THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

AUG 2 2007

The Honorable Carl Levin
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman:

The enclosed report responds to the request in Senate Report 109-254 for the Department to report on the attention being paid to shortfalls in recruitment and retention for the medical corps, dental corps, and nurse corps for both the reserve and active components of the military.

The Department of Defense shares the concern of the Committee that the shortfalls in recruitment and retention of medical, dental, and nurse corps officers would, if uncorrected, threaten future medical readiness. The report provides a broad overview of what the Department is doing to address the nine areas of concern specified by Congress.

Thank you for your continued support of the Military Health System.

Sincerely,

S. Ward Casscells, MD

Enclosure:
As stated

cc:
The Honorable John McCain
Ranking Member

Report on: Department of Defense Military Medical Recruiting & Retention

May 2007

Prepared by:

Assistant Secretary of Defense for Health Affairs

The Military Medical Recruiting Report
(Senate Report 109-254, pg 328)
April 2007

BACKGROUND

The Senate Armed Services Committee asked DoD to report on the attention being paid to shortfalls in recruitment and retention for the medical corps, dental corps, and nurse corps for both the reserve and active components of the military. The Committee asked OSD (P&R), military personnel chiefs, and senior medical leadership to undertake the following:

1. A reassessment of the adequacy of current manpower modeling tools in capturing requirements for medical and dental personnel in the global war on terrorism;
2. An analysis of current and projected manpower needs for military medical, dental, nurse, and medical service corps personnel;
3. Identification of shortfalls, in both Active and Reserve components;
4. An analysis of monetary and non-monetary incentives to improve recruitment and retention, such as reexamining the Navy's policy on general medical officer deployments, and examining tour lengths for key medical personnel in both Active and Reserve Components;
5. An analysis of medical recruitment efforts by the Military Departments, and plan of action to make necessary improvements, including greater use of medical and dental corps officers to assist in recruiting;
6. Reexamination of the professions deemed to be critical skills needed in wartime, including psychologists to address combat-stress related mental health concerns;
7. Plan of action to provide resources necessary to address any shortfalls;
8. Recommendations on changes in policy and legislation needed to provide greater flexibility to Military Departments to assist them in meeting medical readiness manpower requirements;
9. A reassment of military to civilian conversions that may have compounded personnel shortages.

RESPONSES

1. Reassess the adequacy of current manpower modeling tools to capture the medical and dental personnel requirements for the global war on terrorism.

Historically the Services have used their own manpower modeling tools to independently determine medical and dental personnel requirements but without a reliable mechanism to limit gaps and redundancies in a joint environment. Over the last 15 years, several studies were convened to evaluate medical requirements. Two of the most recent studies termed the Section 733 Study (refers to the National Defense Authorization Act [NDAA] for FY94) and the Section 733 Update were led by OSD PA&E and demonstrated differences between the Services' projected medical manpower requirements and PA&E's projections. The Government Accountability Office (GAO) reviewed all of the studies and determined that the differences were not due to the methodology used but rather to the assumptions used.[*] Since the assumptions the Services used were different than those used by PA&E, the manpower requirements projections were different. It became evident that the problem was a lack of regular evaluations using a joint tool and a consensus of assumptions rather than inadequate manpower modeling tools.

The Medical Readiness Review (MRR) started September 2004 in response to Secretary Rumsfeld's concern that the percentage of the force comprised of medical personnel was too high and his belief that some of those positions could be shifted to civilian positions, contractors, or the private sector. The purpose of the review was to find consistent and reliable means for the DOD to identify, develop, and sustain critical military capability in support of resource management and the operational planning process. During the review, wartime medical force capabilities were determined using the Medical Analysis Tool (MAT) and compared to the current force structure to identify capabilities that exceeded requirements. The Services then determined which of those positions were considered military essential and evaluated converting them to civilian positions based upon executability and availability.[†] A major beneficial change stemming from the MRR is that the medical force planning would now be performed on a two year cycle in conjunction with other DOD planning instead of isolated and infrequent evaluations as before.[‡]

The MRR used several groups to study medical readiness and options for force structure:

1. Capabilities group – determined current capabilities and identified future capabilities needed to support joint force health protection.
2. Casualty Estimation and Medical Risk Group – estimated wartime casualties using approved models and scenarios and developed standardized methods to use capabilities based planning.
3. Metrics and Capabilities Needs Group – developed an analytical framework to help determine future medical needs for the purpose of developing programs.

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[*] Government Accountability Office, 1996

[†] A civilian needs to be capable of doing the job (executability) and needs to be available for hire under the terms offered by DOD (availability).

[‡] Carter, 2007.

4. Resources Group – analyzed required resources from peacetime transition to contingency operations.[§]

The MRR final output identified 17,201 military billets that were deemed not military essential and of these, the Services identified 7,203 billets that fit the criteria for military to civilian (MIL-CIV) conversions based on evaluations for cost effectiveness, availability and executability. The MRR also influenced the 2006 Quadrennial Defense Review (QDR) which made some specific recommendations to realign concepts of medical support with the growing movement towards joint capabilities. It also recommended improving the planning process and the transparency of information.[**]

2. Analyze the current and projected manpower needs for military medical, dental, nurse, and medical service corps.

The policies, techniques, and tools that were developed during the MRR are now being embedded within the system, or institutionalized, for future use in rapidly determining optimal medical force structure in a constantly changing threat environment.[††] Current and projected manpower needs for military medical, dental, nurse, and medical service corps will be analyzed when the Operational Assessment (OA) results for 2007 are available in June. The OA-08 working group plans to have the OA-08 results available for preliminary use as early as February 2008.

Detailed analysis by medical professional category is included in section 3.

[§] Chu, 2006.
[**] Department of Defense, 2006.
[††] Carter, 2007.

3. Identify shortfalls in reserve and active components

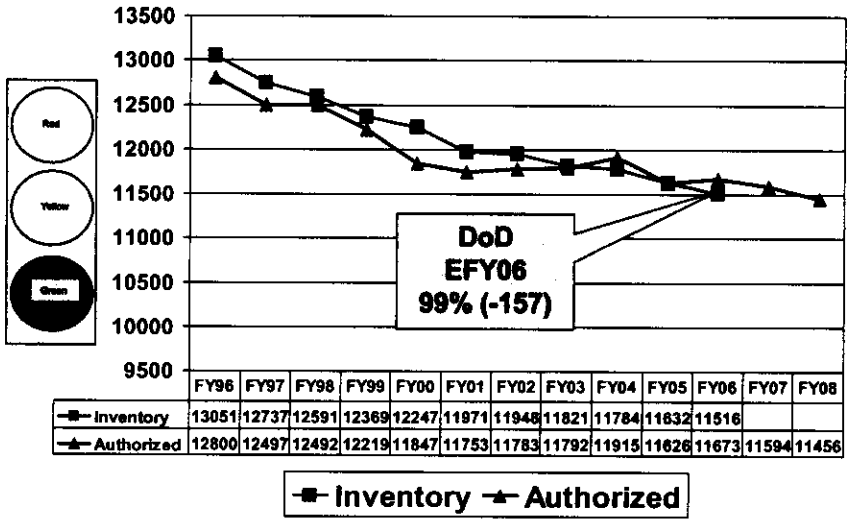
Significant shortages exist in physician, dentist, nurse and other allied health specialties.

Active Duty:

The end of Fiscal Year 2006 overall DOD Active Duty Medical Department officer fill rate was 95%, a decline of 3% from FY04. The fill rate for enlisted medical/dental technicians was 101% and this rate has hovered near 100% since FY04. Manning and shortage specialties by Officer Corps are as follows:

Physicians: Overall physician manning has hovered near 100% over the last several years, ending FY 2006 at **99%** (11,516/11,673). Over the next two years, authorizations trend downward and are projected to decline by 217 to end FY 08 at 11,456 authorizations.

DoD AD Medical Corps
FY 1996 - 2006



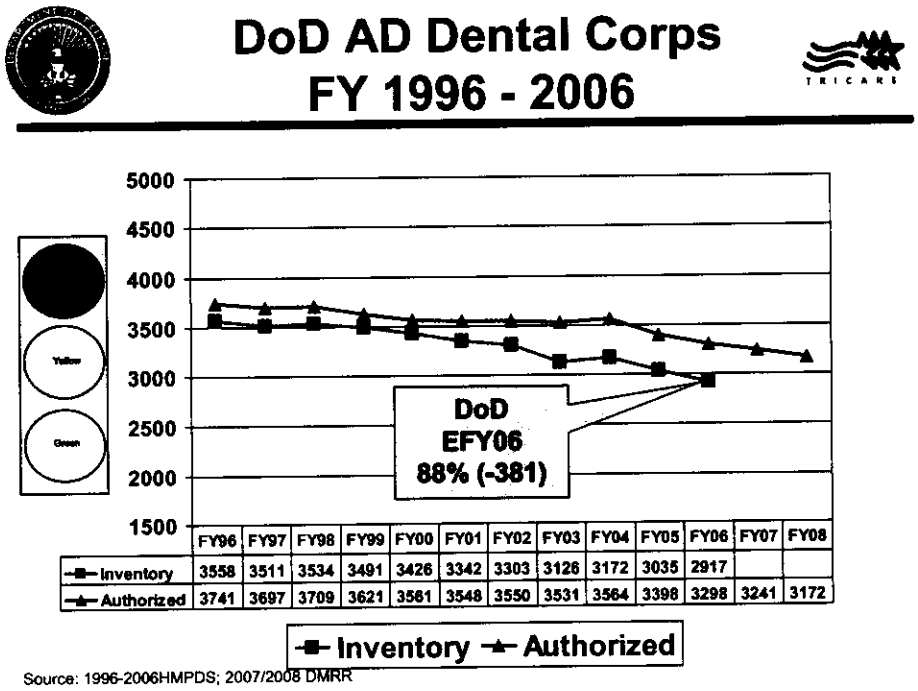
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
Inventory	13051	12737	12591	12369	12247	11971	11948	11821	11784	11632	11516		
Authorized	12800	12497	12492	12219	11847	11753	11783	11792	11915	11626	11673	11594	11456

Source: 1996-2006 Health Manpower Personnel Data System (HMPDS); 2007/2008 Defense Manpower Requirement Report (DMRR) ‡‡

While physician fill rates have hovered near 100%, each service has suffered from significant specialty shortages. For end FY06, shortage specialties include: Psychiatry (86%), Gastroenterology (87%), Radiology (87%), Urology (89%), Preventive Medicine (91%), Cardiology (92%), Anesthesia (92%), Neurosurgery (93%), Family Practice (95%) and Dermatology (95%).

‡‡ The definition for red yellow green throughout the charts is Green – 95% or above, Yellow – 90-94%, and Red – 89% or below

Dentists: Overall Dental Officer manning has been steadily declining over the last several years, ending FY06 at **88%** (2917/3,298). Dental Officer authorizations are projected to decline by 126 to end FY08 at 3,172 authorizations which may tend to keep dental manning near 90%, providing there are no significant changes in current retention rates.

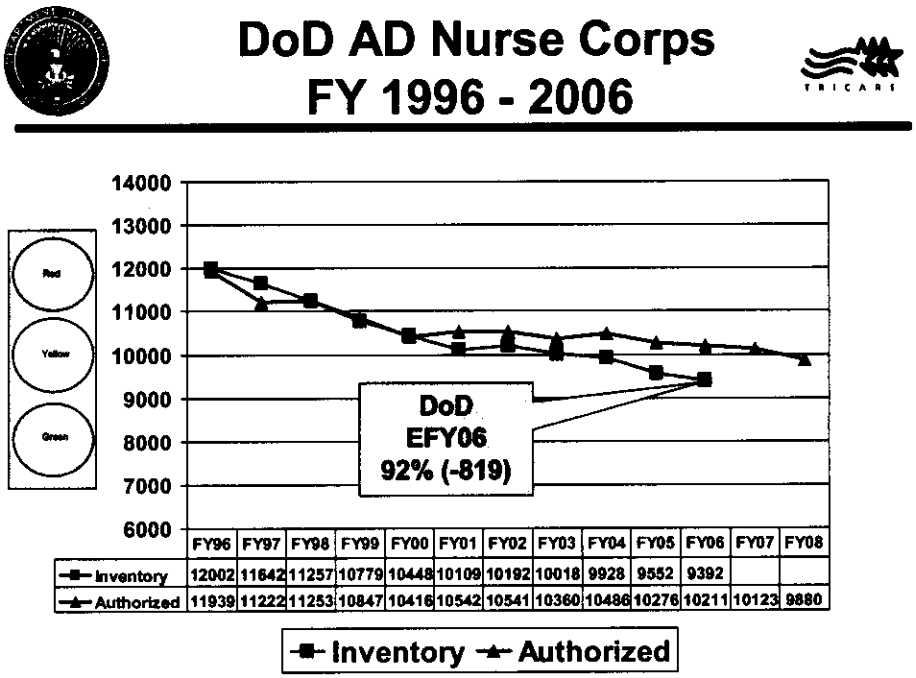


	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
Inventory	3558	3511	3534	3491	3426	3342	3303	3126	3172	3035	2917		
Authorized	3741	3697	3709	3621	3561	3548	3550	3531	3564	3398	3298	3241	3172

Source: 1996-2006HMPDS; 2007/2008 DMRR

As of the end of FY06, there are several shortage specialties and these include: Oral Pathology (77%), General Dentistry (80%), Pedodontics (80%), Comprehensive Dentist (89%) and Orthodontics (92%).

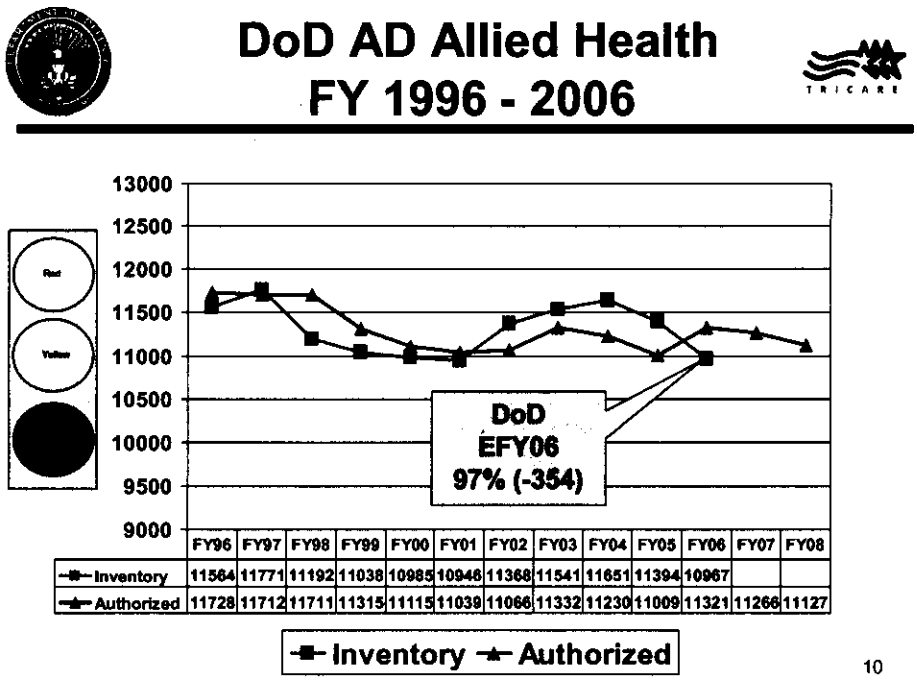
Nurses: Overall Nurse Corps manning at the end of FY06 was **92%** (9,392/10,211) and this gap has been widening over the last several years. The Nurse Corps billet authorizations decline by 331 to end FY08 at 9,880 which may tend to limit the overall size of the gap.



Source: 1996-2006HMPDS; 2007/2008 DMRR

End FY06 Nurse Specialty shortages include: Flight Nurses (55%), Critical Care Nurses (82%), Nurse Anesthetists (84%), Operating Room Nurses (86%), General Nursing (90%), Neonatal Intensive Care (91%) and ER Trauma Nurses (94%).

Allied Health: Overall manning of allied health personnel at the end of FY 06 was **97%** (10,967/11,321). This diverse group of medical personnel includes Army Medical Service Corps, Army Medical Specialists, Navy Medical Service Corps, Air Force Medical Service Corps and Air Force Biomedical Scientists. The inventory does appear to be declining in the last two years.



Source: 1996-2006HMPDS;

End FY06 shortage specialties include: Social Work (76%), Psychologists (80%), Environmental Health (86%), Pharmacy (88%), Bioenvironmental Engineers (88%), Podiatrists (92%), Industrial Hygiene (93%), Entomology (93%), and Optometrists (95%)

Selected Reserves:

The end of Fiscal Year 2006 the DOD Selected Reserve Medical Department officer fill rate was 97%, and the overall rate for Selected Reserve Enlisted Medical and Dental Technicians was 94%. Manning and shortage specialties for SELRES Officer Corps are as follows:

- **Physicians**: 81% (3,822/4,700); shortage specialties include Critical Care (25%), Aviation/Aerospace Medicine (37%), Preventive Medicine/Occupational Health (49%), Colo-Rectal Surgery (50%), Infectious Disease (59%), Gastroenterology (67%), Orthopedic Surgery (67%), General Surgery (82%), Plastic Surgery (84%), Anesthesia (87%) and Nephrology (89%).
- **Dentists**: 78% (1,210/1,542); shortage specialties include Oral Surgeons (54%), comprehensive Dentists (70%) and General Dentists (82%).
- **Nurses:** 104% (9,776/9,431); shortage specialties include Flight Nursing (41% and Pediatric Nurse Practitioner (85%).
- **Allied Health***: 112% (7,515/6,722); shortage specialties include Nuclear Medical Scientist (47%), Psychologist (81%), Sanitary Engineer (86%), Entomology (88%), Bioenviornmental Engineer (90%) and Physician Assistant (93%).

*** Allied Health includes Medical Service Corps, Army Medical Specialists and Air Force Biomedical Science Corps.**

4. Analyze monetary and non-monetary incentives to improve recruitment and retention, for example Navy GMO deployments and tour lengths for key medical personnel of active and reserve components.

HA and the Services continue to monitor, adjust and expand medical special pay plans and bonus structures. The FY07 Special Pay Plan for Active Duty targeted increases in 15 medical and dental specialties and increased the accession bonus for Nurses.

The following incentives are available for physicians:

- Board Certified Pay (BCP): $2.5K-$6K/yr paid monthly
- Variable Special Pay (VSP); $1.2K-$12K/yr paid monthly
- Additional Special Pay (ASP): Annual bonus of $15K/yr
- Multiyear Special Pay (MSP)
    - Annual bonus of $12K-$50K
    - Rate varies by specialty and years of obligation up to 4 years
- Incentive Special Pay (ISP)
    - Annual bonus of $12K-$50K
    - Rate varies by specialty and years of obligation up to 4 years

The following incentives are available for Dentists:

- Board Certified Pay (BCP): $2.5K-$6K/yr paid monthly
- Variable Special Pay (VSP): $3K-$12K/yr paid monthly
- Additional Special Pay (ASP): $4K-$15K annual bonus
- Dental Officer Multiyear Retention Bonus (DOMRB)
    - Annual bonus of $13K-$50K
    - Based on specialty and years of obligation up to 4 years
- Oral Surgeon Incentive Special Pay (ISP)
    - Annual bonus of $25K for each year of obligation up to 4 years
- Dental Officer Accession Bonus: FY06 rate was $30K

The following incentives are available for certain Non-Physician Healthcare Providers:

- Army Nurse Corps: Nurse Anesthetist/CRNA, Nurse Practitioner, Psych Nurse, and Nurse Midwife

- Army Medical Specialist Corps: Occupational Therapy, Physical Therapy, Dietitian, Physician Assistant.

- Medical Service Corps: Pharmacy, Optometry, Podiatry, Nuclear Medical Science Officers, Social Work, Psychology; Audiology/Speech Pathology.

- Veterinary Corps: All Specialties.

- *RATES*: (paid on monthly basis)

Years of Creditable Service	Amount of Pay Monthly / Annual
Less Than 10 Years	$166.66 / $2,000
10 But Less Than 12	$208.33 / $2,500
12 But Less Than 14	$250.00 / $3,000
14 But Less Than 18	$333.33 / $4,000
18 or More Years	$416.66 / $5,000

The following incentives are available for certain Optometrists and Veterinarians:

- Rate of $100/month for each month of active duty; initiated upon entry on active duty.

The following incentives are available for Nurse Anesthetists:

- $20,000/yr for individuals who sign a one year contract.
- $25,000/yr for individuals who sign a two year contract.
- $35,000/yr for individuals who sign a three year contract.
- $40,000/yr for individuals who sign a four year contract

The NDAA FY07 increased statutory authority for several medical retention and accession policy tools. We are currently working with the Services to identify funding that falls outside of the normal programming cycle to implement several of these new authorities. Implementation status:

- Health Professions Scholarship Program (HPSP)Stipend and Financial Assistance Programs (FAP) Annual Grant amounts:
  - Prior to NDAA FY07 , stipend and FAP grants were set by statute in Title 10 (Sec 2121 and 2127).
  - NDAA FY07 now allows for monthly stipend not to exceed $30K/year (~$2,500/mo) and FAP Annual Grant authority increased from $30K to $45K.
  - Stipend and grant are funded via Reserve Manpower Appropriation and any increase must now be coordinated with Service M&RAs; currently requesting Service M&RAs to set FY07/08 school year rate for stipend at $1,812/mo and grant at $34,802.
  - The current FY06/07 school year stipend is $1,319/mo and FAP Annual Grant is $27,841.
  - The estimated cost to implement at the recommended amounts is $27M in Service Reserve Personnel Appropriation

- Health Professions Loan Repayment Program (HPLRP): NDAA FY07 increased the maximum annual cap from $30K to $60K per year (DHP funded); we are proposing to increase the current FY07 rate of $32,003 to $36,782, retroactive to 01 October 2006.
  - The estimated cost at the proposed new FY07 rate is ~$1.5M
  - The estimated cost at the $60K cap is ~$8M

- Enhanced Accession Bonus for Dental Officers: increased authority for accession bonus from $30K to $200K for general dentists.
    - Section 617 also added authority for up to $400K accession bonus for medical/dental critically short wartime specialties;
    - Under the new authority, the FY07 Dental Officer Accession Bonus was increased from $30K to $60K; results pending.
    - Currently working with the Services to identify Medical/Dental specialties and funding for implementation in FY08.
    - Estimated cost to implement is ~$37M in Service Military Personnel Appropriation

- Expansion of Additional Special Pay (ASP) for Dental Officers: NDAA FY07 repealed exclusion of dental residents from eligibility for ASP. Current status: implemented.

HA and the Services staff a standing committee, the Health Professions Incentives Working Group, which recommends adjustment to the special pays within congressional ceilings. The FY08 Special Pay adjustments are being coordinated now. The Services can also request Critical Skills Retention Bonuses as the Air Force has to improve retention of psychologists and the Army has for psychologists, pharmacists, nurses and other allied health professions in specific year groups. Health Affairs and the Services are also working closely with the Quadrennial Review of Military Compensation (QRMC) to provide new ideas to restructure Title 37 incentive and special pays to meet the demands of the future.

Non-monetary incentives are more difficult to analyze because not everyone agrees on the identity of "perks." In this case, the best sources of information are derived from interviews or similar sources. Dr. Harold Koenig, relying upon his extensive experience as a Navy Medical Officer and his interactions with his colleagues has written a report proposing six areas he has concluded are most important to recruitment and retention: income, professional development, working conditions, expectations, adventure, and leadership.[§§]

Income

Some specialties command very high pay in the civilian sector and the military may not be able to match it. The military does have other attractive financial benefits to offer the medical professional, benefits which help to reduce the disparity in income.

Dr. Koenig believes that the desire to serve one's country, not pay, is a major motivational factor for the more experienced medical professionals joining the Reserve. They have already had successful careers and are seeking to make a contribution. The desire to make a contribution can be leveraged through the use of humanitarian missions to maintain both motivation and skills.

Professional Development

§§ Koenig, 2007.

Opportunity for professional development is very important to preventing the boredom and professional dissatisfaction that follow the stagnation of knowledge and skills. Current opportunities for medical professional development include an extensive selection of residencies, fellowships, civilian and military courses, attendance and/or participation at professional conferences, approved continuing education units to maintain licensure, and international training/practice opportunities. Every medical officer is also a military officer and has access to all of the professional development opportunities open to other officers, opportunities that include airborne school, flight surgeon training and other coveted programs. The list of opportunities is far too large to compile but a general rule of thumb is that if the opportunity benefits the Service member and the Service, funding is available, and if there is space available, then approval is possible.

A special comment about General Medical Officers (GMO) is needed because concern for the quality of care a Service member receives is always warranted. There is concern that the GMO lacks sufficient training/experience to provide medical care since the physician has not yet completed a residency. Current graduate medical education training strategy in the US calls for the physician to complete a residency, sometimes multiple residencies, directly after medical school. This strategy can represent 4-5 years of undergraduate work, 4 years of medical school, and roughly 3-7 years of graduate medical education. The purpose of the residency is to gain additional knowledge and experience in a more focused area of medicine but the price is the weakening of previously obtained knowledge and skills in broader areas of medicine. Specialization, by its very nature, limits retention of infrequently used knowledge and limits diversification. Retention of information and diversification of skill sets are important in a resource constrained environment.

As of April 1998, the DOD policy was for the Services to develop manpower plans that would ensure that physicians would not be recruited into the Services unless they had completed a residency or unless they had been recruited directly into a residency program as a trainee. The Services were also required to develop a manpower plan to ensure that physicians who were already serving in a training status would not be assigned to work in isolated or unsupervised situations.[***] Currently, both the Navy and the Army have active GMO programs. About 2/3 of medical school graduates in the Navy do GMO tours while 1/3 go directly into residencies. Some Navy physicians elect to serve three years as a GMO in order to earn enough points to give them a competitive edge for some of the more popular residencies.[†††] For the Army, physicians who drop their residencies may complete GMO tours while waiting to compete for a new residency. While some see the GMO as a delay in the training and a cut in pay, others see it as an exciting opportunity to engage in activities not available to civilian physicians.[‡‡‡]

It is true that in most cases, the GMO has less experience and certainly less specialty knowledge than someone who has completed a residency but that does not mean that the physician is unqualified to practice medicine at all levels; it only means that consultation with a specialty physician needs to be available for complex cases. The requirement for supervision does not preclude a group from providing care as other important groups also require

*** Assistant Secretary of Defense for Health Affairs, 1998.

††† http://forums.studentdoctor.net/archive/index.php/t-77416.html

‡‡‡ ibid

supervision: Physician Assistants, Nurse Practitioners, Nurse Anesthetists, and 3rd/4th year medical students. With sufficient support from more experienced personnel, a GMO rotation can offer a new physician the opportunity to rapidly gain the valuable, practical experience not attainable in the civilian sector yet important within the military sector. One way to recognize the critical differences between civilian and military medicine is to provide some training opportunities that are specific to the military environment; the GMO rotation can provide just such an opportunity. If an appropriate level of supervision is available, the use of GMOs could help minimize the manpower shortages. Additionally, Physicians who have served as GMOs may have a greater breadth of experience and may have a greater appreciation for the realities of military medicine before they compete for and are selected for one of the residency slots.

Working Conditions

Working conditions, when possible, should be comparable to the civilian sector. It is less productive for a medical professional to perform duties that in a civilian environment are performed by adequate numbers of support personnel. It is a waste of training and talent that robs one of motivation. With sufficient support personnel and sufficient space to work, important bottlenecks in care can be avoided. Another de-motivating factor can occur when the equipment and supplies used in the civilian sector are far superior to those used in the military sector. Disparity between equipment/supply quality in the civilian and military environments can frustrate military medical professionals into believing they do not have everything they need in order to provide excellent patient care. Medical and dental officers want to be proud of the work that they do, and in turn they will be the best advertisement for new officers.

Expectations

Disappointment and disillusionment are powerful enemies of motivation. Some medical professionals join the Services because they feel that they will be able to focus on practicing medicine and escape the bureaucracy inherent with participation in the civilian medical insurance programs. Instead they find that the military also has its own administrative requirements that compete with time for patient care. The interference in patient care caused by some of the daily paperwork required of health care providers was one of the complaints from medical professionals returning from Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF). The availability and use of experienced medical and dental officers during the recruitment period can help keep expectations realistic and minimize the level of powerful "negative advertising" that results from Service members disillusioned by unrealistic expectations.

Adventure

Military medicine can be attractive for the adventurous professional. Some of the training opportunities involved might require learning how to Scuba dive or perhaps even learning how to safely parachute from airplanes. Certainly one of the more universal attractions is the ability to temporarily change job locations in order to perform humanitarian services. Medical professionals most likely choose their careers because they want to help others and they want to make a difference. While civilian medical professionals usually have to use vacation time if they want to volunteer their service to assist the less fortunate, the freedom to volunteer is a valuable

part of the job for our Service members. Having to trek through the jungle to reach a remote village in which medical care is going to be provided just adds to the adventure.

Leadership

As with any organization, quality leadership is important to retaining the motivation and enthusiasm of the people. Excellent role models and mentors have the opportunity to help shape the career of the less experienced medical personnel and to assist them in maximally developing their professional skills. As the junior medical officers progress through the ranks, they then have the same opportunity to work with the incoming professionals. The leadership experience acquired as a medical professional in the military is highly valued by the private sector when the officer decides to return to civilian life. Leadership opportunity can be heavily leveraged to provide recruitment and retention incentive; however care must be taken to ensure that members of senior leadership remain quality role models.

Tour Lengths

Tour lengths for medical personnel in the Service are very important. Army Reserve's use of a 90 day deployment (not including the 30 days required for mobilization and demobilization for a total of 120 days away from home) was much better received than a longer deployment due to the requirements for physicians to provide health care continuity to their patients in the civilian sector. As for all other specialties, the reserve component members would then follow the standard reserve force rules governing deployment lengths. Active component medical personnel are spending up to one year or more on unit assignments from CONUS[§§§].

Navy has some differences in tour lengths for medical personnel. There are various exceptions depending on whether the tour is OCONUS[****] accompanied/OCONUS unaccompanied/medical specialty/sea, shore or isolated duty, etc. For Active Duty medical:

- Sea Duty is 24 months.
- Shore duty is 36 months

Navy active duty medical personnel are currently spending up to six months on temporary assignments when deployed from CONUS hospitals to augment operational units.

For Navy Reserve, CDR-CAPT tour lengths are 36 months (up to 48 months if extension is approved by Naval Reserve Force) for Commanding Officer tours. For LCDR and below, the standard tour length is 36 months.

The Air Force has deployed a total of 1157 medical professionals with this distribution:

- 120 days = 1061
- 179 days = 47

[§§§] CONUS = Continental United States
[****] OCONUS = Outside the Continental United States

- 365 days = 49

It should be noted that the AF is currently beginning a new Air Expeditionary Force (AEF) cycle which makes this data fluid. They are expecting a significant increase in requirements as the OEF/OIF theater re-shapes and they expect shortfall requirements from other Services. Sourcing solutions for several emerging requirements have not been identified which adds to the potential fluidity of this data.

5. Analyze medical recruitment efforts by military departments AND provide a plan of action to make necessary improvements that includes greater use of medical and dental corps officers for the recruiting effort

Attracting and retaining the very best medical personnel is essential to providing outstanding best-value care, keeping the trust of those we serve, and sustaining a healthy, fit force. It is no secret we live in a competitive world, and employment opportunities for health care professionals are plentiful and often lucrative in the private sector. Competition for the best people is fierce. As a result, we are currently experiencing significant challenges in recruiting and retaining adequate numbers of personnel in several career fields. Challenging career fields include dentists, nurses, several physician specialties and subspecialties, as well as biomedical sciences career fields such as public health and psychology. Thankfully, the level of training, expertise, and dedication of the personnel we do attract has never been higher.

To mitigate these challenges we are working in unprecedented ways to partner with the Services to maximize the effectiveness of the Health Professions Scholarship Program and recruitment incentives. We are very thankful to the Congress for the expanded authorities for physician and dentist accessions bonuses granted as part of the FY07 NDAA. Once fully funded, these bonuses should provide an effective incentive to attract fully qualified health care professionals who have either funded their own educations or who seek a change in their career path. In addition, the Uniformed Services University of the Health Sciences (USUHS) continues to provide us with approximately 150 world-class physicians each year. With respect to our students, we have redoubled our efforts to engage with, and reach out to medical students in training, both those at USUHS and those on HPSP scholarships at civilian institutions. We know that knowledgeable, engaged and content students in our pipeline frequently serve as "embedded recruiters" as they speak positively to peers about their decision to serve in the military.

There is a growing shortage of physicians and nurses in the US and the Services are affected by these trends. The American Association of Medical Colleges believes medical admissions should be increased by 30%. The demographic of medical school students has been continuously changing over the last 10 years. More than 60% of medical school students are from families in the top quartile of income for American families. Non-US citizens and women now comprise more than 50% of medical students. Despite the high cost of medical tuition, low interest loans are readily available from the private sector for students applying to medical/dental schools. Excessive debt after graduation is not a major concern. Negative press concerning missions required to support the protracted Global War On Terrorism (GWOT) has further reduced the propensity of medical professionals to serve. These are all contributing factors to a shrinking pool of traditional medical school students interested in an HPSP scholarship, which makes recruiting more challenging than in the past.

In recruiting Doctors and Dentists, the military competes in three separate and distinct markets in order to satisfy all the medical requirements of the services. Two additional markets have been identified and are in various stages of consideration for recruitment, but will be discussed in order to completely represent the current market available.

The first market is the **college market or more specifically the pre-medical market**. From this group the military offers two scholarship programs to medical schools in exchange for residency and military service. One scholarship program is offered to direct commission into the Service of the student's choice into the Uniformed Services University of Health Sciences (USUHS), Bethesda MD. The second is the Health Professions Scholarship Program (HPSP) which offers full tuition, stipend, books and associated fees in exchange for military service.

The second market is the **Medical School market**. From this market we recruit prospective and recent graduates. Our incentives to this market focus on scholarships, loan repayment and accession bonuses in exchange for residency and military service.

Addressing both of the above, regarding scholarships, the Army and Navy have under executed planned scholarships for FY05 and FY06 while the Air Force has exceeded goals in those years. We are currently working with the services to enhance the scholarship program by implementing increases under the new NDAA FY07 authorities. The Assistant Secretary of Defense for Health Affairs [ASD(HA)] has requested that the Services increase the monthly HPSP/FAP Stipend to ~75% of the base pay for pay grade 01 (~$1,800/month) and the FAP Annual Grant at~$34,802 per year for the FY07-08 School Year. HPSP/FAP stipend and grant are funded from Service Reserve Personnel accounts and all three services report constrained conditions in those accounts. Additionally, ASD (HA) may revise the FY07 HPLRP maximum annual amount from $32,003 to $36,782. We have also requested authority in the FY08 legislative cycle for a new HPSP signing bonus of $20,000 that would be offered in addition to the stipend. Navy has taken the lead in this area with creation of a Critical Skills Accession Bonus of $20,000 for HPSP participants. However, the Navy has yet to offer the bonus.

The third market is traditionally the most challenging and provides the **fully qualified and ready to practice physician or specialty physician**. Less than 4% of physician and dentist annual gains to active duty are fully qualified accessions. Application of the new NDAA FY07 Accession bonuses for fully trained dentists of $200,000 and fully trained physician and dental specialists up to $400,000 may provide a means for decreased reliance on scholarship accessions. We have developed an active duty Critical Wartime Skills List that will serve as the basis for determining which medical and dental specialties might be offered large signing bonuses and are working with the Services to identify potential funding for FY08 implementation.

Two additional markets have been identified and are being considered as market expanders for medical accessions: **Short-term service by doctors above normal accession age** and **recruitment of foreign medical students in American Medical schools**. Exploiting either of these markets will require internal paradigm shifts and legislative changes.

Since the beginning of the Global War on Terrorism, the Department and Services have received a considerable amount of correspondences from physicians in critical specialties interested in serving in the military for a tour of duty. Further discussion has revealed most are of retirement age and/or only willing to serve for a short period. The Department conducted analysis of this market and believes that it is possible that it could provide some relief to current shortfalls in some critical skills. Current law requires a minimum service obligation of 6 to 8 years (combined active and reserve service) which would exclude such a short term contract. As

a result the Department has crafted and forwarded a legislative proposal to permit commissioning of these doctors for 2 years on a limited basis.

As stated above, the population of American medical schools has an increasing number of foreign students in the country on student visas. The Department is still analyzing this market as a possible source of physicians for the military. However, current law excludes this population from consideration in that it only permits the military to offer reserve commissions to those who are citizens of the United States or who have been lawfully admitted to the United States for permanent residence.

Operational recruiting of Health Care Professionals differs slightly depending on the branch of Service. All Services have a core team of trained officers and enlisted recruiters, supplemented by medical professionals who participate in campus and medical job fairs.

The United States Army Recruiting Command (USAREC) designates one Medical Recruiting Brigade that oversees five Medical Recruiting Battalions, 16 Medical Recruiting Companies, and 73 stations; all of which are strategically positioned in major metropolitan areas or major market producing municipal areas. The mix of recruiters for Army active, reserve and guard varies between officers and enlisted members. They are typically non physician medical personnel (Nurse Corps and Medical Service Corps), but knowledgeable of the professions for which they recruit. The enlisted are professional recruiters; hand picked and trained specifically to recruit the medical professional. The market base design originates from a strategic study conducted by the USAREC G2/staff which correlates with the mission (i.e. student vs. working professional). Additionally, the Army has partnered a program in conjunction with the Office of the Surgeon General (OTSG) called "Peer to Peer"; this program utilizes Army Physicians as subject matter experts (SME) teamed with our recruiters to assist with job fairs, guest speaker events, conferences and school presentations so potential applicants may have direct contact with a provider of their specialty. Additionally, the Nurse Corps has made it part of their duties to ensure that each Army Nurse spends at least two days in their rating period assisting with the recruiting efforts. Although not previously pointed out, it must be noted that the entire AMEDD Corps offer SME's at USAREC's request.

The Air Force uses officer accession recruiters who have historically been the force that generate applications for Officer Training School, but their current focus is on Health Professionals. These are non commissioned officers (NCOs) who have already proven themselves as enlisted recruiters. Currently, Nurse Corps and Medical Service Corps officers are assigned as operations officers to 28 squadrons, but these positions are being deleted due to the drawdown. Air Force recruiting focus is on the student market, "grow your own" model because of their success at recruiting through the Health Professions Scholarship Program (HPSP). Currently there are 117 health recruiting offices which will be reduced to 24 hubs, based on major metropolitan areas that have a student base rather than focusing on the fully qualified market.

The Navy medical program recruiters are selected Medical Service Corps, Nurse Corps and line officers, hospital corpsmen and specially trained enlisted personnel. The Navy

recruiters are assisted by Medical Corps Flag Officers, and practicing professionals who accompany the recruiters when they travel to campuses and regional job fairs. The Navy has also made extensive use of the Navy Medicine Speaker's Bureau (primarily physicians, geared toward the student market), providing a "hometown recruiter" to schools to talk to potential applicants. Recruiters are located in 26 major cities, in 2 regions, with 13 districts on each side. They have a limited direct accession market but utilize the Accession Bonus, Health Professions Loan Repayment Program, and Financial Assistance Program for direct accessions when possible. The Navy's Primary focus is the Uniformed Services University of the Health Sciences and Health Professions Scholarship Program.

6. Re-examine the Active Duty professions deemed to be critical skills needed in wartime, including clinical psychologists to address combat-stress related mental concerns

The Services and Health Affairs are currently staffing a plan to implement and budget for the up to $400K accession bonus for medical/dental critically short wartime specialties. At the time of this report, the following joint list of specialties under consideration were :

Medical Corps:	Aerospace Medicine	Ophthalmology
	Anesthesia	Orthopedics
	Diagnostic Radiology	Otorhinolaryngolgy
	Emergency Medicine	Pediatrics
	Family Practice	Preventive Medicine
	General Surgery	Psychiatry
	Internal Medicine	Pulmonology
	Neurosurgery	Urology
	OB/GYN	Vascular Surgeon
Dental Corps:	Comprehensive Dentist	Oral Surgery

The Secretary of the Air Force has requested to utilize the Critical Skills Retention Bonus (CSRB) to retain Air Force Nurses, Psychologists and Public Health Officers. The CSRB will target those at critical retention points in return for three years of active duty obligation. Current staffing for the three specialties: nurses are at 86 percent, psychologists are at 85 percent, and public health officers are at 79 percent. All three staffing percentages are projected to decline. This CSRB has been approved.

The Secretary of the Army has requested to utilize the Critical Skills Retention Bonus (CSRB) to improve the retention of certain Captain (CPT) specialties to include Medical Service Corps (including Psychologist) and Army Nurse Corps CPTs. This CSRB will also cover Army CPTs in Air Defense Artillery, Adjutant General, Armor, Chemical, Engineer, Field Artillery, Finance, Infantry, Military Intelligence, Military Police, Ordnance, Quartermaster, Signal, and Transportation. ASD(HA) has concurred. The CSRB ($20,000 on contract acceptance) may be offered to those members who are in one of the Army Company Grade commissioned officer basic branches named above, who are serving on active duty and have completed their initial active duty service commitment and who agree to a 3-year contract.. The Assistant Secretary of the Army (ASA) Manpower and Reserve Affairs (M&RA) initially will make funding available in FY07 to target eligible CPTs in Year Groups (YG) 2002 and 2003. Additionally, ASA (M&RA) will target YG04 in FY08 & YG05 in FY09. CSRB authority will provide the means to immediately repair the inventory shortages and prevent serious operational shortfalls. This CSRB is currently in staffing.

7. Provide a plan of action to provide resources necessary to address shortfalls.

Resolving and preventing shortfalls through enhanced recruiting and retention is going to be crucial. ASD (HA) and the Services will continue to leverage our Title 10 and 37 Accession Bonus, Special Pay and Incentive authorities to maximize recruitment and retention of the best and the brightest medical personnel in the nation.

In September 2006, the ASD (HA) launched a concerted effort to develop a Military Health System (MHS) Human Capital Strategic Plan to identify human capital management opportunities across the MHS. The development of this plan is critical to achieving an informed understanding of how we can work together across the Services and Health Affairs/TRICARE Management AgencyMA to best position ourselves as a collective body to support the achievement of overall MHS mission and goals. Human capital strategy development also enables the MHS to effectively integrate and advance key priorities across the enterprise. The plan identifies strategic goals and objectives that will help us successfully meet our missions and provide world-class health care to our beneficiaries. These initiatives include fostering a performance-based culture, building a governance model that will champion MHS human capital management as a strategic objective and building capabilities across the Total Force to align recruiting, education, and workforce planning efforts. Additionally, the plan furthers the integration of human capital across the MHS thereby improving collaboration within the organization and promoting interoperability across the Services and HA/TMA.

During the interim time that it will take to fully implement the MHS Human Capital Strategy, the most expedient way to address health care personnel shortages will be to work closely with both the Veteran's Administration and the TRICARE managed care support contractors to care for our patients if we don't have the resources in the direct care system.

8. Recommend changes to policy and legislation that provide greater flexibility to medical departments to assist them in meeting medical readiness manpower requirements

Legislative changes requested by DOD for FY08 include:

1) An increase in Incentive Special Pay and Multiyear Special Pay for Medical Officers (Section 615 in HR 1585)

(a) Section 302(b)(1) of title 37, United States Code, would be amended by striking "$50,000" and inserting "$75,000".

(b) MULTIYEAR RETENTION BONUS.—Section 301d(a)(2) of such title is amended by striking "$50,000" and inserting "$75,000".

Supporting information: The military departments rely on Multiyear Special Pay (MSP) and Incentive Special Pay (ISP) as critical tools for managing the medical force. A physician shortage has been predicted in the United States. Pay for a civilian physician is increasing. There is a negative trend in physician retention within the Armed Forces. The Department of Defense (DOD) reached the $50,000 annual cap for MSP and ISP for neurosurgeons in 2006. This section would raise both caps to $75,000. The DOD needs this authority to allow it to react quickly to prevent a physician shortfall.

Cost Implications: This section only seeks to provide the Secretaries of the military departments with discretionary authority that would be limited by the availability of annual appropriations. No additional funding is required.

2. An increase in Dental Officer Additional Special Pay (Section 616 or HR 1585):

Section 302b(a)(4) of title 37, United States Code, would be amended by striking the second sentence and inserting the following new sentence: "Such additional special pay shall be paid at a rate determined by the Secretary concerned, not to exceed:

a. $10,000 with less than three years of creditable service.
b. $12,000 with at least three but less than 10 years of creditable service.
c. $15,000 with at least 10 or more years of creditable service.

Supporting Information: This section would increase dental officer additional special pay and provide the Secretary concerned the flexibility to target improved compensation at the junior dental officers who have a continuation rate at the first decision point that continues to fall.

Section 302b of title 37, United States Code, authorizes additional special pay for an officer who is an officer of the Dental Corps of the Army or the Navy or an officer of the Air Force designated as a dental officer, and is on active duty under a call or order to active duty for a period of not less than one year. Additional Special Pay (ASP) provides a retention incentive for dental officers and helps narrow the military-civilian pay gap. Current dental ASP rates have not changed since 1997. As a result, the pay gap between military and civilian pay has widened since authorization of current dental ASP rates.

In the Health Professions Retention-Accession Incentives Study (HPRAIS) I, the Center

for Naval Analyses (CNA) showed that "the uniformed-civilian pay gap existed at every career juncture and that this pay gap was greater for specialists than for general dentists." CNA further stated that "the uniformed-civilian pay gap in 2000 dollars is substantial, averaging approximately $69,000 for general dentists and $113,000 for specialists." The American Dental Association's 2001 Survey of Dental Practice and 2002/2003 Survey of Advanced Dental Education reported an average annual net income of $270,000 for dental specialists and $159,550 for general practitioners. It reported that civilian net pay increased per year at a rate of 5 percent for general dentists and 8 percent for specialists. In HPRAIS II and III, CNA stated that "current uniformed dental ASP should be increased," targeting "the group for which compensation increases will have the most impact on improving uniformed dentist retention (those facing stay-leave decisions)."

Military dentistry's current experience validates CNA's findings. Critical shortages of dental officers in the four-to-ten year commissioned service group exists in all of the Services. This shortage, especially in the O-4 pay grade, severely jeopardizes the Department of Defense's (DoD's) ability to maintain an adequate number of general dentists, a reasonable deployment rotation for junior officers, and an adequate pool from which to train dental specialists. The current Navy O-4 pay grade manning at 66 percent is a result of low continuation rates of dental officers beyond the first term of service. In Fiscal Year (FY) 2005, only 40 percent of dental officers remained on active duty after the first decision point, down from 60 percent in 2001. Most of these officers leave military service due to high dental education debt and the large inequity in pay when compared to civilian dentists. According to the 2002/2003 Survey of Advanced Dental Education, the average education debt load for dentists graduating from dental schools in 2001 was $132,500, resulting in an average monthly debt payment of $1,200.

This section would target dental officers in these year groups with a dental ASP increase. Present annual dental ASP rates are $4,000 for those with less than three years of service (YOS), $6,000 from three to ten YOS, and $15,000 for ten plus YOS. After the proposed increases, new dental ASP rates would be increased per year for the first two groups of all dental officers. This proposed increase in ASP does not mirror current medical corps ASP which is $15,000 for all year groups. These increases would provide increased incentives for junior officers to remain on active duty.

Furthermore, a recent Military Health System value estimation study by the TRICARE Management Activity showed that military dentistry (the direct care system) in FY 2001 delivered a 17 percent "profit margin." Clearly, direct system dental care is more cost-effective than private sector dental care. DOD's severe shortage of military dentists, however, results in productivity losses within our health care facilities that must be made up in the costly civilian sector. In FY 2004, the military departments obligated over $63 million for this private sector dental care; in FY 2005 that amount was $54.4 million.

Multiple factors degrade DOD's ability to staff health care facilities with appropriate levels of qualified dentists. The increased rate of retirements, losses outnumbering gains, and unfilled authorizations -- especially mid-career authorizations -- all point to an impending military dental health crisis at current pay levels for dentists. Annual trends have shown continual decreases in dental officer manning over the past years. Despite the Navy converting

104 dental officer to civilians in FY 2005, Navy active duty dentistry was only manned at 91 percent at the end of FY 2005, down from 99 percent for FY 2000.

Cost implications: This section seeks to provide to the Secretary concerned the discretionary authority to pay ASP up to the statutory maximum amount of $15,000 per year. The DoD estimates that this section would cost $4.1 million annually.

3. An Accession Bonus for Participants in the Armed Forces Health Professional Scholarship and Financial Assistance Program (section 622 of HR 1585):

> Section 2127 of title 10, United States Code, would be amended by adding at the end the following new subsection:
>
> "(f)(1) In order to increase participation in the program under this subchapter, the Secretary of Defense may offer to a person who signs an agreement under section 2122 of this title an accession bonus of not more than $20,000.
>
> "(2) In the case of an individual who receives an accession bonus under this subsection, but fails to commence or complete obligated service under this subchapter, the repayment provisions of section 324(f) of title 37 shall apply to the accession bonus under this subsection."

Supporting Information: The military departments rely on pipeline programs such as the Health Professions Scholarship Program (HPSP) as a primary source of accessions. Both the Navy and the Army were unable to fill their HPSP quotas last year. This section would enhance the ability of the military departments to recruit qualified applicants into the program by authorizing a $20,000 accession bonus. This bonus, in conjunction with the existing HPSP benefits, would make the HPSP program more attractive to prospective medical and dental school students.

The Army and the Navy have fallen short of HPSP recruiting goals in Fiscal Years (FYs) 2005 and 2006. During FY 2005, Army executed 77 percent and Navy filled only 56 percent of their medical student quotas. Projections for FY 2006 are equally poor, with Army projecting 84 percent and Navy 62 percent. To date, the Department of Defense projects FY 2006 HPSP execution for all three military department at 81 percent for physicians and 82 percent for dentists. Anecdotal evidence points to several factors for these shortfalls, including changes in the gender mix at medical schools (currently 50 percent are female, with their lower propensity to serve) and overall perceptions of the war. These shortfalls in HPSP recruitments decrease military department medical and dental readiness capabilities.

An accession bonus of up to $20,000 would revitalize the program and draw more applicants into the system, decreasing the shortfall. The Health Professions Scholarship Program Accession Bonus (HPSPAB) would be offered to students who qualify for the Medical and Dental Corps Health Professions Scholarship Program; agree to serve on active duty after completing medical or dental school as Medical or Dental Corps officers; and execute a written agreement to remain on active duty serving in their qualified specialty for a minimum of four years. The HPSPAB would target college students enrolled or enrolling into a four-year accredited medical or dental program and would consist of a one-time lump sum payment of up

to $20,000.

The HPSP is the main accession pipeline feeding these communities and the impact will be felt 3-4 years from now when the flow out of the pipeline will be lower than required, even considering potential or planned active duty force reductions from future military-to-civilian substitutions. The Navy has received permission to consider HPSP students a critical skill and will offer them a Critical Skill Accession Bonus (CSAB) of $20,000. This section would offer the military departments a permanent solution to the problem. The Navy is the only Service to offer the CSAB and is funding it out of current budget; there is no budget off-set. Since this section would provide discretionary authority, the bonus could be discontinued if recruitment improves because of a reduction in military department billet authorizations due to Medical Readiness Review or if the HPSP program attracts more applicants.

Cost Implications: While the total population of HPSP participants is normally near 4,000 participants at any given time, the Services normally access approximately 800 to the program per year. It would only be new accessions that would be eligible for this bonus. The military departments would be required to assess the benefits and budget within their programs if they choose to implement this bonus at any level up to the maximum. This section would provide the Secretary concerned discretionary authority that would be limited by the availability of annual appropriations. No additional funding is required for FY 2007.

4. Shorten the Eight Year Mandatory Service Obligation for Qualified Health Professionals in Critical Specialties (section 531 of HR 1585):

Section 651 of title 10, United States Code, would be amended by adding at the end the following new subsection:

"(c) The Secretary of Defense may waive the required service provisions of subsection (a) for initial appointments of commissioned officers in critically short health professional specialties, as determined by the Secretary of Defense. However, no such waiver shall reduce the period of obligated service to a period of less than two years, and no waiver can reduce the period of obligated service below the period for which an individual accepted an accession bonus or Multiyear Special Pay contract".

Supporting Information: This section would authorize the Secretary of Defense to waive the eight year minimum service obligation for initial appointments of commissioned officers in critically short health professional specialties, as determined by the Secretary. No such waiver could reduce the period of obligated service to a period of less than two years.

Currently, the Department of Defense (DoD) faces significant challenges in recruiting qualified health professionals, particularly in critical specialties such as surgeons, orthopedists, and nurse anesthetists. Many medical recruiters have said the eight year minimum service obligation (MSO), codified in 10 U.S.C. 651, is a significant disincentive for these professionals. Given the opportunity, many would like to serve the nation, but they are not willing to commit for eight years. For example, the military departments have received a significant number of inquiries from older health care providers between the ages of 48 and 60 who express an interest in serving in the military for a limited period of time. This group would be the primary target of this initiative.

According to a survey conducted by the Dallas firm, Merritt, Hawkins, and Associates, nearly half of physicians age 50 or older plan to leave medicine within the next three years. While 38 percent plan to retire, 12 percent will seek jobs in non-medical settings. A 2004 survey by the American Medical Association found that 38 percent of all physicians are 50 years old or older, while 30 percent are 55 years old or older. Approximately 250,000 physicians are currently between the ages of 50 and 65.

This section would provide a waiver for a select group of experienced physicians who have stated they are willing to serve their country for at least two years, but are unwilling to accept the eight year MSO. The DOD has no interest in reducing the MSO for most physician accessions. This change would not affect retention because this group is not joining now. The President currently has waiver authority; this section would provide similar authority to the Secretary.

Cost Implications: There is no cost to the Department involved in enacting this section.

9. Reassess the military to civilian conversions, some of which have been deemed to have compounded personnel shortages.

The Medical Readiness Review (MRR) evaluated military medical billets that had been identified by the Military Departments as excess to readiness requirements to determine if they could feasibly be converted to civilian or contract personnel at no additional net cost to the Department of Defense. Only billets that met these criteria were selected for conversion, and the Military Departments agreed to these conversions. The Assistant Secretary of Defense (Health Affairs) has placed no restrictions or exemptions on the types of positions converted. Rather, the Service Surgeons General and their staffs had maximum discretion in determining what specialties (e.g., physicians, nurses, technicians, etc.) to convert from military to civilian based upon the current and projected needs of each Service. These conversions are not projected to have a detrimental impact on health care delivery capability or quality at military treatment facilities and have no impact on readiness capabilities. We continue to carefully monitor the conversion execution to ensure a successful outcome is achieved.

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