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PHYSICIANS IN THE ARMY: HOW MANY ARE ENOUGH?

BY

COLONEL LESLIE M. BURGER, MC

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22 APRIL 1985

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PENNSYLVANIA
Faced with increasing emphasis on quality assurance, further technological advances, and the growing expectations of a well educated population, the Army Medical Corps finds itself constrained by a critical manpower shortage. Comparing physician:population ratios in the army community with that of the United States as a whole reveals staggering discrepancies between medical corps resources and responsibilities. The nation has 183 physicians per 100,000 (72 physicians per 100,000 providing primary health care) in
20. Comparison with the medical corps' 84 physicians per 100,000 (33 physicians per 100,000 providing primary health care). These differences are even more striking in view of the army's worldwide deployment and contingency training missions. To remedy this serious deficit will require a multifaceted approach that encompasses increasing medical corps strength, more fully automating the Army Medical Department, addressing the shortages of nursing and paraprofessional personnel that dramatically handicap physician productivity, sharing resources among the military services, judiciously increasing the use of civilian health care resources, and taking a hard look at the size of the population that can be satisfactorily supported.
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PHYSICIANS IN THE ARMY: HOW MANY ARE ENOUGH?

INDIVIDUAL ESSAY

by

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ABSTRACT

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Faced with increasing emphasis on quality assurance, further technological advances, and the growing expectations of a well educated population, the Army Medical Corps finds itself constrained by a critical manpower shortage. Comparing physician:population ratios in the army community with that of the United States as a whole reveals staggering discrepancies between medical corps resources and responsibilities. The nation has 183 physicians per 100,000 (72 physicians per 100,000 providing primary health care) in comparison with the medical corps' 84 physicians per 100,000 (33 physicians per 100,000 providing primary health care). These differences are even more striking in view of the army's worldwide deployment and contingency training missions. To remedy this serious deficit will require a multifaceted approach that encompasses increasing medical corps strength, more fully automating the Army Medical Department, addressing the shortages of nursing and paraprofessional personnel that dramatically handicap physician productivity, sharing resources among the military services, judiciously increasing the use civilian health care resources, and taking a hard look at the size of the population that can be satisfactorily supported.
Ever since the creation of the Hospital Department of the Continental Army in 1775, physicians have served in the Army of the United States with pride and distinction. During the formative years of the Medical Department, military physicians contributed significantly to the health practices of our young nation. From the publication of the first pharmacopoeia and medical journal in the United States, to the establishment of what was to become the United States Weather Bureau and the National Library of Medicine, army physicians were at the forefront of progress in American medicine. One has only to peruse Engleman and Joy's *200 Years of Military Medicine*, published in the bicentennial year of our great nation, to find a litany of significant contributions by military physicians to the health of our nation and to mankind.

From this great heritage evolved one of the largest and most comprehensive health care systems in the world, the Army Medical Department (AMEDD). A far cry from the challenges facing the Hospital Department of the Continental Army more than two centuries ago, today's AMEDD is faced with providing comprehensive health care services, in peace and in war, to literally millions of Americans scattered across the United States and around the globe.

The AMEDD, as we know it today, came into being in the post-World War II period when COL Michael DeBakey, MC, then surgical consultant to the Army Surgeon General, helped establish an AMEDD graduate medical education program to train interns and residents at army hospitals. For the next twenty-five years, this program provided a cadre of army trained physicians that served as the framework upon which the army medical corps was built.
Then, in 1973, the draft ended. As previously drafted physicians left the military to return to civilian practice and were not replaced by other draftees, a medical corps that had numbered some 7000 physicians during the height of the Vietnam conflict rapidly dwindled, reaching its nadir of less than 3900 in 1978. The situation was grave, indeed, as the decline in medical corps manpower, proportionately far in excess of that of the army as a whole with its huge number of health care beneficiaries, threatened the very survival of the AMEDD. Without a draft, the medical corps would either have to drastically alter its health care mission or dramatically expand its training base. The latter course was chosen. As the Surgeon General fought desperately with the congress to provide incentives to attract and retain physicians, the training base was expanded by increasing the internship, residency, and fellowship programs at each of the army’s seven medical centers, by establishing an eighth medical center, and by initiating a few physician training programs at selected large army community hospitals. What followed was a gradual but steady increase in the number of medical corps officers that today stands at about 5200, just 200 short of its authorization, but still far short of its needs.

It has been twelve years since the initiation of the all voluntary army, and the medical corps again finds itself faced with a critical manpower shortage, but one that goes unspoken. This shortage of medical corps officers must be surfaced and addressed if the AMEDD is to survive into the 21st century. Just how many physicians the medical corps needs to accomplish its worldwide peacetime and contingency health care missions, and the specialties these physicians should represent,
are questions for which answers must be found.

To assist in finding some answers, let us use as a yardstick data provided by the Department of Health and Human Services' May, 1984 Report to the President and Congress on the Status of Health Personnel in the United States. (1) In 1981, there were 430,745 professionally active physicians in the United States, excluding those in training, serving a population of 230,500,000, or 183 physicians per 100,000. (See Figure 1.) In contrast, the United States Army Medical Department Personnel Agency (USAMEDDPERSA) reports that, in 1984, there were 3473 physicians in the army medical corps, excluding those in training, and an additional 383 civilian physicians employed by the AMEDD, serving a population of 4,610,500, or 84 physicians per 100,000. (2) Since residents and fellows (physicians in training) provide direct health care services at approximately 35% of the level of full-time practitioners, adding 35% of the 1300 army residents and fellows to the total increases the ratio to 93 physicians per 100,000, still far below the nation as a whole. Only 13 of the AMEDD's 38 CONUS based hospitals exceed a ratio of 100 physicians per 100,000; 11 hospitals have ratios of less than 60 physicians per 100,000. The rather staggering population figure, far more than the 781,000 active duty personnel and their 1.5 million family members, is derived by tabulating the number of medical records maintained at each army medical treatment facility and represents active duty, retirees, and family members of all services as well as other authorized beneficiaries.

Of the active physicians in the United States, 165,383 are involved with primary care (general practice, family practice, internal
medicine, and pediatrics), or 72 physicians per 100,000. Of the 3473 army physicians, 1396 provide primary care, or 33 physicians per 100,000.

It is of interest to note that the Department of Health and Human Services estimates that in 1990 there will be a surplus of 62,750 physicians in the United States; 535,750 physicians with a projected requirement of 473,000, or approximately 189 per 100,000. In that same period, the strength of the Army Medical Corps is programmed to increase to 5400 physicians. Assuming that the strength of the army does not increase, the number of retirees and other beneficiaries does not increase (which it will), and the number of physicians in training decreases somewhat to 1400, in 1990 there will be 95 army physicians per 100,000, little more than half of what is estimated to be required for the population of the United States. And while the need for primary care physicians in the United States will remain at 70 per 100,000, the number and ratio of primary care physicians in the army will not change significantly.

Is it valid to compare physician requirements of the United States as a whole with that of the army? I suggest that it is. While there are major differences between the two health care systems, the basic health care needs of all Americans are the same. With the large and ever expanding retired military population, one can no longer argue convincingly that the army is younger than the nation as a whole. Furthermore, the army's worldwide distribution makes regionalization that much more difficult, and tends to increase, rather than decrease, the need for physicians. Most importantly, unlike the civilian sector,
the AMEDD has a wartime training mission that requires the dedication of significant medical corps resources. All these factors make the discrepancy in physician manpower between the nation and the army even more striking.

As we look toward the 1990's and beyond, continued emphasis on quality assurance issues, further technological advances, and the growing expectations of a well informed population will place even greater demands on the health care system. For these reasons, the AMEDD cannot seek merely to maintain the status quo, but must find solutions to the discrepancy between resources and responsibilities.

To begin with, utilization of physician resources must be maximized. This requires automation not only of administrative, personnel, logistics, and comptroller functions, but of patient care functions as well. Shortages in nursing and paraprofessional personnel, for so long a major factor handicapping physician productivity, must be overcome. The military services must do a better job of sharing resources and regionalizing; there is simply too much duplication. More emphasis must be placed on providing primary health care, both with military resources and through the judicious use of civilian health maintenance type organizations. Strong consideration must be given to closing small, cost ineffective CONUS based hospitals. The Department of Defense must take a look at the many categories of patients it has, and make some hard decisions about which of them it can afford to support.

The Army Medical Department has given the American soldier on the battlefield the highest survivability of any warrior in the history
of mankind, and in peacetime, provides more quality, cost effective health care than any comparable system in the world. As we look toward the future, the army must realize that with the present manpower constraints, the medical department will not be able to perform its peacetime and wartime missions. Physician resources must be increased and/or the population served decreased to bring the physician:population ratio more in line with that of the nation. To do less would be to deprive our soldiers of the level of health care a properly supported AMEDD is capable of providing.

Pp. B-1-4, B-1-29, B-1-30

(2) Data provided by US Army Medical Department Personnel Agency. Washington.
Figure 1.

COMPARISON OF PHYSICIANS IN THE UNITED STATES WITH PHYSICIANS IN THE ARMY MEDICAL CORPS

<table>
<thead>
<tr>
<th>Category</th>
<th>United States</th>
<th>Army Medical Corps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Physicians</td>
<td>4,307,745</td>
<td>165,383</td>
</tr>
<tr>
<td>Physicians per 100,000 population</td>
<td>183</td>
<td>84</td>
</tr>
<tr>
<td>Total Primary Care Physicians</td>
<td>1,396</td>
<td>33</td>
</tr>
<tr>
<td>Primary Care Physicians per 100,000 population</td>
<td>72</td>
<td></td>
</tr>
</tbody>
</table>

(All figures exclude physicians in training)

- US Data, 1981, Dept HHS
- Medical Corps Data, 1984, USAMEDDPERSA