Ensuring Medical Readiness of Reserve Soldiers

The Federal Strategic Health Alliance

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As ongoing operations continue to rely heavily on the readiness of U.S. reserve forces, ensuring that troops are medically fit to deploy is vital. This program—a partnership between the DoD, VA, PHS, and private sector—aims to keep reservists from falling through health care gaps.

he U.S. Army Reserve (USAR) provides a substantial number of forces to compliment the DoD organizational readiness structure and is vital to the war fighting capabilities of the U.S. Army and to the U.S. Armed Forces Command. Over the past few years, Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) have led to a considerable increase in the demand for both combat support and combat service support from the reserve component, and to date, reserve soldiers continue to be in high demand for augmenting the fighting force. The demand has been particularly high for support in the areas of medicine, transportation, military police, supply, engineering, military intelligence, and civil affairs. Between 2001 and 2004, more than 100,000 USAR soldiers were called to active

duty, and throughout 2004, the USAR maintained a large number of soldiers activated or deployed each month.¹

Medical readiness of USAR soldiers always has been an important aspect of force protection. In order to respond efficiently and effectively to the "call of active duty," USAR soldiers must maintain a state of quality medical and physical fitness for activation and deployment. Loss of reserve soldiers for health reasons decreases the armed forces' readiness and adversely affects war fighting capacity. To achieve these standards of readiness, early identification of medical, mental, or dental conditions that would disqualify USAR soldiers from activation or deployment is essential. Early identification and treatment or correction of disqualifying health conditions make for a smoother transition from reserve component to

active component and, likewise, for activation and deployment readiness.

Unfortunately, this lesson was not fully learned until OEF and OIF were fully underway and proceeding at an operations tempo above the usual pace. Reports show that, during the first eight to 10 months of these operations, a large number of reserve soldiers were identified, following their activation, as nondeployable based on various unfit medical and dental conditions. This situation caused significant delays in the deployment process, and its management required diversion of substantial funding and personnel. It also added to the existing stress of meeting the augmentation demands of OIF and OEF and raised concern at all levels of USAR Command.

Reevaluation of the processes in place to track medical readiness of USAR soldiers revealed many challenges as well as opportunities to improve the existing mechanisms, systems, and programs to support medical readiness among USAR soldiers. For instance, it was determined that the Federal Strategic Health Alliance (FEDS_HEAL), a program designed to ensure the management of physical fitness and to promote medical readiness among USAR soldiers, could be expanded to play a more vital role in identifying and address-

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ing factors that inhibit timely physical fitness and readiness reporting among reserve soldiers.

This article describes various health conditions that can inhibit readiness and disqualify reserve soldiers from activation or deployment, the mission of the FEDS_HEAL program, and its evolving role to provide meaningful and measurable services to the USAR and other reserve components that support medical readiness during wartime and peace-keeping missions.

CONDITIONS THAT CAN DELAY OR DISQUALIFY DEPLOYMENT

Data from previous and present activations show that a number of temporary and permanent conditions can render a soldier physically unfit for deployment. Health conditions that render disqualification for deployment include, but are not limited to, various vision and dental problems, women's health issues, mental illnesses, orthopedic and respiratory conditions, and cardiovascular problems associated with diabetes and hypertension.²

Vision health is critical to the success of all military operations.³ One study showed that 44% of USAR soldiers activated during OEF and OIF had never undergone a comprehensive eye examination, and 15% to 26% of them had visual limitations that could be improved with properly prescribed corrective spectacles.⁴

Dental health is another readiness factor that is crucial to successful deployment.^{5,6} Poor dental health can lead to an increase in dental emergencies and time spent out of the fighting force, which can adversely affect mission readiness and war fighting capability, particularly in theater operation.^{7,8} Soldiers classified as Dental Class 3 are those who have a dental condition that, if untreated, could be

Table 1. Medical and dental services provided by the Federal Strategic Health Alliance

Medical

- Periodic or retention physical examinations (Chapter 3), including airborne examinations
- Mass events or Soldier Readiness Processing support (on-site)
- Immunizations
- Vision examinations for corrective spectacles and mask inserts (alerted units)

Dental

- Annual dental examinations
- Panorex and bite wing x-rays
- Dental restoration for deployment

Administrative

- Medical and dental record review and data input
- Medical Protection System reporting
- Immunization record review
- Automated voucher system integration
- Electronic record storage and transmission
- Management of vaccine storage, distribution, and administration
- Individual medical readiness tracking and problem resolution
- Scheduling and appointment management
- Training and education
- Management of recurring requirements for follow-up and scheduling

expected to result in a dental emergency within 12 months. Soldiers with a Dental Class 3 are considered nondeployable.⁹

As the number of women in the military has increased, the need for further development of policies and procedures regarding delivery of women's health care, preventive screening, and follow-up services has become increasingly clear. For example, abnormal Papanicolaou and mammography results and unexpected or complicated pregnancy are all health concerns that require efficient and timely care.10 Detection of medical abnormalities in both male and female soldiers, in fact, often requires further testing or medical procedures and, in many cases, can delay, cancel, or adversely affect projected

functional roles of deployed soldiers. The types of medical follow-up care needed are not always available in the immediate area of operation (such as theater zones).

Behavioral or mental health conditions—such as recent posttraumatic stress disorder and signs of depression, anxiety, and adjustment disorder—are major causes for concern prior to deployment. During the beginning phases of OEF and OIF, a number of USAR soldiers reported to mobilization sites with active behavioral or mental health disorders that prevented or delayed their deployment.²

Orthopedic conditions of the back, neck, knee, and shoulder have been noted as common problems that can impair soldiers' physical range of motion and interfere with their per-

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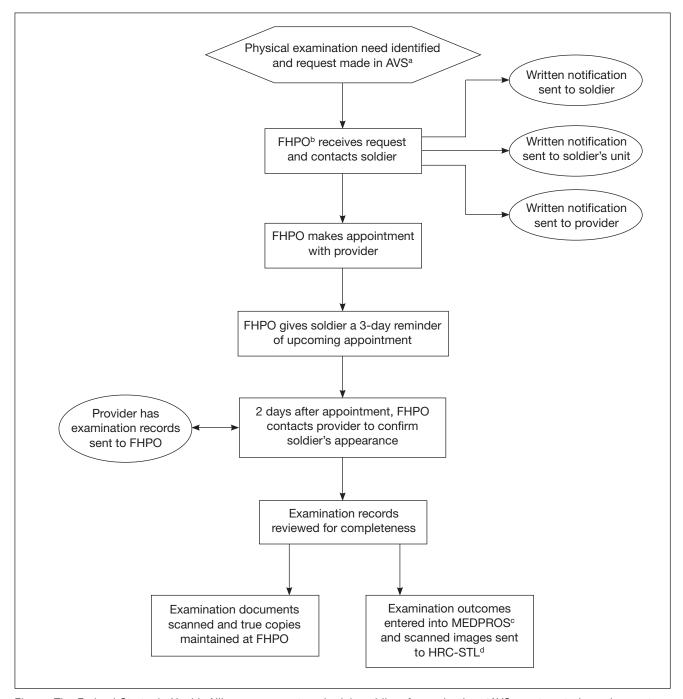


Figure. The Federal Strategic Health Alliance process to schedule soldiers for evaluation. ^aAVS = automated voucher system. ^bFHPO = Federal Strategic Health Alliance Program Office. ^cMEDPROS = Medical Protection System. ^dHRC-STL = Human Resources Command-St. Louis.

formance of basic soldiering skills. Soldiers who deploy with underlying orthopedic problems face the risk of increased aggravation of these existing conditions and time out of the war fighting efforts. Many USAR soldiers were found to be nondeployable for OEF and OIF as a result of chronic back and knee conditions.² Cardiovascular diseases associated with diabetes mellitus and hypertension are prevalent among the general middle-aged population. These health conditions are also common among the same age cohort in the USAR. To promote medical readiness among the reserve component, it is imperative to conduct appropriate screening for these conditions prior to deployment, especially if these reserve soldiers will be assigned to overseas sites where clinical technology for health screening and follow-up is limited.

Respiratory health is another area of concern that is sometimes taken lightly. Frequent exacerbations of asthma and reactive airway disease can result when a person with these conditions is introduced into environments in which dust and certain fumes are found in large quantities. (Such environments are prevalent in Iraq, for instance.) Timely diagnosis of these related respiratory conditions is important to prevent unnecessary or potential exposure to a high risk environment that would further exacerbate the respiratory problem.

As the next section of this article will show, the FEDS_HEAL program assists with identifying and addressing unfit conditions in a timely manner. These processes are complex in nature and require a comprehensive approach, as the program offers.

THE FEDS HEAL PROGRAM

Unlike soldiers in the active component of the U.S. Army, many USAR soldiers are uninsured or underinsured for health care coverage and do not have ready access to health care providers and services. Implementing effective predeployment health and screening programs to identify conditions that would affect deployment readiness of USAR soldiers is one of the more important challenges facing the U.S. Armed Forces Com-

Table 2. Organizations supported by the Federal Strategic Health Alliance		
Organization	Services provided	
U.S. Army Reserve ^a	All services	
Army National Guard	Medical surveillance	
Air National Guard	Dental examinations and radiographs	
U.S. Air Force Reserve	Physical and dental examinations	
Military Sealift Command	Physical examinations	

Table 3. Services completed by the Federal Strategic Health Alliance for the U.S. Army Reserve between program inception (September 2001) and close of fiscal year 2005

Service	No. completed
Physical examinations	93,372
Dental examinations	137,427
Panorex x-rays	55,640
Class 3 dental treatment services	14,301
Immunizations (excluding anthrax)	204,223ª
Anthrax immunizations	31,502ª
Blood draws for HIV testing	78,293
Vision examinations—spectacles and lens inserts provided	9,063
Diagnostic audio examinations	1,546

^aThese figures represent the number of soldiers who received immunizations, not the number of actual immunizations administered.

mand today.¹¹ FEDS-HEAL is one program that was developed to address the need for improving medical and dental readiness of the reserve component.

^aLargest customer.

With a mission of supporting the command reserve units and soldiers of U.S. military organizations in meeting individual medical readiness (IMR) requirements, FEDS_HEAL is a collaborative program that integrates resources from the VA, HHS Federal Occupational Health system, and private providers nationally. The program was started as a pilot project in March 1999. The 81st Re-

gional Support Command (RSC) in Birmingham, AL, the largest reserve organization in the USAR, was chosen as a pilot study site. By October 2000, it was deemed that the FEDS_HEAL program had met many of the end state goals set forth to support medical readiness of USAR soldiers. Following the success of the FEDS_HEAL pilot study, the program was implemented across the national spectrum of the reserve components in September 2001.

Since the USAR is the program's largest customer, FEDS_HEAL funding comes primarily from USAR dol-

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lars allocated for personnel medical readiness. The FEDS_HEAL Program Office (FHPO) in LaCrosse, WI has over 250 employees and maintains a database of over 10,000 providers. Medical data entered into this database are synchronized and analyzed for outcome reviews to help formulate meaningful plans for improvement. The current FEDS_HEAL network consists of over 3,600 medical providers and 2,700 dental providers.

Services provided

A range of physical examinations may be coordinated through FEDS_ HEAL, including the periodic physical examinations, profiles, and annual medical screening examinations reguired for USAR soldiers by Army Regulation (AR) 40-501 (Table 1). 12 FEDS_HEAL also provides immunizations required for USAR soldiers by AR 40-562 (tetanus toxoid, typhoid, hepatitis A, hepatitis B, polio, yellow fever, smallpox, and anthrax), 13 vision examinations for USAR soldiers who have been identified for activation, HIV testing as indicated by AR 600-110,14 annual dental examinations and bitewing and panorex x-rays required by AR 40-35, 10 restorative dental treatment for individuals scheduled for activation who have been classified as Dental Class 3, and Active Guard Reserve accession physical examinations.

The process by which FEDS_HEAL schedules and coordinates examinations is simple and straightforward (Figure). It involves interaction between the FHPO, the unit, the network provider, and the individual reserve soldier. For the convenience of the soldier, the FHPO will contract a network provider located within a 50-mile radius of the soldier's residence. The FHPO also provides the soldier with an appointment confirmation within 72 hours of the re-

quest. Following the examination, the provider sends medical records and documentation to the FHPO, where the records are reviewed for completeness and entered into the Medical Protection System (MEDPROS).

Created in 1998 to track the Anthrax Vaccination Immunization Program, MEDPROS is a secure, integrated medical database program that serves as the medical readiness information database of record for the U.S. Army. It feeds medical readiness information directly to other databases and provides commanders the ability to view their unit's or an individual soldier's medical readiness. It also identifies areas in which a USAR soldier is deficient. (MEDPROS is located on the following web site: http://www.mods.army.mil.) Through the work of FEDS_HEAL, commanders receive standardized medical reviews of all examinations, digitized copies of all medical and dental records, and command reports generated from MEDPROS.

FEDS_HEAL also provides such services as annual dental examinations, immunizations, HIV screening, and tuberculosis screening directly, typically during battle assembly weekends. In these cases, the FHPO sends a health team (consisting of nurses, technicians, and a dentist) to a site to perform the required testing. FEDS_HEAL can provide these services en masse at the reserve unit, an army location, or another designated location suitable for conducting health screening and testing.

In addition to appointment scheduling and coordination, record review and maintenance, and data reporting, other administrative services provided by FEDS_HEAL include management of vaccine storage, distribution, and administration; IMR tracking and problem resolution; and training and education. FEDS_HEAL provides its

full range of medical, dental, and administrative services to the USAR and select services for other U.S. military organizations according to each organization's needs (Table 2).

FEDS HEAL ACCOMPLISHMENTS

Between inception of the program in September 2001 and the close of fiscal year 2005, FEDS_HEAL completed 93,372 physical examinations and 137,427 dental examinations for the USAR (Table 3). Of the total physical examinations completed, 24% were referred for command surgeon review to ensure soldiers were qualified for retention and were profiled appropriately. In most of these cases, the soldiers were determined to be qualified for service. Some cases required review by a Military Occupational Specialty Medical Review Board and were referred to USAR personnel for action. Those physical examinations that indicated the soldiers were not qualified for retention were processed according to Chapter 9 of AR 40-501.12

IN SUMMARY

Although the FEDS_HEAL program is a recent addition to the many readiness resources provided by the DoD to support reserve component personnel, it has proven to be a valuable strategic management program to track and improve USAR soldier readiness. FEDS HEAL is a vital organization that supports the IMR medical requirements of the USAR, USAR National Guard, U.S. Air Force Reserve, and Air National Guard, as well as a number of related DoD organizations. Furthermore, as a result of the success of the FEDS_HEAL program, the U.S. Army's active component is now applying the fundamental principles of FEDS_HEAL to enhance practices for preparing its own soldiers for overseas deployment.

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Author disclosures

The authors report no actual or potential conflicts of interest with regard to this article.

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