This report responds to a Congressional requirement to examine the Navy's advisory council recommendations for restructuring graduate medical education (GME) and to compare these with Army and Air Force GME closure activities. The report focuses on the specific recommendation of the Navy advisory council to drop GME at the Bethesda (Maryland) Medical Center while retaining GME at Portsmouth (Virginia). This decision was overruled by the Navy Surgeon General on the grounds that it had been agreed to concentrate Navy GME in four geographic locations, including Bethesda but not Portsmouth. Similar difficulties are reported for plans to eliminate Army GME positions in Texas and for the GME program closures planned by the Air Force. The report concludes that the services need commonly accepted guidelines and criteria for choosing GME reduction and closure sites and for involving those affected in the decisions. It also recommends that lessons can be learned from parallels in the private sector, which has also been reducing, closing, or otherwise modifying its GME programs. A summary of comments by the Department of Defense notes general agreement with the report's recommendations and plans to develop a directive providing GME program closure and consolidation guidance. (DB)
DEFENSE HEALTH CARE

Collaboration and Criteria Needed for Sizing Graduate Medical Education
Graduate medical education (GME) programs in military hospitals are the Department of Defense's (DOD) main source of active duty physicians to meet the wartime and peacetime care needs of its 8.2 million military and civilian beneficiaries. In recent years, the Army, Navy, and Air Force have sought to reduce GME enrollment as their budgets, along with overall military personnel strength, including the number of physicians, have declined. Such GME adjustments require care to ensure an appropriate balance between the numbers and types of physician specialists in training, and thus not militarily deployable, and the numbers of trained specialists available for deployment. As overall downsizing continues, the services are finding that required GME reductions may entail closing whole programs at selected facilities. In early 1997, moreover, the Navy Surgeon General attempted but was unsuccessful in closing selected GME programs.

In response to the Navy's experience, the Congress included a requirement in the 1998 National Defense Authorization Act that we review a Navy advisory council's recommendations for restructuring Navy GME.\textsuperscript{1} Specifically, we were to review recommendations for GME closures at Bethesda Medical Center that the Navy Surgeon General rejected in favor of closing the Portsmouth, Virginia, Medical Center's GME programs. Also, the National Security Committee's Subcommittee on Military Personnel asked us to comparatively review the Army's and the Air Force's GME closure activities. In discussions with cognizant congressional offices, we

\textsuperscript{1}P.L. 105-85, sec. 748, Nov. 18, 1997.
agreed to focus our response to these requests on (1) why the Navy did not accept its council’s recommendations for Bethesda GME closures and why its other closure attempts did not succeed, (2) whether the other services already have faced or may face similar experiences, and (3) what improvements may be needed if the services are to successfully make and implement their GME sizing decisions. The act prohibits the Navy from restructuring its GME programs until we report on the issue.

In doing our work, we interviewed officials and examined GME requirements and resource records at DOD and service headquarters in Washington, D.C.; Army and Air Force medical and personnel offices in San Antonio, Texas; the Navy’s Portsmouth, Virginia, Medical Center; the Army’s El Paso, Texas, Medical Center; and DOD’s Washington, D.C., and San Antonio regional managed care offices. We reviewed the guidance, GME program data, and processes bearing on recent GME closure decisions and also broader DOD initiatives’ potential effects on GME. While we did not specifically review the services’ sizing models designed to adjust military medical forces to meet readiness requirements, we obtained status information on DOD’s efforts to standardize their use. Appendix I details our work’s scope and methodology. We conducted our work between September 1997 and March 1998 in accordance with generally accepted government auditing standards.

Results in Brief

In early 1997, the Navy Surgeon General decided to eliminate 162 GME positions to comply with lower projected wartime requirements and with DOD restrictions on the ratio of physicians in training to those deployable. A Navy advisory council, lacking specific guidance but responding to the Navy Surgeon General’s indications that GME should occur where active duty personnel are concentrated, recommended that most such training be dropped at the Bethesda Medical Center. Bethesda was recommended rather than the Navy’s other major centers in Portsmouth, Virginia, and San Diego, California, where many active duty personnel are located. The Navy Surgeon General, however, instead decided to close some of the Navy’s Portsmouth Medical Center’s programs following a then-newly-discussed agreement among DOD and the services’ surgeons general to concentrate GME in four geographic locations that included Bethesda and San Diego but not Portsmouth. Lacking site selection guidance and needed communication, the Navy council developed and submitted its recommendations to the Surgeon General without taking account of the agreement, which has never been formalized or acted on by the other services.
When announced, the Portsmouth closure decision surprised Navy command and medical center officials there, as well as local congressional representatives. Publicized arguments ensued that Portsmouth was as advantageous as Bethesda for concentrating GME and that losing Portsmouth's GME would reduce trainee-provided health care to active duty personnel and other beneficiaries and would harm Naval readiness. Although it was unsuccessful, the Surgeon General's office tried justifying the decision and later withdrew it for further study. At about the same time, the Surgeon General made and later reversed a decision to close a Bremerton, Washington, GME program, similarly acting against advisory council recommendations and meeting resistance from those affected by but not privy to the decision.

Shortly thereafter and for the same ends, the Army Surgeon General's office sought to eliminate the 64 GME positions at the William Beaumont Medical Center in El Paso, Texas, also without site selection guidance and likewise failing to involve those who were affected. When it was announced, the closure proposal was firmly resisted and challenged by medical center and line command officials and a local congressional representative. In response, the Surgeon General's office did more site choice analysis, but the decision was ultimately deferred.

While the Air Force also foresees the need for GME program closures, it has not yet attempted to make them. But in the absence of closure policies and criteria and judging from the Navy's and Army's closure attempt experiences, we have no reason to believe that the Air Force would be any more successful in bringing about required GME program adjustments.

In our view, DOD and the services need commonly accepted guidance and criteria for choosing GME reduction and closure sites and for including those affected in the decisions. DOD, the services, and we cannot appropriately judge the merits of closing one GME program over another in the absence of criteria on such matters as what factors to weigh in deciding which programs to close, including who should participate when and how in the decision. A decision framework would also need to account for other DOD initiatives' effects on GME, such as the cost-cutting emphasis under DOD's nationwide managed care program called TRICARE, a recent management reorganization, and efforts to standardize the services' somewhat differing applications of their medical force sizing models. And, while not a direct parallel to DOD GME with its readiness dimension, private sector medical schools and hospitals have been downsizing their GME programs and in doing so have documented success...
factors that may provide a useful reference for DOD in developing guidance for its future sizing efforts.2

Background

DOD's health care system, costing over $15 billion annually, has the dual mission of providing medical care to 1.6 million military personnel during war or other military operations and offering health care to 6.6 million military dependents and retirees. Most care is provided in about 600 military medical facilities worldwide, including medical centers, community hospitals, and clinics. The system employs about 100,000 active duty military personnel.

Military medical personnel include about 12,275 physicians, of whom about 3,000 are in GME programs in military facilities.3 The services view GME as the primary pipeline for developing and maintaining the required mix of medical provider skills to meet wartime and peacetime care needs. They also view GME as important to successful physician recruitment and retention. GME includes internships, residencies, and fellowships enabling medical school graduates to become specialists in such areas as internal medicine, radiology, and general surgery. Some of the military personnel GME training is done in civilian hospitals. The cost of GME is unclear. In May 1997, the DOD Inspector General reported that GME costs exceed $125 million annually, with per-student costs ranging from about $20,000 to $100,000, but reported also that military facilities did not accurately account for such costs.4

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3As of July 1997, the Army had 1,297 GME trainees, the Navy had 881, and the Air Force had 819 in military facilities.

DOD's Office of Health Affairs is responsible for developing overall GME policy guidance and promoting GME program coordination and integration among the services. The services are responsible for ensuring that GME goals are met and for individual GME programs. Civilian boards review DOD's GME programs to ensure that they meet such medical standards as minimum numbers of trainees per program and can thus be accredited. GME is taught at the services' facilities throughout the United States, as shown in figure 1.
Figure 1: Locations of Air Force, Army, and Navy Facilities Providing GME
Several DOD policies directly affect the services’ GME program size, locations, and specialty types. In 1996, for example, DOD issued a requirement that medical force levels including GME trainee numbers be linked to each service’s wartime and operational support requirements. This was a major departure from when each service did as much GME training as it had capacity for or when it trained to the prior year’s level. DOD also defined GME trainees as nondeployable unless a full mobilization state has been reached. Deploying trainees would disrupt the specialty physician pipeline and would likely result in lost GME program accreditation. Thus, as defined, about 25 percent of active duty physicians are not deployable. A 1994 DOD strategic plan set forth the following added GME rightsizing principles:

- Base realignment and closure (BRAC) 1995 would determine whether further sites conducting GME training will close.7
- GME programs having no new trainees for 2 years are to be phased out.
- Duplicate Washington, D.C., and San Antonio, Texas, GME programs should be integrated to the extent possible.
- The number of GME trainees in DOD medical facilities should not exceed their aggregate fiscal year 1994 proportion of all active-duty physicians.

In response to the 1994 plan, BRAC 1995 identified two hospitals for closure that had GME programs, thus eliminating 177 GME positions. But BRAC legislative authority has expired, and any such future authority is uncertain. Also, ending programs lacking new trainees has resulted in few position reductions, according to Health Affairs officials. And the Washington, D.C., and San Antonio GME program integrations have also produced few trainee reductions, while no other GME locations appear to be susceptible to such integration.

Maintaining a maximum ratio of GME trainees to active duty physicians is referred to as DOD’s “25 percent policy.” The aim is a proper mix of experienced specialists, supplemented by the flow of newly trained specialists needed to maintain that mix. The services’ actual GME

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6Operational support here refers to all the medical missions outside the military hospital, including humanitarian missions, readiness training, and hospital ship and deployable unit assignments, often outside the United States.

7There are five mobilization levels—Selective, Presidential Selected Reserve Call-Up, Partial, Full, and Total. Essentially, reserve forces would be mobilized before most GME trainees are deployed.

7This was the fourth in a series of military base closures and realignments made by the independent Defense Base Closure and Realignment Commission, which convened in 1988, 1991, 1993, and 1995 and was subsequently disbanded.
percentages vary slightly, but in total they equal about 25 percent of active duty physicians.

In the past, the GME ratio was met through BRAC actions and by reducing GME without closing programs, but DOD and service officials now agree that GME programs have been cut to levels below which accreditation would be lost. Thus, rather than basing GME size on training capacity, the services are shifting toward basing their reductions of GME on wartime requirements. Beyond trimming programs, moreover, the services are now seeking to close GME programs in specific locations.

Navy Unsuccessfully Attempts GME Closures at Two Locations

The Navy Surgeon General’s GME closure attempts at the Portsmouth, Virginia, and Bremerton, Washington, medical facilities would have made far larger trainee reductions than any such prior Navy efforts had made. But the closure decisions were withdrawn when those affected strongly objected. Clearly at issue was (1) the guidance that the Navy had followed in making the closure decisions, (2) whether DOD had properly deliberated and agreed upon the decisions, and (3) whether those who were affected both within and outside the Navy were aware of the bases for the decisions and whether they had been consulted when the decisions were being made. DOD’s lack of a policy framework for formulating and implementing such decisions will likely spawn continued resistance and thwart the Navy’s and other services’ attempts to reduce GME positions when they are no longer needed to meet wartime needs.

Surgeon General Directs GME Reductions

The Navy’s GME closure efforts began in November 1996. The Navy Surgeon General concluded that the then-current military force downsizing and DOD policy necessitated reducing GME training—such that GME training would be limited to projected wartime requirements. On November 5, 1996, the Navy Surgeon General directed his advisers, the Navy Medical Education Policy Council (MEPC), to recommend appropriate GME training reductions, and this effort resulted in targeted reductions of 162 positions, or 16 percent.

In February 1997, the MEPC recommended making most of the GME reductions by closing the Navy’s Bethesda Medical Center’s programs while preserving GME at the Navy’s other major centers at San Diego and Portsmouth. Lacking specific guidance on how to select closure sites, the

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8The Navy has GME programs also at Bremerton, Camp Pendleton, Jacksonville, and Pensacola, although these are not major programs.
MEPC primarily focused on meeting the Navy sizing model's needed medical specialist estimates and complying with the Surgeon General's past statements about the importance of having GME where the active duty personnel are concentrated—which today is in San Diego and Portsmouth. Records indicate that MEPC considered such other factors as civilian GME accreditation standards and the population, particularly active duty, to be served but did not comparatively analyze how well the areas' available patient mix would support GME—believing that Bethesda and Portsmouth were more than sufficient on both scores. While the MEPC weighed the potentially adverse effects of closing Bethesda's GME programs on the GME integration efforts, it concluded that preserving GME at Portsmouth and San Diego, where active duty personnel are more concentrated, was still preferable. Otherwise, the MEPC viewed essentially all current GME programs to be of equal merit.

Surgeon General Rejects Council's Recommendations

Notwithstanding the MEPC's recommendations for closing GME programs at Bethesda, the Navy Surgeon General decided to close programs at Portsmouth. The Surgeon General informed the MEPC that his decision resulted from an agreement made the previous week among Health Affairs and the surgeons general that the national capital area, including the Bethesda center, was to be one of four areas where the services would begin concentrating GME. Other such areas would be San Antonio, San Diego, and Madigan Army Medical Center near Tacoma, Washington.

In further justifying his decision, the Surgeon General later announced that integrated national capital area GME programs would be maintained. The Surgeon General told us that while the MEPC had acted in the Navy's interests, broader DOD interests were also at stake. Moreover, about 5 months after announcing the Portsmouth GME closure decision, the Navy Surgeon General's office completed a study of health care demographics and workload covering the Bethesda, San Diego, and Portsmouth areas, where it has major health care concentrations. That study concluded that, on the basis of population, workload, and other factors, GME should be preserved at Bethesda and San Diego rather than Portsmouth.

Along with his Portsmouth GME closure decision, the Surgeon General announced plans to close the Bremerton, Washington, naval hospital's GME family practice program. But the MEPC had specifically recommended against family practice program closures, concluding that such residencies were needed services. The Surgeon General, however, had opted for closure based on the Bremerton program's proximity to the Madigan Army Medical Center.
Medical Center's GME family practice—a key factor that the MEPC did not consider.

No Agreement on Site Selection Criteria or Collaboration Among Those Affected

Surprised by the Portsmouth decision, medical center officials and their supporters, including a local active duty forces commander and congressional members, disagreed with the Navy's basis for the Portsmouth GME closure decision, arguing that GME trainee losses would reduce services to active duty personnel and their dependents and other beneficiaries and would harm readiness. The Surgeon General's office responded that it would monitor the effect on Portsmouth's workload and would add resources if needed. Portsmouth Medical Center officials also argued that their center was as rich a GME environment as any of the four locations apparently selected for GME concentration. Taking particular issue with Navy study findings supporting Bethesda, Portsmouth officials told us that they have comparable or better facilities, workload, patient mix, and other GME support advantages. MEPC officials told us that while both locations have more than enough to support GME, Bethesda has the greater workload for supporting GME. And while the Surgeon General agreed that Portsmouth is an attractive GME environment, he told us that Bethesda is preferable because of greater available population and patient mix and the overriding need to continue the national capital area GME program integration efforts.

Regarding the Surgeon General's reliance on the apparent agreement for a four-area GME concentration, Health Affairs officials told us that such an agreement was not made formal or otherwise published. Rather, these officials said the policy aim now is for the services to size their GME programs by requirements-driven analyses rather than by dictating some fixed number of GME centers. Nonetheless, they said that in today's environment having perhaps three to five GME teaching centers with populations and other characteristics best supporting GME would be a worthwhile, overall program outcome.

Those Affected Not Privy to Closure Decisions

Local Portsmouth officials were not included in or adequately informed about the Navy Surgeon General's GME closure decision, and thus they were surprised by it and strongly resisted it. The local Navy command authorities, for example, learned of the decision upon its being made public, which, as Health Affairs officials told us, increased the difficulty of overcoming their objections. While the Surgeon General's office later offered clarifications and reassurances about the decision, the initial
impressions were not overcome. Paralleling this outcome was the Navy's announcement of the Bremerton family practice GME closure. Along with local resistance came local publicity and misunderstanding that the family practice clinic would be closed.

Health Affairs officials told us that while the facilities generally know that GME must be downsized, those affected, regardless of the service or medical center targeted, will object. The officials also agreed that the communication of such GME decisions has been inadequate but must be delivered convincingly to those within the services who are affected, including line commands, as well as to beneficiary groups and affected congressional members, since such decisions affect them just as BRAC decisions do.

Closure Decisions Suspended

In April 1997, while still trying to reassure all concerned, the Navy suspended its Portsmouth GME closure decision pending the outcome of a then-in-progress DOD-wide quadrennial defense review and further Navy analysis. The Navy expected the quadrennial review's results to add GME reduction pressure but, as DOD reported in May 1997, it did not. And the Navy's further analysis, completed in July 1997, supported the Portsmouth closure. But the 1998 National Defense Authorization Act prohibited the Navy from making any GME changes until we complete our review.

As with the general response at Portsmouth, those affected locally objected to the decision to close Bremerton's family practice GME program. They argued that the Navy significantly lacked such specialists and that Bremerton's health care would be markedly reduced with the loss of GME trainees. Initially offering reassurances about maintaining Bremerton's health care levels, the Surgeon General eventually deferred the decision—which occurred at about the same time as he deferred the Portsmouth GME decision. However, the Surgeon General still considered the reasons for closing Bremerton's family practice GME to be valid.

Army's Closure Attempt Also Unsuccessful

While the Army's GME sizing efforts—and the Air Force's for that matter—are independent of the Navy's, the services are subject to the same general policies and downsizing pressures. A few months after the Navy's closure attempts, the Army Surgeon General acted on an internal recommendation to close all remaining GME programs at the Army's

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*The quadrennial defense review is required by the National Defense Authorization Act for fiscal year 1997 and is designed by DOD to comprehensively review America's defense needs through 2015 and provide a blueprint for a strategy-based, balanced, and affordable defense program.
William Beaumont Medical Center in El Paso. A representative from the Surgeon General's office told us that the apparent proposal to concentrate GME in four geographic locations was not a factor in choosing William Beaumont. The official told us that essentially the Army projected a need to eliminate about 50 GME trainee positions, and William Beaumont's remaining 64 positions met that requirement.

Like the Navy's efforts, the Army's closure attempt was met with surprise and resistance by medical center, line command, and congressional representatives, who took issue with the decision's basis. The Army decided not to proceed with the closures, but like the Navy it still faces the need to close programs to achieve GME reductions.

Upon learning that the William Beaumont closure decision was based almost entirely on the need to decrease GME trainee numbers to an extent that the Beaumont numbers would meet, medical center officials argued that the basis was arbitrary and unfair and that they had already scaled back their GME programs. Medical center officials and their local supporters argued that the care level for active duty personnel and their dependents and other beneficiaries in El Paso’s medically underserved community would be devastated and that most El Paso physicians trained in certain specialties are at William Beaumont. The officials also argued that when a military hospital loses its GME training, either the service relocates its best teaching specialists or civilian markets attract them away. An Army Surgeon General's office representative told us that while the plan was to redistribute William Beaumont teaching faculty to other locations, the center's full patient care capability was to be maintained.

Like the Navy, moreover, the Army had not involved those most directly affected by their closure deliberations in the initial decision process. And after William Beaumont officials and a local congressional member appealed for the decision's reconsideration, the Army conducted further analysis of such factors as patient demographics, workload, and quality indicators among the Army's teaching centers and GME programs but then suspended GME reduction decisions for the coming training year.

The Air Force has not recently attempted major GME program closures. But it has been gradually reducing GME trainee numbers in ongoing programs, and soon it too will need to close programs to comply with wartime sizing requirements. The Air Force is subject to the same general closure policies, and we believe that its future attempts to formulate,
communicate, and sustain major GME closure decisions will be as controversial as the Navy’s and Army’s recent experiences. Air Force officials told us that they are uncertain how such future reduction processes will work.

Air Force officials told us that if future GME closures were driven by the four GME geographic centers concept, the Air Force would stand to lose one-third of its programs—including all programs in certain medical specialties. These officials also told us that they were unaware of any formal policy on the four GME center approach.

**Improvements Needed to Facilitate GME Sizing Decisions**

The Navy’s and Army’s recent attempts to reduce their GME programs were resisted by those who were affected, and they were otherwise unsuccessful because DOD and the services lack accepted criteria on such matters as what factors to weigh in deciding which programs to close, including who should participate when and how in the decisions. In the absence of such criteria, DOD, the services, and we cannot appropriately judge the merits of closing one GME program rather than another. Such criteria would also need to account for other DOD initiatives’ possible effects on GME; developing a framework for the criteria might be facilitated by DOD’s review of lessons learned with private sector GME programs.

**Other DOD Health Care Initiatives Affect GME**

The services’ GME decisions can be affected by other DOD initiatives that have to be taken into account for the GME reduction process to work effectively. For example, DOD has two studies that could affect GME’s size and location. One is an ongoing, long overdue study of the medical personnel required to meet wartime requirements, commonly referred to as the 733 Update, originally scheduled for completion by the end of March 1996. The other is the Defense Reform Initiative, announced in November 1997, that recommended reorganizing the DOD health care program. Related actions are expected to strengthen program oversight and thus will likely affect the way GME decisions are guided and made. Another influence on GME is the nationwide implementation of TRICARE, DOD’s managed health care program. TRICARE requires military hospitals to be more cost effective, focus on primary care, and share the care workload with support contractors. Such health care management shifts under TRICARE may reduce funding and, according to DOD officials, reduce or otherwise change the workload support for military facilities’ GME.
Further, DOD and the services are engaged in joint efforts toward more integrated GME management, including collective oversight over DOD’s GME strategic plan, joint evaluation of GME applicants, and planned efforts to consolidate GME administrative functions. Also, DOD is working toward standardizing the application of medical force sizing models. In 1996, we reported that while the services’ respective modeling approaches to estimating medical strength requirements appeared to be reasonable, the models’ results were largely affected by input data and judgmentally assigned values and assumptions. Because the services differ somewhat in their modeling applications, DOD is examining and seeking to reconcile the differences—such as the relative effects of the Army’s inclusion of a “peacetime mission” component that the other services’ models do not include. Differences in sizing model applications are also expected to be addressed in the 733 Update report. (Appendix II provides more information on the services’ models.)

Parallels in Private Sector GME Downsizing

The private medical sector has faced and continues to face the need to reduce, close, or otherwise modify its GME programs at medical schools and hospitals. Growth in managed care, physician oversupply, care delivery changes, and reduced funding to support civilian GME have altered the demands on GME. In October 1997, an Association of American Medical Colleges workgroup representing more than 140 medical schools and 400 major teaching hospitals and health systems published a resource document to assist teaching hospitals and medical schools in developing institution-specific approaches to analyzing and, if need be, modifying their GME programs.

Synthesizing case studies and best practices, the work group identified a number of elements it termed “critical success factors” for rightsizing GME programs that we believe also have general applicability for future DOD GME sizing efforts. The factors include

- starting the GME resizing process well in advance of a critical need to reduce the number of residents;
- establishing clear guiding principles and ground rules;
- ensuring a proper time period for the resizing;
- securing top management’s support, mindful that appropriate information to make a case for resizing can enhance the plan’s acceptance;
- ensuring an inclusive process to minimize anxiety and identify and address concerns;

(Wartime Medical Care: Personnel Requirements Still Not Resolved (GAO/NSIAD-96-173, June 1996).
affirming an institution's commitment to residents currently in training; assessing the financial effect of the resizing; and reengineering an institution's patient care processes where significant reductions in residents will occur.

The work group also pointed out that a resizing effort's success depends largely on minimizing its effects on patient care and fully engaging the institution's leaders in the decisions.

Conclusions

To attain DOD's overall GME policy goal of training to wartime requirements, the services need the ability to make GME reductions now and in the future. Recent Navy and Army GME program closure efforts, however, have not been successful, and the Air Force may face similar problems when it attempts closures.

DOD and the services lack policy guidance and criteria governing site and program selection, including collaboration among decision makers and those affected. In deliberating closure alternatives, for example, the Navy's MEPC did not know that (1) a change in position had occurred on preserving GME where active duty personnel are concentrated, (2) ongoing GME integration efforts were to be preserved, (3) there apparently were to be only four GME concentration centers, or (4) study results would be produced later in support of either Bethesda or Portsmouth. Along with disputes about decision criteria, a key omission in the Navy's and Army's closure attempts was that of not involving medical and line commanders and others most directly affected by the decisions. Unsuccessful closure efforts dissatisfy those making and affected by the decisions and reduce the credibility of the process but they also may result in too many GME trainees, who are not readily deployable, and too few deployable physicians ready when needed.

Thus, we believe that with commonly accepted GME sizing criteria, DOD and the services could make the program consolidations and closures needed to meet readiness goals. And we believe DOD and the services should have an opportunity to collaboratively develop and implement the criteria. But because the programs are highly prized and protected by the service hospitals and areas that have them, achieving criteria and closure decision agreement may not be easy. Moreover, if unsurmountable differences surface in developing or later applying the criteria, DOD may need to resort to forming a group independent of it and the services tasked with
developing criteria or recommending and overseeing the implementation of specific closure or consolidation decisions.

Other DOD initiatives, including TRICARE, ongoing sizing studies, and medical modeling application differences can bear on GME decisions, and they need to be taken into account in the development of GME program closure guidance for the closure process to be effective. In this regard, the Association of American Medical Colleges study of critical success factors in GME resizing efforts could prove helpful to DOD in its future resizing activities, particularly with respect to establishing downsizing principles and ground rules, securing top management support, and ensuring the inclusion of all who are affected.

**Recommendations**

We recommend that the Secretary of Defense direct the Assistant Secretary of Defense for Health Affairs and the services' surgeons general to collaboratively

- develop GME closure policy guidance and implementing criteria and processes covering such matters as key factors in identifying and winnowing potential sites, how to project and mitigate potentially adverse effects on beneficiary health care and readiness, how and when to involve those affected in the services and local areas in the decision-making process, how to reach program closure agreement, and how to communicate and implement the resulting decisions;
- provide in the guidance for the potential effects of such DOD and service initiatives as TRICARE, with its emphasis on cost control and primary care, that can affect GME decisions; and
- develop, obtain agreement on, and publish such policy guidance before any further GME closure decisions are made.

**Agency Comments and Our Evaluation**

In its written comments on a draft of this report, DOD agreed with the report and its recommendations, characterizing our work as objective in addressing the aborted GME closure attempts and the need for clear downsizing criteria. DOD stated, without further elaborating, that the Navy and Air Force also concurred with the report and recommendations but that the Army did not. Nonetheless, DOD stated that Health Affairs would develop a draft DOD directive providing GME program closure and consolidation guidance that takes into account managed care exigencies. DOD and the Navy, Air Force, and Army would be bound by such a directive once it is made final.
We continue to believe that with commonly accepted GME sizing criteria, DOD and the services could make the program consolidations and closures needed to meet readiness goals. And we continue to believe that DOD and the services should have an opportunity to collaboratively develop and implement the criteria. But, as exemplified by the Army's singular nonconcurrence with our recommendations, getting agreement on the criteria and implementing closure decisions likely will not be easy. The programs are highly prized and hence protected by the service hospitals and areas that have them. Thus, in the event that insurmountable differences surface in developing or later applying the criteria, DOD may need to resort to forming a body independent of it and the services tasked with developing criteria or recommending and overseeing the implementation of specific closure or consolidation decisions. We have added this matter to the report's conclusions section.

We are sending copies of this report to the Secretary of Defense and will make copies available to others upon request.

Please contact me at (202) 512-7101 or Dan Brier, Assistant Director, at (202) 512-6803 if you or your staff have any questions concerning this report. Other GAO staff who made contributions to this report are Elkins Cox, Beverly Brooks-Hall, and Allan Richardson.

Stephen P. Backhus
Director, Veterans' Affairs and Military Health Care Issues
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## Abbreviations

- **BRAC**: base realignment and closure
- **DOD**: Department of Defense
- **GME**: graduate medical education
- **MEPC**: Medical Education Policy Council
- **THCSRR**: Total Health Care Support Readiness Requirements
Appendix I

Scope and Methodology

To assess the services' experiences in downsizing their graduate medical education (GME) programs, particularly the Navy's experiences, we examined the role of the Navy Medical Education Policy Council (MEPC) and the guidance and data the MEPC considered, evidence of the Navy's need for GME reductions and of the expected advantages and disadvantages of closing GME programs at one location versus another, and evidence that the Navy can still achieve needed GME reductions in ways that comply with DOD guidance and that overcome the kinds of objections raised in their recent closure attempts. For comparison, we examined comparable guidance, processes, and data used by the other services in their GME decisions. Information sources included Department of Defense (DOD) Health Affairs, the MEPC, the Navy Surgeon General's office, and other cognizant organizations within the Navy, along with comparable units in the other services.

We interviewed (1) representatives of the Navy MEPC; (2) other Navy officials responsible for sizing and managing GME; (3) Health Affairs officials who provide GME guidance and oversight; (4) officials of the other services in Washington, D.C., and San Antonio, Texas, who direct and coordinate GME policy and programs; (5) officials at selected medical centers—particularly the Navy center in Portsmouth and the Army center in El Paso—where recent GME sizing decisions have become an issue; and (6) officials of DOD's TRICARE Northeast and Southwest regions, headquartered in Washington, D.C., and San Antonio, which also included officials of military medical centers in those areas. We also reviewed their policy statements, briefing documents on GME requirements, data on population and workload, studies of GME placement, and other records and reports.

We evaluated the Navy council's recommendations and subsequent GME sizing decisions by the Navy Surgeon General in light of available policy guidance, relevant available data, and other influential factors that were or should have been considered. We compared the Navy's GME approach to decisions with that of the other services for possible lessons from successful efforts and for any common problems that need to be solved for all the services. We also considered the effects on GME of larger DOD initiatives, including the quadrennial defense review, the Defense Reform Initiative, update of the 733 study, and managed care under TRICARE, as well as the services' use of different sizing models to determine overall military medical readiness requirements, including GME. While we noted differences of opinion about the application of the overall sizing models,
Appendix I
Scope and Methodology

resolving those differences was beyond the scope of our work; the
differences are expected to be addressed in the update of the 733 study.

We also researched efforts by private sector medical schools and hospitals
to alter the size of their GME programs, including a recent study by the
Association of American Medical Colleges, representing medical schools
and teaching hospitals, including the Department of Veterans Affairs
medical centers.
Each service has its own sizing model for adjusting military medical forces to meet its requirements. Health Affairs offers a sizing model also and has been promoting a more standardized sizing approach for the services. However, while the models can reveal overall medical force requirements, they do not indicate where medical forces should be located or where GME training should be done.

The Navy’s Model

In response to budgetary and legislative pressures to properly size Navy medical force structure, the Navy Surgeon General completed a requirements model in March 1994, called Total Health Care Support Readiness Requirements (THCSRR), to determine and project its active duty medical force readiness requirements. In November 1996, the Surgeon General decided to apply THCSRR, which resulted in attempts to significantly reduce GME.

The THCSRR model defines readiness requirements as supporting three missions, including (1) a wartime mission meeting the demands of two nearly simultaneous major regional conflicts, including mobilizing hospital ships, supporting Navy fleet and Marine Corps operations ashore and afloat and numerous fleet hospitals, and maintaining military treatment facilities outside the United States; (2) a day-to-day operational support mission for the Navy fleet and Marine Corps that allows Navy personnel to rotate between the United States and operational Navy platforms and overseas assignments and that includes GME; and (3) a peacetime health benefit mission providing health care benefits in military treatment facilities in the United States.

While the Navy views all three missions as imperative to Navy medicine under the THCSRR model, the first two are to determine the number of needed active duty personnel. It is only because of the first two missions of wartime readiness and day-to-day operational support that active duty Navy personnel are to be available to support the third mission of providing peacetime health care benefits.

Pressure to develop a model such as THCSRR came from a study by the Office of the Secretary of Defense of the overall military health services system and the system’s wartime medical force requirements; commonly referred to as the 733 study, it was required by section 733 of the 1992 National Defense Authorization Act and was completed in 1994. The 733 study examined the total medical care requirements needed to support all three services during a post-cold war wartime scenario along with
Appendix II
Services' Use of Military Medical Force
Sizing Models

peacetime health care requirements. The study concluded that the three services' medical force requirements for the two major regional conflict scenarios would be significantly reduced from earlier global wartime scenarios. However, the Navy saw a need for further study on its own to adequately determine its medical force requirements for day-to-day operational support and to combine those requirements with the wartime requirements to define the minimum number of fully trained active duty personnel required to accomplish both missions. The determinations for operational support requirements include the needed flow of trained physicians from GME.

Other Sizing Models and Standardization

The Army and Air Force have independently developed sizing models to project their readiness needs, including GME requirements, and Health Affairs has presented a DOD medical sizing model to all three services to promote the standardization of requirements determinations and has used that model to compare requirements projections by the three services. A comparison in March 1997 showed that the Army's model included consideration of GME requirements beyond readiness to include what the Army defined as "peacetime mission," thus projecting more needed training positions than did the DOD model. Health Affairs used the Navy's THCSRR model as the starting point for the DOD model, specifying the same three critical DOD health care missions of readiness, day-to-day operational support, and peacetime health care and providing that only the first two missions are to determine the required number of active duty personnel. Also, use of the DOD medical sizing model is to be reflected in an ongoing update to the 733 study, which was initially to be completed by the end of March 1996 and may lead to a more standardized sizing approach.
Dear Mr. Backhus:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE HEALTH CARE: Collaboration and Criteria Needed for Sizing Graduate Medical Education," dated March 26, 1998 (GAO Code 101609/OSD Case 1574).

DoD concurs with the report and its recommendation. The Navy and Air Force also concur; the Army does not concur. The report objectively examines the circumstances surrounding the proposed but aborted program closures at two large military treatment facilities and addresses the need for clear guidance for medical sizing plans.

DoD’s position on the recommendations provided in the report is enclosed. My point of contact for this action is CAPT Peg Orcutt, (703) 695-6800.

Sincerely,

Gary A. Christopherson
Acting Assistant Secretary of Defense

Enclosure:
As stated
"DEFENSE HEALTH CARE: COLLABORATION AND CRITERIA NEEDED FOR SIZING GRADUATE MEDICAL EDUCATION"

DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

RECOMMENDATION: The GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense (Health Affairs) and the Service's Surgeons General to collaboratively

- Develop GME closure policy guidance and implementing criteria and processes covering such matters as key factors in identifying and winnowing potential sites; how to project and mitigate potential adverse effects on beneficiary health care and readiness; how and when to involve affected parties in the Services and local areas in the decision-making process; how to reach program closure agreement; and how to communicate and implement the resulting decisions;
- Provide in the guidance for the potential effects of such DoD and Service initiatives as TRICARE, with its emphasis on cost control and primary care, that can affect GME decisions; and
- Develop, obtain agreement upon, and publish such policy guidance before any further GME closure decisions are made. (pp. 24-25/GAO Draft Report)

DoD Response: Concur. The Assistant Secretary of Defense (Health Affairs) will prepare and staff a draft DoD Directive providing guidance for medical sizing and GME program closure and/or consolidation. This guidance will address GME sizing decisions and will take into account the exigencies of managed care.
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