Improving Trauma and Critical Care Proficiency and Readiness for Air Force Personnel in Critical Medical Specialties

A Pacific Air Forces Perspective

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Most U.S. Air Force medical personnel spend their time at military treatment facilities (MTFs) caring for patients whose ailments are far less complex or urgent than the severe trauma-related injuries they would see in war. This mismatch between peacetime and wartime medical care necessitates a deliberate effort on the part of the Air Force Medical Service (AFMS) as a whole, and Pacific Air Forces (PACAF), to ensure that personnel in critical medical specialties receive the training and hands-on clinical experience they need to save lives in a high-casualty environment. The goal of this project was to investigate approaches for increasing readiness and proficiency.

APPROACH

To develop a portfolio of readiness building activities, the project team

1. analyzed manpower and personnel data
2. reviewed Comprehensive Medical Readiness Program (CMRP) checklists
3. reviewed relevant literature
4. engaged in discussions with the stakeholder community
5. developed models of the assignment system and of skill acquisition and decay.

In addition, the team developed a prototype framework to demonstrate a possible method for deciding which readiness building activities and assignment policies to employ.

KEY FINDINGS

In regard to maintaining clinical proficiency and measuring readiness, we found the following:

- Although personnel assigned to the Western Pacific (WestPac) tend to be more experienced, on average, than those in locations in the continental United States, undermanning combined with skill decay in remote regions can affect readiness.
Deployments have been opportunities to develop proficiency, but these opportunities are declining. The impact on proficiency needs to be better understood, and other options to develop currency and readiness need to be utilized.

CMRP checklists do not fully function as intended, in part because the requirements are not complete and not consistently defined for all specialties. As a result, there is no real standard against which to measure readiness, measure improvements in knowledge or skills, or identify areas of concern.

In regard to developing a portfolio of readiness building activities, we found the following:

- We could identify no single organization with visibility over the types of readiness activities currently being used throughout the MTFs and major commands, lessons learned, or investments being made and required. As a result, it appears that sharing information on effective readiness initiatives occurs primarily on an ad hoc basis.
- Training activities are perhaps the easiest options to increase currency because they can be focused directly on trauma and critical care, have low manpower costs and time commitment, and require little coordination outside the Air Force.
- Readiness activities in the practice category include a wide variety of options for placing medical personnel in settings that require more-intensive patient care than the typical MTF. The different characteristics of these options accommodate the requirements of different Air Force Specialty Codes (AFSCs) and specialties.
- Assignment policies could contribute to readiness for WestPac without having a negative effect on other locations. Shortening tours, assignment sequencing, and using nonmilitary personnel at low-volume locations produced a meaningful increase in proficiency for several AFSCs.
- Using a systematic framework to match different types of personnel according to their priority ranking, constraints on participation, and constraints on the activities could enable the AFMS to take a holistic view of different strategies for building readiness and how to employ them for different types of personnel.

RECOMMENDATIONS

1. The Air Force should treat the readiness of medical personnel as an enterprise problem requiring an enterprise solution. To implement this recommendation, the AFMS needs to
   - ensure an organizational entity has the authority and resources to maintain an enterprise-wide view of the proficiency and readiness of medical personnel
   - develop consistent metrics for reviewing readiness levels across critical medical AFSCs that can be used to monitor personnel in different types of assignments
   - take a portfolio approach to employing and developing readiness building activities.
2. The AFMS, in collaboration with the Air Force Personnel Center, should view assignments over the course of a career as a key component in the development of the proficiency and readiness of its personnel.
3. PACAF should continue to advocate for activities and policies that enhance proficiency of wartime skills and readiness for potential conflict.
4. The AFMS should undertake a comprehensive assessment of the requirements for medical simulation across the spectrum of modes, levels of complexity, and needed outcomes to include infrastructure and support.