHA has developed and regularly revises over 3,000 special salary rates based on local market conditions. For example, IHS officials stated that Phoenix Indian Medical Center cannot offer salaries that are competitive with VHA because salaries for providers in the Phoenix area are relatively high compared to national salaries, and IHS has not developed local salary rates in the Phoenix market. For example, using pay rates effective January 7, 2018, a nurse just starting a career in the Phoenix area could make \$63,871 at VHA (local pay table), versus \$44,835 at IHS (national pay table).

Although offering increased salaries is an important strategy that IHS uses for recruitment, IHS still experiences challenges in offering competitive salaries. Officials from two area offices told us the maximum amount for a physician salary or certain nursing salaries were not enough for some potential hires, who sought employment elsewhere. While IHS may seek approval from HHS to exceed the maximum salary of certain pay tables, IHS officials said the approval process can be lengthy, which has resulted in the loss of promising candidates—including emergency medicine, general surgery, radiology, and anesthesiologist providers. Similarly, officials from one area office stated that federally operated IHS facilities have experienced challenges competing with other health care systems in recruiting local health care providers, including tribally operated facilities. For example, officials from the Oklahoma City area office told us their area has four of the largest American Indian tribes in the country running their own health systems. According to these officials, in addition to IHS funds, these tribes use money from other sources to pay health care salaries. IHS officials explained that, as a result, tribes can pay higher salaries and may be able to offer other incentives that IHS is unable to provide.

- **Recruitment, relocation, and retention incentives.** IHS may offer recruitment, relocation, and retention incentives. Specifically, for positions that are difficult to fill or for individuals who are unlikely to accept the position without an incentive, IHS may offer potential employees a recruitment incentive up to 25 percent of their annual salary. IHS may also pay a relocation incentive for a current employee who must relocate for a position that would otherwise be difficult to fill.

²⁵ In addition, IHS may pay a retention incentive of up to 25 percent of an employee's current salary if he or she (1) has unusually high or unique qualifications or if there is a special need of the agency, which makes retention essential, or (2) is likely to leave IHS without the retention incentive.²⁶ Officials from the Phoenix area office told us IHS facilities use the retention bonuses extensively for nursing staff, in particular, to help match the market pay. IHS also analyzed the recruitment and retention of nurses and, as a result of this analysis, requested an exception to the 25 percent limit on recruitment, relocation, and retention incentives, from the Office of Personnel Management (OPM). In December, 2017, OPM approved IHS's request to offer incentives up to 50 percent, and IHS officials told us that they are currently reviewing implementation options.

- **Loan repayment.** IHS's Loan Repayment Program pays provider education loans in exchange for an initial two-year service commitment to practice in health facilities serving AI/AN communities.²⁷ Recipients agree to serve two years in exchange for up to \$20,000 per year in loan repayment funding and up to an additional \$5,000 per year to offset tax liability, which IHS pays

²⁵Before paying a recruitment incentive, IHS must require the employee to sign a written service agreement to complete a specified period of employment with the agency (or successor agency in the event of a transfer of function). The service period may not be less than 6 months and may not exceed 4 years. The recruitment incentive may not exceed 25 percent of the annual rate of base pay of the employee at the beginning of the service period, multiplied by the number of years in the required service period. IHS may provide this incentive as an initial lump-sum payment, or in installments throughout the service period required by the service agreement, or as a final lump sum payment at the conclusion of the service period, or a combination of these methods. OPM may authorize an agency to waive the 25 percent limit based on critical agency need.

²⁶OPM can waive the 25 percent limit and pay retention incentives of up to 50 percent of basic pay, based on critical agency need.

²⁷Area offices and facilities may also transfer funds to provide supplemental loan repayments to recruit and retain providers at the area or facility level.

directly to the Internal Revenue Service.²⁸ Loan repayment recipients can extend their initial two-year contract on an annual basis until their original approved educational loan debt is paid. In fiscal year 2017, a total of 1,267 providers—about 8 percent of the federal IHS workforce—were receiving IHS loan repayments. This included 434 new two-year contracts, 396 one-year extension contracts, and 437 providers starting the second year of their fiscal year 2016 two-year contract. However, IHS's Loan Repayment Program is not able to pay for the loans of all providers who request it due to limited funding. According to officials in one area office, this has caused providers to either decline a job offer or leave IHS. According to IHS's fiscal year 2019 budget justification, in fiscal year 2017, 412 providers employed by IHS who applied for loan repayment, did not receive one. An additional 376 applicants either declined a job offer because they did not receive loan repayment funding or were unable to find a suitable assignment meeting their personal or professional needs. Officials in the Billings Area Office told us several physicians stated during exit interviews that they were leaving because they did not receive the loan repayment funding they hoped to receive. According to area office officials, the Billings area lost 5 physicians in 2 weeks because they were not awarded loan repayments.

In addition to its own loan repayment program, IHS has worked with HHS's Health Resources and Services Administration (HRSA) to increase opportunities for providers to apply for loan repayment through the National Health Service Corps. Specifically, IHS worked with HRSA to increase the number of facilities deemed medically underserved and therefore designated Health Professional Shortage Areas. According to IHS, this resulted in 684 health care delivery sites for placement of National Health Service Corps providers, and the number of placements

²⁸The President's fiscal year 2019 budget proposal for IHS included a legislative proposal to make the funds awarded to Loan Repayment Program recipients exempt from their gross incomes for tax purposes. The proposal noted that including the awarded funds in recipients' gross income increases their overall tax bracket and creates a financial disincentive to serve at Indian health facilities. According to the proposal, such a change would make the agency's Loan Repayment Program more comparable to the National Health Service Corps Loan Repayment Program. According to IHS officials the agency could redirect the \$5,000 spent to offset tax liability toward awards without an increase in overall funding levels. IHS also requested the same treatment for funds awarded under its Health Professions Scholarship Program. See Department of Health and Human Services, *Fiscal Year 2019 Indian Health Service: Justification of Estimates for Appropriations Committees* (Rockville, Md.: 2018).

increased to 443 providers as of August 2016.²⁹ As of January 2018, according to IHS officials, there were 499 providers serving at 797 eligible sites. Applicants cannot receive loan repayment from more than one program concurrently.³⁰

Professional Development Opportunities

Officials from several facilities told us they provide access to professional development opportunities for IHS employees as a retention tool. For example, Northern Navajo Medical Facility (Shiprock) officials said they are sending nurse managers and two to three potential future leaders to the American Organization of Nurse Executive trainings. Officials told us this training allows the nurses to network with private executives and look at fellowships. In addition, Chinle Comprehensive Health Care Facility officials told us they paid for a 2-year residency at University of Texas Health Science Center so one of their dentists could obtain additional training in pediatric dentistry. Officials told us that, in return, the dentist agreed to stay at the Chinle Comprehensive Health Care Facility for 6 years. In addition, Shiprock service unit officials told us they have offered their providers, through a partnership with the University of New Mexico, an online Masters of Science in Public Health program in health management.

Housing

When housing is limited near IHS facilities, IHS has made some housing available to assist with recruitment and retention of providers. Area officials told us federally operated IHS facilities in the Albuquerque, Great

²⁹The National Health Service Corps offers loan repayment support to qualified health care professionals dedicated to practicing in medically underserved areas. The National Health Service Corps Loan Repayment Program participants also earn salaries from their site and other benefits in addition to loan repayment. The National Health Service Corps Loan Repayment Program offers an initial award of up to \$50,000 for 2 years of full-time service when applicants select a service site with a Health Professional Shortage Area score of 14 or higher and up to \$30,000 for sites with a score of 13 and below. Half-time service options are also available.

³⁰Additional loan repayment programs available to IHS providers include HRSA's NURSE Corps Loan Repayment Program—which funds up to 60 percent of qualified health education loans for registered nurses and nurse practitioners who agree to a 2-year service commitment—and state loan repayment programs. These additional loan repayment options are available to providers interested in pursuing employment at IHS, as well as providers already practicing at IHS facilities.

Plains, Phoenix, Billings, and Navajo areas provide some government-subsidized housing for providers and their families. At four of the seven facilities we visited—the Kayenta Health Center, Chinle Comprehensive Health Care Facility, Rosebud Hospital, and Pine Ridge Hospital—we observed some staff housing.

- **Kayenta Health Center.** Officials from Kayenta Health Center told us that they provide 158 housing units, from 1 bedroom to 4 bedrooms. In addition, the facility has a 19-unit building, similar to a hotel (fully furnished), for temporary contract providers. Officials said they are considering opening units in this building to permanent employees.
- **Chinle Comprehensive Health Care Facility.** Officials from Chinle Comprehensive Health Care Facility told us there are 264, 1 to 4 bedroom housing units available for providers both on its campus and nearby. IHS officials also told us they provide access to 19 parking spaces for camping vehicles.
- **Rosebud Hospital.** Officials from Rosebud Hospital stated they provide 150 housing units and are also constructing a 19-unit hotel-style building. They said that most, if not all, candidates from outside of the area ask about housing unit availability when deciding whether to accept a position.
- **Pine Ridge Hospital.** Officials from Pine Ridge Hospital told us that IHS also provides 105 housing units for its employees. IHS officials explained the housing is a necessity for on-call providers because staff without on-site housing are required to commute extreme distances in very harsh environments to locate housing outside of reservation boundaries.

See figure 6 for examples of government-subsidized provider housing near the Kayenta Health Center, Chinle Comprehensive Health Care Facility, Rosebud Hospital, and Pine Ridge Hospital. See appendix II for information about housing provided by one selected tribe.

Figure 6: Examples of Government-Subsidized Provider Housing Near Indian Health Service (IHS) Facilities



Kayenta Health Center

Kayenta Health Center provides a mixture of older and newer housing to their permanently employed providers. Officials said they have 158 units; 110 units of those units are new.



Chinle Comprehensive Health Care Facility

IHS provides 264 housing units for providers working at the Chinle Health Care Facility—both on the Chinle Comprehensive Health Care Facility campus and nearby.



Rosebud Hospital

Rosebud Hospital provides 150 housing units to health care providers because nearby housing is limited. Officials said they are also constructing a 19-unit hotel-style building.



Pine Ridge Hospital

Pine Ridge Hospital provides 105 housing units to health care providers.

Source: GAO. | GAO-18-580

However, there is a greater demand for housing than IHS can provide. During our site visit, Chinle Health Care Facility officials stated that government-subsidized housing availability to meet employee demand is

severely limited at all of their three facilities, and the availability of private housing in the community is “non-existent.” As a result, IHS officials from Chinle told us that some providers commute 60 to 90 minutes to work one-way each day. IHS officials told us that, after conducting a needs assessment in 2016, they determined the unmet need for housing at IHS facilities was 1,100 units. According to these officials, the needs assessment also helped them identify some of the greatest needs for housing. The President’s fiscal year 2017 budget proposal for IHS requested \$12 million to build new staff housing units “in isolated and remote locations for healthcare professionals to enhance recruitment and retention.”³¹ According to agency officials, based on its needs assessment, HHS provided \$24 million to build new staff housing units at the Rosebud and Pine Ridge hospitals in the Great Plains area, at the Crownpoint and Chinle health care facilities in the Navajo areas, and at the Supai clinic in the Phoenix area.³²

Student Recruitment Efforts

IHS has also taken steps to recruit future providers by providing scholarships, externships, internships, and residency rotations to health professional students.

- **Scholarships.** IHS’s scholarship program provides financial support to qualified AI/AN candidates in exchange for a minimum 2-year service commitment within an Indian health program. Nearly 7,000 AI/AN students have received scholarship awards since the program started in 1978. The awards include (1) scholarships for candidates enrolled in preparatory or undergraduate prerequisite courses in preparation for entry to a health professions school, (2) pre-graduate scholarships for candidates enrolled in courses leading to a bachelor’s degree, including pre-medicine, pre-dentistry, and pre-podiatry, and (3) health professions scholarships for candidates who are enrolled in an eligible health profession degree program. According to IHS, in fiscal year 2017, there were 805 new scholarship applications submitted. After evaluating the applications, 331 applications were

³¹See Department of Health and Human Services, *Fiscal Year 2017 Indian Health Service: Justification of Estimates for Appropriations Committees* (Rockville, Md.: 2016).

³²The Supai clinic serves members of the Havasupai tribe, whose approximately 500 members inhabit a remote village on the floor of the Grand Canyon. IHS officials stated that patients at the Supai Clinic receive medication by foot, pack mule, or occasionally by helicopter.

deemed eligible for funding, and the program was able to fund 108 new awards. The IHS Scholarship program also reviewed applications from previously awarded scholars who were continuing their education. In fiscal year 2017, 154 continuation awards were funded. In addition to the scholarship program, according to IHS officials, the agency funds two medical students enrolled at the Uniformed Service University of the Health Sciences each year. Each graduate agrees to a 10-year obligation to IHS after medical school graduation and completion of training. In future years, IHS endeavors to fund two additional medical students at the Uniformed Service University of Health Sciences.

- **Externships and internships.** IHS provides scholarship recipients with opportunities to receive clinical experience in IHS facilities. In fiscal year 2017, the agency funded 94 students, who were employed for 30 to 120 workdays per calendar year.³³ In addition, IHS provides externships to students temporarily called to active duty as Commissioned Corps officers through the Commissioned Officer Student Training and Extern Program (COSTEP). IHS officials said that the agency funded about 60-70 students in COSTEP in 2016.³⁴ IHS also offers a Virtual Internship program through a partnership with the Department of State. Virtual interns spend 10 hours a week from September through May working remotely on their projects, which have included producing bilingual Navajo and English videos for rural health clinics, developing Navajo-specific health education materials on palliative care, improving behavioral health data collection methods, and creating social media strategies and campaigns for health promotion. For the 2017-2018 academic year, about 15 students are participating in virtual internships with IHS.

³³Externs receive a salary based on experience and years of academic training. If the externship fulfills a required academic field placement or an internship, IHS pays all required tuition and fees instead of a salary.

³⁴The Commissioned Corps offers both a Junior COSTEP program and a Senior COSTEP program. Students who participate in the Junior COSTEP program work in federal agencies and programs alongside active duty Commissioned Corps officers for between 31 and 120 days during school breaks. The Senior COSTEP program is available to full-time students about to begin their final year of academic study toward a commissionable degree. Senior COSTEP participants become commissioned officers and receive full pay and benefits of an active duty officer during their final year of academic study for up to 12 months. In return for financial assistance, participants agree to work for the sponsoring agency as a Commissioned Corps officer immediately after graduation for twice the period of sponsorship.

- **Residency rotations.** IHS service units offer rotation opportunities for medical, nursing, optometry, dental, and pharmacy residents as a recruitment tool because research shows students are likely to stay and practice medicine in the area where they studied.³⁵ For example, the Oklahoma City area has a Memorandum of Agreement with the Oklahoma State College of Medicine, which permits area officials to annually recruit up to two residents from the current year's residency class to become federal employees while completing their residency program. For every year that IHS sponsors the residents' position at the university, the resident has a one-year service obligation. In addition, IHS officials from Chinle stated that the service unit participates in educational agreements with numerous universities and residency programs to host medical students, nursing students, and medical residents for rotations. According to officials, recent graduates from residency programs applying for permanent positions with the Chinle Comprehensive Health Care Facility often cite prior rotations at the service unit, or word of mouth from students or residents who have rotated through the service unit, as a reason for applying. The IHS Pharmacy Resident Program is another recruitment program that offers residency training to pharmacists who are willing to serve in high-need locations. Pharmacy residents who are Commissioned Corps officers are required to complete 2 years of service at an IHS federal or tribal facility. Twenty-six Commissioned Corps and civilian pharmacists participate in the Pharmacy Residency Program. See app. II for information on residency programs at tribally operated facilities.

Connecting with Potential Applicants

IHS officials said they have conducted webinars and career fairs in an attempt to connect with health professional students. For example, in 2016, IHS conducted two informational webinars to recruit Commissioned Corps applicants to facilities in the Great Plains area with critical clinical vacancies. According to IHS officials, approximately 60 applicants attended the two webinars, resulting in 15 nurse hires. In addition,

³⁵Through medical school, students earn a medical degree and become physicians, but they are required to undergo graduate medical education (GME) training to be able to practice independently. This GME training is commonly known as residency training. We previously found that physicians may practice in geographic areas similar to those where they complete their residency training. See GAO, *Physician Workforce: Locations and Types of Graduate Training Were Largely Unchanged and Federal Efforts May Not be Sufficient to Meet Needs*, [GAO-17-411](#) (Washington, D.C.: May 25, 2017.)

Nashville area officials stated that the area office conducted a marketing campaign at the National Congress of American Indians Conference. Officials explained that the area office provided information about desirable aspects of living in the Nashville area and collected e-mail addresses and areas of interest from potential job candidates. IHS's Office of Human Resources also partners with HRSA's Bureau of Health Workforce by participating in nationwide virtual career fairs to promote the National Health Service Corps scholarship and loan repayment opportunities.

IHS has also worked with the Office of the Surgeon General to increase the recruitment and retention of Commissioned Corps officers. In May 2017, the Office of the Surgeon General gave IHS priority access to new Commissioned Corps leads—meaning IHS has at least 30 days to make contact with potential applicants to the Commissioned Corps before other agencies have the opportunity to contact them. According to IHS officials, since being given priority access to Commissioned Corps leads, the agency has made 20 direct clinical care selections, of which 15 have entered on duty.

IHS Uses Strategies to Maintain Patient Access to Services and Reduce Provider Burnout When Positions Are Vacant, But Lacks Agency-wide Data on Use of Temporary Providers

In addition to its recruitment and retention strategies, IHS uses strategies to mitigate the negative effects of vacancies by helping to maintain patient access to services, and helping to reduce provider burnout when positions are vacant. Specifically, IHS provides telehealth services; implements alternative staffing models, including hiring nurse practitioners and physician assistants in lieu of physicians; temporarily assigns Commissioned Corps officers to alternate duty stations as needed; and contracts with temporary providers.

Providing Telehealth Services

IHS's telehealth services include two agency-wide programs that provide teleophthalmology and telebehavioral health services.³⁶

- **Teleophthalmology.** The IHS Joslin Vision Network (IHS-JVN) Teleophthalmology Program provides annual diabetic eye exams to AI/AN patients in almost all IHS areas with federally operated facilities.³⁷ According to IHS, patients' retinal images are scanned locally and sent to a reading center where doctors interpret the images and report back. Officials told us the IHS-JVN program examined 22,000 patients in 2016.
- **Telebehavioral health.** The Telebehavioral Health Center of Excellence provides direct care services through video conferencing to patients at remote facilities from providers at IHS facilities that are able to provide the services.³⁸ These services are provided in all IHS areas with federally operated facilities, and more than 5,800 patient visits occurred in 2016. Additionally, officials told us there are regional telebehavioral health programs, such as in the Oklahoma City area that, combined with the Telebehavioral Health Center of Excellence, saw over 10,000 patients in 2016. IHS officials stated that patients appreciate the telebehavioral services in their communities, because they are the only behavioral health services available in many communities. The IHS psychiatrist who provides services is located in Oklahoma City because, according to IHS officials, it is easier to recruit providers to a more urban location.

In addition to these agency-wide telehealth programs, IHS officials identified multiple other local telehealth arrangements that facility staff have developed to help maintain patient access to medical services. For example, there is a diabetes consultant for the Portland area who conducts telenutrition services. There is also a teledermatology program

³⁶IHS defines telehealth services as services that use electronic communications to facilitate the provision of health care, with clinical appointments provided remotely. According to IHS, in some cases, specialty care furnished through telehealth is supplemented by a nurse or assistant who is co-located in the room with the patient.

³⁷According to IHS officials, IHS-JVN is not offered in the California area because the single federally operated facility in the area—an adolescent substance abuse treatment center—chose not to participate.

³⁸The Telebehavioral Health Center of Excellence was developed through support from the IHS Division of Behavioral Health and in partnership with the University of New Mexico Division of Community Behavioral Health.

for the Phoenix Area federal facilities operated out of the Phoenix Indian Medical Center. Additionally, several service units—including Pine Ridge Hospital, Rosebud Hospital, and the Sioux San Medical Center—have contracts for emergency department telehealth services. Figure 7 shows telehealth equipment in the Rosebud Hospital emergency department.

Figure 7: Telehealth Equipment in the Rosebud Hospital Emergency Department



Source: GAO. | GAO-18-580

Implementing Alternative Staffing Models

Staff from multiple facilities told us they have implemented alternative staffing models to focus on hiring for non-physician practitioner positions because these positions are slightly easier to fill. For example, Northern Navajo Medical Center officials told us the facility, facing an emergency department physician shortage, hired physician assistants and nurse practitioners instead. These officials said they converted two physician positions into four physician assistant and nurse practitioner positions. In addition, Chinle officials stated that they added two physician assistants to the urgent care department due to complaints about patient wait times, and patient wait times have decreased as a result. Officials also

mentioned dental therapists as an additional type of clinical professional who may be added to the Chinle Health Care Facility staffing model because the service unit has been unable to recruit and retain enough dentists to meet patient need.

Commissioned Corps Deployments and Temporary Duty Assignments

IHS officials stated that they have worked with the Office the Surgeon General to deploy Commissioned Corps officers, mainly to the Great Plains area, and have also coordinated voluntary temporary duty assignments of Commissioned Corps officers (within IHS and from other agencies) to temporarily fill staffing shortages or meet other mission-critical needs.³⁹ IHS officials stated that Commissioned Corps officers may also be temporarily assigned to an IHS site to provide services, such as behavioral health support during a suicide cluster.

Temporary Contract Providers

IHS officials from 9 of the 10 geographic areas with federally operated facilities and all seven facilities in our review told us they regularly use temporary contract providers—such as through locum tenens contracts and contracts with university fellowship programs—to maintain patient access to care when positions are vacant.⁴⁰

- **Locum tenens.** Officials from the Kayenta Health Center said they contract with temporary providers to compensate for vacancies, and the facility contracts with about 9 providers who rotate to fill 3 vacant

³⁹Commissioned Corps officers may be deployed as authorized by the HHS Secretary or the President in response to a local, regional, domestic, or international public health emergency, or an urgent health need such as a critical staff shortage that threatens the health and safety of the affected population. Those deployments are coordinated by Commissioned Corps Headquarters. IHS would request specific needs and skillsets of Commissioned Corps officers required, the location of need, and the duration of needed assistance.

For temporary duty assignments, area directors send a request to other IHS area directors and if desired, to other agencies through the IHS Commissioned Corps Liaison, specifying the skillsets required, length of the temporary duty, whether salary is reimbursable or not, and so forth. A temporary duty assignment does not require Commissioned Corps engagement or a personnel action, and may be documented through memorandum.

⁴⁰Locum tenens providers hold the place of, or temporarily substitute for other providers.

emergency department positions. Officials from the Portland area stated that they use temporary providers when there is a staffing shortage with providers. They explained that the Portland area has provider vacancies that have been open for years, and temporary providers fill these vacancies for an extended period of time, usually with a rotating series of providers. Chinle Health Care Facility officials said temporary providers, when of sufficiently high quality, have been recruited to join the permanent corps of civilian service staff. However, they told us locum tenens can cost between \$50,000-\$200,000 more annually than permanent physicians' salaries, exclusive of benefits, depending on the specialties and hourly rates associated with the contracts. They said they are finding that increasingly higher hourly rates are needed to ensure a sufficient supply of high-quality temporary providers.

IHS officials at all levels of the agency told us they prefer to hire permanent providers, rather than use locum tenens contracts. Facility officials explained that persistent turnover in temporary staff may jeopardize continuity of care. For example, Sioux San Medical Center officials expressed concern about the quality of the care provided by temporary contractors, as well as the consistency of the care provided because the contractors rotate frequently. IHS officials told us that many providers prefer to be on contract due to the higher compensation rates as a contractor, even when taking federal benefits into account.

- **University physicians.** IHS officials explained that area offices may also contract with university fellowship programs to provide visiting providers. For example, according to IHS, the Chinle Health Care Facility has entered into long-term contractual agreements with two academic fellowship programs—University of California-San Francisco Health Program and the University of Utah Global Health Fellowship. Officials told us these programs provide U.S. residency-trained, board certified physicians interested in global health to work 6-month assignments alternating with another fellow at an international site. In addition, IHS officials stated that the Navajo area office is collaborating with the University of California-San Francisco and its global health fellowship to assign global health fellows to a Navajo Area site for 6 months out of each year. The officials explained that 24 fellows were placed in Navajo-area facilities in 2017 at costs substantially lower than that of locum tenens contracts. According to IHS, the Great Plains area office has collaborated with the University of Washington's global health fellowship program to assign global health fellows in Internal Medicine to Pine Ridge Hospital for 11-month placements.

Agency-wide information on the extent to which facilities use these temporary providers, and the amount spent on them, is not readily available to IHS leadership. While IHS has agency-wide information on vacancies through the Capital Human Resource Management System, IHS delegates the acquisitions process for temporary provider contracts to the head of each area-level Contracting Office. Therefore, agency-wide information on the number of full-time equivalent employees that are temporary providers working at IHS facilities, as well as the cost of these providers, is not readily available.⁴¹ As discussed, officials we spoke with at IHS facilities told us that temporary providers can cost more depending on the specialties and hourly rates. Without agency-wide information on the extent to which such providers are used, IHS is not fully informed about facilities' reliance and expenditures on temporary providers or their potential effect on patient care, which is inconsistent with federal internal control standards regarding the availability of relevant information to facilitate management decision making and performance monitoring.⁴² Specifically, federal internal controls standards state that agency management should obtain, process, and use quality information to make informed decisions and evaluate the agency's performance in achieving key objectives and addressing risks. IHS's lack of agency-wide information on the costs and number of temporary providers used at its facilities impedes its ability to make decisions about how best to target its resources to address gaps in provider staffing and ensure that health services are available and accessible across IHS facilities.

Conclusions

Maintaining a stable clinical workforce capable of providing quality and timely care is critical for IHS to ensure that comprehensive health services are available and accessible to American Indian/Alaska Native

⁴¹We have recently reported on the use of contract physicians at VHA facilities. Specifically, in 2017, we reported that VHA data generally underestimated the total number of physicians providing care at VHA facilities because VHA lacked data on contract physicians. We recommended that VHA develop and implement a process to accurately count all physicians providing care at each medical center, including physicians who are not employed by VHA. While the VA did not concur with our recommendation, we stated that we did not believe that VA has a systematic or consistent way to identify all physicians providing care at its VA medical centers. See GAO, *Veterans Health Administration: Better Data and Evaluation Could Help Improve Physician Staffing, Recruitment, and Retention Strategies*, [GAO-18-124](#) (Washington, D.C.: Oct. 19, 2017).

⁴² See [GAO-14-470G](#).

people. However, despite efforts to recruit and retain providers, IHS continues to face considerable challenges to overcome its long-standing struggle to fill sizeable provider vacancies, including geographic isolation and limited amenities. Although IHS is authorized to offer recruitment and retention incentives, such as loan repayments and subsidized housing, the demand for these incentives has been greater than the agency can meet due to resource constraints. However, more complete information on contract providers could help IHS officials make decisions on where to better target its limited resources to address gaps in provider staffing and ensure that health services are available and accessible to American Indian/Alaska Native people across IHS facilities.

Recommendation for Executive Action

We are making the following recommendation to IHS:

The Director of IHS should obtain, on an agency-wide basis, information on temporary provider contractors, including their associated cost and number of full-time equivalents, and use this information to inform decisions about resource allocation and provider staffing.
(Recommendation 1)

Agency Comments

We provided a draft of this report to HHS and the Department of Veterans Affairs (VA) for review and comment. We received written comments from HHS that are reprinted in appendix III. HHS concurred with our recommendation.

In its comments, HHS stated that IHS plans to update its policies by December 2018 to include a centralized reporting mechanism requirement for all temporary contracts issued for providers. HHS also stated that, upon finalization of the policy, IHS will broadly incorporate and implement the reporting mechanism agency-wide and maintain it on an annual basis. HHS also provided technical comments, which we incorporated as appropriate.

VA provided comments on a draft of this report in an email, stating that VA officials continue to work to improve recruitment and retention of providers at VHA to ensure that they have the correct number of providers with the appropriate skills.

We are sending copies of this report to HHS, the Department of Veterans Affairs, and appropriate congressional committees. In addition, the report will be available at no charge on GAO's website at <http://www.gao.gov/>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or farbj@gao.gov. Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. Other major contributors to this report are listed in appendix IV.

A handwritten signature in black ink that reads "Jessica Farb". The signature is written in a cursive, flowing style.

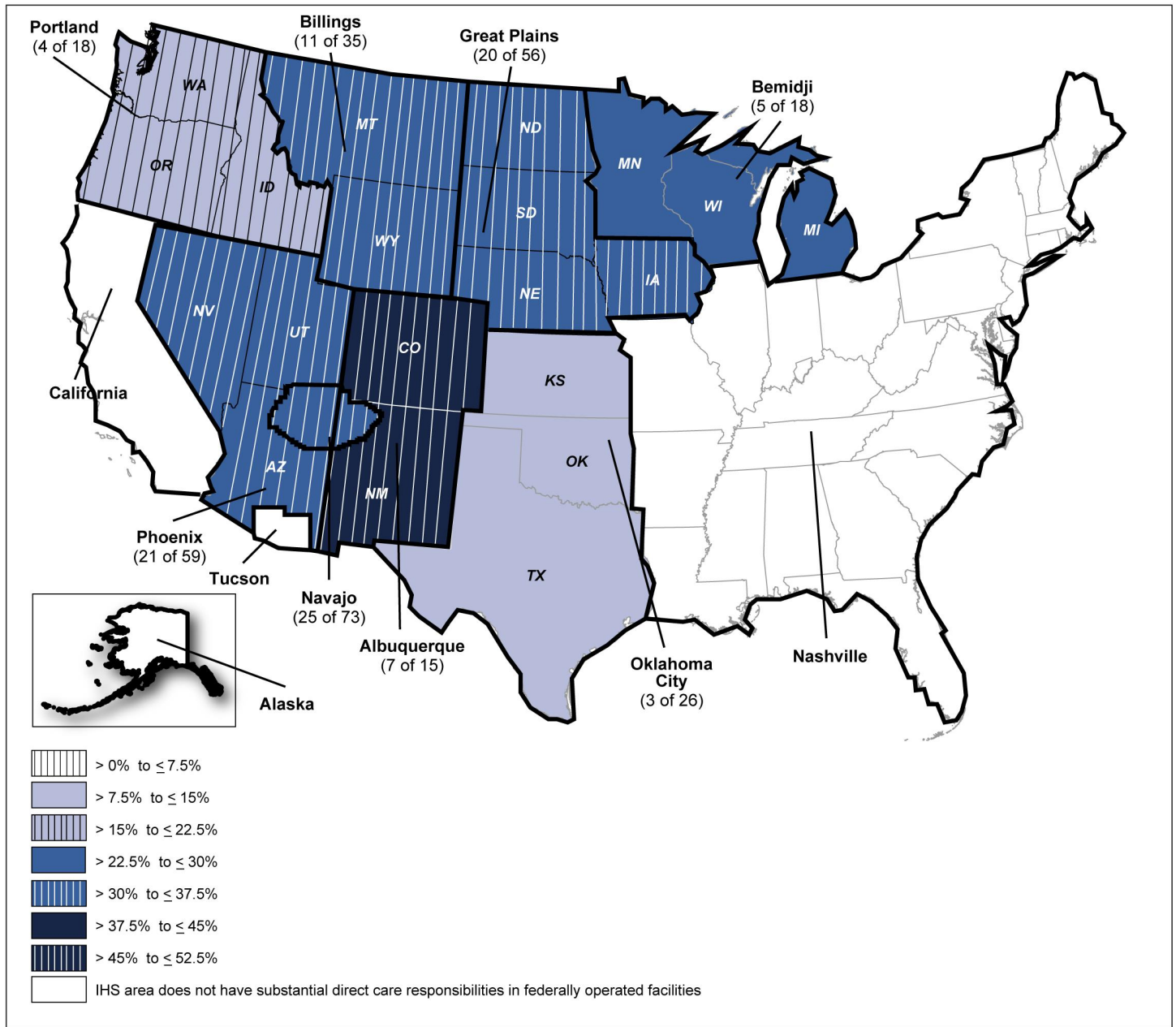
Jessica Farb
Director, Health Care

Appendix I: Provider Vacancies with the Indian Health Service (IHS)

IHS data collected in November 2017, included the number of positions and vacancies for several types of providers, including physicians, nurses, dentists, pharmacists, nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, and physician assistants. Most of these positions are in the 8 of 12 IHS areas in which IHS has substantial direct care responsibilities. Vacancies for nurse practitioners, nurse midwives, dentists, pharmacists, and physician assistants are provided in this appendix.

Nurse practitioners. Nationwide, 97 of 303 positions were vacant in November 2017, and vacancy rates in the 8 areas in which IHS has substantial direct care responsibilities ranged from 12 percent in the Oklahoma City area to 47 percent in the Albuquerque area. (See fig. 8)

Figure 8: Nurse Practitioner Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

Note: For the four areas in which IHS does not have substantial direct care responsibilities the total number of positions for nurse practitioners were low Alaska (0), California (2, with 0 vacancies),

Appendix I: Provider Vacancies with the Indian Health Service (IHS)

Nashville (1, with 1 vacancy), and Tucson (0) areas. IHS does not operate any federal health care facilities in Hawaii.

Certified nurse midwives. Nationwide, 8 of 55 positions were vacant in November 2017. See table 1.

Table 1: Number of Total and Vacant Positions for Certified Nurse Midwives with the Indian Health Service (IHS), November 2017

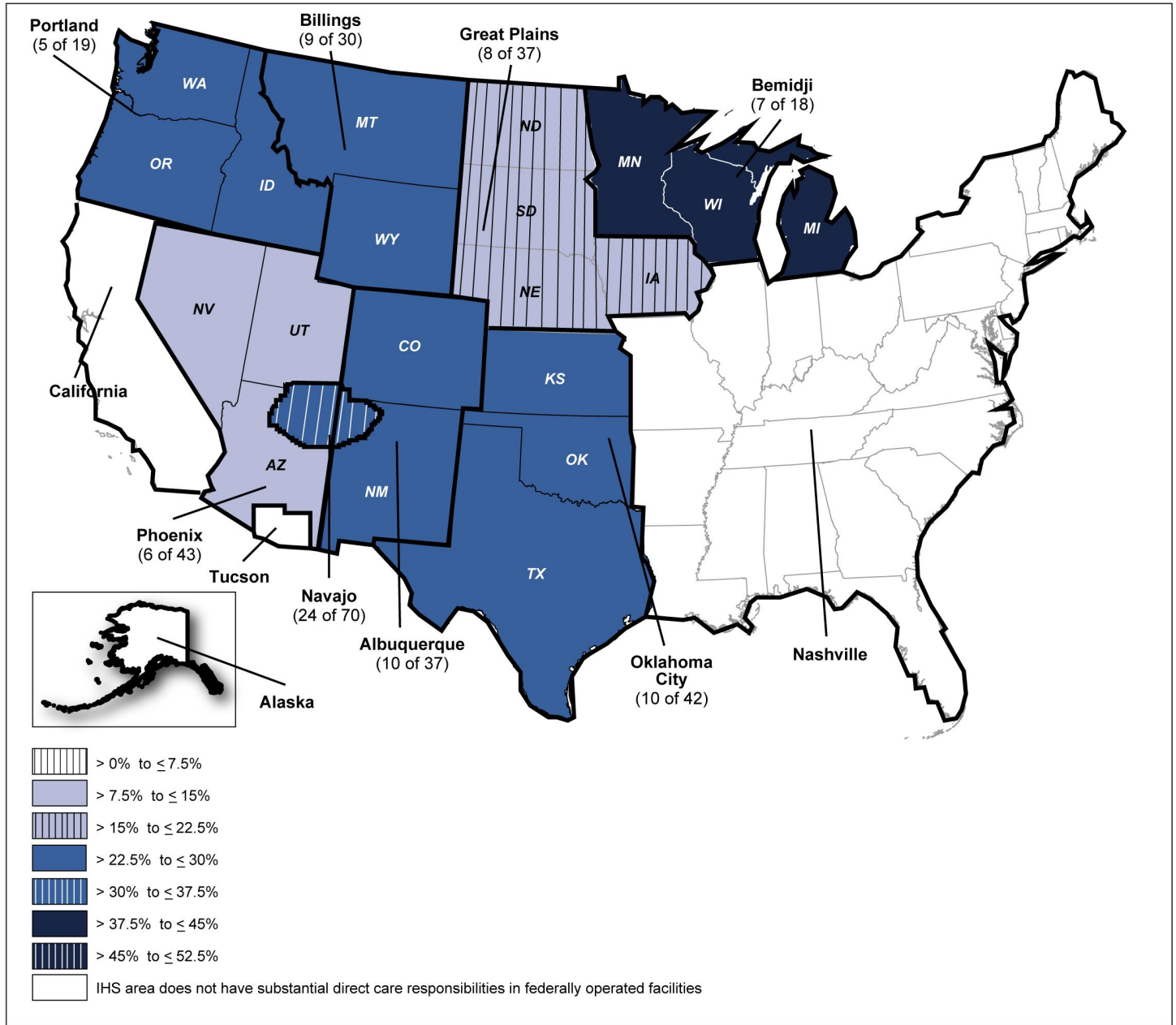
IHS Area	Total positions	Vacant positions
Alaska	0	0
Albuquerque	1	0
Bemidji	1	0
Billings	2	1
California	0	0
Great Plains	9	1
Nashville	0	0
Navajo	28	5
Oklahoma City	4	0
Phoenix	10	1
Tucson	0	0
Portland	0	0
Total	55	8

Source: GAO analysis of Indian Health Service data. | GAO-18-580

Note: IHS does not have substantial direct care responsibilities in the Alaska, California, Nashville, or Tucson areas.

Dentists. Nationwide, 81 of 306 positions were vacant in November 2017 and vacancy rates in the 8 areas in which IHS has substantial direct care responsibilities ranged from 14 percent in the Phoenix area to 39 percent in the Bemidji area. (See fig. 9.)

Figure 9: Dentist Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

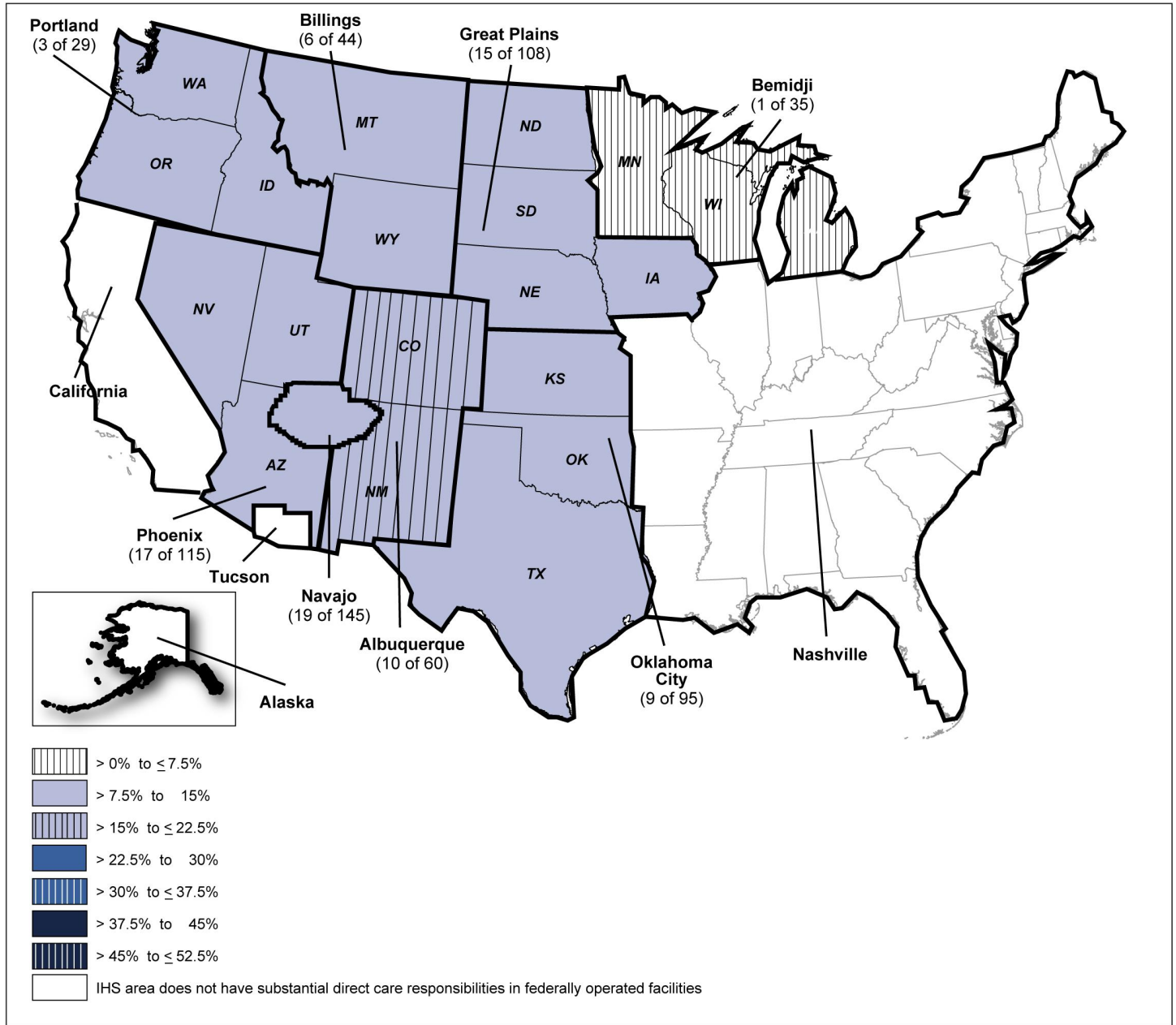
Note: For the four areas in which IHS does not have substantial direct care responsibilities, the total number of positions for dentists were low: Alaska (0), California (1, with 0 vacancies), Nashville (3,

Appendix I: Provider Vacancies with the Indian Health Service (IHS)

with 1 vacancy), and Tucson (0) areas. IHS does not operate any federal health care facilities in Hawaii.

Pharmacists. Nationwide, 80 of 637 positions were vacant in November 2017 and vacancy rates in the 8 areas in which IHS has substantial direct care responsibilities ranged from 3 percent in the Bemidji area to 17 percent in the Albuquerque area. (See fig. 10.)

Figure 10: Pharmacist Vacancy Rates in the Eight Indian Health Service (IHS) Areas with Substantial Direct Care Responsibilities, November 2017



Sources: GAO analysis of IHS data; Map Resources (map). | GAO-18-580

Note: For the four areas in which IHS does not have substantial direct care responsibilities, the total number of positions for pharmacists were low: Alaska (0), California (1, with 0 vacancies), Nashville

Appendix I: Provider Vacancies with the Indian Health Service (IHS)

(2, with 0 vacancies), and Tucson (0) areas. IHS does not operate any federal health care facilities in Hawaii.

Physician assistants. Nationwide, 37 of 125 positions were vacant in November 2017. See table 2.

Table 2: Number of Total and Vacant Positions for Physician Assistants with the Indian Health Service (IHS), November 2017

IHS Area	Total positions	Vacant positions
Alaska	0	0
Albuquerque	7	4
Bemidji	2	1
Billings	15	6
California	1	0
Great Plains	24	9
Nashville	2	0
Navajo	35	10
Oklahoma City	3	0
Phoenix	29	6
Tucson	0	0
Portland	7	1
Total	125	37

Source: GAO analysis of IHS data. | GAO-18-580

Note: IHS does not have substantial direct care responsibilities in the Alaska, California, Nashville, or Tucson areas.

Appendix II: Tribal Strategies of Housing Units and Physician Residency Programs to Recruit and Retain Healthcare Providers

Tribal officials from the Chickasaw Nation and Choctaw Nation described their use of strategies to address vacancies, which were very similar to strategies used by the Indian Health Service (IHS).¹ Like the IHS, one tribe uses the availability of housing units near its medical facility as a recruitment tool for health care providers. Both tribes that described their strategies to recruit and retain providers told us they use their physician residency program in Family Medicine as a recruitment tool.²

- **Availability of housing units near the medical facility.** Tribal officials from the Choctaw Nation told us the tribe uses housing units—58 housing units that range from studio apartments to multi-room houses—as a recruitment strategy for providers.³ The provider

¹To identify other strategies, if any, that tribal medical facilities use to address vacancies, we interviewed tribal officials from: the Navajo Nation Department of Health, the Chickasaw Nation Department of Health, and the Choctaw Nation Health Services Authority. We visited the Chickasaw Nation Medical Center and the Choctaw Nation Talihina Health Care Center. The Navajo Nation is not involved in recruitment and retention of providers because they contract out tribal health care delivery to various service delivery providers; therefore we did not collect any information on their strategies used to address vacancies.

²Through medical school, students earn a medical degree and become physicians, but they are required to undergo Graduate Medical Education (GME) training to be able to practice independently. GME training is commonly known as residency training. Physicians in GME training are known as residents and must complete a GME program in a specific medical specialty. Specialty GME programs generally last 3 to 5 years depending on the medical specialty, after which physicians are eligible for medical licensure and initial board certification to practice medicine.

³At the time of our site visit, the tribe had 58 housing units, which vary in size and include studio apartments, provider homes ranging from modular homes to large, 4-bedroom homes, and resident homes of duplexes and modular homes.

housing units are occupied by physicians, as well as by physician residents who need housing during their residency or for medical students doing clinical rotations through the facility. According to tribal officials, a factor they considered in making housing units available for providers was the location of its hospital in a rural area of Oklahoma, in a town with a population of about 1,000, which lacks sufficient housing.

In September 2017, tribal officials told us all the available housing units were occupied, and the tribe was in the process of constructing at least two 4-bedroom houses. See fig. 11 for photos of a completed multi-room house and one under construction. Offering the housing units to provider staff is also part of the tribe's overall strategy of offering quality-of-life benefits to attract and retain providers.

Figure 11: Examples of Multiroom Houses for Choctaw Nation Providers



Choctaw Nation Completed Multiroom House

A completed multi-room housing unit for a provider with a large family.



Choctaw Nation Multiroom House Under Construction

Tribal officials told us this home is for a physician who requested a larger home to accommodate the physician's visiting family members.

Source: GAO. | GAO-18-580

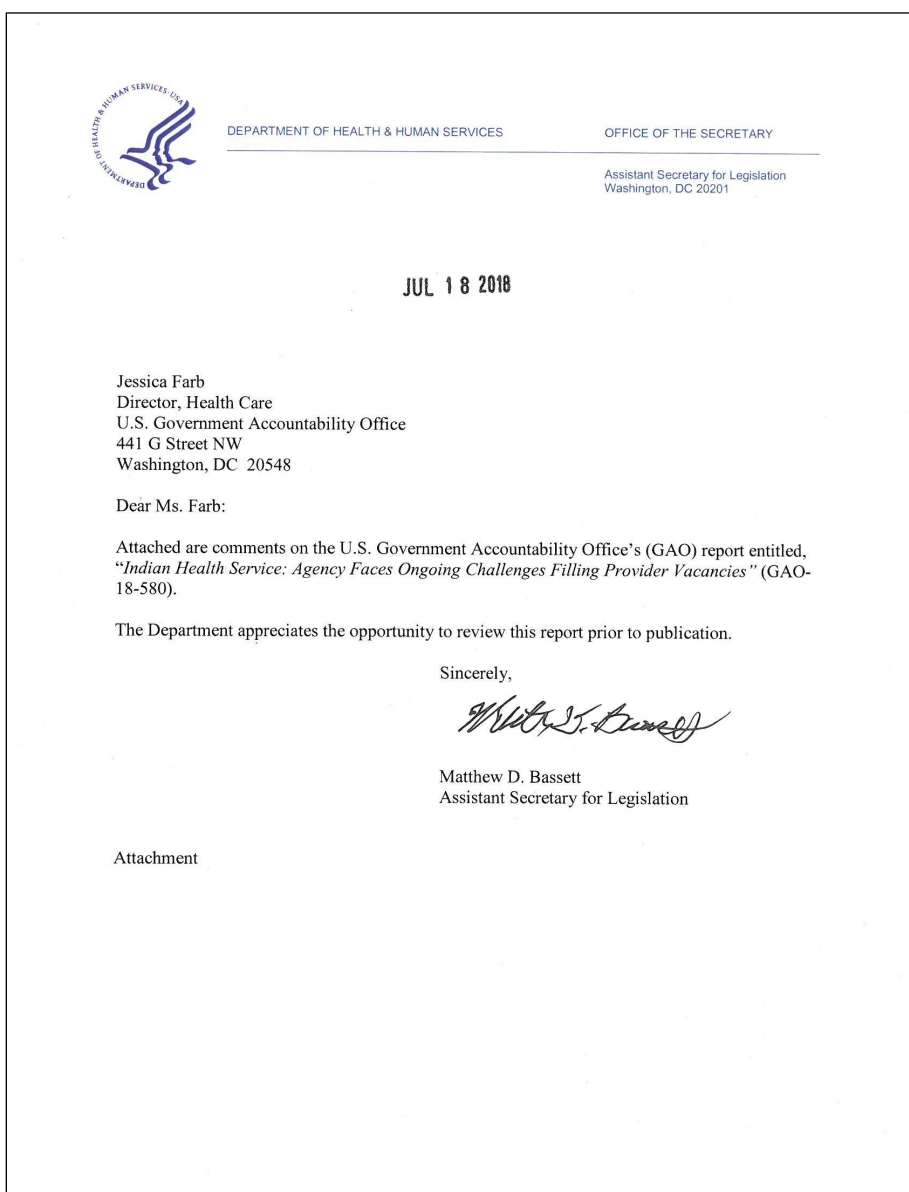
- **Implementing Accredited Physician Residency Programs.** Tribal officials we interviewed noted that they developed physician training programs—specifically graduate medical education, commonly known as residency training—which they use as an important recruitment tool for physicians. One tribe has implemented its Family Medicine residency program, while the other tribe intends for its Family Medicine residency program to be operational in July 2018. Both residency programs are accredited by the American Osteopathic

Association, in addition to the American College of Osteopathic Family Practice for one tribe and the American Council for Graduate Medical Education for the other tribe. One program is accredited for 3 resident physicians per year for a total of 9 physician residents at a time, while the other program is accredited for 4 resident physicians per year.

We previously found that physicians may practice in geographic areas similar to those where they complete their residency training.⁴ Tribal officials with the implemented Family Medicine residency program told us it is successful in that they hired 7 of the 9 residents who completed the residency program. There is also a retention benefit—current providers have the opportunity to stay up-to-date on the latest medical treatment methods by serving as either mentors or as faculty for the residents.

⁴See GAO, *Physician Workforce: Locations and Types of Graduate Training Were Largely Unchanged and Federal Efforts May Not be Sufficient to Meet Needs*, [GAO-17-411](#) (Washington, D.C.: May 25, 2017).

Appendix III: Comments from the Department of Health and Human Services



GENERAL COMMENTS FROM THE DEPARTMENT OF HEALTH & HUMAN SERVICES ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT REPORT ENTITLED - INDIAN HEALTH SERVICE: AGENCY FACES ONGOING CHALLENGES FILLING PROVIDER VACANCIES (GAO-18-580)

The U.S. Department of Health & Human Services (HHS) appreciates the opportunity from the Government Accountability Office (GAO) to review and comment on this draft report.

Recommendation 1

The Director of the Indian Health Service (IHS) should obtain, on an agency-wide basis, information on temporary provider contractors, including their associated cost and number of full-time equivalents, and use this information to inform decisions about resource allocation and provider staffing.

HHS Response

HHS concurs with GAO's recommendation.

The IHS plans to update its policy to include a centralized reporting mechanism requirement for all temporary provider contracts issued for providers, which will include physicians, nurses, nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, physician assistants, dentists and pharmacists. Upon finalization of the policy, IHS will broadly incorporate and implement the reporting mechanism Agency-wide and maintain on an annual basis, at minimum. Target finalization of the policy is the end of December 2018, with implementation to follow.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Jessica Farb, (202-512-7114), farbj@gao.gov

Staff Acknowledgments

In addition to the contact named above, Kathleen M. King (Director), Ann Tynan (Assistant Director), Kelly DeMots (Assistant Director/Analyst-in-Charge), Sam Amrhein, Kristen Anderson, Muriel Brown, Kaitlin Farquharson, Peter Mann-King, Maria Ralenkotter, Lisa Rogers, and Jennifer Whitworth made key contributions to this report.

Appendix V: Accessible Data

Data Tables

Accessible Table for Number of Provider Positions and Vacancy Rates by IHS Area, November 2017

Provider Positions Filled	Provider Positions Vacant
275	118
140	62
311	135
661	234
1103	464
464	67
827	223
136	30

Accessible Table for Figure 5: Composition of the Indian Health Service (IHS) Provider Positions by IHS Area, November 2017

Vacancies	Civilians	Commissioned Corps Officers
30%	51%	19%
31%	46%	23%
30%	62%	8%
26%	64%	10%
30%	63%	7%
13%	66%	21%
21%	60%	19%
18%	57%	25%
25%	61%	13%

Agency Comment Letter

Text of Appendix III: Comments from the Department of Health and Human Services

Page 1

Dear Ms. Farb:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "Indian Health Service: Agency Faces Ongoing Challenges Filling Provider Vacancies" (GAO- 18-580).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Matthew D. Bassett
Assistant Secretary for Legislation

Attachment

Page 2

GENERAL COMMENTS FROM THE DEPARTMENT OF HEALTH & HUMAN SERVICES ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT REPORT ENTITLED - INDIAN HEALTH SERVICE: AGENCY FACES ONGOING CHALLENGES FILLING PROVIDER VACANCIES (GAO-18-580)

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