The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Support RAND

- Purchase this document
- Browse Reports & Bookstore
- Make a charitable contribution

For More Information

- Visit RAND at www.rand.org
- Explore the RAND Arroyo Center
- RAND Health

View document details

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.
This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.
REPORT

Improving the Deployment of Army Health Care Professionals

An Evaluation of PROFIS

Melony E. Sorbero • Stuart S. Olmsted • Kristy Gonzalez Morganti • Rachel M. Burns
Ann C. Haas • Kimberlie Biever

Prepared for the United States Army
Approved for public release; distribution unlimited
The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2013 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND website is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (http://www.rand.org/publications/permissions.html).

Published 2013 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: http://www.rand.org
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org
Summary

Background and Purpose

The Army Medical Department (AMEDD) has multiple missions, including to provide a medical force that supports deployed operations and to deliver health care to soldiers and retirees and their families. The AMEDD does not have enough medical personnel to simultaneously fully staff the requirements it has for both (1) deployable Table of Organization and Equipment (TOE) units, such as combat support hospitals (CSHs), that are under the command of the U.S. Army Forces Command (FORSCOM) or other commands, and (2) Table of Distribution and Allowances (TDA) units, such as military treatment facilities (MTFs), clinics, and other commands on Army bases, which are under the command of the U.S. Army Medical Command (MEDCOM). To accomplish both missions, most medical personnel are permanently assigned to TDA units and are temporarily reassigned by MEDCOM to fill or augment TOE units with additional medical personnel when these units are preparing for deployment. Upon redeployment, these personnel return to their assigned MTFs (or other assignments). MEDCOM uses a system called the Professional Filler System (PROFIS) to accomplish this. In addition, it utilizes the PROFIS Deployment System (PDS) as a selection and management system to improve the predictability and equity of PROFIS deployments in the current rotational deployment environment. It is used to fill requirements with appropriate personnel for units scheduled to deploy within the following year. PDS separates health care professionals by area of concentration (AOC), for officers, or military occupation specialty (MOS), for enlisted personnel, into tiers based on their numbers and deployment schedule, which determine whether PROFIS assignments are decided nationally (Tier I), at the regional medical commands and major subordinate commands (Tier II), or within individual MTFs (Tier III).

Although MEDCOM has been able to fill all of its PROFIS deployment requirements, AMEDD leaders are concerned that the contemporary operating environment of persistent conflict is taxing PROFIS and PDS and that the PROFIS/PDS system is not fully meeting the expectations it was designed to satisfy, such as providing soldiers and deploying units with predictability and equity among deployments. The system also potentially generates negative consequences, including dissatisfaction among health care professionals that may affect their retention, and reduced access to care at the home station when PROFIS personnel deploy.

These concerns prompted the Army Surgeon General to ask RAND Arroyo Center to study PROFIS and assess its effects on providers and on nonmedical Army personnel, determine whether the issues that led to the establishment of PROFIS still remain, and determine whether there should be an alternative to PROFIS or whether PROFIS itself needs improvement. To answer these questions, we (1) reviewed the literature and interviewed key stakeholders; (2) analyzed databases to determine which health care professionals were deployed, how
often, and for how long; and (3) conducted a web-based survey of Army health care professionals. We also drew data from another RAND Arroyo Center project that was assessing the ability of MTFs to care for beneficiaries during deployments. Based on this information, we identified and assessed potential modifications to the system.

Findings

We identified four areas of concern related to PROFIS: predictability, skills and training, impact on MTFs, and equity.

Predictability

Predictability was a concern for both those who deploy as part of the system and those who interact with it. Health care professionals, who deploy as part of PROFIS, reported that notification often came very close to the time of deployment, giving them little time to prepare. The absence of official orders often exacerbated the challenge of short preparation time. Orders are necessary to carry out many of the activities that must occur before deploying personnel depart, such as arranging housing issues and storing household goods.

For those units receiving PROFIS personnel, the issue was different. Interviewees told us that the name of the PROFIS individual who was going to be deploying with the unit would often change and sometimes changed multiple times. This hampered the unit’s ability to incorporate the PROFIS individual into the predeployment training so that he or she could become familiar with the unit personnel and its operating procedures.

Skills and Training

Skills and training were also issues for both health care professionals and receiving units. Health care professionals want to be well trained for the position they are filling, and they do not want their skills to degrade while deployed. Receiving units want their PROFIS fillers to have the required clinical skills, but units also need their health care professionals to have appropriate soldier skills.

Some receiving units reported that their PROFIS fillers were not as well prepared as they could have been, especially with regard to soldier skills, while health care professionals reported that the 30 days of predeployment training that some of them had to participate in was not very useful. In addition, 20–30 percent of subspecialty-trained physicians who deployed as battalion surgeons reported that they were poorly prepared for the clinical duties that they were expected to perform.

Fifty percent of physicians who had deployed reported in the survey that their clinical or surgical skill decreased while deployed. Two main reasons for this were suggested during interviews. First, when deployed, physicians and other clinicians may not use the same skills as when they are working in an MTF. For example, an obstetrician rarely delivers a baby while deployed. Second, even if they are performing similar activities while deployed as they would in the MTF, they may not have enough cases to maintain their skills. Skill degradation was not universally the case; many nonphysician health care professionals reported improvement in their skills, especially their leadership skills.
Effect on Military Treatment Facilities

Health care professionals who deploy under PROFIS are typically pulled from their permanent duty stations at the MTFs. While the facilities and regional commands make efforts to replace them, this does not always occur, and the remaining staff must spread the workload across fewer personnel. In those cases where a backfill is provided, it does not always cover the entire period of the deployment. Consequently, those who remain behind have an increased workload. A secondary effect, which we were not able to establish definitively, is a perceived reduction in access to medical care for those remaining behind at the installation.

Equity

Not all health care providers deploy, and among those who do, some deploy more frequently and for longer periods than others.

We found that deployment frequency varies by medical AOC. In most AOCs, less than 10 percent of the members deployed two or more times in the 2002–2009 period. However, in some AOCs a much larger fraction of personnel have deployed more than twice. For example, over 45 percent of physician assistants, nurse anesthetists, and general surgeons have deployed two or more times. Even in these AOCs, however, there are people who have not deployed at all. This can lead to a perception that the system is not equitable, particularly among those who have deployed; this is a view that approximately 20 percent of the Nurse Corps, Medical Specialist Corps, and Medical Service Corps and a third of the Medical Corps hold. This study showed that those who feel unequally treated by PROFIS have a lower propensity to remain in the Army compared with other health care providers.

Part of the reason that more physicians view PROFIS as inequitable is the battalion surgeon position. Battalion surgeon deployments are typically longer than other physician deployments, and physicians are more likely to report skills degradation and being clinically unprepared for their deployed duties when they have deployed as a battalion surgeon.

Conclusions

Based on our analyses, we arrived at the following ten conclusions:

- PROFIS generally works. It enables the Army to deploy the required number of health care professionals with the appropriate skills, but there are areas for improvement.
- PROFIS is largely viewed as equitable, but a sizable minority view it as inequitable.
- Those who perceive it as inequitable were more likely to have deployed during Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF).
- Deployments differ substantially in number and length depending on the AOC of the health care professional.
- Filling the battalion surgeon position imposes additional demands on PROFIS personnel, including longer deployments and skills mismatch.
- A substantial percentage of PROFIS deployers receive notification of deployment and delivery of formal orders very late in the process.
- The PROFIS selection process involves noticeable turmoil, which reduces predictability for the PROFIS deployers and the units to which they are assigned.
• Physicians reported degradation of their clinical skills during deployment, particularly when deployed as a battalion surgeon; however, almost all perceived improvement in their leadership skills.
• PROFIS deployments result in the perception of increased workload and reduced access to medical care at the MTF from which health care professionals deploy.
• Health care professionals who have long or multiple deployments and perceive PROFIS as inequitable report a decreased propensity to remain in the military.

Modifications

We have identified 23 potential modifications to PROFIS, which are described in Chapter Five. No one modification addresses all of the issues that stakeholders raised regarding PROFIS. Indeed, some will likely have mixed effect, improving things for some stakeholders and making them worse for others. From these potential modifications, we selected 11 (Table S.1) that we view as most promising, which are discussed in Chapter Six. In Table S.1, we have distinguished between (1) those that could be done independently and quickly but with modest effect and (2) those that would have greater effect but are more difficult to implement, in part because they would require a more complex integrated approach. The modifications requiring an integrated approach are highlighted in gray in Table S.1.

Table S.1
Promising Modifications to PROFIS and Their Qualitative Impacts

<table>
<thead>
<tr>
<th>Category</th>
<th>Potential Modification</th>
<th>Issues Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the supply of health care professionals available for deployment</td>
<td>Limit the number of consecutive assignments to nondeployable positions (e.g., Office of the Surgeon General, Deputy Commander of Clinical Services, Deputy Commander for Nursing).</td>
<td>Equity; impact on MTFs; retention</td>
</tr>
<tr>
<td></td>
<td>Limit the number of personnel with nondeployable profiles assigned to deployable positions. (Assign personnel with nondeployable profiles to “fenced positions” or other nondeployable positions.)</td>
<td>Equity; impact on MTFs; retention</td>
</tr>
<tr>
<td></td>
<td>Shift the requirements for number of personnel in each AOC to increase personnel in AOCs in higher demand for deployment (e.g., increase supply of physician assistants or general surgeons).</td>
<td>Equity; skills and training; impact on MTFs; retention</td>
</tr>
<tr>
<td></td>
<td>Offer long-term civilian contracts for Army-trained subspecialists (all corps).</td>
<td>Equity; skills and training; impact on MTFs; retention</td>
</tr>
<tr>
<td>Change the battalion surgeon position</td>
<td>Implement short-term “retraining” before deployment (for subspecialists and nonpracticing MDs) (sick call, trauma, deployed medicine).</td>
<td>Skills and training</td>
</tr>
<tr>
<td></td>
<td>Fill all battalion surgeon PROFIS positions with physician assistants and nurse practitioners (depending on substitutability). (This would require increase in physician assistant/nurse practitioner manning.)</td>
<td>Equity; skills and training; impact on MTFs; retention</td>
</tr>
<tr>
<td></td>
<td>Use a borrowed military manpower system for battalion surgeons. (Providers assigned permanently to battalion surgeon positions, but must work part-time at local MTF.)</td>
<td>Equity; skills and training; impact on MTFs; retention</td>
</tr>
<tr>
<td>Category</td>
<td>Potential Modification</td>
<td>Issues Affected</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Improve predictability</td>
<td>Cut orders sooner. Follow the Army Force Generation (ARFORGEN) cycle for PROFIS positions and personnel. (Do not assign PROFIS personnel to units during reset period of ARFORGEN.)</td>
<td>Predictability; Equity; predictability; retention</td>
</tr>
<tr>
<td>Reduce the impact of deployment on MTFs</td>
<td>Use national backfill contracts to ease hiring challenges at some regional medical commands/MTFs.</td>
<td>Impact on MTFs</td>
</tr>
<tr>
<td>Reduce skills degradation</td>
<td>Implement a more formal reassessment of staff skills upon redeployment.</td>
<td>Skills and training; impact on MTFs; retention</td>
</tr>
</tbody>
</table>