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Report to Congressional Committees

DEFENSE HEALTH CARE

DOD Should Collect and Use Key Information to Make Decisions about Incentives for Physicians and Dentists

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GAO-20-165

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GAO Highlights

Highlights of GAO-20-165, a report to congressional committees

Why GAO Did This Study

DOD invests in a number of incentives to recruit and retain its nearly 15,000 military physicians and dentists, such as providing a tuition-free education to medical and dental students who in return agree to serve as military physicians or dentists for a specific amount of time.

Section 597 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 included a provision for GAO to review military physicians' and dentists' compensation, among other things. This report addresses, among other objectives, (1) how compensation for military physicians and dentists compared to private sector civilians with comparable skills in 2017, and (2) the extent to which DOD has developed an approach to recruit and retain military physicians and dentists through a package of incentives that reflect key principles of effective human capital management. GAO compared military and civilian cash compensation for 2017—the most recent year of data amongst data sources, assessed incentive packages against key principles of human capital management, and conducted surveys and held focus groups to obtain the perspectives of current military medical students and residents regarding military service obligations.

What GAO Recommends

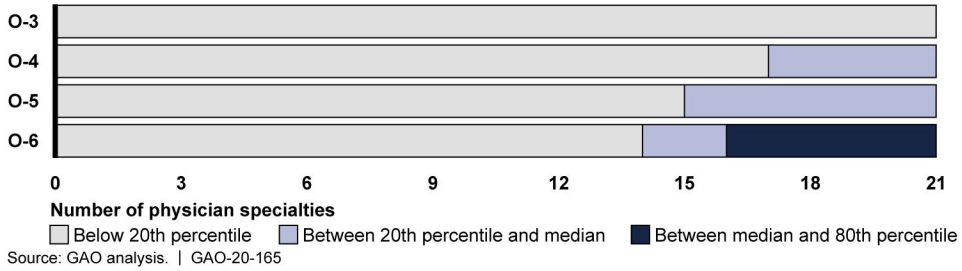
GAO recommends that DOD should collect and use information on (1) replacement costs of military physicians and dentists, (2) retention, and (3) private sector civilian wages to inform its investment decisions. In commenting on a draft of this report, DOD concurred with these recommendations.

View GAO-20-165. For more information, contact Brenda S. Farrell at (202) 512-3604 or farrellb@gao.gov

What GAO Found

In 2017, cash compensation for military physicians and dentists in most of the 27 medical and dental specialties GAO reviewed was generally less than the median compensation of private sector civilians, but the Department of Defense (DOD) provides substantial deferred and noncash benefits, such as retirement pensions and tuition-free education, whose value to servicemembers is difficult to determine. GAO found that for 21 of the 27 physician and dental specialties, the maximum cash compensation was less than the private sector civilian median within four officer pay grades (O-3 to O-6) (see figure for number of physician specialties by pay grade). Moreover, cash compensation for military physicians and dentists was less than the private sector civilian median at key retention points, such as after physicians and dentists fulfill their initial active-duty service obligations.

Number of Physician Specialties Where Range of Military Cash Compensation is Above or Below Selected Percentiles of Private Sector Civilian Cash Compensation, by Pay Grade



Source: GAO analysis. | GAO-20-165

DOD recruits and retains physicians and dentists through a package of incentives, including tuition-free medical or dental school and special and incentive pays, such as multi-year retention bonuses. However, DOD does not consistently collect information related to the following three key principles of effective human capital management to help inform investment decisions in its package of recruitment and retention incentives:

- **Replacement costs**. DOD does not consistently collect information on replacement costs of military physicians and dentists. However, DOD has previously identified replacement costs as a factor in assessing the appropriateness of incentive pays.
- **Current and historical retention information**. DOD does not consistently collect information on retention of physicians and dentists, specifically acceptance rates for retention bonuses, to help assess the effectiveness of these bonuses.
- **Private sector civilian wages.** DOD does not consistently collect information on private sector civilian wages. Officials stated that civilian wages are not a driving factor when considering adjustments to special and incentive pays, in part because DOD cannot always match civilian sector compensation for military physicians and dentists.

By collecting and using this information to help inform its decision-making, DOD would be better positioned to assess the effectiveness of its incentives to recruit and retain military physicians and dentists and make sound investment decisions for the future.

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Abbreviations

ASD(HA)	Assistant Secretary of Defense for Health Affairs
BRS	Blended Retirement System
DOD	Department of Defense
Scholarship	Health Professions Scholarship Program
University	Uniformed Services University of the Health Sciences

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January 15, 2020

The Honorable James M. Inhofe
Chairman
The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Adam Smith
Chairman
The Honorable Mac Thornberry
Ranking Member
Committee on Armed Services
House of Representatives

In fiscal year 2018, the Department of Defense (DOD) spent over $1.8 billion on special and incentive pay programs, representing compensation in addition to their basic pay, to incentivize servicemembers for occupations that are dangerous, less desirable, or require special skills.[1] Of this $1.8 billion, $710.1 million, or 40 percent of the total, was used to recruit and retain DOD's nearly 15,000 active-duty physicians and dentists.[2] DOD also invests in programs to create a pipeline of future military physicians and dentists. For example, to educate medical and dental students in its Health Professions Scholarship Program (the scholarship program), DOD spent approximately $212 million in fiscal year 2018.[3] Despite these investments, DOD has faced challenges in

[1] We use the term "special and incentive pays" to refer to special pays, incentive pays, and bonuses authorized in chapter 5 of title 37 of the United States Code.

[2]The special and incentive pay amount of $710.1 million includes special pays that are specifically for physicians and dentists. It does not include other special and incentive pays, such as hardship duty pay or diving duty pay which physicians and dentists may receive. In this report, we use the term "recruit" and "recruitment" to refer to all forms of entrance into military service, including the accession of officers.

[3]Cost includes only the cost for educating medical and dental students funded by the Defense Health Program's operation and maintenance account for education and training; it does not include stipends, pays, and allowances, which are funded by the services' military personnel accounts. The costs are for tuition, books, fees, and other related educational expenses.

recruiting and retaining the desired number of physicians and dentists in required critical specialties, including those needed for wartime or operational deployments. Such challenges include national shortages in certain specialties and competition with the private sector.[4] Moreover, the Association of American Medical Colleges projects national shortages to continue.[5]

DOD's primary method of meeting its needs for physicians and dentists is to recruit medical students through the scholarship program and the Uniformed Services University of the Health Sciences (the University).[6] DOD pays for recruits' medical or dental school and provides additional financial incentives, such as a stipend for its scholarship program students or salary for those attending the University. In return for this investment, participants accrue an active-duty service obligation. Recently, DOD has begun to consider changes to the active-duty service obligation as a means to address personnel shortages. For example, in its February 2019 interim report on developing a personnel management plan for trauma-related wartime medical specialties, DOD stated that some actions, such as increased service obligations paired with increased benefits, may be required in order to close the gaps between authorized and filled positions.[7]

Our recent work reviewing the recruitment and retention of physicians assessed the extent to which DOD was able to fill its authorized positions. Specifically, in February 2018 we found that each of the three military departments experienced gaps for a number of active-duty military physician specialties, including those considered critically short wartime

[4]GAO, *Military Personnel: Additional Actions Needed to Address Gaps in Military Physician Specialties*, GAO-18-77 (Washington, D.C.: Feb. 28, 2018) and GAO, *Military Personnel: DOD Needs to Improve Dental Clinic Staffing Models and Evaluate Recruitment and Retention Programs*, GAO-19-50 (Washington, D.C.: Dec. 13, 2018).

[5]Association of American Medical Colleges, *The Complexities of Physician Supply and Demand: Projections from 2017 to 2032,* (Washington, D.C.: April 2019).

[6]DOD primarily recruits dental students through its scholarship program because the University does not have a dental school. DOD recruits a small number of fully-qualified physicians and dentists each year. For example, in fiscal year 2016, DOD recruited 23 physicians and 20 dentists into the active components.

[7]Department of Defense, *Section 708 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) "Establishment of Joint Trauma Education and Training Directorate" Interim Report* (February 2019).

specialties.[8] Specifically, we found that DOD's use of its recruitment and retention programs was not fully addressing military physician gaps in certain critical specialties, in part because DOD did not have targeted and coordinated strategies for reducing such gaps. We recommended that each of the military departments develop targeted strategies to use their recruitment and retention programs collectively to address key military physician gaps in a coordinated manner, and develop metrics to monitor the effectiveness of their programs in reducing gaps. DOD concurred with the recommendations and, according to DOD officials, a DOD working group has been formed to produce a plan by June 2020 to address recruitment and retention of critical specialties.

We also recently assessed DOD's recruitment and retention of dentists. Specifically, in December 2018 we found that the three military departments experienced gaps in certain dental specialties, including critically short wartime specialties.[9] Moreover, we reported that while the military departments rely on incentives such as special pays to recruit and retain military dentists, they did not know the extent to which some of these programs have been effective in achieving their goals because they have not evaluated their effectiveness. We recommended, among other things, that the military departments ensure that their Surgeons General evaluate the effectiveness of their respective recruitment and retention programs for military dentists. DOD concurred with the recommendation and, according to DOD officials, efforts are underway and a study will be done to determine the effectiveness of the recruitment and retention programs for military dentists, including the need for the incentives currently offered. DOD expects to complete its final report in 2020.

Section 597 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 included a provision for us to report on military physicians' and dentists' compensation and the effects of changing active-duty service obligations for medical and dental education and residency training by requiring the obligations to be served consecutively, or one after another.[10] In February 2019, we provided an interim briefing to the congressional armed services committees; this report transmits the final results of our work. This report addresses: (1) how compensation for

[8]GAO-18-77.

[9]GAO-19-50.

[10]Pub. L. No. 115-232, § 597 (2018). We use "residency training" to encompass all training in graduate medical education and graduate dental education.

military physicians and dentists compared to private sector civilians with comparable skills in 2017; (2) the extent to which DOD has developed an approach to recruit and retain military physicians and dentists through a package of incentives that reflect key principles of effective human capital management; and (3) the perceptions of military medical students, residents, and DOD officials regarding active-duty service obligations, including their effect on recruitment and retention.[11]

To address our first objective, we reviewed DOD policy and guidance and relevant statutes to identify the types of military compensation in 2017. To compare cash compensation for military physicians and dentists to comparable private sector civilian specialties, we estimated military cash compensation using information reported in DOD's *Greenbook* publication[12] and *Health Professions Officer Special and Incentive Pay Plan*[13] and compared that to private sector civilian compensation information reported in surveys from the American Medical Group Association and American Dental Association.[14] We selected 2017 because it was the most recent year of available data amongst all of our sources. To determine the reliability and accuracy of private sector civilian compensation information, we checked these data for reasonableness and the presence of any obvious or potential errors in accuracy and completeness. We believe the data are sufficiently reliable for the purpose of this report. To describe the deferred and noncash benefits available to military physicians and dentists, we reviewed our reports, other relevant research, and DOD reports. To develop estimates of the value of DOD's two retirement benefit programs, we used DOD's publically-available retirement calculators. To help determine the reliability

[11]Physicians and dentists in graduate medical education or graduate dental education are known as residents. In this report, the term "residents" also refers to interns, those in their first year of residency, and fellows, physicians and dentists who have already completed a residency and are obtaining additional training in an advanced specialty or subspecialty.

[12]Department of Defense, *Selected Military Compensation Tables (Greenbook)* (January 2017).

[13]Assistant Secretary of Defense for Health Affairs Memorandum, *Health Professions Officer Special and Incentive Pay Plan* (Sep. 27, 2016). We used the fiscal year 2017 *Health Professions Officer Special and Incentive Pay Plan* in our analysis because 2017 was the most recent year of available data amongst all of our sources.

[14]American Medical Group Association, *2018 Medical Group Compensation and Productivity Survey—2018 Report Based on 2017 Data,* purchased June 2019. American Dental Association, Health Policy Institute, *Income, Gross Billings, and Expenses: Selected 2017 Results from the Survey of Dental Practice (*November 2018).

and accuracy of DOD's retirement calculators, we checked the data for reasonableness and the presence of any obvious or potential errors in accuracy and completeness and interviewed DOD officials knowledgeable about the data. We believe the data are sufficiently reliable for the purpose of this report. We also interviewed DOD officials to confirm our understanding of military cash compensation, and to obtain their perspectives on our approach to comparing military and private sector civilian cash compensation and estimating retirement benefit estimates.

To address our second objective, we reviewed pay plans, policies, and other documents developed by the Office of the Assistant Secretary of Defense for Health Affairs (ASD(HA)) and the respective military departments concerning DOD's approach to recruitment and retention of military physicians and dentists. We also interviewed officials from the Office of the ASD(HA) and the military departments concerning their decision-making process in managing this package of incentives. We compared this information with seven key principles of effective human capital management which we identified in our February 2017 report on military compensation.[15] As we stated in that report, to identify key principles of effective human capital management, we reviewed a compilation of GAO's body of work on human capital management, DOD's *Report of the Eleventh Quadrennial Review of Military Compensation*, and the DOD *Diversity and Inclusion Strategic Plan 2012 - 2017.*[16] In addition to these key principles, we also compared aspects of DOD's approach to recruitment and retention of military physicians and dentists against federal internal control standards, which state management should use quality information to achieve an entity's objectives, and highlighted areas where DOD's approach differed from these principles.[17]

[15]GAO, *Military Compensation: Additional Actions Are Needed to Better Manage Special and Incentive Pay Programs,* GAO-17-39 (Washington, D.C.: Feb. 3, 2017).

[16]GAO, *A Model of Strategic Human Capital Management*, GAO-02-373SP (Washington, D.C.: Mar. 15, 2002); GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, GAO-04-39 (Washington, D.C.: Dec. 11, 2003); Department of Defense, *Report of the Eleventh Quadrennial Review of Military Compensation* (June 2012) and Department of Defense, *DOD Diversity and Inclusion Strategic Plan 2012-2017* (2012).

[17]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sep. 10, 2014).

To address our third objective, we conducted two web-based surveys with medical students who have either accepted the scholarship or are attending the University to obtain information on the students' perceptions on their willingness to accept different lengths of service obligations, among other topics. We selected scholarship program and University participants from a stratified random sample of medical students in their first, second, or third year of school, by military department.[18] Our unweighted survey response rate was 60.5 percent for scholarship program participants and 80 percent from University students, with 624 and 259 respondents, respectively. Based on this, we determined that the data collected from the surveys are generalizable. We developed sampling weights per stratum and adjusted for any potential bias. All survey estimates, including margin of errors, presented in this report reflect the sample design and use the adjusted sampling weights.[19]

We also conducted eight focus group meetings at three military treatment facilities—two each with Army, Navy, and Air Force medical residents and two cross-departmental pilot focus groups—with military medical residents who had previously either accepted the scholarship or attended the University.[20] We conducted these focus groups to obtain participants' perspectives on issues related to (1) the nature of active-duty service obligations, including their willingness to accept different lengths of active-duty service obligations; (2) the relative importance of the service obligations in relation to other factors at different decision points, including accepting the scholarship or attending the University; (3) participating in a military residency program; and (4) choosing a medical specialty to pursue. To identify focus group participants, we considered gender, number of residents who had accepted the scholarship or attended the University, medical specialties, military department affiliation, number of years in a military residency training program, and prior service as a General Medical Officer. The focus groups involved a range of seven to 15 participants during each meeting. We did not select focus group participants using a statistically representative sampling

[18]We determined fourth-year medical students were less likely to participate in the survey because they were close to graduating from medical school at the time we administered the survey, so we excluded them from the sample population.

[19]The margin of error for all estimates in this report is within plus and minus 6 percent, unless otherwise specified.

[20]A military treatment facility is a facility established for the purpose of furnishing medical and/or dental care to eligible individuals. These military hospitals, clinics, or medical centers are located on military bases and posts around the world.

method, and therefore the information collected from the focus groups is not generalizable and cannot be projected across DOD, a military department, or any single military treatment facility the team visited. We also conducted interviews with DOD officials from each of the military departments to understand their perceptions of active-duty service obligations and the effect of these obligations on the recruitment and retention of military physicians and dentists. Our scope and methodology for all of our objectives is described in further detail in appendix I.

We conducted this performance audit from September 2018 to December 2019 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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Roles and Responsibilities for the Recruitment and Retention of Military Physicians and Dentists

The ASD(HA) serves as the principal advisor for all DOD health policies and programs.[21] The ASD(HA) has the authority to issue DOD instructions, publications, and memorandums that implement policy approved by the Secretary of Defense or the Under Secretary of Defense for Personnel and Readiness and govern the management of DOD medical programs. The ASD(HA) also exercises authority, direction, and control over the President of the Uniformed Services University of the Health Sciences. Further, the ASD(HA) sets the maximum special and incentive pay amounts for all military physicians and dentists.

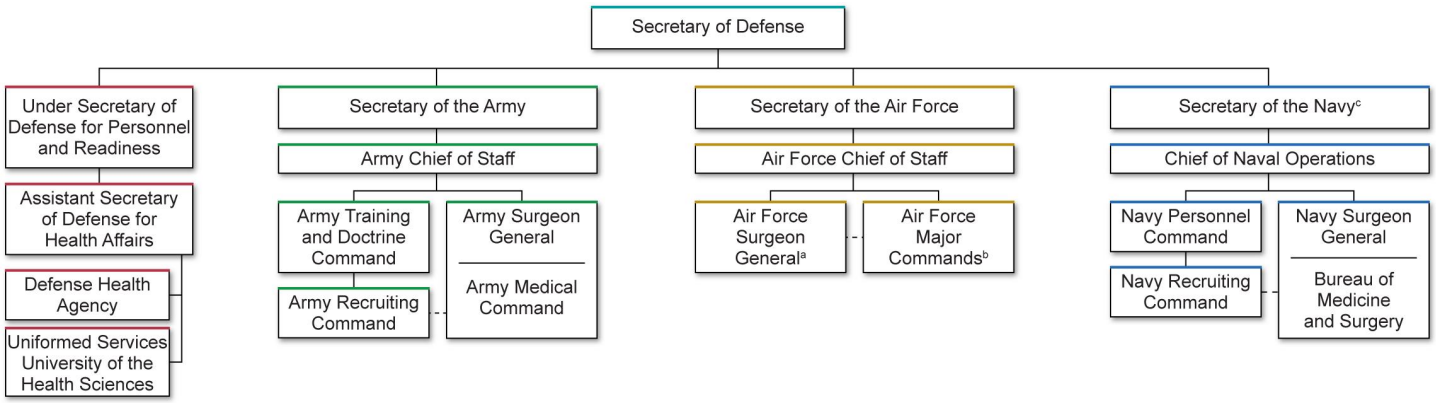
The Army, the Navy, and the Air Force have the authority to recruit, train, and retain physicians and dentists.[22] Currently, there is no joint DOD unit or process dedicated to recruiting medical students and accessing medical officers because recruiting and retention are the responsibility of

[21]Department of Defense Directive 5136.01, *Assistant Secretary of Defense for Health Affairs (ASD(HA))* (Sept. 30, 2013) (incorporating change 1, Aug. 10, 2017).

[22]The Navy provides medical services for both Navy and Marine Corps.

the military departments. Each military department has its own organizational structure, responsibilities, and varying degrees of personnel resources for accessing physicians and dentists. The departments' recruiting commands recruit medical and dental students into the scholarship program. In a separate process, the University recruits and admits a set number of medical students each year. Figure 1 shows the organizational structure of the Military Health System as it relates to the recruitment and retention of military physicians and dentists.

Figure 1: Organizational Structure of the Military Health System as It Relates to Recruitment and Retention of Military Physicians and Dentists



Source: GAO analysis of Department of Defense information. | GAO-20-165

[a]The Air Force Surgeon General also leads the Air Force Medical Service. This agency is responsible for medical planning, programming, policy, and execution of service medical operations. The Air Force Surgeon General interacts with the Air Force's major commands and military treatment facilities.

[b]There are 10 active Air Force Major Commands, including the Air Education and Training Command. The Air Force Recruiting Service reports to the Air Education and Training Command.

[c]The Navy provides medical services to both the Navy and the Marine Corps.

Career Path of Military Physicians and Dentists

DOD has two primary sources of recruitment for military physicians: the scholarship program and the University.[23] DOD recruits most military

[23]In addition to the scholarship program and the University, the departments can recruit fully qualified physicians. For example, individuals may become military physicians through direct accessions, either by entering the service as fully trained or through the Financial Assistance Program, which provides stipends for physicians accepted or enrolled in a residency program.

dentists through the scholarship program.[24] Participants in DOD's scholarship program and the University accrue an active-duty service obligation in return for a tuition-free medical or dental education and certain financial benefits. Specifically, scholarship program participants enrolled in a civilian medical or dental school receive paid tuition, books and fees, and a monthly stipend.[25] In some cases, participants are also offered an accession bonus. In exchange, scholarship program participants incur a 6- month active-duty service obligation for each 6 months of benefits received, with a 2-year minimum service obligation.[26] Students at the University are enrolled in the DOD-sponsored medical school at no cost, enter active-duty service as medical students and receive the pay and benefits of an officer at the O-1 pay grade.[27] In exchange, University medical students accrue a 7-year service obligation.

Career paths for medical and dental school graduates can differ. For example, Army and Air Force medical school graduates typically become specialized before practicing medicine, while 55 percent of Navy physicians complete a General Medical Officer tour before becoming specialized, according to department officials.[28] Moreover, dental school graduates typically practice as general dentists after completing licensure requirements before choosing to specialize. To become specialized, medical and dental school graduates apply to a medical or dental residency training program, which may require or include a 1-year internship, depending on the program or specialty. After residency, some physicians or dentists may decide to pursue further training, known as "fellowships," in order to become subspecialists. For example, to become

[24]The Uniformed Services University of the Health Sciences Postgraduate Dental College consists of the Army, Navy, and Air Force Postgraduate Dental Schools. The University itself does not have a dental school. In addition to the scholarship program, individuals may become military dentists through direct accessions, either by entering the service as fully trained and licensed or through the Financial Assistance Program.

[25]10 U.S.C. §§ 2120-2128.

[26]Department of Defense Instruction 6000.13, *Accession and Retention Policies, Programs, and Incentives for Military Health Professions Officers (HPOs)* (Dec. 30, 2015) (incorporating change 1, May 3, 2016).

[27]Time served as a medical student is generally not creditable when computing years of service creditable under 37 U.S.C. § 205 or for determining eligibility for retirement.

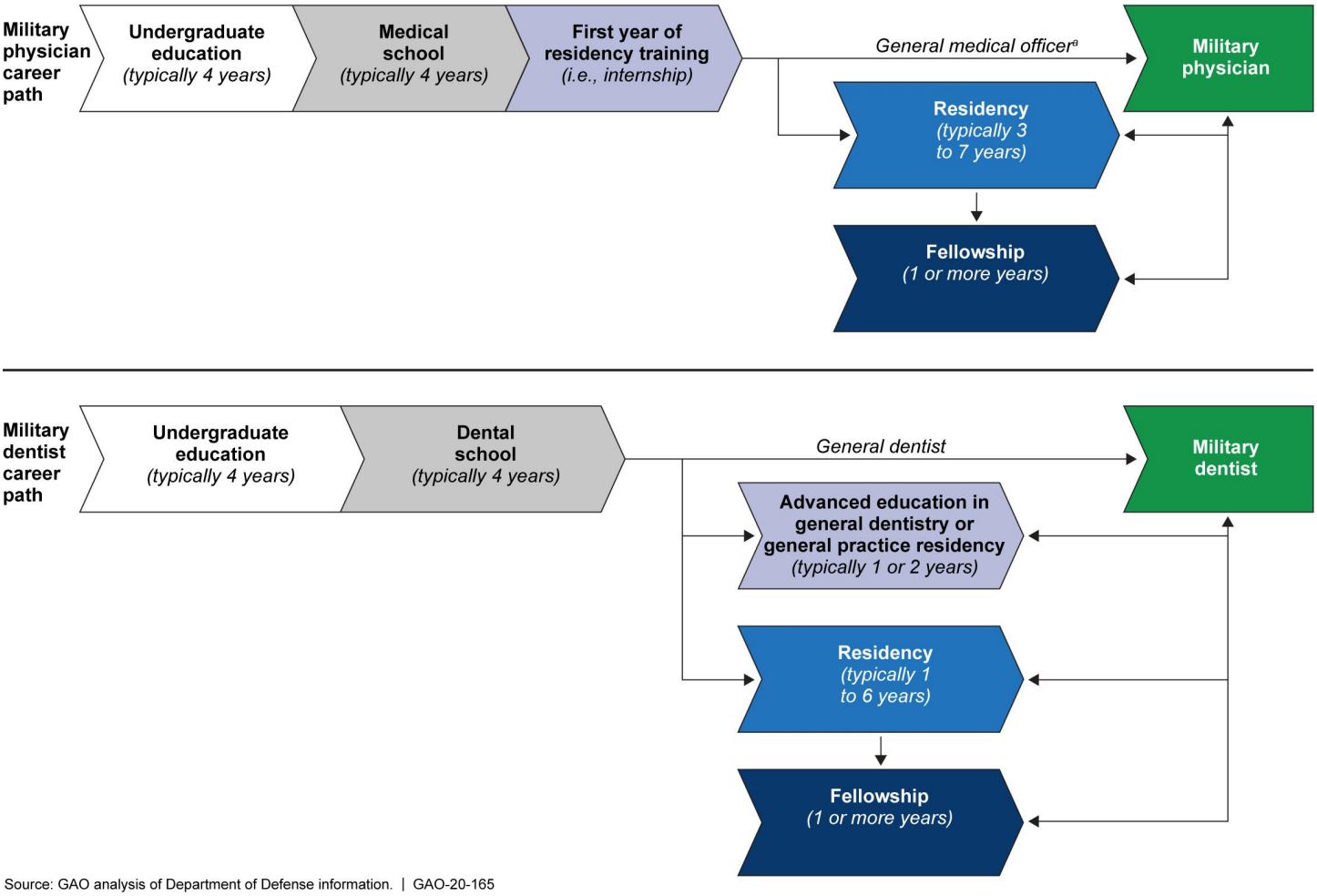
[28]According to department officials, certain physicians who do not complete a residency, which may include General Medical Officers, Flight Surgeons, and Undersea Medical Officers who complete initial training, can start practicing medicine independently after they complete their internships.

a cardiologist, a physician must complete an internal medicine residency followed by a cardiology fellowship. Residency training typically requires 3 to 7 years for physicians and 1 to 6 years for dentists.[29] Fellowship training typically is 1 or more years in length for physicians and dentists. The required number of years depends on the specialty or subspecialty. After residency or fellowship training—hereafter referred to collectively as residency training—physicians and dentists become credentialed and privileged to practice the specialty or subspecialty that they trained in, and they are also eligible for board certification.[30] Figure 2 portrays possible paths to becoming a military physician or dentist.

[29]Residency and fellowship training may last longer than 7 years. For example, physicians may specialize in more than one area and there are some subspecialties, such as subspecialty trained neurosurgery, that require longer than 7 years.

[30]Credentialing is the process of obtaining, verifying, and assessing the qualifications of both privileged and nonprivileged providers to provide safe patient care services. Clinical privileging is the granting of permission and responsibility of a healthcare provider to independently provide specified or delineated healthcare within the scope of his or her license, certification, or registration. Clinical privileges define the scope and limits of practice for individual providers and are based on the capability of the healthcare facility, licensure, relevant training and experience, current competence, health status, judgment, and peer and department head recommendations.

Figure 2: Paths to Becoming a Military Physician or Dentist



Source: GAO analysis of Department of Defense information. | GAO-20-165

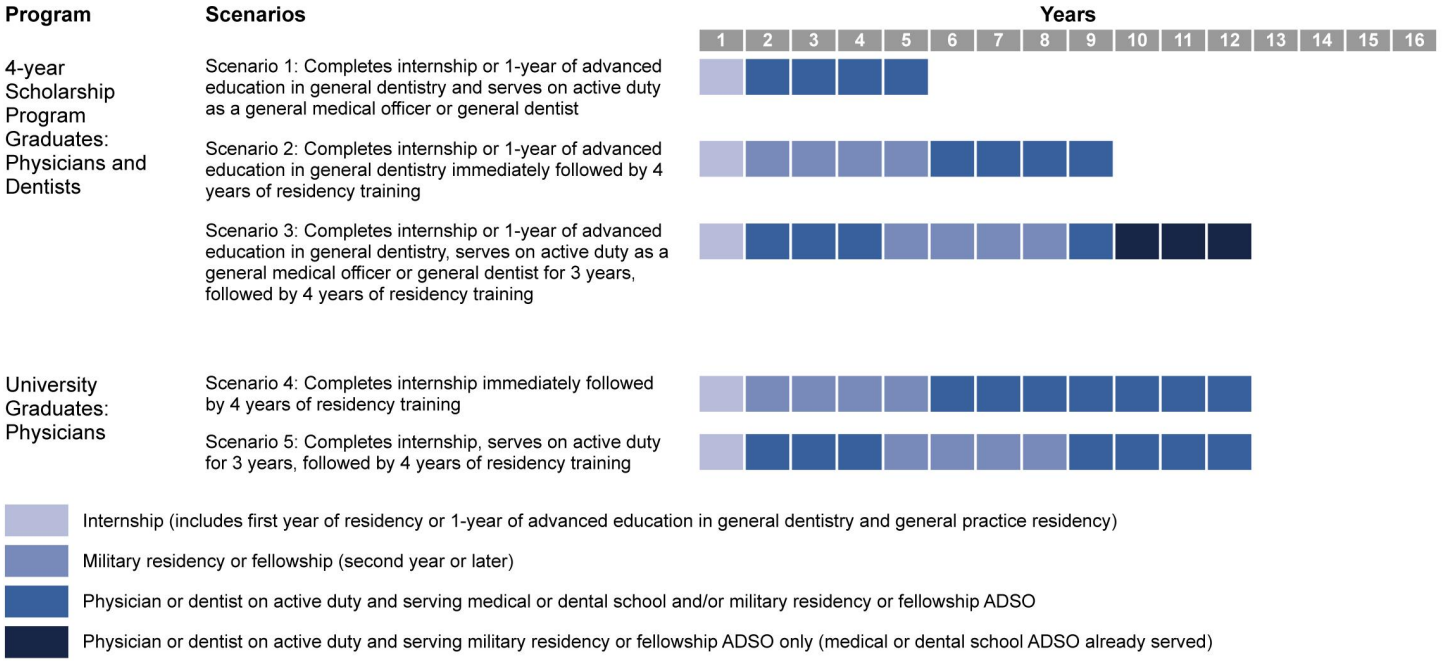
Note: Becoming a military physician or dentist is not always a linear process. For example, physicians and dentists may receive further graduate medical or dental education training after they are a practicing physician or dentist.

[a]General Medical Officers are physicians who have completed their internship and who practice general or preventive medicine. They can also receive additional specialized medical training to serve as a flight surgeon, field surgeon, or undersea medical officer. General Medical Officer tours normally range from 1 to 3 years.

As noted earlier, scholarship program medical and dental students incur 6 months of an active-duty service obligation for each 6 months of benefits received, with a 2-year minimum service obligation; University medical students accrue a 7-year service obligation. While training in a military residency program, residents receive the pay and benefits of an officer at the O-3 pay grade or higher, depending on prior years of service, and earn creditable years of service toward retirement. In exchange,

participants incur an additional 6 months of an active-duty service obligation for each 6-months of residency training, with a minimum 2-year service obligation. However, according to DOD officials, the first year of postgraduate training (i.e., internship or 1 year of advanced education in general dentistry and general practice residency) does not accrue a service obligation and is considered obligation neutral. Currently, the two sets of obligations—the obligation for medical or dental school and the obligation for military residency training—are served concurrently, or at the same time, effectively resulting in the servicemember serving the longer of the two obligations. For example, a student who accepts a 4-year scholarship, trains in a 1-year internship, and then trains in a 4-year residency program will serve a total of 9 years. The first 5 years would be spent in internship and residency, and the final 4 years of this service would be spent discharging the active-duty service obligations concurrently (see figure 3, scenario 2). Depending on career path, years of active-duty service after completion of medical and dental school will vary (see figure 3).

Figure 3: Examples of Number of Years of Active-Duty Service Obligation (ADSO) and Number of Years of Active-Duty Service After Medical or Dental School for Scholarship Program and University Graduates



Scholarship program — Health Professions Scholarship Program
ADSO — Active Duty Service Obligation
University — Uniformed Services University of the Health Sciences

Source: GAO analysis of Department of Defense information. | GAO-20-165

Cash Compensation for Military Physicians and Dentists

DOD's measure of cash compensation, known as regular military compensation, includes the sum of basic pay, basic allowance for housing, basic allowance for subsistence, and the federal income tax advantage that accrues from the non-taxable nature of the allowances.[31] For example, according to DOD, in 2017 the average married military officer at the pay grade of O-3 received annual regular military compensation of around $99,000.[32] Specifically, this average officer received around $67,000 for basic pay, $24,000 for the basic allowance for housing, $3,000 for the basic allowance for subsistence, and a federal income tax advantage of $5,000.

In addition to regular military compensation, physicians and dentists may be eligible for various special and incentive pays which vary depending upon their status as residents, their service obligations, and their specialty.[33] During residency training, physicians and dentists are eligible for select medical or dental corps incentive pays.[34] Upon completion of residency training, they become eligible for higher rates of incentive pay and, if they become board certified, for Board Certification Pay.[35] After fulfilling their active-duty service obligations from medical or dental school and residency training, in addition to special and incentive pays already

[31]37 U.S.C. § 101(25) and DOD, *Report of the Eleventh Quadrennial Review of Military Compensation*. Basic pay varies by pay grade and years of service. Basic allowance for housing varies by geographic region and is intended to capture the variation in housing costs across the country.

[32]*Selected Military Compensation Tables (Greenbook)* (Jan. 1, 2017).

[33]37 U.S.C. § 335. Special and incentive pays provide targeted monetary incentives to specific groups of personnel to attract and retain qualified personnel in hard-to-fill areas, such as health care.

[34]In fiscal year 2017, the annual incentive pay for nonspecialized physicians also differed, $1,200 for interns, $8,000 for residents after their first year, and $20,000 for General Medical Officers. The annual incentive pay for nonspecialized dentists (general dentists) is $20,000. Rates remain the same in the fiscal year 2019 pay plan.

[35]In fiscal year 2017, the annual amounts of incentive pay for specialized physicians varied by specialty, ranging from $43,000 to $59,000 for those who did not take a retention bonus, and $43,000 to $83,000 for those who took a retention bonus. The annual amount of incentive pay for oral and maxillofacial surgery dentists is $55,000 if no retention bonus is taken and $75,000 if a retention bonus is taken. The annual incentive pay for all other specialized dentists is $25,000. Board Certification Pay is a flat $6,000 annual payment. Rates remain the same in the fiscal year 2019 pay plan.

received, physicians and dentists become eligible for a multi-year retention bonus.[36]

Cash Compensation for Military Physicians and Dentists Is Generally Less Than the Private Sector, but DOD Provides Substantial Deferred and Noncash Benefits

Cash compensation for active-duty military physicians and dentists was generally less than the median compensation for private sector civilians in calendar year 2017 for most specialties we reviewed, including at key retention points. However, a substantial portion of the costs of DOD's overall compensation package is comprised of deferred and noncash benefits provided to active-duty personnel, such as a pension in retirement and tuition-free medical and dental education, but the extent to which servicemembers value these benefits is difficult to determine.

Cash Compensation for Military Physicians and Dentists Was Generally Below the Median of Private Sector Civilian Compensation in Comparable Specialties in 2017

Cash compensation for active-duty military physicians and dentists varied depending on pay grade, specialty, and decisions to accept retention bonuses or other special and incentive pays, but was generally less than the median compensation for private sector civilians in calendar year

[36]In fiscal year 2017, annual physician multi-year retention bonuses ranged from a low of a $12,000, 2-year retention bonus for a number of specialties, such as physical medicine, to a high of a $60,000, 4-year retention bonus for a number of specialties, such as anesthesiology. For dentists, in 2017 these ranged from a low of a $13,000, 2-year retention bonus for general dentistry, and a high of a $50,000, 4-year retention bonus for a number of specialties. Rates remain the same for the 2-year through 4-year retention bonuses in the 2019 pay plan. Starting in the fiscal year 2019 pay plan, some specialties are now eligible for a 6-year retention bonus of $75,000.

2017 for most specialties.[37] Although we could not make direct comparisons of military and private sector civilian cash compensation by years of service or experience, we estimated the minimum and maximum military cash compensation for specialized active-duty physicians and dentists in pay grades O-3 to O-6, which represented more than 99 percent of military physicians and dentists in fiscal year 2018. Specifically, we found that

- the minimum military cash compensation for all 21 physician and 5 of 6 dental specialties we reviewed was less than the civilian median for all pay grades;[38] and
- the maximum military cash compensation for 16 of 21 physician (see figure 4 below) and 5 of 6 dental specialties (see figure 5 below) we reviewed was also less than the civilian median for all pay grades.[39]

Therefore, for many of these specialties, even the most senior military physician and dentists (i.e., pay grade O-5 or higher) at the top of the pay range were estimated to receive cash compensation below the private sector civilian median. The minimum and maximum of total military cash compensation, by specialty and pay grade, and how these compare to

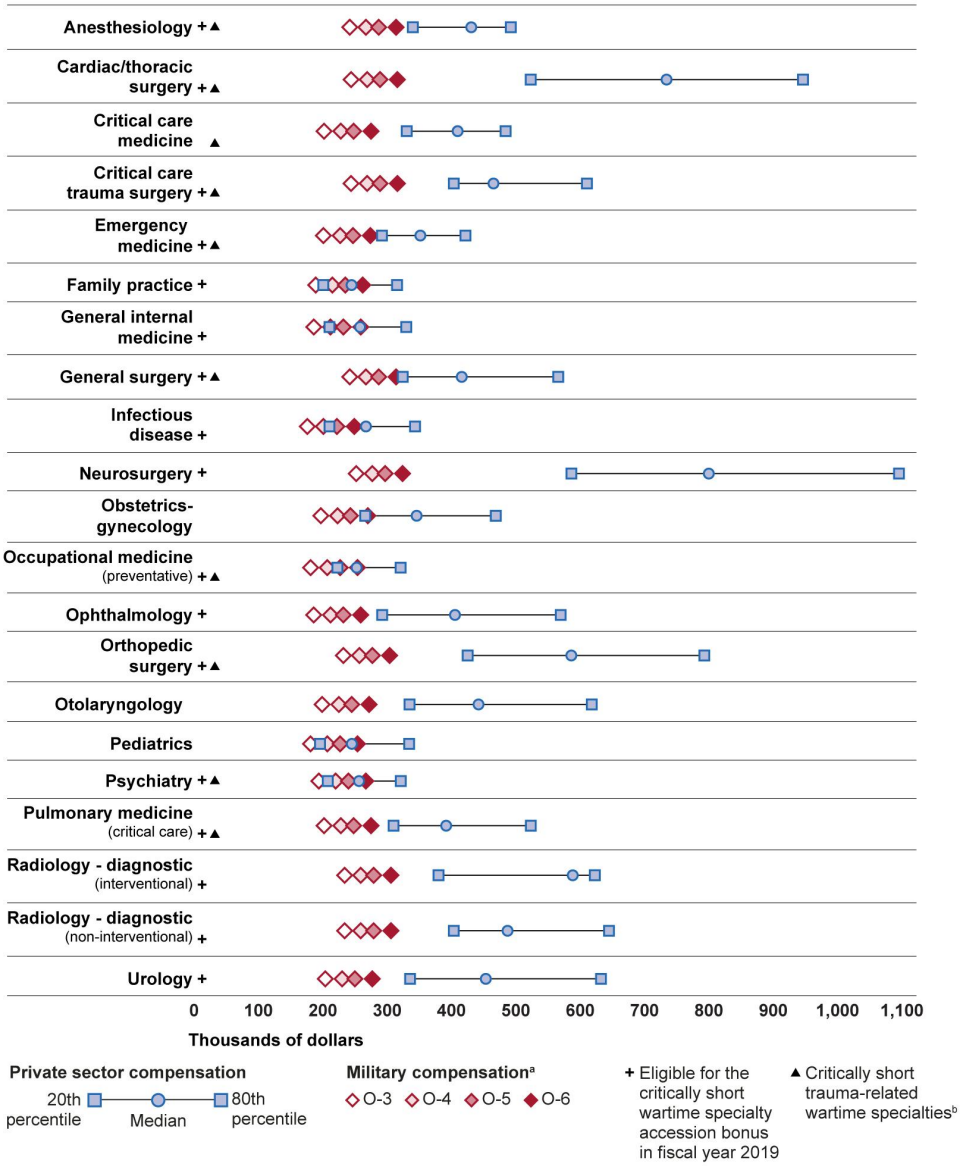
[37]Our scope and methodology is described in detail in appendix I. We chose American Medical Group Association's *2018 Medical Group Compensation and Productivity Survey* (based on 2017 data) because it included all the specialties we selected to review and it contained information on physicians who practiced in settings that were similar to those in which federal physicians practice. The data excluded the value of any employer-provided malpractice insurance, but some physicians may incur costs for this coverage. Military physicians generally do not need to purchase malpractice insurance. We chose the American Dental Association Health Policy Institute's *Income, Gross Billings, and Expenses: Selected 2017 Results from the Survey of Dental Practice* because it included all the specialties we selected to review and it included the net income of dentists, and therefore does not include the malpractice insurance for dentists. Military dentists generally do not need to purchase malpractice insurance.

[38]We estimated the minimum military cash compensation by specialty for pay grades O-3 to O-6 by using the regular military compensation, Board Certification Pay, and incentive pay. According to a DOD official, general dentists are generally not board certified, and we did not include board certification pay when calculating their cash compensation. Cash compensation for a general dentist at the O-6 pay grade minimum military cash compensation was more than the civilian median.

[39]We estimated the maximum military cash compensation by specialty for pay grades O-3 to O-6 by using the regular military compensation, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus. According to a DOD official, general dentists are generally not board certified and we did not include board certification pay when calculating their cash compensation.

reported private sector civilian cash compensation are presented in appendix II.

Figure 4: Maximum Military Physician Cash Compensation and Private Sector Civilian Compensation for Selected Specialties (in thousands of dollars per year), 2017



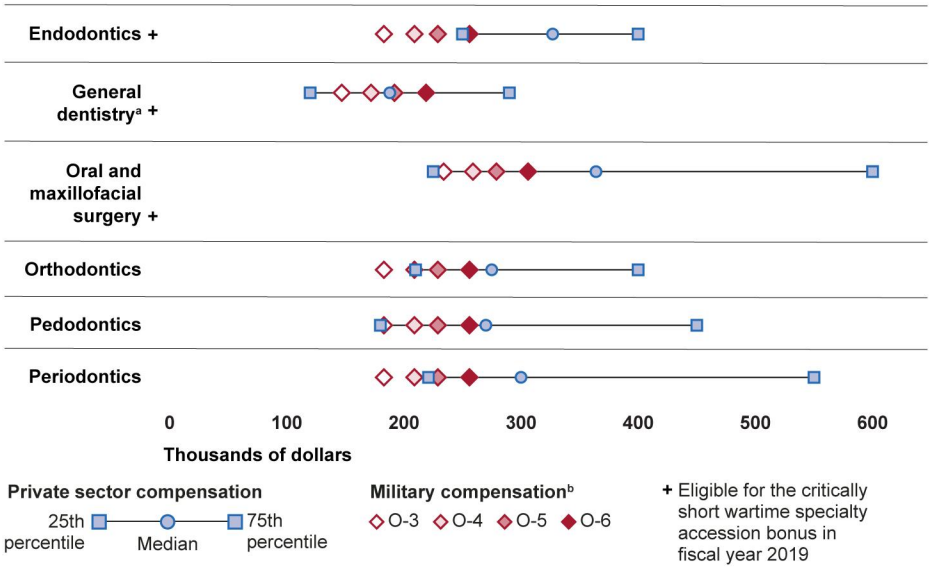
Source: American Medical Group Association Medical Group Compensation and Productivity Survey information and GAO analysis of Department of Defense data. | GAO-20-165

Note: Military physicians are generally within the pay grades of O-3 to O-6. As of fiscal year 2018, over 99 percent of physicians fell within this range, according to Health Manpower Personnel Data System information. According to DOD officials, physicians are typically commissioned to the O-3 pay grade after medical school and are eligible for promotion every 6 years.

[a]The maximum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus.

[b]Specialties were identified as critically short trauma-related wartime specialties in a 2019 interim report that DOD submitted to Congress in response to section 708 of the National Defense Authorization Act for Fiscal Year 2017.

Figure 5: Maximum Military Dentist Cash Compensation and Private Sector Civilian Compensation for Selected Specialties (thousands of dollars per year), 2017



Source: American Dental Association, Health Policy Institute, Survey of Dental Practice information; GAO analysis of Department of Defense data. | GAO-20-165

Note: Military dentists are generally within the pay grades of O-3 to O-6. As of fiscal year 2018, over 99 percent of dentists fell within this range, according to Health Manpower Personnel Data System information. According to DOD officials, dentists are typically commissioned to the O-3 pay grade after dental school and are eligible for promotion every 6 years.

[a]According to a DOD official, general dentists are generally not board certified and we did not include board certification pay when calculating their cash compensation.

[b]The maximum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus.

Cash Compensation for Military Physicians and Dentists Is Generally Less Than Private Sector Civilian Compensation at Key Retention Points

Cash compensation for military physicians and dentists is generally less than private sector civilian compensation at key retention points.[40] Specifically, we calculated 2017 cash compensation for military medical officers who completed their residency directly after medical school across 21 medical specialties and found that at their first unobligated year of service—after they fulfill their initial active-duty service obligations accrued from medical school and military residency training—all 21 specialties had cash compensation below the private sector civilian median. In addition, we found that all but one specialty (psychiatry) was less than the 20th percentile for private sector civilian compensation. Notably, nine specialties that DOD identified as critical trauma-related wartime specialties in 2019 were less than the 20th percentile.[41] According to senior military department medical corps officials, the first unobligated year of service is a key point of retention for military physicians. A 2012 study of military physicians found that compensation had a large impact on the decision to remain in the military in the first unobligated year of service and just a small impact on retention in the years afterward.[42] For DOD's scholarship program participants, which constitute the majority of recruited military physicians, we estimate that initial service obligation fulfillment typically occurs about 4 years after successful completion of their residency, or at about 9 years of service.

[40] For each specialty's key retention point, we estimated the pay grade at service obligation fulfillment based on the length of each residency and, if applicable, fellowship. We assumed: no creditable military service prior to medical or dental school, a 4-year active-duty service obligation accrued during medical or dental school, a commissioning to the O-3 pay grade with 4 years of constructive credit after medical or dental school, and a promotion to O-4 at 6 years of service and to O-5 at 12 years of service. The majority of specialties will reach this decision point as an O-4 officer, but those with longer residencies will reach this decision point as an O-5 officer. General dentists will generally reach this decision point as an O-3 officer.

[41] Department of Defense, *Section 708 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) "Establishment of Joint Trauma Education and Training Directorate" Interim Report* (February 2019).

[42] Bradley M. Gray and James E. Grefer, "Career Earnings and Retention of U.S. Military Physicians," *Defense and Peace Economics,* vol. 23(1) (February 2012). The study's measure of compensation reflected the value of the annual salary and the discounted value of the pension at the time.

We also calculated cash compensation for military medical officers who (a) completed a 3-year General Medical Officer tour prior to specializing in a residency, or (b) attended the University and accrued a 7-year active-duty service obligation and found that all but three specialties (pediatrics, family medicine, and psychiatry) had cash compensation less than the 20th percentile for private sector civilian compensation, and all specialties were compensated below the median.

We reviewed 2017 cash compensation for typical military dental officers across six dental specialties and found that at each of these retention points, military cash compensation was less than the median private sector civilian compensation, three of which were below the 25th percentile (orthodontics, endodontics, and periodontics). According to senior military department dental corps officials, two key points of retention for military dentists are (1) after they fulfill their scholarship service obligation by practicing as a general dentist for several years, and (2) after they have completed residency training for a dental specialty, such as orthodontics, and fulfill their residency service obligation. Unlike their physician counterparts, dental students typically do not begin residency immediately after graduation. According to military department dental corps Chiefs, dental student graduates generally complete a 1-year advanced education in general dentistry certificate, which does not incur a service obligation, then fulfill their dental school active-duty service obligation as general dentists before taking a general dentist's retention bonus and beginning residency training.

Cash compensation is just one factor that servicemembers may consider when making the decision to stay with or separate from the military. According to DOD medical and dental corps officials, other factors that may influence this decision include number and frequency of deployments, ability to function at full scope of practice for training, additional nonphysician duties and administrative requirements placed on active-duty physicians that their private sector counterparts do not experience, family considerations associated with permanent change of station orders, nonselection to residency of choice, nonselection for promotion, and retirement eligibility. Similarly, data from the 2017 *DOD Status of Forces Survey* show that among all officers, the most important factors that would be considered in a decision of whether to stay on active-duty were the military retirement system and personal choice/freedoms (e.g. control of where to work), as well as factors such as opportunities to be assigned to station of choice, family concerns, and

pay and allowances.[43] Moreover, a 2019 study of Army physician service obligations showed that military physicians who were most likely to continue serving after completion of their obligation and ultimately retire were those who had the most years of service accumulated when obligations were completed.[44] That is, those who were close to retirement after completing their service obligations were more likely to stay to receive their retirement benefit.

DOD Provides Substantial Deferred, Noncash, and Other Benefits Which Must Be Considered Alongside Cash Compensation, but Value to Servicemembers Is Difficult to Quantify

In addition to cash compensation, DOD offers substantial deferred benefits, such as retirement pensions and benefits, and noncash benefits, such as tuition-free medical school education and health care, to its military physicians and dentists. In its report on military compensation, DOD noted that nearly half of military compensation is made up of deferred and noncash benefits, and that this proportion is considerably higher than in civilian compensation.[45] Additionally, in 2011 we identified military personnel costs as an area where DOD could recognize long-term cost avoidance by using a total compensation approach to manage military compensation in a holistic manner that considers deferred and noncash benefits alongside cash compensation.[46]

Studies of military compensation highlight that assigning a value to deferred and noncash benefits and comparing them to the civilian private

[43]Department of Defense, Office of People Analytics, *2017 Status of Forces Survey of Active Duty Members: Tabulations of Responses* (July 2018).

[44]Military Medicine, *Factors Associated With U.S. Army Physician Service After Obligation Completion*, (July/August 2019). This was a retrospective study of Army physicians; the authors note it is not clear how the implementation of the Blended Retirement System will affect physician retention.

[45]Specifically, DOD reported that approximately 51 percent of the average military compensation consisted of cash payments, which includes regular military compensation and special and incentive pays and other forms of cash payments, 21 percent consisted of noncash, or in-kind, benefits, and 28 percent consisted of deferred benefits.

[46]GAO, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue,* GAO-11-318SP (Washington, D.C.: Mar. 1, 2011). DOD did not address this action.

sector proves more difficult than for cash compensation because servicemembers value or use these benefits differently, various assumptions have to be made to assign value, and access to such benefits is not universal among private sector civilian workers. Additionally, it is difficult to measure the extent to which servicemembers discount the value of future benefits. We previously reported that it is generally accepted that some deferred benefits, such as a pension in retirement, are not valued as highly by servicemembers as current cash compensation.[47] However, a recent study found that servicemembers, particularly military officers, may value deferred benefits more highly than was previously reported.[48] For these reasons we did not compare the value of military deferred and noncash benefits to similar benefits in the civilian private sector; however, we describe certain types of deferred and noncash benefits available to physicians and dentists and provide estimates of their value where possible.[49]

DOD Deferred Benefits

DOD provides access to two primary types of deferred benefits: its employer-sponsored retirement plans and retiree health and dental care. As mentioned previously, the likelihood of benefiting from DOD's military retirement system is a factor that officers consider when deciding to stay on active duty.

Retirement plans. In DOD's traditional retirement system, known as the "High-Three System," servicemembers are eligible to receive a defined benefit annuity based on their pay grade and years of service after a minimum 20 years of active-duty service, with no benefits provided to those who separate before then. This system was closed to new entrants

[47]GAO, *Military Personnel: DOD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of Its Military Compensation System*, GAO-05-798 (Washington, D.C.: July 19, 2005). John T. Warner and Saul Pleeter, "The Personal Discount Rate: Evidence from Military Downsizing Programs," *The American Economic Review* (March 2001).

[48]Curtis J. Simon, John T. Warner and Saul Pleeter, "Discounting, Cognition, and Financial Awareness: New Evidence from a Change in the Military Retirement System," *Economic Inquiry*, vol. 53, No.1, (January 2015).

[49]We previously reported on the various types of deferred and noncash benefits offered by DOD. See GAO, *Military Personnel: Military and Civilian Pay Comparisons Present Challenges and Are One of Many Tools in Assessing Compensation*, GAO-10-561R (Washington, D.C.: Apr. 1, 2010).

at the end of 2017. Based on our estimates, under the High-Three System, the defined benefit for a physician or dentist who retires with 20 years of service in 2035 was estimated to be $2,457,253 (present value).[50]

New servicemembers from 2018 onwards were enrolled in the Blended Retirement System (BRS).[51] BRS is a hybrid retirement system that includes a revised defined benefit plan requiring 20 years of active-duty service, a defined contribution plan with agency matching contributions, and a one-time direct cash payout—called continuation pay—distributed at the midcareer point (between 8-12 years of service).[52] Based on our estimates, under the BRS, the defined benefit for a physician or dentist who retires with 20 years of service in 2035 was estimated to be $1,965,802 (present value).[53] The defined contribution plan offers government automatic and matching contributions of up to 5 percent of basic pay to the servicemember's Thrift Savings Plan, and vested servicemembers who separate before 20 years of active-duty service retain ownership of these contributions.

The BRS was implemented in 2018 to modernize the military retirement system. As the Military Compensation and Retirement Modernization Commission reported in 2015, roughly 51 percent of military officers exited service before 20 years, meaning that most left without any

[50]The estimate is as of August 2019 and is the result of our analysis based on DOD information, using DOD's publically available retirement calculators. The estimate was for a physician or dentist who was commissioned as an O-3 officer in 2015 and assumed separation from service at 20 years. DOD's publically available retirement calculators use a discount rate of 5 percent per year, as of July 2018. Our scope and methodology is described in detail in appendix I.

[51]Servicemembers in service as of December 31, 2017 were grandfathered under the High-Three System, but active component servicemembers with fewer than 12 years of service at that time could opt into the BRS.

[52]While the defined benefit is a component of both the High-3 System and the BRS, the defined benefit multiplier changed from 2.5 percent to 2 percent.

[53]The estimate is as of August 2019 and is the result of our analysis based on DOD information, using DOD's publically available retirement calculators. The estimate was for a physician or dentist who was commissioned as an O-3 officer in 2015 and assumed separation from service at 20 years. DOD's publically available retirement calculators use a discount rate of 5 percent per year, as of July 2018. Our scope and methodology is described in detail in appendix I.

retirement benefits under the High-Three System.[54] The BRS is expected to provide retirement benefits for the majority of servicemembers, including those who serve fewer than 20 years, according to DOD.

In our interviews, some DOD officials expressed concern about the effects of BRS on retention of military physicians and dentists, because, for example, they believed the opportunity to separate with defined contributions will reduce their incentive to remain for a longer period of active duty. Other DOD officials we interviewed stated that it is too soon to determine the effects of the BRS on retention, and noted that the inclusion of continuation pay as part of the BRS was designed to encourage servicemembers to continue serving at the mid-career point.

Retiree health and dental care. Servicemembers retiring from active duty are eligible to enroll in TRICARE. Specifically, retired servicemembers and their eligible dependents are able to participate in TRICARE Prime which is comparable to a health maintenance organization (HMO) program, and TRICARE Select, which is comparable to a preferred provider organization (PPO) program. After they are eligible for Medicare, retired servicemembers and their eligible dependents with Medicare Part A and B can enroll in TRICARE for Life, which provides Medicare-wraparound coverage. Eligible retired servicemembers may also receive benefits from the Department of Veterans Affairs health care system. Specifically, active-duty servicemembers who served 24 continuous months or the full period for which they were called to active duty are eligible for Veteran Affairs' health care.

DOD Noncash and Other Benefits

DOD provides access to a wide variety of noncash benefits, some of which are uncommon in the civilian sector, and may offset some of the discrepancies in military and private sector civilian cash compensation.[55] However, limited information exists on the extent to which noncash benefits are used by military physician and dentists. Therefore, we have highlighted select benefits that may be used by military physicians and dentists.

[54]Military Compensation and Retirement Modernization Commission, *Report of the Military Compensation and Retirement Modernization Commission: Final Report* (January 2015).

[55] Examples of noncash benefits include education, health care, child care services, and discounted shopping at its commissaries and exchanges.

Tuition-free medical and dental school. Military physicians and dentists benefit from DOD's scholarship program and the University, through which prospective medical and dental students receive tuition-free education in exchange for commitment to a number of years in active-duty service. This benefit allows physicians and dentists to avoid thousands of dollars of student debt. For example, according to the Association of American Medical Colleges, the average first-year medical student paid $36,755 for tuition, fees, and health insurance to attend a public medical school during the 2018-19 academic year, and the average first-year student attending a private medical school paid $59,076.[56]

Medical and dental care. DOD offers comprehensive health coverage to military personnel and their dependents through TRICARE, a managed care program. Care is provided in more than 650 military treatment facilities worldwide, supplemented by civilian providers. TRICARE offers two health care options to non-Medicare-eligible beneficiaries: TRICARE Prime and TRICARE Select.[57] All active-duty servicemembers are automatically enrolled in TRICARE Prime, which is comparable to a private health maintenance organization plan. Under this program, active-duty servicemembers have no premium costs, deductibles, or out-of-pocket costs for servicemembers and no or low costs for dependents. Medical Expenditure Panel Survey data indicate that the average private sector civilian employee spent over $5,000 in health insurance employee contributions for family coverage in 2018.[58]

The TRICARE Active Duty Dental Program supplements the dental services available to active-duty servicemembers at military treatment facilities when necessary care is not available or the servicemember does

[56]Association of American Medical Colleges, Summary Statistics for Academic Years 2012-2013 through 2018-2019, AAMC Tuition and Student Fees Questionnaire, Data as of October 2018.

[57]The TRICARE non-Medicare-eligible beneficiary population includes all beneficiaries—such as active-duty personnel and their dependents, National Guard and Reserve servicemembers and their dependents, and retired servicemembers and their dependents or survivors—who do not meet the requirements for obtaining health care coverage under Medicare. Medicare is available, generally, to people age 65 or older, younger people with disabilities, and people with end-stage renal disease.

[58]Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, *2018 Medical Expenditure Panel Survey—Insurance Component* (2018), Table II.D.2.

not have ready access to a military treatment facility. Active-duty servicemembers do not pay premiums for this dental care, do not share in the costs of the care, and do not face any annual or lifetime maximums on the cost of care.

Financial benefits during education and training. Medical and dental scholarship students receive O-1 pay and allowances for 45 days of active duty for annual training performed for each year the scholarship is awarded. Participants may also be eligible for a $20,000 signing bonus. During their education, medical and dental scholarship students receive a monthly stipend, and medical students at the University receive officer salary and benefits at grade O-1. After medical school, medical and dental residents receive officer pay and benefits at grade O-3 or higher, according to DOD officials.

DOD Uses Incentives to Recruit and Retain Military Physicians and Dentists, but Does Not Consistently Collect Information to Help Inform Investment Decisions

Based on our analysis of DOD's incentives to recruit and retain military physicians and dentists, DOD generally (1) clearly defined the criteria used to determine when to offer incentives, (2) identified and incorporated opportunities for improvement, (3) identified and evaluated unique staffing situations, and (4) made investments to attract and retain top talent. However, we found that DOD did not consistently collect information on (1) replacement costs, (2) current and historical retention efforts, and (3) comparable civilian wages to help inform investment decisions in its package of incentives to recruit and retain military physicians and dentists. Fully applying these seven key principles of effective human capital management in its approach to recruit and retain military physicians and dentists is important to making fully informed investment decisions.[59]

[59]GAO-02-373SP; GAO-04-39; DOD, *Report of the Eleventh Quadrennial Review of Military Compensation (*June 2012), and DOD*, Diversity and Inclusion Strategic Plan 2012-2017 (*2012).

DOD Generally Applied Four Key Principles of Effective Human Capital Management to Its Package of Incentives for Recruiting and Retaining Military Physicians and Dentists

We found that DOD generally applied effective human capital management principles related to clearly defined criteria on when to use incentives, making investments based on expected improvement in agency results, identifying and evaluating unique staffing situations, and identifying and incorporating opportunities for improvement. To support its operational needs, DOD uses educational, training, and monetary incentives to recruit and retain physicians and dentists. Specifically, DOD's package of incentives includes, among other things, a tuition-free medical school education through the scholarship program and the University, pay as an O-3 officer or higher during medical or dental residency, the opportunity for further training via a fellowship, and a series of special and incentive pays for fully trained physicians and dentists. According to DOD's report on military compensation, special and incentive pay authorities provide the services with greater flexibility to target additional compensation where needed to address emerging staffing shortfalls and maintain staffing in critical or hard-to-fill skills.[60]

We found that DOD generally applied four of the seven key principles, as described below:

- **Relied on clearly defined, well-documented, consistently applied, and transparent criteria.** DOD and the military departments have established rules-based pay plans with clear eligibility criteria for special and incentive pays and recruitment and retention bonuses. Key principles for human capital management state that agencies should consider making targeted investments in specific human capital approaches, and that these approaches should have clearly defined, well-documented, transparent, and consistently applied criteria for making these investments.[61]
- **Identified opportunities for improvement and incorporated these opportunities into the next planning cycle.** The services and

[60]DOD, *Report of the Eleventh Quadrennial Review of Military Compensation (*June 2012).

[61]GAO-02-373SP.

officials from the Office of the ASD(HA) participate in the Health Professions Incentives Working Group to review recruitment and retention special pay and incentives and recommend adjustment to amounts offered as necessary. For example, as a result of working group discussions, DOD officials stated that they established a new 6-year retention bonus in the fiscal year 2019 pay plan for select medical and dental specialties, in part to ensure greater stability in the numbers of physicians and dentists within these specialties. Military department officials stated they plan to identify potential impacts and determine adjustments, if any, that need to be made. DOD's report on military compensation advises officials to identify opportunities for improvement using analytical tools to model how changes in compensation might alter the force or career profile. It further states that taking a structured approach to determining both incentive pay eligibility criteria and amounts helps force managers optimize their limited special and incentive pay budgets. Such an approach also provides a mechanism to periodically conduct a rigorous assessment of such pays to ensure that they keep pace with changing conditions.

- **Identified and evaluated unique staffing issues.** According to military department officials, medical corps and dental corps community managers, specialty leaders, consultants, and others actively discuss military physicians' and dentists' career plans to help inform future staffing needs. Moreover, to attract physicians and dentists in specialties which DOD has identified as a critically short wartime specialty, DOD offers a Critical Wartime Skills Accession Bonus. However, as we reported in 2018, military department officials cited a number of challenges that make it difficult to attract and retain military physicians and dentists, including national shortages and competition with the private sector.[62] Incentive pay and retention bonus amounts are specific to each specialty. DOD's report on military compensation states that evaluation of unique staffing issues identified by community managers should be a core part of a systematic approach to assessing the application of a special or incentive pay. Similarly, key principles for human capital management note that agencies should tailor human capital strategies to meet their specific mission needs.
- **Targeted investments to attract and retain top talent.** The services are authorized to offer targeted monetary incentives in the

[62]GAO-18-77 and GAO-19-50.

form of special and incentive pays and recruitment and retention bonuses to eligible physicians and dentists who are in good standing. Moreover, military department officials stated that DOD offers Board Certification Pay to physicians and dentists who achieve and maintain this accreditation because it reflects that the physician or dentist is maintaining skills and qualifications and allows the department to better reflect the high level of the quality of care that is provided by the military health system. Similarly, we reported in 2018 that DOD and the military departments had established a set of minimum qualifications for medical school applicants applying to the scholarship program and the University.[63] Key principles for human capital management state that targeted investments in human capital approaches should help the agency attract, develop, retain, and deploy the best talent and then elicit the best performance for mission accomplishment.[64] The principles further state that decisions regarding these investments should be based largely on the expected improvement in agency results. Similarly, DOD's *Diversity and Inclusion Strategic Plan 2012-2017* notes that retaining top talent is essential to sustaining mission readiness that is adaptable and responsive.[65]

DOD Does Not Consistently Collect Information to Help Inform Investment Decisions in Its Package of Recruitment and Retention Incentives

In three key areas of effective human capital management related to data on replacement costs, recruitment and retention, and civilian wages, DOD does not consistently collect information to help inform investment decisions in its package of incentives to recruit and retain military physicians and dentists, as described below:

- **Did not identify replacement costs.** Military departments do not consistently collect information on replacement costs of military physicians and dentists. Specifically, no military department was able to provide us with a comprehensive assessment of the replacement cost for military physicians and dentists. Replacement cost

[63]GAO-18-77.

[64]GAO-02-373SP.

[65]DOD, *DOD Diversity and Inclusion Strategic Plan 2012-2017* (2012).

assessments can be found in other occupations within DOD. For example, in 2017, we reported that the Navy considers the high replacement costs of its nuclear propulsion personnel—up to $986,000 per trainee—in justifying a strategy that prioritizes investment in retention initiatives over new accessions or recruits.[66] Moreover, DOD requires that the training investment and replacement cost for those qualified in the skill be considered when justifying the need for the critical skills retention bonus.[67] DOD's report on military compensation identified replacement costs and training costs as a factor in assessing incentive pay appropriateness.

In 2018, we recommended that the ASD(HA) require that the University develop a reliable method to accurately determine the cost to educate its medical students.[68] DOD partially concurred with our recommendation. In response to our recommendation, the University contracted with the Institute for Defense Analyses to determine the costs to educate University medical students. In its October 2019 final draft report, the Institute for Defense Analyses estimated total accession costs for a fully trained physicians through both the scholarship program and the University; specifically, the report estimated the total cost for a fully trained physician who completes 4 years of medical school and a 3-year military residency to be $878,000 for scholarship medical students and approximately $1.5 million for University medical students.[69] In another similar ongoing effort, Navy officials stated that they have commissioned a Life Cycle Cost study with the Center for Naval Analyses. We are encouraged by these initiatives, which will provide the Office of the ASD(HA) and the military departments a foundation for formalizing the process of collecting information on replacement costs. With the benefit of this information, DOD can make more informed decisions regarding its packages of recruitment and retention incentives.

[66]GAO-17-39.

[67] Department of Defense Instruction 1304.29, *Administration of Enlistment Bonuses, Accession Bonuses for New Officers in Critical Skills, Selective Reenlistment Bonuses, and Critical Skills Retention Bonuses for Active Members* (Dec. 15, 2004), (incorporating change 1, July 11, 2016).

[68]GAO-18-77.

[69]Institute for Defense Analyses, *Analysis of DoD Accession Alternatives for Military Physicians: Readiness Value and Cost* (October 2019).

- **Did not collect current and historical retention information.** Military departments do not consistently collect and use current and historical retention information to help inform decisions about investment in retention incentives. Specifically, Navy and Air Force officials told us that they do not have readily available information to determine the percentage of those who accepted a retention bonus among the eligible population, and Army officials noted they do not have a framework in place to use retention information to determine the effectiveness of retention bonuses.[70]

  Using retention data to measure effectiveness of retention incentives is performed by other communities within DOD. For example, in 2018 we reported that officials from the Navy, Marine Corps, and Air Force measured the effectiveness of aviation retention bonuses by monitoring bonus acceptance rates.[71] DOD's report on military compensation stated that a review of current and historical data on retention should be a core part of a systematic approach to assessing the application of a special or incentive pay. Further, key principles for human capital management note that periodic measurement of an agency's progress toward human capital goals and the extent that human capital activities contributed to achieving programmatic goals provides information for effective oversight by identifying performance shortfalls and appropriate corrective actions.[72] Without information on the acceptance rate among those eligible, the military departments cannot assess the effectiveness of the performance of their investment in retention bonuses.

- **Did not assess private sector civilian wages.** DOD does not consistently collect and use private sector wage information to help inform investment decisions in its special and incentive pays for physicians and dentists. Based on our review of the minutes of meetings of the Health Professions Incentives Working Group, which recommends changes to the rate and term of special and incentive pays, private sector compensation was occasionally raised as a challenge. However, it was not collected and used to help inform

[70]Servicemembers may not be eligible for retention bonuses for a variety of reasons, including because they are fulfilling an existing service obligation accrued from participation in the scholarship program or attendance at the University.

[71]GAO, *Military Personnel: Collecting Additional Data Could Enhance Pilot Retention Efforts*, GAO-18-439 (Washington, D.C.: June 21, 2018).

[72]GAO-04-39.

investment decisions on a consistent basis. According to officials from the Office of the ASD(HA) and the military departments, an assessment of civilian wages is not a driving factor when considering adjustments to special and incentive pays, in part because DOD cannot always match civilian sector compensation for military physicians and dentists.

Officials from the Office of the ASD(HA) and the military departments acknowledged the disparity between military and civilian cash compensation varies by specialty; however, incentive pay and retention bonus amounts have largely remained the same for over a decade. DOD's *Ninth Quadrennial Review of Military Compensation* states that pay at around the 70th percentile of comparably educated civilians is necessary to enable the military to recruit and retain the quantity and quality of personnel it requires.[73] Based on our comparison of military and civilian cash compensation pay previously discussed, we found that the gap between military and private sector civilian varies by specialty and many fall below the civilian private sector median. Moreover, based on our review of cash compensation for medical officers who completed their residency directly after medical school across 21 medical specialties, we found that at their first unobligated year of service, all 21 specialties had cash compensation below the private sector civilian median. Additionally, all but one specialty (psychiatry) were compensated at less than the 20th percentile of private sector civilian compensation.

Use of assessments of private sector civilian compensation can be found in other communities within DOD. For example, in 2017, we reported that the Navy justified its use of selective reenlistment bonuses for cyber-related occupations by noting the specific level of starting salaries for comparable civilians.[74] DOD's report on military compensation states that reviewing civilian wages is a key element in assessing the application of a special or incentive pay. Further, it states that periodic reviews, which should include the use of an analytical tool or model, will ensure that resources are directed at the most pressing staffing needs. For example, professions that consistently command higher pay in the civilian sector—such as the medical professions—may merit predictable pays over the long term.

[73]Department of Defense, *Report of the Ninth Quadrennial Review of Military Compensation* (March 2002).

[74]GAO-17-39.

Yet in other areas, evolving mission needs, changing conditions in the civilian market, and other factors may call for increasing an incentive or, in some cases, may show that additional pay can be reduced or eliminated.

According to a former Under Secretary of Defense for Personnel and Readiness and a noted expert on defense personnel issues, DOD would benefit from analysis to determine the point at which cash compensation for military physicians, including special and incentive pays, reaches a minimum threshold of attractiveness compared to the private sector. Assessing civilian wages could help DOD understand the relationship of any military and civilian pay discrepancies to its ability to fill particular specialties. For example, we found that in fiscal year 2018, all but three of the specialties we reviewed were below 90 percent of authorization by at least one of the services' active components.[75] By consistently collecting civilian wage information and using it to inform its package of incentives, DOD will be better positioned to make the most effective use of its recruitment and retention incentives.

DOD officials stated that their approach to managing the package of incentives to recruit and retain military physicians and dentists is driven by a number of considerations. Specifically, DOD officials stated that the rates of special and incentive pays represent amounts that are affordable and that the military departments generally believe have allowed them to meet their personnel needs. Further, military department officials stated that budget considerations and statutory limitations hinder their ability to change the rate of special and incentive pays. Current statutory limits to the amount of the retention bonus, incentive pay, and board certification pay are $75,000, $100,000, and $6,000, respectively; there is currently no statutory limit on the critical skills retention bonus for health professionals, which can be paid in addition to other pays.[76] While we believe these are

[75]We reviewed fiscal year 2018 fill rates (positions authorized to be filled compared to personnel in-place) for military physicians based on data from the Department of Defense Health Manpower Personnel Data System. Emergency Medicine, Pediatrics, and Critical Care/Trauma, Surgery were the three specialties that were not below 90 percent filled by any of the active components. Interventional and noninterventional diagnostic radiologists were grouped together.

[76] 10 U.S.C. § 355; DOD Instruction 1304.29. DOD policy states that this bonus normally shall not be authorized for use by health profession officers and if it is, it should only be approved to bridge the gap in bonus authority for a particular skill while needed statutory enhancements are pursued and enacted.

valid considerations, collecting information on replacement costs, retention, and civilian wages would allow the Office of the ASD(HA) and the military departments to provide greater stewardship of available funding by ensuring its efficient application. Specifically, *Standards for Internal Control in the Federal Government* state that management should use quality information to achieve the entity's objectives.[77] For example, further analysis of replacement costs could reveal that retention of fully trained physicians is highly economical for DOD, and provide strong support for changes to retention incentives to safeguard significant investment in physicians and dentists. By collecting and using this information to inform its decision-making, DOD and the military departments would be better positioned to assess the effectiveness of their incentives to recruit and retain military physicians and dentists and make sound investment decisions for the future.

Medical Students and Residents Perceive That Lengthening Service Obligations Could Negatively Affect Recruitment and Retention of Military Physicians

Our surveys of medical students, focus groups with medical residents, and interviews with DOD officials showed there was a general perception that lengthening active-duty service obligations, such as through a system of serving obligations from medical school and residency training consecutively, could negatively affect recruitment and retention of military physicians.[78] Moreover, DOD is considering reductions to the overall number of active-duty physicians, including targeted reductions to certain specialties, and participants in all eight focus groups with residents had

[77]GAO-14-704G.

[78]Dental students and residents were not included in our analysis because a change from a concurrent to consecutive system of active-duty service obligations would not affect military dentists in the same manner as military physicians. According to DOD officials, the majority of military dentists effectively serve consecutive active-duty service obligations. Our scope and methodology is described in detail in appendix I. See appendix III to see how information about the active-duty service obligation system was introduced in the survey and to see survey results.

concerns about the proposed reductions to authorizations for certain medical specialties.[79]

Medical Students and Residents Reported General Unwillingness to Accept Longer Service Obligations without Additional Cash Incentives

In our surveys of medical students, we found that they generally would not have accepted the scholarship or attended the University if the service obligations from medical education and residency training were served consecutively. Specifically, an estimated 61 percent of scholarship recipients and an estimated 51 percent of University students in our representative survey responded that they would not have accepted DOD's scholarship program or attended its University had they been required to fulfill these service obligations consecutively.[80] However, our survey results indicated that students are willing to accept some additional active-duty service obligation for their current programs.[81] Specifically, 68 percent of the University students and almost half (46 percent) of the scholarship students would be willing to accept an additional year of active-duty service obligation. Notably, a lower percentage of medical students would accept 2 additional years of active-duty service obligations—specifically 34 percent of University students and 16 percent of scholarship recipients.

Our survey results found that medical students would be more willing to accept longer service obligations if accompanied by additional cash incentives. For example, 80 percent of University students and more than half of scholarship recipients (63 percent) would be willing to accept an additional year of service obligation if accompanied by additional cash

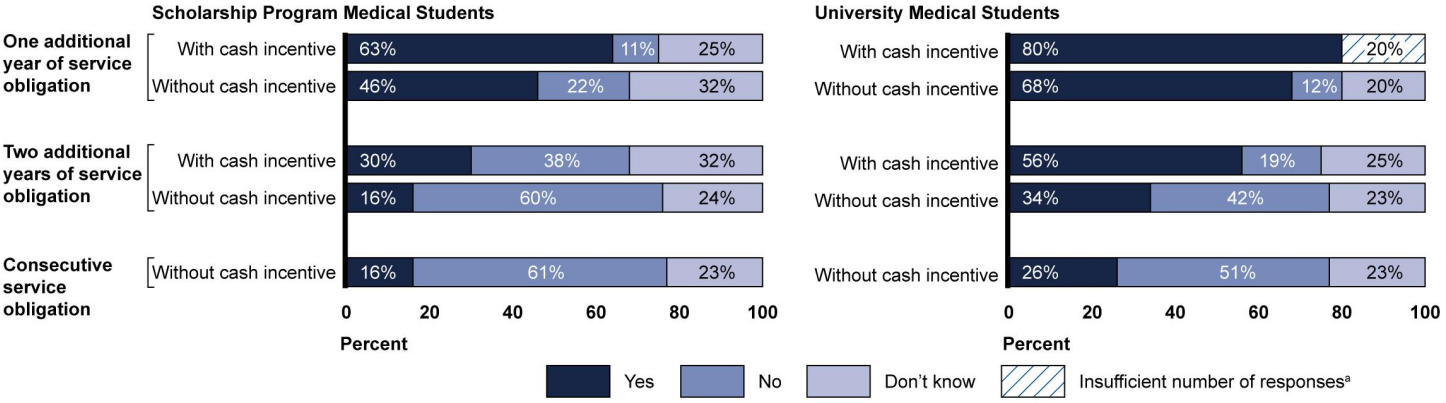
[79]Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission.

[80]See appendix III for information on survey results. All reported percentages from the survey are weighted estimates. The margin of error for all estimates in this report is within plus and minus 6 percent, unless otherwise specified.

[81]In addition to assessing how medical students would have responded to consecutive service obligations, we assessed their sensitivity to one or two years of additional service obligation with or without additional cash incentives.

incentives. (See figure 6 and appendix III for specific estimates and confidence intervals.)[82]

Figure 6: Survey of Medical Students' Willingness to Accept Various Increases to the Active-Duty Service Obligation, Estimates of Department of Defense Scholarship Program and University Graduates



Source: GAO survey of medical students results. | GAO-20-165

Note: DOD's primary method of meeting its needs for physicians is to recruit medical students through the Health Professions Scholarship Program (the scholarship program) and the Uniformed Services University of the Health Sciences (the University). We did not specify an amount of the cash incentive. The 95 percent confidence intervals for all estimates shown in this figure are within +/- 6 percent, unless otherwise noted.

[a]We are not showing the estimates for the 'No' and 'Don't Know' responses due to an insufficient number of responses.

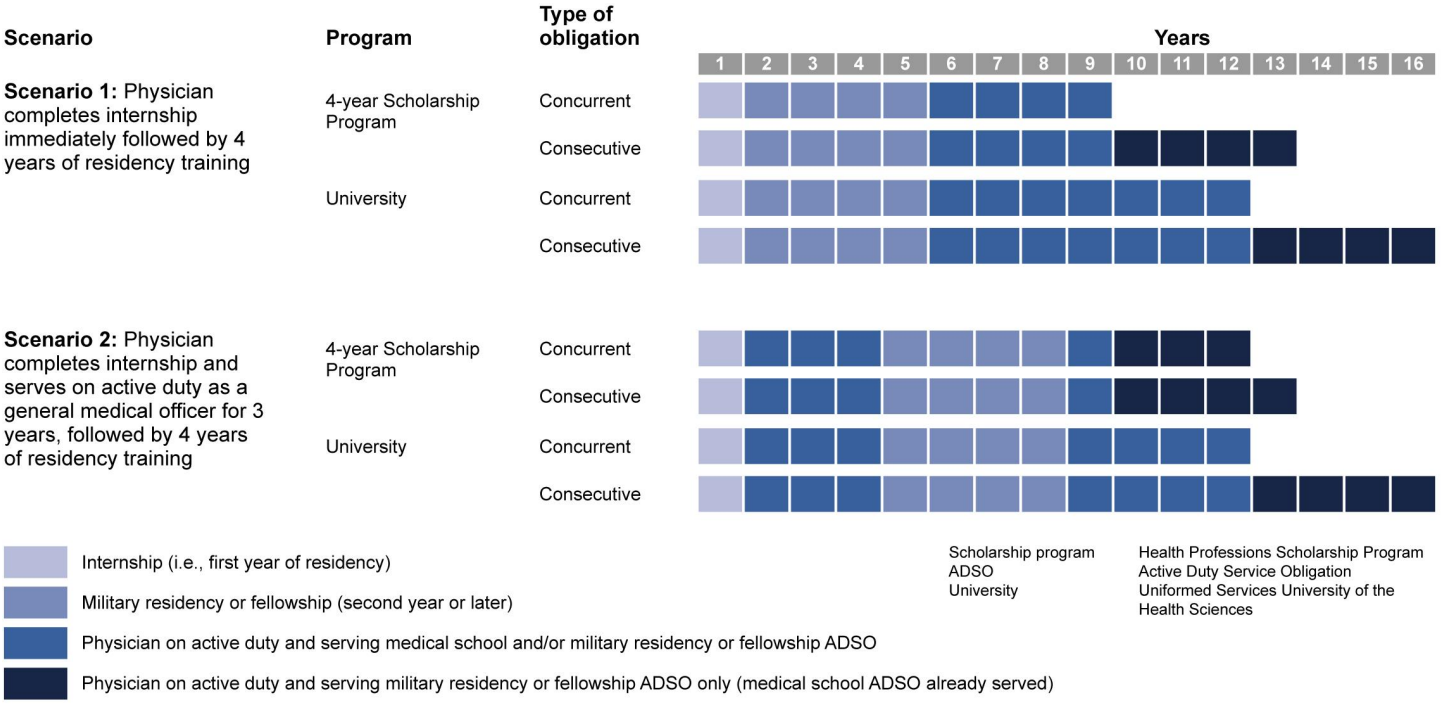
Similar to the survey responses, participants in all eight focus groups with medical residents also would not have accepted the scholarship or attended the University under a system of consecutive active-duty service obligations. However, participants in seven out of eight focus groups we conducted stated that they would be more willing to accept longer service obligations if accompanied by additional cash incentives, such as a larger accession bonus.

Lengthening service obligations may also have unintended consequences without other changes to DOD policy. Specifically, participants in five out of eight of our focus groups with medical residents and DOD officials we interviewed expressed concern that lengthening service obligations would delay physicians' eligibility for retention bonuses, resulting in a reduction

[82]We did not specify an amount for additional cash incentives, but DOD previously reported that some actions, such as increased service obligations paired with increased incentives, may be required in order to close the gaps between authorized and filled positions.

of cash compensation over the course of a career. For example, under current policy, a physician who accepted a 4-year scholarship, completed a 1-year internship, and then trained in a 4-year residency training program would be eligible for a retention bonus after 9 years of service. Under a consecutive service obligation model, that same physician would be eligible for a retention bonus after 13 years of service (see figure 7). Further, as previously reported, cash compensation for military physicians is generally less than private sector civilian compensation, and participants in seven out of eight of our focus groups with residents expressed that lengthening service obligations would extend the amount of time they would not be paid comparably to their private sector civilian counterparts.

Figure 7: Examples of Number of Years of Active-Duty Service After Medical School for Scholarship Program Recipients and University Graduates, by Type of Active-Duty Service Obligation (ADSO) and Total Effective ADSO



Source: GAO analysis of Department of Defense information. | GAO-20-165

Note: Under current policy, a physician is eligible for a retention bonus after medical school active-duty service obligation has been served.

[a]DOD's primary method of meeting its needs for physicians is to recruit medical students through the Health Professions Scholarship Program (the scholarship program) and the Uniformed Services University of the Health Sciences (the University).

Residents Stated That Longer Service Obligations and Reductions in Authorizations for Medical Specialties Would Likely Affect Their Decision to Continue Military Service

Residents in our focus groups stated that lengthening active-duty service obligations would make residency training in a military hospital less attractive and would likely affect their decision to continue military service. Specifically, medical residents in most focus groups we held noted that lengthening service obligations would make them more likely to:

- fulfill their medical school active-duty service obligation by serving one or more tours as a General Medical Officer and then separate from the military in order to train in a civilian residency program;
- decline to participate in further medical training and specialization via a fellowship program within the military; and
- separate from the military sooner than planned, in part because a longer active-duty service obligation would delay their eligibility for certain special and incentive pays.

Military department officials we interviewed expressed concern that lengthening active-duty service obligations, such as through a system of serving obligations consecutively, could encourage potential medical residents to choose shorter residency training programs over longer ones. However, participants in all eight focus groups we held with medical residents stated that the ability to train in a chosen medical specialty is more important than the length of the residency program, and a longer active-duty service obligation would not influence their chosen medical specialty.

Further, residents who participated in our focus groups stated that the proposed reductions in authorizations—that is, funded positions—for certain medical specialties and associated reductions in residency program spots could negatively affect the attractiveness of residency training in a military setting. DOD has reduced authorizations for certain specialties based on our analysis of DOD's Health Manpower Personnel Data System information and is considering additional reductions to the overall number of active-duty physicians as part of its budgeting process for fiscal years 2020-2024, including targeted reductions to certain specialties. For example, DOD reduced authorizations for the general

pediatrics specialty by 40 percent from fiscal year 2015 through fiscal year 2018, and based on our surveys of medical students, 12 percent of scholarship recipients and 16 percent of University students in the clinical stage of medical school responded that they are interested in practicing the pediatrics specialty after they have completed all required training.

Participants in all eight of our focus groups with residents commented that the ability to specialize in their medical specialty of choice was important when deciding to accept the scholarship or attend the University, and narrowing such opportunities would negatively affect the attractiveness of either program for future prospective participants. When reflecting on the proposal to reduce the range of available specialties, residents questioned their ongoing ability to practice their preferred specialty as an active-duty servicemember. In our focus groups, some residents expressed that this issue could play a role in their future decision to continue military service or separate and pursue civilian medical practice.

Conclusions

DOD's ability to recruit and retain the right numbers and types of physicians and dentists depends in part on the effectiveness of the package of incentives in which the department invests. To initially recruit these physicians and dentists, DOD relies on its scholarship program and University, which come with active-duty service obligations. Changes to the structure of its active-duty service obligations could affect recruitment and retention of physicians and dentists.

Given that DOD spends millions of dollars annually to train medical and dental students to become fully trained physicians and dentists and that almost half of DOD's special pay budget is dedicated to retaining them, consistently collecting information to help inform investment decisions is critical to ensuring the efficiency of these significant resources. For example, information on the replacement costs of physicians and dentists would help DOD make decisions about whether it is more cost effective to train or retain these personnel. Further, consistent collection of information on the extent to which eligible physicians and dentists accept retention bonuses will help DOD monitor the effectiveness of an incentive that represents a significant investment by DOD. Our comparison of military to private sector cash compensation highlighted that military physicians and dentists generally receive less cash compensation than their private sector civilian counterparts for most specialties we reviewed. This differential, according to DOD officials, is one factor that

servicemembers consider in deciding whether to continue service in the military. However, while DOD and military department officials stated that they are aware of how prevailing private sector civilian wages for medical and dental specialties compare to military cash compensation, they do not consistently collect information on this matter and that its role in setting military cash compensation is limited. By collecting and using such information to inform investment decisions, DOD will have better information to efficiently and effectively meet its mission of providing health care during times of war and peace.

Recommendations for Executive Action

We are making the following three recommendations to DOD:

The Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on the replacement costs of military physicians and dentists and use this information to inform investment decisions in the package of incentives to recruit and retain military physicians and dentists. (Recommendation 1)

The Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on current and historical retention data, to include data on the percentage of eligible physicians and dentists who accept retention bonuses, and use this information to inform investment decisions in the package of incentives to retain military physicians and dentists. (Recommendation 2)

The Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on private sector civilian wages and use this information to help inform investment decisions in the package of incentives to recruit and retain military physicians and dentists. (Recommendation 3)

Agency Comments

We provided a draft of this report to DOD for review and comment. DOD concurred with all three recommendations and noted that it will take

actions to incorporate them into policy within the next two years. DOD's comments are reprinted in appendix IV.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Defense, the Office of the Assistant Secretary of Health Affairs, the Secretaries of the Army, the Navy, the Air Force, and the President of the Uniformed Services University of the Health Sciences. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3604 or FarrellB@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

Brenda S. Farrell
Director
Defense Capabilities and Management

Appendix I: Objectives, Scope, and Methodology

This report addresses the following objectives:

1. how compensation for military physicians and dentists compares to private sector civilians with comparable skills in 2017;
2. the extent to which the Department of Defense (DOD) has developed an approach to recruit and retain military physicians and dentists through a package of incentives that reflect key principles of effective human capital management; and
3. the perceptions of military medical students, residents, and DOD officials regarding active-duty service obligations, including their effect on recruitment and retention.

Objective 1 - Comparison of Compensation

For our first objective, we compared cash compensation for military physicians and dentists to comparable private sector civilian specialties, described the deferred and noncash benefits available to military physicians and dentists, and created estimates of the value of DOD's retirement benefit for officers with varying current years of service.

To compare cash compensation for military physicians and dentists to comparable private sector civilian specialties, we estimated military cash compensation and compared that to civilian compensation data reported in surveys by the American Medical Group Association and American Dental Association.

Specialty selection. To select DOD physician and dental specialties that have private sector civilian equivalents, we began with the list of 44 physician and 11 dental specialties in DOD's Fiscal Year 2018 *Health Manpower Personnel Data System* report. We selected 21 physician specialties in consideration of the following factors: a comparable private sector civilian specialty existed; the majority of the physician workforce was represented; deploying specialties were included; a balance of procedural, surgical, and other specialties was included, and; specialties

identified as critically-short, trauma-related wartime specialties were included.[1] We selected six dental specialties in consideration of the following factors: a comparable private sector civilian specialty existed, and private sector civilian compensation information was available.

Estimates of military cash compensation. To estimate cash compensation for military physicians and dentists for our selected specialties, we reviewed DOD policy and guidance and relevant statutes to identify any current measures of cash compensation and other key elements of cash compensation for physicians and dentists. DOD's measure of cash compensation, known as regular military compensation, includes the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, and the federal income tax advantage that accrues from the nontaxable nature of the allowances.[2] Another key element of cash compensation is the special and incentive pays that DOD offers to eligible military physicians and dentists, such as incentive pay, Board Certification Pay, and retention bonuses. We collected information on basic pay, basic allowance for housing, and basic allowance for subsistence for married personnel from DOD's fiscal year 2017 *Greenbook* publication, and information on incentive pays, Board Certification Pay, and retention bonuses from DOD's fiscal year 2017 *Health Professions Officer Special and Incentive Pay Plan.*[3] We selected fiscal year 2017 because it was the most recent year of available data amongst all of our sources, and we selected married personnel because according to a DOD report, the majority of officers in the pay grades O-4 to O-6 are married, which largely aligns with DOD's population of physicians and dentists.[4]

We estimated a range—the minimum and maximum—of military cash compensation by specialty for pay grades O-3 to O-6. The minimum and

[1]Critically-short, trauma-related wartime specialties were identified in a 2019 interim report that DOD submitted to Congress in response to section 708 of the National Defense Authorization Act for Fiscal Year 2017.

[2]37 U.S.C. § 101(25), and Department of Defense, *Selected Military Compensation Tables (Greenbook)* (January 2017).

[3]Assistant Secretary of Defense for Health Affairs Memorandum, *Health Professions Officer Special and Incentive Pay Plan* (Sept. 27, 2016).

[4]Department of Defense, *2017 Demographics: Profile of the Military Community*, Table 2.61 (2017). Department of Defense, Health Manpower Personnel Data System: Fiscal Year Statistics 2018, Table A3 (2018).

maximum are based on two scenarios that represent a range of pay that specialized physicians and dentists can expect to receive, considering only the special and incentive pays listed in the *Health Professions Officer Special and Incentive Pay Plan*. The minimum includes regular military compensation, Board Certification Pay, and incentive pay. The maximum includes the regular military compensation, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus. Our estimates represent the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, special and incentive pays, and the federal tax advantage that accrues from the nontaxable nature of the allowances. To calculate the federal tax advantage, we used the 2018 federal tax tables and applied the 2018 federal tax standard deduction and then converted the calculated federal tax advantage to 2017 dollars. According to a senior DOD dental corps official, most general dentists are not board-certified and do not receive Board Certification Pay; we therefore omitted Board Certification Pay in our estimates for the minimum and maximum military cash compensation of general dentists.

Private sector civilian cash compensation information. To identify private sector civilian cash compensation for physicians in comparable specialties, we chose the American Medical Group Association's 2018 *Medical Group Compensation and Productivity Survey—2018 Report Based on 2017 Data* because (1) it included all the specialties we selected to review, and (2) it contained information on physicians who practiced in settings that were similar to those in which federal physicians practiced.[5]The survey data provided compensation amounts for each specialty by 20th percentile, median, and 80th percentile. The data excluded the value of any employer-provided malpractice insurance, but some physicians may incur costs for this coverage. Military physicians generally do not need to purchase malpractice insurance.

To identify private sector civilian cash compensation for dentists in comparable specialties, we chose the American Dental Association's Health Policy Institute, *Income, Gross Billings, and Expenses: Selected 2017 Results from the Survey of Dental Practice* because (1) it included all the specialties we selected to review, and (2) included the net income of dentists and specialists in private practice, which is comparable to

[5]American Medical Group Association, *2018 Medical Group Compensation and Productivity Survey—2018 Report Based on 2017 Data*, purchased June 2019.

military dentists who generally do not need to purchase malpractice insurance.[6] We obtained net income information for full-time practitioners—those who reported working 35 hours a week or more—from the American Dental Association. The survey data provided compensation amounts for each specialty by 25th percentile, median, and 75th percentile. Both surveys represent salaries for 2017.

To help determine the reliability and accuracy of private sector civilian compensation information, we checked these data for reasonableness and the presence of any obvious or potential errors in accuracy and completeness. We believe the data are sufficiently reliable for the purpose of this report.

Comparisons of military and private sector civilian cash compensation. We compared our estimates of the ranges of military cash compensation by specialty and pay grade to the ranges of private sector civilian cash compensation by specialty from our selected surveys. As we could not make direct comparisons of military and civilian cash compensation by years of service or experience due to data limitations, we compared and presented the ranges of compensation as appropriate.

We also compared military cash compensation at the first unobligated year of service to the range of private sector civilian cash compensation, by specialty. We estimated military cash compensation at the first unobligated year of service based on the length of each residency and, if applicable, fellowship—among other assumptions. We identified physician residency and fellowship length information by using the Accreditation Council for Graduate Medical Education's *Data Resource Book for Academic Year 2017-2018*, and we requested information on military residency lengths from military department officials to confirm that residency lengths generally aligned with this information.[7] We identified dentist residency and fellowship length information by requesting it from military department officials.

For each specialty, we estimated the officers' pay grade using the following assumptions: (1) no creditable service before medical or dental

[6]American Dental Association, Health Policy Institute, *Income, Gross Billings, and Expenses: Selected 2017 Results from the Survey of Dental Practice—Table 3: Annual Net Income of Specialists in Private Practice, 2017* (November 2018).

[7]Accreditation Council for Graduate Medical Education, *Data Resource Book Academic Year 2017-2018* (Chicago, IL: 2018).

school; (2) a 4-year medical or dental school duration; (3) participants were commissioned at the O-3 pay grade after medical or dental school completion with 4 years of constructive credit—in accordance with entry grade credit guidance outlined in DOD Instruction 6000.13; (4) the first year of post-graduate medical or dental education does not accrue an active-duty service obligation, and; (5) were promoted to O-4 at 6 years of service, and to O-5 at 12 years of service—in accordance with DOD's promotion schedule outlined in DOD Instruction 1320.13. The entry grade credit and promotion schedule practices were confirmed by DOD officials.

For physicians, we assumed that the active-duty service obligations for medical school and residency were served concurrently, in other words we assumed immediate entry into a residency program. We performed our calculations twice, first assuming no tour as a General Medical Officer and second assuming that physicians completed a 3-year tour as a General Medical Officer—adding 3 years to their years of service at service obligation fulfillment. According to Navy medical corps officials, 55 percent of Navy physicians perform such a tour. When assuming no General Medical Officer tour, the majority of physicians reached this decision point at the O-4 pay grade with the exception of neurosurgeons and cardiac/thoracic surgeons, who were at the O-5 pay grade due to longer residency and fellowship lengths. When assuming a 3-year General Medical Officer tour, physicians in 12 specialties reached this point at the O-5 pay grade, with the remaining nine specialties at the O-4 pay grade.[8] We also conducted this analysis for Uniformed Services University of the Health Sciences (University) students who accrued a 7-year active-duty service obligation. We found that assuming a 7-year obligation for University students produced the same results as assuming a 3-year tour as a General Medical Officer for Health Professions Scholarship Program (scholarship) participants.

For dentists, we assumed that the dental school and residency obligations were not served concurrently because, according to the military department Dental Corps Chiefs, dental student graduates typically complete a 1-year advanced education in general dentistry certificate, which does not incur a service obligation, then fulfill their dental school active-duty service obligation as general dentists before

[8]These 12 specialties were pulmonary medicine (critical care), critical care medicine, infectious disease, neurosurgery, orthopedic surgery, otolaryngology, radiology-diagnostic (non-interventional), radiology-diagnostic (interventional), general surgery, cardiac/thoracic surgery, critical care trauma surgery, and urology.

taking a general dentist's retention bonus and beginning residency training. We completed an analysis to understand how the pay grade at the first year of unobligated service may vary for general dentists who worked as a general dentist immediately after completing dental school or completed a 1-year advanced education residency. We found that general dentists generally reached this decision point at the O-3 pay grade; endodontists, orthodontists, pedodontists, and periodontists reached it at the O-4 pay grade, and; oral and maxillofacial surgeons reached it at the O-5 pay grade.

Estimates of retirement benefit. To develop estimates of the value of the defined benefit portion for DOD's two retirement benefit programs—the Blended Retirement System (BRS) and the High-Three—we developed two scenarios for a hypothetical officer who either chose to remain in the High-Three System or to opt into the BRS. We used DOD's publically-available, online retirement calculators to generate an estimate for each scenario, which Office of the Under Secretary for Personnel and Readiness officials described as the best available tools to determine the value of military retirement benefits. [9] Specifically, the estimates were for a physician or dentist who was commissioned as an O-3 officer in 2015 and assumed separation from service at 20 years. For these scenarios, we developed reasonable estimates to enter into the calculators. For example, in the personal information section of the calculators we estimated the pay entry base date assuming that the officer began earning creditable years of service toward retirement after medical or dental school and that they began active-duty service as an officer at the O-3 pay grade in the month of June after the completion of medical or dental school. The calculators produced an estimate of the present value estimated retirement benefit at 20 years of service, which is when the defined benefit portion becomes effective. Estimates were as of August 2019 and included a specific value for the defined benefit. DOD's publically available retirement calculators use a discount rate of 5 percent per year, as of July 2018. We also consulted with a senior DOD official from the Office of the Under Secretary for Personnel and Readiness to corroborate the reasonableness of our approach. To help determine the reliability and accuracy of DOD's retirement calculators, we checked the data for reasonableness and the presence of any obvious or potential errors in accuracy and completeness and interviewed DOD officials

[9]The calculators are called the High-3 Calculator and the BRS Calculator and were available at https://militarypay.defense.gov/Calculators/ at the time of our analysis.

knowledgeable about the data. We believe the data are sufficiently reliable for the purpose of this report.

Description of deferred and noncash benefits. To describe deferred and noncash benefits available to military physicians and dentists, we reviewed our prior reports, other relevant research, and publically available reports and information from DOD. We interviewed cognizant DOD officials to understand which benefits military physicians and dentists were most likely to utilize.

Objective 2 – DOD's Approach to Recruit and Retain Physicians and Dentists

For our second objective, we reviewed pay plans, policies, and other documents developed by the Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA)) and the respective military departments concerning DOD's approach to recruitment and retention of military physicians and dentists. We also interviewed officials from OASD(HA) and the military departments concerning their decision-making processes in managing this package of incentives. We compared this information with seven key principles of effective human capital management, which was reported in our February 2017 report on military compensation.[10] As we reported in that report, to identify key principles of effective human capital management, we reviewed a compilation of our body of work on human capital management, DOD's *Report of the Eleventh Quadrennial Review of Military Compensation*, and the *DOD Diversity and Inclusion Strategic Plan 2012 - 2017*.[11] The seven key principles of effective human capital management include (1) criteria for making human capital investments are clearly defined, well-documented, consistently applied, and transparent; (2) replacement costs of personnel are considered when deciding to invest in recruitment and retention programs; (3) decisions regarding human capital investments are based largely on expected improvement in agency results and implemented in a manner that fosters

[10]GAO, *Military Compensation: Additional Actions Are Needed to Better Manage Special and Incentive Pay Programs*, GAO-17-39 (Washington, D.C.: Feb. 3, 2017).

[11]GAO, *A Model of Strategic Human Capital Management,* GAO-02-373SP (Washington, D.C.: Mar. 15, 2002); GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, GAO-04-39 (Washington, D.C.: Dec. 11, 2003); Department of Defense, *Report of the Eleventh Quadrennial Review of Military Compensation* (June 2012), Department of Defense, *DOD Diversity and Inclusion Strategic Plan 2012-2017* (2012).

top talent; (4) unique staffing issues are identified and evaluated as part of establishing the incentive structure; (5) opportunities for improvement are identified and incorporated into the next planning cycle; (6) current and historical retention data are collected and reviewed as part of efforts to evaluate effects and performance of human capital investments; and (7) civilian wages are assessed and plans are updated as needed. In addition to using the key principles, we also compared aspects of DOD's approach to recruitment and retention of military physicians and dentists with federal internal control standards, which state management should use quality information to achieve an entity's objectives, and highlighted areas where DOD's approach differed from these principles.[12]

Objective 3 – Perceptions Regarding Active-Duty Service Obligations

For our third objective, to obtain perceptions of (1) military medical students, (2) residents, and (3) DOD officials regarding active-duty service obligations, including their effect on recruitment and retention, we utilized, respectively, (1) web-based surveys of military medical students, (2) focus groups with military medical residents, and (3) interviews with knowledgeable officials.

Surveys. For our third objective, to obtain perceptions of military medical students regarding active-duty service obligations, including their effect on recruitment and retention, we conducted two web-based surveys with a generalizable sample of current scholarship and University medical students to obtain information on the students' knowledge of the current program and willingness to accept different lengths of service obligations or a change to a consecutive service obligation model (see table 1). One survey was administered to current scholarship medical students, while the other was administered to current University medical students. The questions in both surveys were largely the same. The main differences reflected the different pay and benefits from accepting a scholarship or attending the University and the differences in length of active-duty service obligation. For example, scholarship students receive a monthly stipend and, sometimes, an accession bonus, while University students receive the pay and allowances for commissioned officers in the O-1 pay grade. Scholarship participants incur 6 months of an active-duty service

[12]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

obligation for each 6 months of scholarship benefits they receive, with a 2-year, minimum service obligation, while University medical students accrue a 7-year active-duty service obligation. A full listing of survey questions is provided in appendix III.

We worked with our social science survey specialists to develop our survey questionnaires, applying generally accepted survey design standards. We conducted pretests of the survey with scholarship and University students who varied by number of years in medical school and military service. Pretesting is necessary to ensure common understanding of terms used and to minimize errors that might occur from respondents interpreting the questions differently than we intended. During each pretest, the subject was not provided the draft survey in advance, but instead was either provided the draft survey at the meeting, or the survey was emailed to the subject at the beginning of the teleconference. After the pretester completed the survey, we discussed all survey questions and response options with the pretester to ensure clarity. We revised the survey instruments based on the feedback we received during each of the pretests until clarity issues were reasonably addressed.

We determined fourth-year medical students were less likely to participate in the survey for three reasons: (1) they were close to graduating from medical school at the time the survey instrument was launched; (2) they lose their school email addresses shortly after graduation; and (3) once they are out of medical school, they are further removed from the decision point about either accepting the scholarship or attending the University. Therefore, we excluded them from the sample population. Dental students were also excluded from the sample population because they generally practice as general dentists after graduating from dental school and before training in a residency program, which differs significantly from the career paths of scholarship and University medical students.

We defined our target population to be all medical students in their first, second, or third school year under the scholarship program or enrolled at the University. By stratifying, as shown in table 1, the sample allowed us to estimate any population figure across the service with a predetermined statistical precision. We determined the target sample size needed to achieve precision levels of plus or minus 10 percentage points or fewer, at the 95 percent confidence level. We then increased the sample size within each stratum for an expected response rate of 25 percent.

Table 1: Sample Design and Number of Responses by Stratum

Stratum	Population count	Target sample size	Sample size reflecting expected response rate of 25 percent	Number of responses	Response rate (percent)
Uniformed Services University of the Health Sciences medical students	524	81	324	259	80
Health Professions Scholarship Program medical students: Army	802	86	344	180	52
Health Professions Scholarship Program medical students: Navy	712	85	339	233	69
Health Professions Scholarship Program medical students: Air Force	889	87	348	211	61
Health Professions Scholarship Program medical students subtotal	2,403	258	1,031	624	61
Total	**2,927**	**339**	**1,355**	**883**	**65**

Source: GAO analysis of DOD information and GAO survey of medical students results. | GAO-20-165

The resulting sample frame included 2,972 students, and we selected a stratified random sample of 1,355. We stratified the sampling frame into four mutually exclusive strata based on medical program and service. One survey was administered to current scholarship medical students from June 26, 2019 through August 26, 2019; the survey of current University medical students was administered from June 25, 2019 through August 6, 2019. We created two administrative email accounts, one for scholarship medical students and one for the University medical students, through which we sent an announcement email to the medical students in our sample population. We administered the survey through a web-based application and sent an email from the administrative email accounts stating that the survey was ready to complete. When we received bounce-back messages, we used secondary email addresses if available or called students to request updated contact information. To maximize our response rate, we sent two reminder emails and contacted nonrespondents by telephone to encourage them to complete the survey. Also, we took steps in the development of the survey, data collection, and data analysis to minimize nonsampling errors and help ensure the accuracy of the answers that were obtained.[13] For example, a social-science survey specialist helped to design the questionnaire, in

[13]The practical difficulties of administering any survey may introduce errors, commonly referred to as nonsampling errors. For example, differences in how a particular question is interpreted, the sources of information available to respondents, how the responses were processed and analyzed, or the types of people who do not respond can influence the accuracy of the survey results.

collaboration with analysts having subject-matter expertise. Then, as noted earlier, the draft questionnaire was pretested to ensure that questions were relevant, clearly stated, and easy to comprehend.

Our unweighted survey response rate was 60.5 percent for scholarship students and 80 percent for University students, with 624 and 259 respondents, respectively. Per Office of Management and Budget (OMB) *Standards and Guidelines for Statistical Surveys*, a nonresponse bias analysis should be conducted for a survey with a response rate less than 80 percent (Guideline 3.2.9).[14] The response rate for the survey of University students met this threshold, and we did not assess the potential for nonresponse bias. With respect to scholarship students, after conducting an analysis of propensity of responding to the survey to identify potential sources of nonresponse bias, we identified differential student response patterns by military department and marital status.

We developed sampling weights based on the population size, divided by the number of sample students within each stratum. Weights were adjusted for overall nonresponse in University students and nonresponse by military department and marital status among scholarship students so that statistical estimates for survey response percentages are generalizable to the population of students.

We expressed the precision of our particular sample's survey responses as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. As a result, we were 95 percent confident that each of the confidence intervals in this report included the true percentages of survey responses in the study population. All survey response percentage estimates presented in this report from this survey had a margin of error of plus or minus 6 percentage points or fewer, unless otherwise noted.

Focus groups. We also conducted eight focus group meetings with a nongeneralizable sample of 79 military medical residents at three military treatment facilities to obtain the perspectives of military medical residents on issues related to: (1) the nature of active-duty service obligations, including their willingness to accept different lengths of active-duty service obligations; (2) the relative importance of the service obligations in

[14]Office of Management and Budget, "Standards and Guidelines for Statistical Surveys" (September 2006).

relation to other factors at different decision points, including accepting the scholarship or attending the University; (3) participating in a military residency program, and; (4) choosing a medical specialty to pursue. These meetings involved structured small-group discussions designed to gain more in-depth information about specific issues that cannot easily be obtained from single or serial interviews.

Consistent with typical focus group methodologies, our design included multiple groups with varying characteristics but some similarity in experience and responsibility. To identify focus group participants, we considered gender, number of residents who had accepted the scholarship or attended the University, medical specialties, military department affiliation, number of years in a military residency training program, and prior service as a General Medical Officer. The focus groups involved a range of seven to 15 participants during each meeting. We did not select participants using a statistically-representative sampling method, so the information collected from the focus groups is not generalizable and, therefore, cannot be projected across DOD, a military department, or any single military treatment facility we visited.

The eight focus group sessions included two pilot focus groups at Walter Reed National Military Medical Center and two sessions for each of the three military departments (Army, Navy, and Air Force). To identify the focus group locations, we selected military treatment facilities that included a diverse mix of medical specialties and a large pool of residents from which to select participants in order to ensure sufficient participation in the focus groups. We traveled to military treatment facilities in Bethesda, Portsmouth, and San Antonio to conduct the focus groups. Table 2 illustrates the total number of focus group participants categorized by military treatment facility, military department, and whether they accepted the scholarship or attended the University.

Table 2: Focus Group Locations and Participant Demographics

Military treatment facility	Total number of participants	Army (Department)	Navy (Department)	Air Force (Department)	Scholarship (Program)	University (Program)
Walter Reed National Military Medical Center	**28**	12	14	2	14	14
Portsmouth Naval Medical Center	**21**	0	21	0	18	3

Military treatment facility	Total number of participants	Army (Department)	Navy (Department)	Air Force (Department)	Scholarship (Program)	University (Program)
Brooke Army Medical Center[a]	**30**	15	0	15	25	4
Total	**79**	**27**	**35**	**17**	**57**	**21**

Source: GAO analysis of DOD information. | GAO-20-165

[a]One participant had neither accepted the scholarship nor attended University, and another participant was in the Medical Service Corps.

To conduct the focus groups, one of our trained facilitators moderated each of the sessions, following a protocol that included discussion guidelines and a set of eight questions (see table 3). The focus group protocol was validated by one of our methodologists with a social science background and knowledge of small group methods. The same focus group protocol was used at all military treatment facilities the engagement team visited, with some minor modifications made after the pilot sessions at Walter Reed National Military Medical Center. We assured participants that their names would not be directly linked to their responses, and that the results would generally be reported in the aggregate. Because of the limitations on the use of data derived from the focus group meetings, including the nongeneralizable sample and results reported in the aggregate, we did not rely entirely on focus groups, but rather used several different methodologies to corroborate and support our conclusions, including web-based surveys with medical students who either accepted the scholarship or attended the University, and interviews with DOD officials.

Table 3: Focus Group Protocol Questions the GAO Moderator Asked Medical Residents during the Focus Group Meetings

Question number	Question
1.	What were the factors that you considered in your decision to accept either the HPSP or attend USU?
2.	What was the relative importance of accepting the service obligation relative to the other factors in your decision-making?
3.	How did you arrive at your decision to select a residency rather than to serve as a General Medical Officer? How did the years of obligated service factor into that decision?
4.	How did the length of the service obligation factor into your decision when selecting a specialty?
5.	How would a change in the requirement for consecutive service obligation have affected your decision at each of these decision points?
6.	Instead of changing the requirement for the service obligation to be concurrent to consecutive, how would an increase of 1-2 years of the service obligation for accepting HPSP or attending USU have affected these decisions?
7.	If you were to get more cash, such as an increase in the HPSP stipend or a larger accession bonus, along with an increase in the service obligation, how would that affect your consideration in accepting an increase in the service obligation?
8.	Is there anything else on this topic of service obligations that you think is important to discuss?

Legend:
USU= Uniformed Services University of the Health Sciences
HPSP= Health Professions Scholarship Program

Source: GAO. | GAO-20-165

We performed a content analysis on the responses to identify common themes from across the responses to determine their frequencies. For the qualitative analysis, we developed a standard coding scheme to identify common themes and determine their frequencies. We also identified other themes that we determined to be important based on our surveys with scholarship and University medical students and interviews with DOD officials.

To obtain information concerning military dental residents' views, perceptions, and feelings on issues related to the nature of active-duty service obligations, including their willingness to accept different lengths of service obligations and a change from a concurrent to a consecutive model of service obligation fulfillment, we conducted two focus group sessions with 20 Air Force dental residents who were in training at the Air Force Postgraduate Dental School, Joint Base San Antonio. The focus group participants had previously accepted the scholarship and varied by gender, rank, prior military service, dental specialty, and number of years in dental residency training. These discussions were conducted using a method and protocol that was similar to the approach for the medical students.

After analyzing the results of these two focus groups with military dental residents and taking into consideration the interviews we conducted with DOD officials, we determined it was not necessary to conduct further

focus groups with military dental residents or include dental students in our survey of current scholarship students. Dental students' career paths differ in significant ways from medical students' career paths. According to DOD officials and residents in the dental focus groups, military dentists are generally already serving consecutive service obligations by fulfilling their active-duty service obligation from dental school while serving as general dentists before training in a military residency program. As a result, a change from a concurrent to a consecutive service obligation model may not affect military dentists in a similar way that it would military physicians.

Interviews. In addition, we conducted interviews with relevant DOD officials to understand their position on the effect of the length of active-duty service obligations on recruitment and retention of military physicians and dentists. Specifically, we interviewed officials from the Office of the Assistant Secretary of Defense for Health Affairs; the Office of the Under Secretary of Defense for Personnel and Readiness; the Defense Health Agency, and; various areas within the military departments with responsibilities related to medical or dental corps recruitment, retention, and education, such as the Offices of the Surgeons General, Manpower and Reserve affairs, and medical and dental corps or commands.

We conducted this performance audit from September 2018 to December 2019 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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Cash Compensation of Specialized Military Physicians and Dentists Compared to Private Sector Civilians, 2017

Table 4: Annual Cash Compensation of Military Physicians Compared to Private Sector Civilian Physicians, by Specialty and Pay Grade, Calendar Year 2017

Specialty	Pay grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]
Anesthesiology	O-3	166,952	Below 20th percentile	241,861	Below 20th percentile
Anesthesiology	O-4	92,241	Below 20th percentile	267,282	Below 20th percentile
Anesthesiology	O-5	12,736	Below 20th percentile	287,279	Below 20th percentile
Anesthesiology	O-6	39,767	Below 20th percentile	313,767	Below 20th percentile
Cardiac/Thoracic Surgery	O-3	66,952	Below 20th percentile	243,861	Below 20th percentile
Cardiac/Thoracic Surgery	O-4	192,241	Below 20th percentile	269,282	Below 20th percentile
Cardiac/Thoracic Surgery	O-5	212,736	Below 20th percentile	289,279	Below 20th percentile
Cardiac/Thoracic Surgery	O-6	239,767	Below 20th percentile	315,767	Below 20th percentile
Critical Care Medicine	O-3	153,952	Below 20th percentile	202,263	Below 20th percentile
Critical Care Medicine	O-4	179,241	Below 20th percentile	228,282	Below 20th percentile
Critical Care Medicine	O-5	199,297	Below 20th percentile	248,279	Below 20th percentile
Critical Care Medicine	O-6	226,620	Below 20th percentile	274,767	Below 20th percentile
Emergency Medicine	O-3	156,952	Below 20th percentile	201,229	Below 20th percentile
Emergency Medicine	O-4	182,241	Below 20th percentile	227,282	Below 20th percentile
Emergency Medicine	O-5	202,399	Below 20th percentile	247,279	Below 20th percentile
Emergency Medicine	O-6	229,721	Below 20th percentile	273,767	Below 20th percentile

Specialty	Pay grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]
Family Practice	O-3	150,952	Below 20th percentile	188,952	Below 20th percentile
Family Practice	O-4	176,241	Below 20th percentile	214,929	Above 20th percentile, below median
Family Practice	O-5	196,196	Below 20th percentile	235,279	Above 20th percentile, below median
Family Practice	O-6	223,519	Above 20th percentile, below median	261,767	Above median, below 80th percentile
General Internal medicine	O-3	150,952	Below 20th percentile	185,952	Below 20th percentile
General Internal medicine	O-4	176,241	Below 20th percentile	211,828	Above 20th percentile, below median
General Internal medicine	O-5	196,196	Below 20th percentile	232,279	Above 20th percentile, below median
General Internal medicine	O-6	223,519	Above 20th percentile, below median	258,767	Above median, below 80th percentile
General Surgery	O-3	159,952	Below 20th percentile	241,861	Below 20th percentile
General Surgery	O-4	185,241	Below 20th percentile	267,282	Below 20th percentile
General Surgery	O-5	205,500	Below 20th percentile	287,279	Below 20th percentile
General Surgery	O-6	232,767	Below 20th percentile	313,767	Below 20th percentile
Infectious Disease	O-3	150,952	Below 20th percentile	175,952	Below 20th percentile
Infectious Disease	O-4	176,241	Below 20th percentile	201,491	Below 20th percentile
Infectious Disease	O-5	196,196	Below 20th percentile	222,040	Above 20th percentile, below median
Infectious Disease	O-6	223,519	Above 20th percentile, below median	248,767	Above 20th percentile, below median
Neurosurgery	O-3	166,952	Below 20th percentile	251,861	Below 20th percentile
Neurosurgery	O-4	192,241	Below 20th percentile	277,282	Below 20th percentile
Neurosurgery	O-5	212,736	Below 20th percentile	297,279	Below 20th percentile
Neurosurgery	O-6	239,767	Below 20th percentile	323,767	Below 20th percentile
Obstetrics-Gynecology	O-3	161,952	Below 20th percentile	197,094	Below 20th percentile
Obstetrics-Gynecology	O-4	187,241	Below 20th percentile	223,199	Below 20th percentile

Specialty	Pay grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]
Obstetrics-Gynecology	O-5	207,567	Below 20th percentile	243,279	Below 20th percentile
Obstetrics-Gynecology	O-6	234,767	Below 20th percentile	269,767	Above 20th percentile, below median
Occupational Medicine	O-3	150,952	Below 20th percentile	180,952	Below 20th percentile
Occupational Medicine	O-4	176,241	Below 20th percentile	206,659	Below 20th percentile
Occupational Medicine	O-5	196,196	Below 20th percentile	227,208	Above 20th percentile, below median
Occupational Medicine	O-6	223,519	Above 20th percentile, below median	253,767	Above median, below 80th percentile
Ophthalmology	O-3	158,952	Below 20th percentile	185,952	Below 20th percentile
Ophthalmology	O-4	184,241	Below 20th percentile	211,828	Below 20th percentile
Ophthalmology	O-5	204,466	Below 20th percentile	232,279	Below 20th percentile
Ophthalmology	O-6	231,767	Below 20th percentile	258,767	Below 20th percentile
Orthopedic Surgery	O-3	166,952	Below 20th percentile	231,861	Below 20th percentile
Orthopedic Surgery	O-4	192,241	Below 20th percentile	257,282	Below 20th percentile
Orthopedic Surgery	O-5	212,736	Below 20th percentile	277,279	Below 20th percentile
Orthopedic Surgery	O-6	239,767	Below 20th percentile	303,767	Below 20th percentile
Otolaryngology	O-3	160,952	Below 20th percentile	199,162	Below 20th percentile
Otolaryngology	O-4	186,241	Below 20th percentile	225,267	Below 20th percentile
Otolaryngology	O-5	206,534	Below 20th percentile	245,279	Below 20th percentile
Otolaryngology	O-6	233,767	Below 20th percentile	271,767	Below 20th percentile
Pediatrics	O-3	150,952	Below 20th percentile	180,952	Below 20th percentile
Pediatrics	O-4	176,241	Below 20th percentile	206,659	Above 20th percentile, below median
Pediatrics	O-5	196,196	Above 20th percentile, below median	227,208	Above 20th percentile, below median
Pediatrics	O-6	223,519	Above 20th percentile, below median	253,767	Above median, below 80th percentile
Psychiatry	O-3	150,952	Below 20th percentile	193,993	Below 20th percentile
Psychiatry	O-4	176,241	Below 20th percentile	220,098	Above 20th percentile, below median

Specialty	Pay grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (20th percentile, median, 80th percentile)[b]
Psychiatry	O-5	196,196	Below 20th percentile	240,279	Above 20th percentile, below median
Psychiatry	O-6	223,519	Above 20th percentile, below median	266,767	Above median, below 80th percentile
Pulmonary Medicine	O-3	153,952	Below 20th percentile	202,263	Below 20th percentile
Pulmonary Medicine	O-4	179,241	Below 20th percentile	228,282	Below 20th percentile
Pulmonary Medicine	O-5	199,297	Below 20th percentile	248,279	Below 20th percentile
Pulmonary Medicine	O-6	226,620	Below 20th percentile	274,767	Below 20th percentile
Radiology- Diagnostic (Interventional)	O-3	166,952	Below 20th percentile	233,861	Below 20th percentile
Radiology- Diagnostic (Interventional)	O-4	192,241	Below 20th percentile	259,282	Below 20th percentile
Radiology- Diagnostic (Interventional)	O-5	212,736	Below 20th percentile	279,279	Below 20th percentile
Radiology- Diagnostic (Interventional)	O-6	239,767	Below 20th percentile	305,767	Below 20th percentile
Radiology- Diagnostic (Non-Interventional)	O-3	166,952	Below 20th percentile	233,861	Below 20th percentile
Radiology- Diagnostic (Non-Interventional)	O-4	192,241	Below 20th percentile	259,282	Below 20th percentile
Radiology- Diagnostic (Non-Interventional)	O-5	212,736	Below 20th percentile	279,279	Below 20th percentile
Radiology- Diagnostic (Non-Interventional)	O-6	239,767	Below 20th percentile	305,767	Below 20th percentile
Trauma Surgery	O-3	66,952	Below 20th percentile	243,861	Below 20th percentile
Trauma Surgery	O-4	192,241	Below 20th percentile	269,282	Below 20th percentile
Trauma Surgery	O-5	212,736	Below 20th percentile	289,279	Below 20th percentile
Trauma Surgery	O-6	239,767	Below 20th percentile	315,767	Below 20th percentile
Urology	O-3	158,952	Below 20th percentile	204,331	Below 20th percentile
Urology	O-4	184,241	Below 20th percentile	230,282	Below 20th percentile
Urology	O-5	204,466	Below 20th percentile	250,279	Below 20th percentile
Urology	O-6	231,767	Below 20th percentile	276,767	Below 20th percentile

Source: American Medical Group Association Compensation and Productivity Survey information and GAO analysis of Department of Defense data. | GAO-20-165

[a]The minimum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay.

[b]The American Medical Group Compensation and Productivity Survey information represents the total annual compensation of the physician, including base and variable compensation plus all voluntary salary reductions. Examples of total compensation would include, but are not limited to, the following: compensation paid as salary or production-based compensation plans, any type of additional bonuses or incentives, clinically-related medical directorships, call coverage, and ancillary or advanced practice clinical supervision stipends. Compensation excludes any fringe benefits and employer payments to any type of retirement, pension, Supplemental Executive Retirement Plan, or tax-deferred profit-sharing plan.

[c]The maximum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus.

Table 5: Annual Cash Compensation of Military Dentists Compared to Private Sector Civilian Dentists, by Specialty and Pay Grade, Calendar Year 2017

Specialty	Pay Grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (25th percentile, median, 75th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (25th percentile, median, 75th percentile)[b]
General Dentistry[d]	O-3	120,218	Above 25th percentile, below median	146,952	Above 25th percentile, below median
General Dentistry[d]	O-4	147,241	Above 25th percentile, below median	172,241	Above 25th percentile, below median
General Dentistry[d]	O-5	167,144	Above 25th percentile, below median	192,144	Above median, below 75th percentile
General Dentistry[d]	O-6	193,587	Above median, below 75th percentile	219,384	Above median, below 75th percentile
Endodontics	O-3	132,820	Below 25th percentile	182,952	Below 25th percentile
Endodontics	O-4	158,241	Below 25th percentile	208,727	Below 25th percentile
Endodontics	O-5	178,144	Below 25th percentile	229,276	Below 25th percentile
Endodontics	O-6	204,911	Below 25th percentile	255,767	Above 25th percentile, below median
Oral and Maxillofacial Surgery	O-3	162,952	Below 25th percentile	233,861	Above 25th percentile, below median
Oral and Maxillofacial Surgery	O-4	188,241	Below 25th percentile	259,282	Above 25th percentile, below median
Oral and Maxillofacial Surgery	O-5	208,601	Below 25th percentile	279,279	Above 25th percentile, below median
Oral and Maxillofacial Surgery	O-6	235,767	Above 25th percentile, below median	305,767	Above 25th percentile, below median
Orthodontics	O-3	132,820	Below 25th percentile	182,952	Below 25th percentile
Orthodontics	O-4	158,241	Below 25th percentile	208,727	Below 25th percentile
Orthodontics	O-5	178,144	Below 25th percentile	229,276	Above 25th percentile, below median
Orthodontics	O-6	204,911	Below 25th percentile	255,767	Above 25th percentile, below median

Specialty	Pay Grade	Minimum military cash compensation[a]	Compared to reported civilian cash compensation (25th percentile, median, 75th percentile)[b]	Maximum military cash compensation[c]	Compared to reported civilian cash compensation (25th percentile, median, 75th percentile)[b]
Pedodontics	O-3	132,820	Below 25th percentile	182,952	Above 25th percentile, below median
Pedodontics	O-4	158,241	Below 25th percentile	208,727	Above 25th percentile, below median
Pedodontics	O-5	178,144	Below 25th percentile	229,276	Above 25th percentile, below median
Pedodontics	O-6	204,911	Above 25th percentile, below median	255,767	Above 25th percentile, below median
Periodontics	O-3	132,820	Below 25th percentile	182,952	Below 25th percentile
Periodontics	O-4	158,241	Below 25th percentile	208,727	Below 25th percentile
Periodontics	O-5	178,144	Below 25th percentile	229,276	Above 25th percentile, below median
Periodontics	O-6	204,911	Below 25th percentile	255,767	Above 25th percentile, below median

[a]The minimum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay.
[b]The American Dental Association, Health Policy Institute, Survey of Dental Practice information represents the reported annual net income of specialists in private practice, 2017. We obtained net income information for full-time practitioners—who reported working 35 hours a week or more—from the American Dental Association (ADA). Payments toward a retirement plan are included in net income.
[c]The maximum included regular military compensation (meaning the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, federal tax income advantage) for a married servicemember, Board Certification Pay, and incentive pay at a higher amount in conjunction with a 4-year retention bonus.
[d]According to a DOD official, general dentists are generally not board certified and we did not include board certification pay when calculating their cash compensation.

Appendix III: Estimated Population Proportion of Questions from GAO's Surveys of Military Medical Students

We conducted two web-based surveys with a generalizable sample of current Health Professions Scholarship Program (scholarship) and Uniformed Services University of the Health Sciences (University) medical students to obtain information about the students' knowledge of the current program and willingness to accept different lengths of service obligations or a change to a consecutive service obligation model. One survey was administered to current scholarship medical students from June 26, 2019 through August 26, 2019; the survey of current University medical students was administered from June 25, 2019 through August 6, 2019. The questions in both surveys were largely the same. The main differences reflected the different pay and benefits from accepting a scholarship or attending the University and the differences in length of active-duty service obligation. The survey provided to scholarship students also included questions about whether students considered attending the University, while the survey provided to University students did not include a question about whether they considered accepting the scholarship. As a result, the scholarship survey had additional questions than the University survey. Responses to selected questions we asked in the surveys that were directly applicable to the research objectives in this report are shown below.[1] The surveys consisted of closed- and open-ended questions, including demographic questions that were used in our analyses of the students' responses. In this appendix, we did not provide information on responses provided to the open-ended or the demographic

[1]We did not include estimates for which the number of respondents was fewer than 20, in part because of the possibility that an estimate based on a lower number of respondents might not be accurate. Such results are denoted by "NA" in this appendix.

questions. See appendix I for a full description of the survey and estimation methodologies.

GAO Survey of HPSP Medical Students

The U.S. Government Accountability Office (GAO), an agency of the United States Congress, is studying the active-duty service obligation associated with the Armed Forces Health Professions Scholarship Program (HPSP) and the Uniformed Services University of the Health Sciences (USUHS).

As a part of this study, GAO is conducting a nationwide survey of medical students who are participating in the HPSP or attending USUHS. We appreciate your insights, as it is important for GAO to provide student views of the current program to the Congress.

Question 1 - How much did the following factors contribute to your decision to accept the HPSP scholarship?

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Desire to avoid or reduce medical school debt: Very Great Contribution	44.7	41.2	48.2
Desire to avoid or reduce medical school debt: Substantial Contribution	32.9	29.5	36.2
Desire to avoid or reduce medical school debt: Moderate Contribution	13.9	11.4	16.4
Desire to avoid or reduce medical school debt: Some Contribution	6.5	4.7	8.8
Desire to avoid or reduce medical school debt: Little or No Contribution	NA	NA	NA
Signing bonus: Very Great Contribution	15.3	12.8	17.9
Signing bonus: Substantial Contribution	23.0	20.0	26.0
Signing bonus: Moderate Contribution	30.8	27.6	34.1
Signing bonus: Some Contribution	16.3	13.7	18.9
Signing bonus: Little or No Contribution	14.6	12.0	17.1
Stipend: Very Great Contribution	24.9	21.8	28.0
Stipend: Substantial Contribution	37.7	34.3	41.2
Stipend: Moderate Contribution	24.4	21.4	27.5
Stipend: Some Contribution	10.1	8.0	12.3
Stipend: Little or No Contribution	NA	NA	NA
Desire to serve your country in the armed forces: Very Great Contribution	55.9	52.4	59.4
Desire to serve your country in the armed forces: Substantial Contribution	31.4	28.1	34.7

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Desire to serve your country in the armed forces: Moderate Contribution	9.7	7.5	12.3
Desire to serve your country in the armed forces: Some Contribution	NA	NA	NA
Desire to serve your country in the armed forces: Little or No Contribution	NA	NA	NA
Desire to provide care to military personnel, dependents, and retirees: Very Great Contribution	56.1	52.6	59.7
Desire to provide care to military personnel, dependents, and retirees: Substantial Contribution	31.7	28.4	35.0
Desire to provide care to military personnel, dependents, and retirees: Moderate Contribution	9.4	7.2	12.0
Desire to provide care to military personnel, dependents, and retirees: Some Contribution	NA	NA	NA
Desire to provide care to military personnel, dependents, and retirees: Little or No Contribution	NA	NA	NA
Desire to provide medical care while deployed: Very Great Contribution	37.0	33.6	40.4
Desire to provide medical care while deployed: Substantial Contribution	27.9	24.7	31.1
Desire to provide medical care while deployed: Moderate Contribution	18.4	15.6	21.2
Desire to provide medical care while deployed: Some Contribution	9.1	7.0	11.7
Desire to provide medical care while deployed: Little or No Contribution	7.6	5.6	10.0
Other (please specify below): Very Great Contribution	21.5	16.9	26.1
Other (please specify below): Substantial Contribution	10.1	6.7	14.6
Other (please specify below): Moderate Contribution	10.7	7.1	15.2
Other (please specify below): Some Contribution	NA	NA	NA
Other (please specify below): Little or No Contribution	53.0	47.4	58.6

Question 2 - Did you consider attending the Uniformed Services University of the Health Sciences (USUHS)? (CHECK ONLY ONE ANSWER)

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Yes	46.7	43.1	50.2
No	53.3	49.8	56.9

If 'Yes' to Question 2: Question 2a - How much of a contribution, if at all, was the 7-year active-duty service obligation in your decision NOT to attend USUHS? (CHECK ONLY ONE ANSWER)

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Very Great Contribution	10.7	7.5	14.8
Substantial Contribution	17.4	13.3	22.2
Moderate Contribution	13.0	9.4	17.3
Some Contribution	14.4	10.6	18.9
Little or No Contribution	44.5	39.4	49.5

Active-Duty Service Obligations

Generally, participants in the HPSP incur a 1-year active-duty service obligation for each year of HPSP scholarship accepted. Similarly, a military residency may also result in an active- duty service obligation of 1 year for each year of residency. Currently, these two sets of obligationsare served at the same time, so a servicemember will effectively serve the longer of the two obligations.

Residencies vary in length, and result in different service obligations. One example would be that a service member accepts 4 years of HPSP funding, requiring a 4-year active-duty service obligation, AND completes a 4-year military residency, which requires a 3-year active-duty service obligation.

A 4-year military residency only requires a 3-year active-duty service obligation because the intern year or first year of residency does not result in a service obligation. Under the current system, this servicemember would serve both obligations (4 years and 3 years) at the same time. Completion of the first 3 years would satisfy the residency obligation and 3 of the 4 years of HPSP obligation; the final 1 year would satisfy the remaining HPSP obligation.

Question 3 - When you decided to accept an HPSP scholarship, how familiar were you, if at all, with the active-duty service obligation requirements for HPSP and for completing a military residency?

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
HPSP: Extremely Familiar	31.0	27.7	34.3
HPSP: Very Familiar	36.0	32.5	39.4
HPSP: Moderately Familiar	20.2	17.4	23.0
HPSP: Somewhat Familiar	9.8	7.6	12.4
HPSP: Not at All Familiar	NA	NA	NA
Military residency: Extremely Familiar	15.3	12.8	17.9
Military residency: Very Familiar	18.3	15.5	21.1
Military residency: Moderately Familiar	26.9	23.7	30.0
Military residency: Somewhat Familiar	20.2	17.3	23.0
Military residency: Not at All Familiar	19.3	16.5	22.1

Question 4 - When you decided to accept the HPSP scholarship, how familiar were you with the fact that the HPSP and military residency service obligations are served at the same time? (CHECK ONLY ONE ANSWER)

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Extremely Familiar	19.9	17.1	22.8
Very Familiar	18.4	15.7	21.1
Moderately Familiar	25.8	22.7	28.9
Somewhat Familiar	15.0	12.5	17.4
Not at All Familiar	20.9	18.0	23.8

Alternative Active-Duty Service Obligations

Question 5 - Would you have accepted the HPSP scholarship if the service obligation was as follows?

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Additional service obligations: An additional 1-year service obligation for 4 years of HPSP (1.25 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) (CHECK ONLY ONE ANSWER): Yes	46.1	42.6	49.7
Additional service obligations: An additional 1-year service obligation for 4 years of HPSP (1.25 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) (CHECK ONLY ONE ANSWER): No	22.1	19.1	25.0
Additional service obligations: An additional 1-year service obligation for 4 years of HPSP (1.25 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) (CHECK ONLY ONE ANSWER): Don't Know	31.8	28.5	35.1
Additional service obligations: An additional 2-year service obligation for 4 years of HPSP (1.5 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Yes	16.3	13.7	18.8
Additional service obligations: An additional 2-year service obligation for 4 years of HPSP (1.5 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: No	59.8	56.3	63.3
Additional service obligations: An additional 2-year service obligation for 4 years of HPSP (1.5 years of commitment for each year of funding)? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Don't Know	23.9	20.8	27.0
Additional service obligations and incentives: An additional 1-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Yes	63.4	59.9	66.8
Additional service obligations and incentives: An additional 1-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: No	11.4	9.2	13.7
Additional service obligations and incentives: An additional 1-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Don't Know	25.2	22.1	28.3
Additional service obligations and incentives: An additional 2-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Yes	30.1	26.9	33.3

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Additional service obligations and incentives: An additional 2-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: No	38.4	34.9	41.8
Additional service obligations and incentives: An additional 2-year service obligation for 4 years of HPSP AND additional cash incentives? (No change in the service obligation for the medical residency.) *(CHECK ONLY ONE ANSWER)*: Don't Know	31.6	28.3	34.9
Other service models: Service obligations served one after the other? For example, a service obligation for 4 years of medical school with the HPSP scholarship and a 4 year military residency have two service obligations – 4 years for HPSP and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 7 years. *(CHECK ONLY ONE ANSWER)*: Yes	16.0	13.4	18.6
Other service models: Service obligations served one after the other? For example, a service obligation for 4 years of medical school with the HPSP scholarship and a 4 year military residency have two service obligations – 4 years for HPSP and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 7 years. *(CHECK ONLY ONE ANSWER)*: No	61.0	57.5	64.5
Other service models: Service obligations served one after the other? For example, a service obligation for 4 years of medical school with the HPSP scholarship and a 4 year military residency have two service obligations – 4 years for HPSP and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 7 years. *(CHECK ONLY ONE ANSWER)*: Don't Know	23.0	20.0	26.0
Other service models: A 4-year active-duty commitment AND a 2-year selected reserve commitment? Currently, HPSP participants may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(CHECK ONLY ONE ANSWER)*: Yes	47.2	43.6	50.7
Other service models: A 4-year active-duty commitment AND a 2-year selected reserve commitment? Currently, HPSP participants may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(CHECK ONLY ONE ANSWER)*: No	19.7	16.9	22.6

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval - upper bound (percentage)
Other service models: A 4-year active-duty commitment AND a 2-year selected reserve commitment? Currently, HPSP participants may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(CHECK ONLY ONE ANSWER)*: Don't Know	33.1	29.7	36.4
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: Loans: Yes	91.5	88.9	93.6
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: Personal or family resources: Yes	32.5	29.0	35.9
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: School scholarships: Yes	63.5	59.9	67.1
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: Work during school: Yes	16.7	14.0	19.5
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: Post 9/11 GI Bill: Yes	5.0	3.3	7.1
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: National Health Service Corps Scholarship Program: Yes	26.7	23.5	29.9
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: None - would not have attended medical school: Yes	5.7	3.9	7.9
If 'No' or 'Don't Know' to Questions 5a, 5b, 5c, 5d, 5e, or 5f: Which of the following funding options, if any, would you have pursued instead of accepting the HPSP scholarship? *(CHECK ALL THAT APPLY)*: Other (please specify): Yes	NA	NA	NA

GAO Survey of Uniformed Services University of the Health Sciences Students

The U.S. Government Accountability Office (GAO), an agency of the United States Congress, is studying the active-duty service obligation associated with the Armed Forces Health Professions Scholarship Program (HPSP) and the Uniformed Services University of the Health Sciences (USUHS).

As a part of this study, GAO is conducting a nationwide survey of medical students who are participating in the HPSP or attending USUHS. We appreciate your insights, as it is important for GAO to provide student views of the current program to the Congress.

Question 1 - How much did the following factors contribute to your decision to attend USUHS?

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
Desire to avoid or reduce medical school debt: Very Great Contribution	29.7	25.8	33.7
Desire to avoid or reduce medical school debt: Substantial Contribution	35.9	31.7	40.1
Desire to avoid or reduce medical school debt: Moderate Contribution	16.6	12.3	21.7
Desire to avoid or reduce medical school debt: Some Contribution	10.0	6.7	14.4
Desire to avoid or reduce medical school debt: Little or No Contribution	7.7	4.8	11.7
Officer pay while in school: Very Great Contribution	34.4	30.2	38.5
Officer pay while in school: Substantial Contribution	37.1	32.9	41.3
Officer pay while in school: Moderate Contribution	17.8	13.3	23.0
Officer pay while in school: Some Contribution	8.9	5.7	13.0
Officer pay while in school: Little or No Contribution	NA	NA	NA
Desire to serve your country in the armed forces: Very Great Contribution	59.5	55.2	63.7
Desire to serve your country in the armed forces: Substantial Contribution	30.1	26.1	34.1
Desire to serve your country in the armed forces: Moderate Contribution	NA	NA	NA
Desire to serve your country in the armed forces: Some Contribution	NA	NA	NA

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
Desire to serve your country in the armed forces: Little or No Contribution	NA	NA	NA
Desire to provide care to military personnel, dependents, and retirees: Very Great Contribution	62.5	58.3	66.7
Desire to provide care to military personnel, dependents, and retirees: Substantial Contribution	27.4	23.5	31.3
Desire to provide care to military personnel, dependents, and retirees: Moderate Contribution	NA	NA	NA
Desire to provide care to military personnel, dependents, and retirees: Some Contribution	NA	NA	NA
Desire to provide care to military personnel, dependents, and retirees: Little or No Contribution	NA	NA	NA
Desire to provide medical care while deployed: Very Great Contribution	49.0	44.7	53.4
Desire to provide medical care while deployed: Substantial Contribution	24.3	20.6	28.0
Desire to provide medical care while deployed: Moderate Contribution	16.2	11.9	21.3
Desire to provide medical care while deployed: Some Contribution	NA	NA	NA
Desire to provide medical care while deployed: Little or No Contribution	NA	NA	NA
USUHS reputation: Very Great Contribution	21.2	17.7	24.8
USUHS reputation: Substantial Contribution	24.3	20.6	28.0
USUHS reputation: Moderate Contribution	25.1	21.3	28.9
USUHS reputation: Some Contribution	16.6	12.3	21.7
USUHS reputation: Little or No Contribution	12.7	8.9	17.4
Desire to continue prior military service: Very Great Contribution	24.0	20.1	27.9
Desire to continue prior military service: Substantial Contribution	8.9	5.7	13.2
Desire to continue prior military service: Moderate Contribution	NA	NA	NA
Desire to continue prior military service: Some Contribution	NA	NA	NA
Desire to continue prior military service: Little or No Contribution	56.5	52.0	61.0
Other (please specify below): Very Great Contribution	25.4	18.2	33.8
Other (please specify below): Substantial Contribution	NA	NA	NA
Other (please specify below): Moderate Contribution	NA	NA	NA
Other (please specify below): Some Contribution	NA	NA	NA
Other (please specify below): Little or No Contribution	47.7	40.2	55.2

Active-Duty Service Obligations

The active-duty service obligation for completing the 4-year program at USUHS is 7 years. A military residency also results in an active-duty service obligation of 1 year for each year of residency, with the exception of the first year or intern year, which does not result in an active duty service obligation. Currently, these obligations are served at the same time, so a servicemember will serve the longer of the two obligations.

Residencies vary in length and result in different service obligations. An example would be that a servicemember completes medical school at USUHS, which requires a 7-year active-duty service obligation, AND completes a 4-year military residency, which requires a 3-year active-duty service obligation. A 4-year military residency only requires a 3-year active-duty service obligation because the intern year or first year of residency does not result in a service obligation. Under the current system, this servicemember would serve both obligations (7 years and 3 years) at the same time. Completion of the first 3 years would satisfy the residency obligation and 3 of the 7 years of USUHS obligation; the next 4 years would satisfy the remaining USUHS obligation.

Question 2 - When you decided to attend USUHS, how familiar were you, if at all, with the active- duty service obligation requirements for attending USUHS and for completing a military residency?

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
USUHS: Extremely Familiar	47.4	42.9	51.9
USUHS: Very Familiar	36.3	32.0	40.6
USUHS: Moderately Familiar	10.8	7.2	15.3
USUHS: Somewhat Familiar	NA	NA	NA
USUHS: Not at All Familiar	NA	NA	NA
Military residency: Extremely Familiar	22.4	18.8	26.1
Military residency: Very Familiar	23.2	19.5	27.0
Military residency: Moderately Familiar	23.2	19.5	27.0
Military residency: Somewhat Familiar	18.1	13.6	23.4
Military residency: Not at All Familiar	13.0	9.1	17.8

Question 3 - When you decided to attend USUHS, how familiar were you with the fact that the medical school and military residency service obligations are served at the same time? (CHECK ONLY ONE ANSWER)

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
Extremely Familiar	20.5	17.0	24.1
Very Familiar	24.8	21.0	28.6
Moderately Familiar	18.6	15.2	22.0
Somewhat Familiar	11.2	7.7	15.7
Not at All Familiar	24.8	21.0	28.6

Alternative Active-Duty Service Obligations

Question 4 - Would you have attended USUHS if the service obligation was as follows:

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
Additional service obligations: An additional 1-year service obligation for attending USUHS? (No change in the service obligation for the medical residency.): Yes	67.7	63.6	71.8
Additional service obligations: An additional 1-year service obligation for attending USUHS? (No change in the service obligation for the medical residency.): No	12.5	8.7	17.1
Additional service obligations: An additional 1-year service obligation for attending USUHS? (No change in the service obligation for the medical residency.): Don't Know	19.8	16.4	23.3
Additional service obligations: An additional 2-year service obligation for attending USUHS? *(No change in the service obligation for the medical residency.)*: Yes	34.2	30.1	38.4
Additional service obligations: An additional 2-year service obligation for attending USUHS? *(No change in the service obligation for the medical residency.)*: No	42.4	38.1	46.7
Additional service obligations: An additional 2-year service obligation for attending USUHS? *(No change in the service obligation for the medical residency.)*: Don't Know	23.3	19.6	27.0
Additional service obligations and incentives: An additional 1-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: Yes	80.0	76.5	83.5
Additional service obligations and incentives: An additional 1-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: No	NA	NA	NA
Additional service obligations and incentives: An additional 1-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: Don't Know	14.5	10.4	19.4
Additional service obligations and incentives: An additional 2-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: Yes	56.4	52.1	60.8
Additional service obligations and incentives: An additional 2-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: No	18.7	15.3	22.1

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
Additional service obligations and incentives: An additional 2-year service obligation for attending USUHS AND additional cash incentives? *(No change in the service obligation for the medical residency.)*: Don't Know	24.9	21.1	28.7
Other service models: Service obligations served one after the other? For example, a service obligation of 7 years for attending USUHS and a 4-year military residency has two service obligations – 7 years for USUHS and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 10 years.: Yes	26.1	22.2	29.9
Other service models: Service obligations served one after the other? For example, a service obligation of 7 years for attending USUHS and a 4-year military residency has two service obligations – 7 years for USUHS and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 10 years.: No	51.4	47.0	55.7
Other service models: Service obligations served one after the other? For example, a service obligation of 7 years for attending USUHS and a 4-year military residency has two service obligations – 7 years for USUHS and 3 years for the residency. Service obligations served one after the other in this example would result in a term of 10 years.: Don't Know	22.6	18.9	26.2
Other service models: A 7-year active-duty commitment FOLLOWED BY a 2-year selected reserve commitment? Currently, USUHS graduates may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(No change in the service obligation for the medical residency)*: Yes	57.6	53.3	61.9
Other service models: A 7-year active-duty commitment FOLLOWED BY a 2-year selected reserve commitment? Currently, USUHS graduates may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(No change in the service obligation for the medical residency)*: No	19.5	16.0	22.9
Other service models: A 7-year active-duty commitment FOLLOWED BY a 2-year selected reserve commitment? Currently, USUHS graduates may be subject to an individual ready reserve commitment after the completion of their active-duty service obligation. With a selected reserve commitment, reservists typically drill about 1 weekend a month and 2 weeks a year, and may be activated in support of military operations. *(No change in the service obligation for the medical residency)*: Don't Know	23.0	19.3	26.6

Responses	Estimated Percentage	95 Confidence Interval – lower bound (percentage)	95 Confidence Interval – upper bound (percentage)
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Health Professionals Scholarship Program (HPSP) *(Note: HPSP requires 1 year of service obligation for each year of medical school)*: Yes	81.6	75.7	86.7
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Loans: Yes	66.7	62.1	71.2
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Personal or family resources: Yes	25.6	21.4	29.8
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* School scholarships: Yes	48.3	43.5	53.2
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Work during school: Yes	19.8	14.6	25.9
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* National Health Service Corps Scholarship Program: Yes	10.1	6.4	15.1
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Post 9/11 GI Bill: Yes	13.5	9.2	19.0
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* None - would not have attended medical school: Yes	12.6	8.4	17.9
If 'No' or 'Don't Know' to Questions 4a, 4b, 4c, 4d, 4e, or 4f: Which of the following funding options, if any, would you have pursued instead of attending USUHS? *(CHECK ALL THAT APPLY):* Other: Yes	NA	NA	NA

Appendix IV: Comments from the Department of Defense

THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 18 2019

Brenda S. Farrell
Director, Defense Capabilities & Management
U.S. Government Accountability Office
441 G. Street, N.W.
Washington, DC 20548

Dear Ms. Farrell:

Thank you for the opportunity for the Department of Defense (DoD) to review and respond to the recommendations contained in the Government Accountability Office (GAO) Draft Report, Defense Health Care: DoD Should Collect and Use Key Information to Make Decisions about Incentives for Physicians and Dentists GAO-20-165.

The Department concurs with all three recommendations contained in the report. Specific responses to each of the three GAO recommendations is enclosed.

Again, thank you for the opportunity to review and respond to the recommendations. My point of contact for this issue is our GAO/DoD Inspector General Liaison, Mr. Richard Legg-Benavides. Mr. Legg-Benavides can be reached at (703) 681-5922 or via email at richard.w.leggbenavides.civ@mail.mil.

Thomas P. McCaffery

Enclosure:
As stated

GOVERNMENT ACCOUNTABILITY OFFICE (GAO) DRAFT REPORT DATED NOVEMBER 15, 2019
GAO-20-165 (GAO CODE 103049)

"DEFENSE HEALTH CARE: DOD SHOULD COLLECT AND USE KEY INFORMATION TO MAKE DECISIONS ABOUT INCENTIVES FOR PHYSICIANS AND DENTISTS"

DEPARTMENT OF DEFENSE (DoD) COMMENTS TO THE GAO RECOMMENDATION

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on the replacement costs of military physicians and dentists and use this information to inform investment decisions in the package of incentives to recruit and retain military physicians and dentists.

DoD RESPONSE: Concur. Recommendation 1 will be incorporated into Department policy within the next 24 months.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on current and historical retention data, to include data on the percentage of eligible physicians and dentists who accept retention bonuses, and use this information to inform investment decisions in the package of incentives to recruit and retain military physicians and dentists.

DoD RESPONSE: Concur. Recommendation 2 will be incorporated into Department policy within the next 24 months.

RECOMMENDATION 3: The GAO recommends that the Secretary of Defense should ensure that the Assistant Secretary of Defense for Health Affairs, in coordination with the military departments, collect consistent information on private sector civilian wages, and use this information to inform investment decisions in the package of incentives to recruit and retain military physicians and dentists.

DoD RESPONSE: Concur. Recommendation 3 will be incorporated into Department policy within the next 24 months.

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact:

Brenda S. Farrell, (202) 512-3604 or farrellb@gao.gvo

Staff Acknowledgments:

In addition to the contact named above, Lori Atkinson (Assistant Director), Adam Howell-Smith (Analyst in Charge), Taylor Bright, Timothy Carr, Breanne Cave, Alexandra Gonzalez, Caitlin Jackson, Ronald La Due Lake, Won (Danny) Lee, Kirsten Leikem, Amie Lesser, Amanda Miller, Dae B. Park, Stephanie Santoso, and Lillian Yob made key contributions to this report.

Appendix VI: Accessible Data

Data Tables

Accessible Data for Number of Physician Specialties Where Range of Military Cash Compensation is Above or Below Selected Percentiles of Private Sector Civilian Cash Compensation, by Pay Grade

Category	Below 20th percentile	Between 20th percentile and median	Between median and 80th percentile
O-3	21	0	0
O-4	17	4	0
O-5	15	6	0
O-6	14	2	5

Accessible Data for Figure 4: Maximum Military Physician Cash Compensation and Private Sector Civilian Compensation for Selected Specialties (in thousands of dollars per year), 2017

NA	Private sector compensation			Military compensation			
Category	20th percentile	Median	80th percentile	O-3	O-4	O-5	O-6
Anesthesiology	340	430.8	492.2	242	267	287	314
Cardiac/thoracic surgery	292	351.7	421.7	244	269	289	316
Critical care medicine	200.8	244.8	315.5	202	228	248	275
Critical care trauma surgery	210.8	258	329.8	244	269	289	316
Emergency medicine	310	391.8	523.3	201	227	247	274
Family practice	330.5	409.6	484.1	189	215	235	262
General internal medicine	210.4	267.1	343.4	186	212	232	259
General surgery	586.4	800	1095.5	242	267	287	314
Infection disease	266	345.9	468.9	176	201	222	249
Neurosurgery	292.3	405.5	569.8	252	277	297	324
Obstetrics-gynecology	425.3	586.3	793	197	223	243	270

NA	Private sector compensation			Military compensation			
Category	20th percentile	Median	80th percentile	O-3	O-4	O-5	O-6
Occupational medicine	334.8	442.1	618.1	181	207	227	254
Ophthalmology	222.8	252.7	321	186	212	232	259
Orthopedic surgery	195.8	245.2	334.3	232	257	277	304
Otolaryngology	207.7	256.4	321.3	199	225	245	272
Pediatrics	380	588.5	622.8	181	207	227	254
Psychiatry	403.6	487.2	644.9	194	220	240	267
Pulmonary medicine	324.4	416	566	202	228	248	275
Radiology – diagnostic (interventional)	523.2	734.3	946.4	234	259	279	306
Radiology – diagnostic (non-interventional)	404.3	465.3	610.5	234	259	279	306
Urology	335.7	453.4	632.4	204	230	250	277

Accessible Data for Figure 5: Maximum Military Dentist Cash Compensation and Private Sector Civilian Compensation for Selected Specialties (thousands of dollars per year), 2017

NA	Private sector compensation			Military compensation			
Category	20th percentile	Median	80th percentile	O-3	O-4	O-5	O-6
Endodontics	250	327	400	183	209	229	256
General dentristry	120	188	290	147	172	192	219
Oral and maxillofacial surgery	225	364	600	234	259	279	306
Orthodontics	210	275	400	183	209	229	256
Pedodontics	180	270	450	183	209	229	256
Periodontics	221	300	550	183	209	229	256

Accessible Data for Figure 6: Survey of Medical Students' Willingness to Accept Various Increases to the Active-Duty Service Obligation, Estimates of Department of Defense Scholarship Program and University Graduates

NA	NA	Scholarship Program Medical students			University Medical Students		
Category	**Subcategory**	**Yes**	**No**	**Don't know**	**Yes**	**No**	**Don't know**
One additional year of service obligation	With cash incentive	64	11	25	80	20	0
One additional year of service obligation	Without cash incentive	46	22	32	68	12	20
Two additional years of service obligation	With cash incentive	30	38	32	56	19	25
Two additional years of service obligation	Without cash incentive	16	60	24	34	43	23
Consecutive service obligation	Without cash incentive	16	61	23	26	51	23

Agency Comment Letter

Accessible Text for Appendix IV Comments from the Department of Defense

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DEC 18 2019

Brenda S. Farrell

Director, Defense Capabilities & Management

U.S. Government Accountability Office

441 G. Street, N.W.

Washington, DC 20548

Dear Ms. Farrell:

Thank you for the opportunity for the Department of Defense (DoD) to review and respond to the recommendations contained in the Government Accountability Office (GAO) Draft Repo rt, Defense Health Care: DoD Should Collect and Use Key Information to Make Decisions about Incentives for Physicians and Dentists GAO-20-165.

The Department concurs with all three recommendations contained in the report. Specific responses to each of the three GAO recommendations is enclosed.

Again, thank you for the opportunity to review and respond to the recommendations. My point of contact for this issue is our GAO/DoD Inspector General Liaison, Mr. Richard Legg-Benavides. Mr. Legg-Benavides can be reached at (703) 681-5922 or via email at richard.w.leggbenavides.civ@mail.mil.

Thomas P. McCaffery

Enclosure:

As stated

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Related GAO Products

Defense Health Care: DOD's Proposed Plan for Oversight of Graduate Medical Education Programs. GAO-19-338. Washington, D.C.: March 28, 2019.

Defense Health Care: Actions Needed to Determine the Required Size and Readiness of Operational Medical and Dental Forces. GAO-19-206. Washington, D.C.: February 21, 2019.

Military Personnel: DOD Needs to Improve Dental Clinic Staffing Models and Evaluate Recruitment and Retention Programs. GAO-19-50. Washington, D.C.: December 13, 2018.

Military Personnel: Additional Actions Needed to Address Gaps in Military Physician Specialties. GAO-18-77. Washington, D.C.: February 28, 2018.

Defense Health Reform: Steps Taken to Plan the Transfer of the Administration of the Military Treatment Facilities to the Defense Health Agency, but Work Remains to Finalize the Plan. GAO-17-791R. Washington, D.C.: September 29, 2017.

Military Compensation: Additional Actions Are Needed to Better Manage Special and Incentive Pay Programs. GAO-17-39. Washington, D.C.: February 3, 2017.

Defense Health Care Reform: DOD Needs Further Analysis of the Size, Readiness, and Efficiency of the Medical Force. GAO-16-820. Washington, D.C.: September 21, 2016.

Defense Health Care: Actions Needed to Help Ensure Full Compliance and Complete Documentation for Physician Credentialing and Privileging. GAO-12-31. Washington, D.C.: December 15, 2011.

Military Cash Incentives: DOD Should Coordinate and Monitor Its Efforts to Achieve Cost-Effective Bonuses and Special Pays. GAO-11-631. Washington, D.C.: June 21, 2011.

Military Personnel: Status of Accession, Retention, and End Strength for Military Medical Officers and Preliminary Observations Regarding Accession and Retention Challenges. GAO-09-469R. Washington, D.C.: April 16, 2009.

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