Chapter 23

FOSTERING THE PRACTICE OF SOLDIER SELF-CARE

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INTRODUCTION

Self-care is the most basic form of healthcare and an essential factor in determining an individual's health and well-being. Self-care involves both the optimization of health-related behaviors and the detection and treatment of minor illnesses. This chapter explores the historical development of self-care in the military, including elements of military life and the military healthcare system that both (*a*) facilitate self-care efforts and (*b*) make self-care difficult. This is followed by a description of a well-designed self-care program that demonstrates a positive return on investment (ROI) and offers tools that healthcare providers can use to improve self-care in their clinical practices. Healthcare providers, who are uniquely positioned to support self-care in the recruit population, can use the tools described in this chapter to assist recruits in (*a*) the promotion of their health and well-being and (*b*) the prevention, detection, and treatment of minor illness—improving provider clinical practices and increasing work satisfaction.

DEFINING AND DESCRIBING SELF-CARE

Self-care is a continuum of self-initiated behaviors that may enhance the health and functioning of individuals. Although this concept at first seems intuitive, self-care is something that must be learned, applied, and made habitual. Medical professionals are instrumental in teaching self-care skills. Self-care may be described as individuals making their own decisions about diagnosis and treatment of minor health problems as well as preventive care. The US Army Center for Health Promotion and Preventive Medicine *Self-care Program Replication Tool Kit*[1] provides a more elaborate definition:

> Self-care is practicing prevention and taking personal responsibility for health. It includes a wide range of health-related decision making skills and care undertaken by individuals on their own behalf. Self-care may include: health maintenance, illness prevention, symptom evaluation, self-diagnosis, self-treatment using common remedies and over-the-counter (OTC) medications, and an encounter with a professional health care provider.[1(p5)]

Healthy lifestyle behaviors that promote health and prevent disease include maintenance of good dietary and sleeping habits, avoidance of smoking and inactivity, promotion of environmental and home safety, and maintenance of good personal hygiene habits. The continuity of these lifestyle practices throughout life largely determines one's overall health and considerably decreases the risk of acute health problems as well as chronic diseases in later life. A self-care program is a population health program that unites preventive medicine and clinical services.

Implementing self-care principles in a military setting can become problematic because of the unique nature of military operations. For example, most people know that 6 to 8 hours of uninterrupted sleep per night is the ideal, but during continuous operations, such as a combat environment, there may be opportunity for less than 4 hours sleep per 24 hours. In these circumstances, military leaders should be familiar with actions to protect their soldiers' performance by planning shifts, assigning naps, and providing snacks.[2,3] As another example, military members are advised to bathe every day, if possible, or at least once a week.[4] Again, in austere environments where there may be limitations on water and privacy, daily bathing becomes a matter requiring leader facilitation.[5]

Military leaders, when fully engaged in the operational aspects of combat, may rely on healthcare providers' support in maintaining the health of soldiers. Consequently, effective self-care in the military setting relies on a collaborative effort among healthcare providers, military leaders, and military members. The implied tasks for individual service members and leaders in taking personal responsibility for health, in both organizational and medical systems, are outlined in Table 23-1.

SELF-CARE IN CIVILIAN AND MILITARY POPULATIONS

Although self-care has received a lot of attention over the past few years, the concept is not new. Since the beginning of civilization, self-care has been the primary mode of caring for minor health problems. It is the oldest form of health management—people taking care of themselves and their loved ones without the involvement of healthcare professionals. Books on self-care appeared well before the 20th century. In 1747 the Reverend John Wesley, founder of the Methodist Church, published a popular self-care book called *Primitive Remedies*.[6] Also in the 18th century, Thomas Jefferson insisted that freshmen attending the University of Virginia take a course in medical self-care.

TABLE 23-1

INDIVIDUAL AND LEADER RESPONSIBILITIES IN SELF-CARE

Self-Care Component	Individual Responsibility	Organizational Responsibility*
Relaxation	Have a friend/buddy do deep-breathing exercise	Recognize symptoms of stress and suicide risk
Rest	Sleep 6–8 hours/night	Adjust schedule for continuous operations (eg, shift work) Provide adequate rest area
Hydration	Drink 5–12 qt fluids/d	Provide palatable water or beverages Monitor WBGT and supervise fluid consumption
Diet	Eat 3 square meals per day	Ensure that subordinates eat their meals at least twice a day
Exercise	Do aerobic activity 30 min/day and 8–12 repetitions of muscle-fitness exercises 3 times/wk	Enforce the requirement for regular physical exercise Provide time, facilities, schedule, and guidance for sufficient physical exercise
Oral Hygiene	Brush teeth after each meal Floss between teeth daily	Ensure that potable water is available, and promote regular oral hygiene
Hearing Protection	Wear ear plugs and/or ear muffs when exposed to loud noise	Enforce hearing protection based on impulse or steady noise IAW standards
Sexual Responsibility	Show respect for others' dignity Maintain abstinence or monogamy Use protective measures when engaging in potentially risky sexual behavior	Provide regular counseling on respect for others, prevention of unintended pregnancy/paternity, and STD risk
Bathing	Bathe once a day, especially in skin folds and creases	Ensure that water is available and promote regular skin hygiene, even if water is scarce Provide subordinates with sufficient time and privacy to bathe
Washing Clothes	Wash clothes once a week	Ensure that clean water is available Promote alternate methods if water is scarce (eg, airing clothing)
Washing Hands	Wash hands after using the latrine, before touching food, and after sneezing, coughing, or blowing nose	Provide handwashing or hand-sanitizing facilities Enforce the practice of handwashing, especially before meals
Protect Skin (from sun, wind, cold, and water)	Wear uniform as prescribed Apply sunscreen Change out of wet clothing	Be aware of and enforce proper wearing of uniform Provide sunscreen and ensure its use
Protect Skin (from bitinginsects)	Apply insect repellant Use mosquito netting	Provide insect repellent and ensure its use Ensure that mosquito netting is provided and used

*Refers to both medical leadership and nonmedical supervisors IAW: in accordance with STD: sexually transmitted disease WBGT: wet bulb globe temperature

Data sources: (1) US Department of the Army. *Combat Stress*. Washington, DC: DA; 2000. Field Manual 6-22.5, Marine Corps Reference Publication 6-11C, Navy Tactics, Techniques, and Procedures 1-15M. (2) US Department of the Army, Commandant US Marine Corps. *Field Hygiene and Sanitation*. Washington, DC: DA; 2000. Field Manual 21-10, Marine Corps Reference Publication 4-11.1D. (3) US Department of the Army. *Physical Fitness Training*. Washington, DC: DA; 1998. Field Manual 21-20. (4) US Department of the Army. *Army Training and Education*. Washington, DC: DA; 2003. Army Regulation 350-1. (5) US Army Center for Health Promotion and Preventive Medicine. *Don't Be a Victim of Disease—Fight Germs*. Aberdeen Proving Ground, Md: USACHPPM; [n.d.]. Poster.

The current interest in self-care developed in the 1960s with the advent of social movements concerned with issues of autonomy, self-determination, and independence. The wellness and self-help movements of the 1970s brought knowledge about self-care to a broader public.

When healthcare costs began to rise faster than the Consumer Price Index in the early 1970s, the US government initiated a study of alternative ways to deliver healthcare at a lower cost. In 1973 Congress passed the Health Maintenance Organization Act to support the development of health maintenance organizations (HMOs). HMOs, now well-established in the healthcare industry, offer medical care at discounted rates to enrollees. HMOs began sponsoring self-care programs to keep medical costs down while managing the increasing demand for healthcare. Many enrollees view the self-care programs provided by these organizations as a significant benefit.

Many of these managed-care plans offer newsletters and 24-hour telephone services that provide consumers information on healthy living habits as well as specific self-care instructions for minor illness and injuries. Many millions of copies of self-care guidebooks have been published, and increasingly, consumers are finding accurate health information on the Internet (when provided by reputable medical organizations such as the National Institutes of Health).

The impact of self-care interventions was not thoroughly investigated until the 1980s. Four studies of HMOs demonstrated a reduction in demand for clinic appointments after the implementation of a self-care program. The first, by Moore and LoGerfo,[7] presented evidence of a 21% to 24% decrease in physician office visits. A second study, by Kemper,[8] showed an 11% decrease in clinic visits and a 35% decrease in referrals to physician specialists, but no reduction in total costs. A third study, by Vickery and colleagues,[9] demonstrated a savings of $30.29 per person within a Medicare population group. Finally, Leigh and Fries[10] found that claims decreased by $74 per person in the experimental (self-care) group but increased $266 per person in the control (non–self-care) group.

Despite the emergence of self-care programs, there has not been a dramatic reduction in visits to primary care providers or emergency rooms in the general population. According to the American Hospital Association, Americans went to hospital emergency departments 97.4 million times in 1993.[11] In 1994 the Centers for Disease Control and Prevention estimated that 55.4% of these emergency department visits were for nonurgent conditions such as headaches, sore throats, or stubbed toes.[12] Resources expended for these hospital emergency department visits are 3-fold to 4-fold higher than a primary healthcare provider's fee. Many individuals seek professional healthcare for problems that could be treated at home. According to a National Ambulatory Medical Care Survey in 1992, approximately 762 million visits (about three visits per person per year) were made to non–federally-employed, office-based physicians.[13] Estimates are that roughly 25% of these visits (190.5 million) were unnecessary.

The US Department of Defense operates one of the nation's largest healthcare systems. In 1995, in response to the challenge of maintaining combat medical readiness while providing the best medical care for all eligible personnel, the department introduced TRICARE, a regionally managed healthcare program for military families and retirees. The TRICARE preventive services benefits package compares favorably with other leading managed care programs in the United States. Like other managed-care operations, TRICARE enables medical treatment facilities (MTFs) to use their resources more efficiently and gives beneficiaries multiple healthcare options. Each MTF has a unique self-care program; however, most offer classes on using a self-care guide to symptoms, courses of action, and when to seek professional medical care. Another benefit of these self-care classes is enrollment in the installation pharmacy over-the-counter (OTC) medication program, which allows beneficiaries to obtain certain medications from the pharmacy without a prescription.

CHALLENGES TO SELF-CARE IN THE MILITARY

In its 1987 publication, *Army Health Promotion*, the US Army signaled its endorsement of principles of the health-maintenance aspect of self-care for the purpose of "maximizing readiness, combat efficiency, and work performance."[14(p3)] The Army formally adopted medical self-care when TRICARE began in 1995; however, implementation varies widely. While most medical professionals acknowledge the benefits of self-care, there are times when, for a variety of reasons that will be discussed next, supporting self-care becomes a challenge.

Environmental Impediments

Because of increasing pressure on the healthcare system to manage more patients, time available to evaluate each patient is reduced. Providers have less time to listen, support, assist in the learning process,

or locate appropriate educational materials. At times, patients are not allowed adequate time for questions and decision making, factors that can diminish the effectiveness of self-care efforts. In some cases, providers have little incentive to support self-care for minor illnesses because self-care measures lower the patient count. Further impediments include lack of resources, limited appointment time and space for educating patients, lack of dedicated space for self-care pharmacy operations, formulary policies for OTC medications, and inflexible appointment systems. Despite these difficulties, the military healthcare system is gradually placing more emphasis on disease prevention and health promotion.

The Healthcare Provider's Attitude

The attitude of some providers about the ability of people to care for themselves may present a challenge to self-care program implementation. Some healthcare professionals may foster patient dependence. Providers may see themselves as the experts on the health of their patients, and fail to provide information that fosters patient self-care. Because self-care can be completely opposite to what some healthcare providers learned during their professional training, they may be unwilling to transfer a portion of care control to their patients.

The Soldier's Attitude

The attitudes of service members may also impede self-care. Soldiers may believe that all illnesses require the attention of a provider who will tell him or her what to do. This preference for easy cures over preventive action seems to be prevalent in American society. Alternatively, soldiers may also think they are nearly invincible and perceive any self-care practice as a sign of weakness. The military culture may encourage this tendency to "tough out" a condition rather than take steps to prevent or treat an illness.

In the past, the Army Medical Department (AMEDD) has encouraged soldiers to seek treatment from a healthcare provider[15] even for common, minor health conditions that might have been remedied by self-care if a program had been available. Soldiers in basic combat training and advanced individual training (AIT) are in a restricted environment with few healthcare choices. If a self-care program is not available, these soldiers cannot perform effective self-care and are directed to a provider at the troop medical clinic (TMC). This practice takes time away from training for the soldier and decreases the amount of time the healthcare provider has for more complex cases.

FACILITATING SELF-CARE

The military healthcare system has a special interest in facilitating the self-care of soldiers. First, service members must be physically able and prepared at all times to do their jobs and carry out their missions. Service members are often deployed to areas where access to healthcare is limited. Secondly, the available healthcare system resources might have to be conserved for extreme types and numbers of casualties. Knowing how to care for oneself and one's companions contributes to a sense of self-confidence. Self-care also contributes to wise allocation of healthcare resources.

Environment of Support

Adopting a new prevention-oriented paradigm for healthcare requires moving away from the "sickness care" approach and toward "wellness care." This should not be as difficult for the military as for the civilian sector, in which disease intervention has historically formed the basis for compensation. The military healthcare system should support self-care by providing personnel resources, making space available, removing obstacles, and implementing favorable policies.

Self-care should be made easily accessible to consumers. In an environment supportive of self-care, healthcare providers must be encouraged to consider education and prevention essential parts of the care that they provide. A healthcare facility's measure of success may someday rely on the health of the population it serves, as opposed to the number of patients it treats over a given period.[16]

Healthcare Provider as Facilitator

Self-care takes place within the context of a collaborative relationship between the soldier and the healthcare provider. To effectively adopt the role of self-care facilitator, providers must perceive themselves as partners with their patients in the pursuit of health. If no formalized self-care program exists, it is incumbent on providers to take the lead in implementing a well-designed program through accessing the available tools. A service member trained in self-care will possess the confidence and skills to make decisions about health-related matters. In addition, an informed, critical consumer is an excellent source of insight to help healthcare providers determine which practices work and which do not.

Partnership with Military Leadership

The successful implementation of a carefully planned and organized self-care program for soldiers depends on the collaborative efforts of military line supervisors (drill instructors, sergeant majors, and company commanders) and healthcare providers, with the support of senior leadership such as the hospital commander and the battalion and brigade commanders. The goals of a self-care program for service members will be difficult to achieve if the soldiers' supervisors are not intimately involved in the process. Military line supervisors and senior leaders, when shown the benefits of the program to the overall readiness of the unit, will be more willing to facilitate the process. Military leaders can become the best allies of healthcare providers in the promotion of self-care to soldiers when they themselves believe in the program.

A MEDICAL SELF-CARE PROGRAM FOR INITIAL ENTRY AND ADVANCED TRAINEES

In 1995 Steinweg and colleagues[15] conducted a study of a US Army self-care program using pretest-treatment-posttest instruments that was published in 1998. The intervention group was given self-care instruction and had the option of taking advantage of the entire self-care process. The control group received no self-care education and continued to use the TMC as usual. Results showed that not only did soldiers in the intervention group spend less time at the TMC but also that they returned to training more quickly. A survey of the intervention group also found that the majority of soldiers rated the self-care program as beneficial. A majority of these soldiers also believed that they became wiser healthcare consumers.

The study recorded the following positive results from participants[14]:

- increased knowledge of personal health issues (84.3%),
- increased confidence to treat minor illnesses (77%),
- increased practice of healthy behaviors (64.9%), and
- increased commitment to seek preventive medicine (62.8%).

In addition, 72% of the self-care program participants reported avoiding at least one clinic visit, and 39.8% reported avoiding at least one emergency room visit. The calculated ROI was 11:1.

In 1997, on behalf of the US Army Medical Command (USAMEDCOM), the US Army Center for Health Promotion and Preventive Medicine (USACHPPM) funded the development of the IET Self-Care Program in an IET brigade at Fort Leonard Wood (FLW), Missouri. Since its implementation, all IET soldiers at FLW have participated in the self-care program. A total of 77,916 IET soldiers were enrolled and educated in self-care from January 1998 through May 2000. During this same time, the self-care pharmacy was used 17,839 times, and the following outcomes were produced[17]:

- avoidance of lost duty time: 14,024 hours per year;
- avoidance of provider visits: 7,381 per year; and
- provider time saved: 2,460 hours per year.

In addition, no adverse outcomes (eg, drug overdose, drug toxicity, delay in obtaining medical treatment for a serious health condition) were reported by healthcare providers.

This self-care program enabled the Army to educate its soldiers about health matters when they enter active duty. The 9-week IET schedule leaves few opportunities to make up lost training time; however, as this study[14] shows, the self-care program allows IET soldiers to return to regular training much sooner than a visit to a TMC would allow. Additionally, as nonessential visits to the TMC are decreased, TMC personnel can give more attention to those soldiers who have a more urgent need for professional medical care.

The health and well-being of military health system (MHS) beneficiaries are closely linked with the personal responsibility to take care of oneself. Self-care emphasizes the importance of accepting this personal responsibility for preventing disease and injury. Self-care also involves the processes of education and empowerment. This knowledge includes awareness of types of treatment needed for common, minor health conditions, as well as awareness of when the services of a healthcare provider are required. Self-care programs can enhance the operating efficiencies of the MHS by reducing the demand for ambulatory services. By creating standardized self-care programs that are adapted to the unique local needs of each MTF, a portion of routine sick call can be effectively managed by self-care. This conserves provider time, increases the efficiency in which nonemergent care is delivered, and saves training time for soldiers.

Model Development

The self-care program at FLW was identified as a program with great potential to be implemented across AMEDD. USACHPPM provided support and consultative services to the self-care program implementers during the replication project. USACHPPM was responsible for developing all program tools, collecting and evaluating data, providing subject matter expertise, and providing support to the replication sites. Five program replication sites were chosen from among US Army Training and Doctrine Command (USATRADOC) installations. In developing the self-care program replication model, research into successful self-care programs, health behavior models, intervention studies, and other data within the civilian and military sectors was conducted. In addition, USACHPPM personnel conducted several site visits to FLW to observe and assess the self-care program. Program information addressing quality assurance, risk management, and data management was collected and evaluated. Interviews were conducted with soldiers, medical personnel, drill instructors, and line commanders to obtain feedback on the program from multiple perspectives. In addition, the chief of pharmacy at the MTF was interviewed by the USACHPPM team to discuss the impact that the self-care program had on pharmacy services; it was noted that there was little or no adverse impact on delivery of pharmacy services.

The self-care model program developed from this research used a self-care class, treatment options form, and a train-the-trainer component. It also included a self-care manual for each participant. Participants were taught basic preventive medicine concepts; how to recognize symptoms of common, minor illnesses; and how to implement appropriate treatment strategies. It is important to note that self-care is *not* self-treatment rendered for a medical condition that is beyond the scope of minor illness or injury. A self-care program is *never* meant to replace the expertise of a healthcare provider but rather is intended to help participants make informed decisions about caring for their own health. The eligibility criteria for self-care is described more fully in Exhibit 23-1.

Goals and Objectives of Replication

The goals and objectives of self-care program replication were to

- assess the safety, efficiency, and effectiveness of the Soldier Self-Care Program,
- determine the ROI of the program,
- decrease training time lost to sick call,
- empower soldiers to share responsibility for their health,
- conserve provider time, and
- reduce unnecessary sick call visits, thereby decreasing demand for unnecessary clinical services.

Implementation Tools

Using the FLW program as a model, USACHPPM developed the Self-Care Program Tool Kit,[1] which was distributed to the replication sites. It included

- program guidelines,
- briefings slides,
- a videotape of a self-care class,
- a data collection template, and
- other materials needed to implement and evaluate the self-care program, such as participant forms and class evaluation surveys.

USACHPPM also produced a self-care manual for use with the program, the *Soldier Health Maintenance Manual*,[18] written during the summer of 2001. The manual was produced as a USACHPPM Technical Guide and made available electronically to all replication sites through the Internet and on CD-ROM in the fall of 2001. Manuals were also printed and distributed to the replication sites in January 2002.

The decision to write a new self-care manual rather than use a commercially available product was driven by expense and content considerations. The *Soldier Health Maintenance Manual* could be produced locally at low cost. Commercial manuals were also not targeted to the needs of a military population, whereas the *Soldier Health Maintenance Manual* was written for a military population by 11 subject-matter experts at USACHPPM and reviewed by 28 subject-matter experts from USACHPPM, USAMEDCOM, and USATRADOC. The 104-page manual was written at the 7th grade reading level and sized to fit into the cargo pocket of a battle dress uniform, so the soldier could carry it at all times. The manual complements the self-care class as a decision-support tool for the soldier. Together, the manual and the self-care class help soldiers make wise choices about their health.

Program Process

USACHPPM developed a self-care process flowchart (Figure 23-1) as an aid to replication program

EXHIBIT 23-1

ELIGIBILITY CRITERIA FOR SELF-CARE

- What criteria are used to decide self-care eligibility?
  - Soldiers are given formal training in how to evaluate their health symptoms or conditions to determine if the Soldier Self-care Program is appropriate for their symptoms or conditions.
  - The symptoms or conditions must be evaluated by the soldier seeking self-care services using the Symptom Evaluation Charts in the *Soldier Health Maintenance Manual*[1] beginning on page 37.
  - The soldier's oral temperature must be < 100.5°F.
  - The soldier must not have any other conditions that require a standard sick call visit.
  - Instructions for the appropriate use of the Soldier Self-care Program are provided on the inside front cover of the *Soldier Health Maintenance Manual*.[1]
- Who decides self-care eligibility?
  - The soldier does, after he or she receives the formal training and the *Soldier Health Maintenance Manual*.[1]
  - Every soldier seeking self-care services *must* complete a Green Sheet. On this form, the soldier must specify the symptoms or conditions and request the over-the-counter medicine needed for treatment. If the symptoms or conditions are *not* on the Green Sheet, then the soldier is denied access to self-care and instructed (by the medic or pharmacy technician operating the self-care services) to use regular sick call.
  - In addition, observations by the medic or pharmacy technician of obvious physical symptoms beyond the scope of self-care (e.g., pronounced limp, severe cough) will result in a referral to regular sick call.
  - Each installation will also determine parameters for allowable frequency of self-care pharmacy visits to ensure that an ongoing symptom will be addressed by a healthcare provider (e.g., cold or flu symptoms continuing longer than one week).

(1) US Army Center for Health Promotion and Preventive Medicine. *Soldier Health Maintenance Manual.* Aberdeen Proving Ground, Md: USACHPPM; 2001. Technical Guide 272. Available at: http://chppm-www.apgea.army.mil/documents/TG/TECHGUID/shmm.PDF. Accessed January 9, 2006.

implementers. The self-care process for replication sites was as follows:

- All AIT students attend a self-care education class and receive a *Soldier Health Maintenance Manual*.
- If AIT students have minor illnesses (eg, runny nose, sneezing), they identify their symptoms using the manual and perform self-treatment as appropriate.
- If their symptoms are minor and manageable with nonprescription medication, trainees obtain and complete the "green sheet," "Treatment Options for Symptoms/Conditions," from their drill instructors.
- Trainees are transported to the TMC. Those trainees intending to use the Self-Care Program are segregated from trainees waiting for sick call.
- Triage is first performed by a medic. If the symptoms and vital signs indicate, further triage is performed by a registered nurse or licensed practical nurse, who decides whether (*a*) the soldier should be seen by the privileged, credentialed healthcare provider, or (*b*) continue the self-care process.
- If self-care is determined to be appropriate, and the trainee has a temperature below 100.5°F, then the trainee may proceed to the self-care pharmacy window.
- At the pharmacy window, a pharmacy technician reviews the trainees' green sheets ("Treatment Options for Symptoms/Conditions"), which have been completed by the trainees. Trainees sign the informed consent statement, receive appropriate self-care medications, obtain pharmacy counseling on how to take the medications, and then may return to their

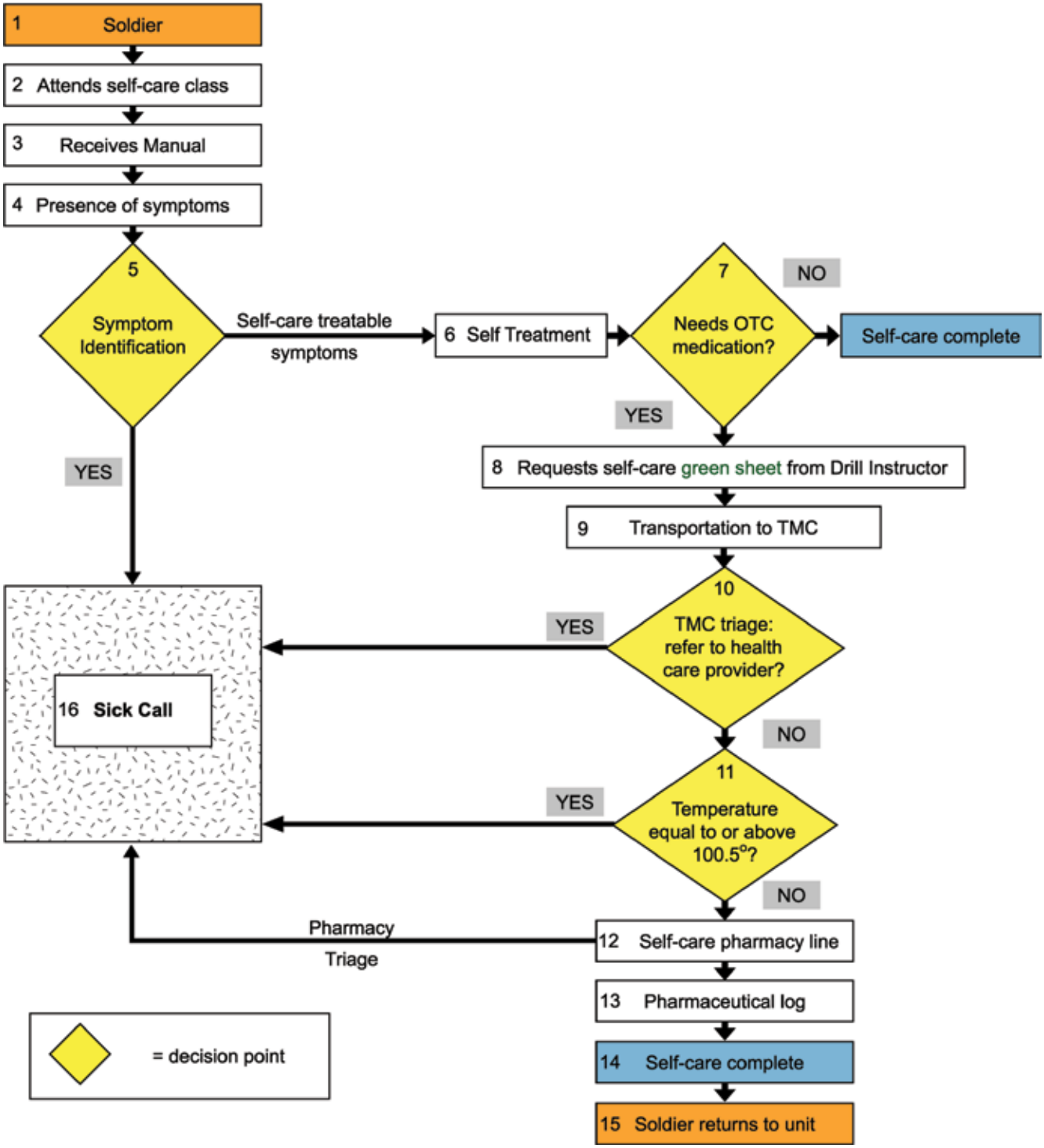

Fig. 23-1. Self-care process flowchart. Symptoms are described in detail in the *Soldier Health Maintenance Manual*.
OTC: over the counter
TMC: troop medical clinic
Adapted from: US Army Center for Health Promotion and Preventive Medicine. *Self-Care Program Replication Tool Kit*. Aberdeen Proving Ground, Md: USACHPPM; 2002.

units. The pharmacy technician also logs trainee information into the computer database during the self-care pharmacy visit.

Critical Success Factors

Any self-care program depends on four critical factors for overall program success:

1. education,
2. communication,
3. program structure, and
4. quality assurance.

These factors were identified during initial program implementation at FLW and substantiated through the program replication and evaluation. The presence of these critical factors ensures that the self-care program can meet the specified program goals of empowering soldiers to share responsibility for their health, conserving provider time, and reducing unnecessary sick call visits.

The first critical factor for self-care program success, education, includes both the *Soldier Health Maintenance Manual* and the self-care class. Education is the vehicle for delivering knowledge of general health and the self-care-process to the soldier. Without education, the self-care program is reduced to little more than a pharmacy "vending machine." Soldiers who are knowledgeable about their own health and wellness are empowered to make better decisions about their health needs, thereby reducing unnecessary sick call visits and decreasing demand for unnecessary clinical services. The education components of the self-care program increase soldier readiness through better health awareness.

The second critical factor, communication, is necessary for the many different stakeholders to work together to make the program function as intended (Table 23-2). Communication must occur during all phases of program implementation and be used to secure command support and coordinate stakeholder activities among the program implementer, the line leaders, drill instructors, and MHS personnel. Regular program data summaries are very effective in communicating program status and success to all stakeholders.

The third critical factor, a well-defined program structure (see Figure 23-1), enhances efficiency by (*a*)

TABLE 23-2

SOLDIER SELF-CARE PROGRAM STAKEHOLDER SURVEY* RESULTS

Stakeholder	No. Stakeholders Responding	Survey Questions	Percentage of "Yes" Responses (%)
Participants	1,359	1. Self-care should be available to all soldiers	89
		2. Self-care helped avoid missing training	33
		3. Self-care is a valuable benefit for my health	82
		4. When I can, I prefer to use self-care	73
Self-Care Program Coordinators	5	1. The program should be exported to other sites	100
		2. At my installation, the program will continue beyond the replication and data-collection period	100
		3. USACHPPM support was instrumental in making the program operational	100
Healthcare Providers	19	1. The program should be exported to other sites	100
		2. Program helped to better manage soldiers with nonemergent, minor DNBIs	93
		3. Program had a positive impact on my schedule	56
Drill Instructors	25	1. The self-care program should be exported to other sites	100
		2. Saved me time in assisting soldiers with health concerns	63
		3. Drill instructors should be eligible for the self-care program	77

*The surveys were developed by US Army Center for Health Promotion and Preventive Medicine personnel and was sent to the replication sites to be completed and returned.
DNBI: disease and nonbattle injuries

outlining specific program procedures for the user and (*b*) defining specific roles for each stakeholder. A clear program structure enables a smooth overall process flow so that training time lost to sick call is decreased and provider time is conserved.

The fourth critical factor, quality assurance, consists primarily of triage and feedback. Triage points are included within the self-care process to ensure appropriate use of the program and the delivery of quality medical care. Program feedback is gathered through surveys that measure program effectiveness for participants as well as stakeholders. The inclusion of these quality assurance points into program design and implementation adds value to the program for the commander, military leadership, drill instructors, the program implementer, MHS, and, most importantly, the soldier.

The success of a self-care program depends on the coordination of a variety of program elements. Inclusion of education, communication, a well-defined program structure, and built-in program quality assurance are crucial to meeting program goals. These critical factors are essential components of the entire program and must be considered during all phases of program planning and implementation.

PROGRAM REPLICATION: EVALUATION

Methods

Program replication is necessary before the program becomes widely used to ensure that a potential *best practice* is effective in various settings (see Exhibit 23-2). Program outcomes must be reliably validated across installations. The FLW self-care program was identified as a potential best practice based on robust program outcomes. The effectiveness of this program had been demonstrated by

- conservation of soldier training time,
- conservation of healthcare provider encounter time,
- avoidance of adverse medical outcomes, and
- achievement of high program satisfaction levels from program stakeholders.

The three distinct stages in program replication, preimplementation, implementation, and sustainment, are discussed below. USACHPPM developed, packaged, and delivered program materials to the selected AIT sites, and then undertook a 6-month replication study of the program.

Preimplementation

The preimplementation stage of the self-care replication program included development of an effective program model based on the FLW self-care program. This model was developed as a collaborative program between line supervisors and healthcare providers appropriate for Army-wide use. The preimplementation stage also included securing support from USATRADOC for a program tailored to the AIT student population. Consequently, USATRADOC installations

EXHIBIT 23-2

BEST PRACTICE

The term "best practice" is used as a label that identifies the best way for practitioners (healthcare providers in this case) to achieve desired goals, objectives, or both. The word "best" is defined in terms of the multiple factors that influence the input and output of a dynamic system. In general, the practices of healthcare providers and the delivery of healthcare services can be assessed in terms of safety, appropriateness, efficiency, and effectiveness. The essence of outcome study in healthcare is to determine differences in the end state of the dynamic systems under study, including the patient, the provider, and the healthcare delivery system, and relate these differences to the different processes involved with achieving that end state.

Soldier self-care demonstrates, through the metrics collected during the replication phase of the program, that it is a best practice for providing medical care for minor, nonemergent health conditions. When compared with a provider encounter at a sick call visit, self-care has demonstrated that it saves soldier time, provider time, and prescription medication expenses. In addition, soldiers are given the opportunity to take responsibility for their own health, which builds a more capable, more agile, and more ready force. From this perspective, soldier self-care is an essential part of the Military Health System.

were chosen as self-care project replication sites. Finally, the US Army Office of The Surgeon General and USACHPPM were briefed on the self-care program in March 2001. These key medical leaders agreed on the following objectives for the replication study:

- Develop a safe, appropriate, efficient, and effective self-care program for the replication sites.
- Conserve soldier training time.
- Conserve medical provider time.
- Empower AIT soldiers to appropriately care for themselves.
- Provide more efficient healthcare to AIT students for minor, self-limiting diseases and non-battle injuries.
- Demonstrate a positive ROI.

Implementation

In accordance with the Centers for Disease Control publication, "Framework for Program Evaluation in Public Health,"[19] evaluation was conducted during the implementation of the self-care program, using data collected monthly from the replication sites. Electronic data templates were developed and distributed to the replication sites to enable tracking of the quantitative metrics. These data were analyzed monthly and used by the USACHPPM replication project team to assess the impact of the program on the delivery of healthcare services to the target population. In addition, cumulative summary reports that included program performance were sent monthly to each replication site.

Replication supports the USACHPPM goal of providing service and science to customers in the field. With the tools, technology, support, and service that USACHPPM provided, customers were able to build new organizational capacity and shift resources into a new product line. This was a significant undertaking for both the replication project implementers and USACHPPM.

Sustainment

All replication sites reported that they will continue the program. As evidenced by stakeholder survey results (see Table 23-2), stakeholders were very satisfied with the program. At the close of the replication project, USACHPPM coordinated with the US Army Office of The Surgeon General, USATRADOC, USAMEDCOM, the regional medical commands, and other staff for program briefs and updates. In addition, the Soldier Health Maintenance Manual and other program materials continue to be posted on the USACHPPM website.

FINDINGS AND DISCUSSIONS

Process

The process of teaching preventive medicine concepts and skills to AIT students begins with self-care instruction. Self-care instruction process measures collected during replication include the number of soldiers trained, the number of self-care classes taught, and the number of soldiers referred from self-care to sick call (Table 23-3).

The amount of time required for teaching a self-care class is addressed in the Tool Kit.[1] It is recommended that a small team of self-care instructors be created, using the "instructor-trainer" approach, to ensure that the demands of teaching a regularly scheduled class are shared and no single instructor is overburdened. Class instructors include trained medical personnel such as community health nurses and healthcare specialists (military occupation specialty 91W). Depending on the size of the target audience, the number of self-care classes taught varies from one to two per week at each replication site. Since the ideal class requires an hour-long block of instruction in addition to an hour of preparation time, staff time requirements range from 2 to 4 hours per week, to be spread out among multiple team members.

TABLE 23-3

SELF-CARE PROCESS OUTCOMES DURING THE SOLDIER SELF-CARE PROGRAM 6-MONTH REPLICATION PERIOD, AUGUST 1, 2001, THROUGH JANUARY 31, 2002

Indicator	Metric	Amount
Education	Soldiers trained	12,589 (total)
Training	Classes	144 (total)
Quality	Soldiers referred from self-care to sick call	24/1,000 (rate for population of trained and eligible soldiers)

Data source: data provided by the five replication sites and collected by US Army Center for Health Promotion and Preventive Medicine personnel.

Quality Assurance

The self-care model incorporates several quality assurance checkpoints (see Figure 23-1 and Table 23-1). The checkpoints were monitored in the monthly data collected from each replication site. The fact that not all soldiers who requested self-care were able to utilize the program, although the number was not excessive, demonstrates that the model is functioning as designed (ie, soldiers with presenting signs and symptoms requiring the attention of a healthcare provider were excluded from self-care, regardless of the soldiers' desire to use the program). If an excessive number of soldiers who requested self-care were referred to sick call, this would have indicated a need to address a possible deficiency in instructions given at the self-care classes; however, this was not the case.

Quality assurance checkpoints are a unique feature of the soldier self-care model, ensuring that self-care is not inferior care. In contrast to other self-care programs, the requirement to triage those who access the program ensures program quality and safety (see Exhibit 23-1).

Utilization

Not surprisingly, self-care is used when available because it is efficient. The fact that the program was used more than anticipated (29% eligible usage compared with the 15% FLW benchmark) demonstrates that self-care is filling a medical need of AIT students (Table 23-4). Many self-care studies present utilization statistics only in the teens.[20–26]

The replication data are similar to the findings of Vickery and colleagues,[9] who reported that 25% of minor ailments are self-treatable. The expressed interest by military community members for the program was right on this target. It is worth noting that self-care and sick call are not competitive services but rather complementary services. Each service is appropriate for specific illnesses, reflecting a stepped approach to healthcare delivery.

Soldiers trained in disease and injury prevention through self-care initiatives are a positive long-term benefit to force readiness. During the replication project, soldiers made 3,626 self-care visits to the TMCs or forward screening stations. The aggregate number of self-care visits for all five replication sites showed an overall monthly increase in the number of self-care visits (Figure 23-2). Aggregate visits reached a high of 801 in January 2002, representing 12% of the total ambulatory MTF visits. The December 2001 number is low because of the holiday season, when IET and AIT soldiers are released for approximately 2 weeks.

Facility demand is an indication of the impact that self-care had on an entire MTF. Although not all beneficiaries were eligible to use self-care, 8% of the total ambulatory visits were for self-care. As a percentage of total ambulatory services, self-care varied from a high of 36% at one replication site to only 4% at another, which had a large nontrainee population. Shifting patients from sick call to self-care is a method of managing demand for medical services. Demand reduction is not *withholding* services but rather (*a*) educating consumers about when to access service and (*b*) empowering consumers to determine the appropriate usage.

Demand reduction at replication sites resulting from the inauguration of the self-care program is shown in Figure 23-3. These data reflect the first 3 months of

TABLE 23-4

SELF-CARE UTILIZATION DURING THE SOLDIER SELF-CARE PROGRAM 6-MONTH REPLICATION PERIOD, AUGUST 1, 2001 THROUGH JANUARY 31, 2002

Indicator	Metric	Amount
Access to care	Self-care visits	3,626 (total)
Usage	Eligible utilization	29%
Facility demand management	Percentage of total ambulatory services	8%

Data source: data provided by the five replication sites and collected by US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

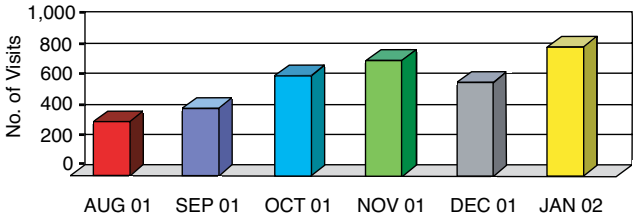

Fig. 23-2. The aggregate self-care visits show the increasing use of the Soldier Self-Care Program over time at the five replication sites. The increased use is shown from a starting point of about 300 self-care visits in August 2001 to about 800 visits in January 2002. The lower utilization in December 2001 is accounted for by the holiday exodus. Data source: US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

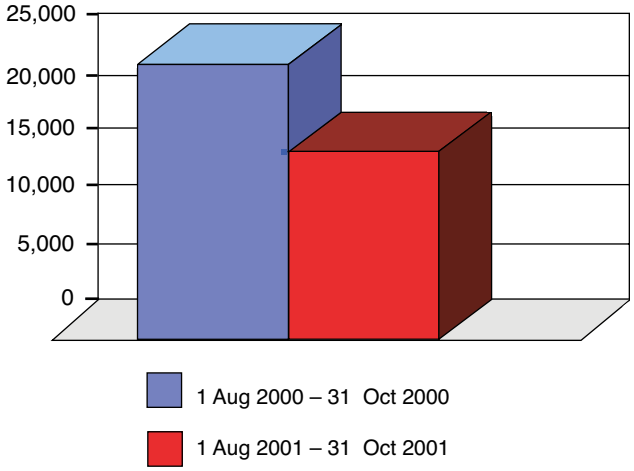

Fig. 23-3. The positive impact of the Soldier Self-Care Program is demonstrated by comparing the number of ambulatory visits to a healthcare provider by soldiers enrolled in AIT during the same months before and after program implementation. These data are from 2000, 1 year before the program started, and 2001, the first year of the program. As expected, when self-care takes the place of an encounter with a healthcare provider, the demand for provider encounters decreases (in this case by 32%).
Data source: Reportable Medical Events Project Officer, US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md. Personal communication, November 2001.

EXHIBIT 23-3

OPTIMIZATION DURING THE SOLDIER SELF-CARE PROGRAM 6-MONTH REPLICATION PERIOD, AUGUST 1, 2001, THROUGH JANUARY 31, 2002

• Soldier training time conserved	4,242 hours
• Provider time conserved (reported by site)	784 hours
• Private sector visits recaptured*	3,136 visits

*Provider time conserved (in hours) • 4 TRICARE appointments per hour
Data source: data provided by the five replication sites and collected by US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

replication. The number of ambulatory visits of AIT units during replication is compared with the same months of the previous year to eliminate seasonal demand fluctuations. Data for the 3-month period for all five sites showed a 32% reduction in healthcare provider encounters. As noted from other data analysis, use of self-care services increased as programs matured.

Efficiency

Without a self-care program in place, AIT soldiers are limited in their healthcare choices. Sick call is a lengthy and expensive event. The average cost for a sick call visit is $104. The average time to be treated at sick call for all replication sites was approximately 1 hour, 20 minutes. In contrast, self-care offers a viable, cost-effective, and time-saving alternative.

The self-care program resulted in 3,626 soldier visits, which conserved 4,242 hours of training time (Exhibit 23-3). In addition, the self-care program is an excellent example of medical personnel and line leadership working together to ensure that soldier training time is minimally impacted by minor health conditions.

Proactive management of 3,626 soldier visits (see Table 23-4) with minor, self-limiting health symptoms or conditions conserved the use of healthcare provider time. Providers were able to direct 784 hours (see Exhibit 23-3) of patient encounter time to the care of soldiers with more serious health conditions. Exhibit 23-3 also shows the number of private sector visits that could be recaptured with self-care. Although more than 784 provider hours were conserved, at four visits per hour, these would yield recapture of 3,136 private sector visits. This is a projected figure, given the clinic time saved when a soldier utilizes self-care rather than a traditional sick call visit. Provider hours conserved by an operational self-care program can be redirected to reduce network referrals. The financial impact of reducing the high cost of additional TRICARE services is another positive aspect of the program. As medical inflation continues in the double digits, evidence-based solutions to reduce costs should be systematically implemented. Depending on the level of medical care provided by an MTF—some have limited capabilities—referrals to a network provider can be, and have, been used often. Bringing public health and clinical care together in the form of self-care is a cost-effective population approach to optimize the delivery of medical services for minor health ailments. MHS success depends on innovations and enterprise-wide reengineering of the healthcare delivery system.

Stakeholder Survey Results

The Soldier Self-Care Program fosters an active partnership between medical assets and military line leadership. Self-care program implementers were cen-

tral to the effort of fielding the self-care program and coordinating tasks and roles among the many stakeholders impacted by the program. The four categories of principal stakeholders in program replication were the following:

1. program users (ie, AIT soldiers),
2. program implementers,
3. healthcare providers, and
4. drill instructors.

Qualitative self-report surveys were administered to all categories of stakeholders, allowing individuals to comment on their perceptions of the program (see Table 23-2). The fact that all four categories of stakeholders overwhelmingly recommended that the program be expanded lends credence to the contention that users and providers alike believed that the program had a positive impact.

Program Users

The vast majority of program users (AIT students), the first group of stakeholders in the self-care program, recommended that self-care be available to all soldiers. Their approval demonstrates that the self-care program met their needs and expectations. The self-care program advances the philosophy that healthcare is a joint responsibility between the patient and AMEDD. The fact that 82% of users perceived self-care as a "valuable benefit" reinforces the belief among soldiers that AMEDD is concerned about their well-being and has valuable programs in place to maintain their health.

A disparate finding from the program users' surveys was that only 33% felt that self-care helped them avoid missed training time. This may be due to the perception that self-care is being used only when the soldier obtains an OTC medication from the self-care pharmacy, and not when the user follows health promotion strategies to stay well or uses nonpharmacological measures to obtain relief from a minor symptom. Another possible explanation is that the users may have considered any time away from training as lost time, without considering time saved by exchanging a 15-minute self-care visit for a 1.5-hour sick call visit.

Anecdotal evidence from student testimonies when designing the initial self-care program was that soldiers "would rather be at training than at sick call." The survey shows that 73% of users prefer to use self-care over sick call. These soldiers prefer efficient ways to meet their healthcare needs without missing training time.

Program Implementers

All five replication program implementers, the second group of stakeholders, indicated that the self-care program should be exported to other sites. Obviously, these implementers felt that the benefits of the program outweigh program costs. All the implementers stated that they will sustain the self-care program.

Healthcare Providers

All healthcare providers, the third stakeholder group, also said that the program should be exported to other sites. This gives a strong indication that the program is valuable. Nearly all healthcare providers (93%) thought the self-care program helped manage soldiers with nonemergent, minor diseases or nonbattle injuries. Self-care teaches customers when to access the healthcare system as well as what services to seek. Safely shifting a small percentage of patients toward self-care and away from sick call decreases the demand for provider services. Over half of the providers (56%)

EXHIBIT 23-4

HEALTHCARE PROVIDERS' SATISFACTION WITH THE SOLDIER SELF-CARE PROGRAM

- In the survey taken to gauge overall satisfaction with the Soldier Self-Care Program, healthcare providers were asked to answer "yes" or "no" to the statement, *"Program had a positive impact on my schedule."* "Yes" replies were made by 56% of the providers.
- This question elicits the sense of personal benefit the program had for healthcare providers, who are generally overworked in the military health system. For example, did it free them from seeing minor, self-limiting conditions that could be addressed appropriately by over-the-counter medications?
- The overall positive perception by providers gives clear indication that the program did not cause unwelcome extra work; it was not seen as something that takes them away from their work as primary care providers. It is important for any new program to be seen as worthwhile and advantageous to those who are affected by the program.

believed that self-care positively impacted their schedules (Exhibit 23-4). This positive impact could include fewer unnecessary patient encounters, a more tenable sick call workload, and an increased ability to focus on those with the greatest need.

Drill Instructors

The fourth group of stakeholders, drill instructors, have considerable interest in the health and welfare of their students, and, therefore, were important facilitators in the self-care process. Like the other three groups of principal stakeholders, all drill instructors recommended that the program be exported. The role of drill instructors is crucial to the success of the program: drill instructors ensure that their students attend the self-care class and hand out the OTC medication request forms (green sheets) at formations. Sixty-three percent of drill instructors thought the program assisted troops with health concerns.

Costs and Benefits: Replication

The costs to develop and implement the self-care program at the five selected AIT sites are described in Table 23-5. These financial resources were required to provide program design and guidance information;

TABLE 23-5

SELF-CARE RESOURCE REPLICATION COSTS

Installation	Students (No.)	TDY* ($)	PPT Class† Slides ($)	Books‡ ($)	0.5 FTE§ ($)	Direct Training Costs¥ ($)	Funding ($)	Total Cost per Installation ($)
Site 1	1,296	—	100	4,190	—	931	15,000	20,221
Site 2	2,500	—	100	20,531	—	900	15,000	36,531
Site 3	12,000	195	100	16,760	—	1,148	25,000	43,203
Site 4	9,279	950	100	8,380	—	869	20,000	30,299
Site 5	4,187	684	100	8,380	—	620	25,000	34,784
USACHPPM	—	3,756	—	2,095	32,170	—	—	38,021
Totals	**29,262**	**5,585**	**500**	**60,336**	**32,170**	**4,468**	**100,000**	**203,059**

* Travel: visits to replication sites were made to ensure that the self-care program was being properly implemented and to address questions and concerns of the program stakeholders.

† Class: the self-care class is the foundation of the program. Soldiers may not access the self-care process until they have taken the class. During the 1-hour class, soldiers are taught about self-care and how to use the self-care program at their specific installation.

‡ Books: the self-care guide is an integral part of the self-care process. For a self-care program to be effective, both a class and a guide are required. The guide reinforces and expands the information presented in the class. Individuals who use the self-care guide and follow its algorithms are empowered to make informed healthcare decisions. The guide stresses primary prevention and health-promoting behaviors. During the replication phase, guides were purchased from a contract vendor; now they are available through USACHPPM.

§ Labor: a 0.5 FTE GS-12-equivalent employee was hired at USACHPPM to develop the self-care program and its implementing materials, so that purchasing off-the-shelf self-care books was not necessary. Additionally, this individual was responsible for data analysis and reporting. NOTE: the level of effort to support training and data collection at AIT replication sites is below the workload required of 0.5 FTE; therefore, this work was done by existing personnel.

¥ Training costs: number of self-care classes taught x (1 h instruction time + 1 h preparation time) x $15.25 (GS-4 hourly wage). Funding covered start-up cost of the program. Funds were used for (a) printing (OTC requests and program surveys [yellow sheets]; (b) programs materials and supplies (marketing materials and miscellaneous supplies); (c) equipment (one-time purchase of technical equipment such as laptop computers and LCD projectors, etc). The purchase of computers was essential to establish the self-care program. Some posts had forward screening stations not equipped with computers; therefore, the infrastructure did not have access to the prescription history of the individual soldiers, project training materials, and CHCS. NOTE: pharmacy costs were not included in this analysis, as they were assumed to stay the same whether or not self-care was implemented.

AIT: advanced individual training
CHCS: Composite Health Care System
USACHPPM: US Army Center for Health Promotion and Preventive Medicine
FTE: full-time equivalent (employee)
GS: General Service
LCD: liquid crystal display
PPT: Power Point
TDY: temporary duty
Data source: US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

TABLE 23-6

SOLDIER SELF-CARE PROGRAM SUMMARY STATISTICS AND CALCULATIONS—REPLICATION

Benefit	Value	Unit of Measure	Data Source
Total utilization (regular sick call and self-care visits)	43,247	all soldiers	TMC logs
Total number of soldiers trained	12,589	AIT soldiers	TMC logs
Total number of soldiers seen for self-care	3,626	AIT soldiers	Self-care green sheets
Length of average TMC non–self-care visit	1.41	hours	TMC logs
Length of average TMC self-care visit	0.24	hours	TMC logs
Length of average TMC provider visit	0.22	hours	TMC logs
Summary Calculations (based on data above)	**Value**	**Unit of Measure**	**Explanation of Calculation**
Percentage of self-care usage at TMC (soldiers trained)	29%	percent usage	Self-care visits/total soldiers trained
Percentage of self-care usage at TMC (regular sick call + self-care)	8%	percent usage	Self-care visits/total soldiers in sick call
Training Benefits			
Training time saved per self-care visit	1.17	hours	Length of non-self-care visit minus time of self-care visit
Total training time saved by use of self-care	4,242	hours	No. self-care visits x training time saved per self-care visit
Medical Benefits			
Total provider visits saved	3,626	visits	No. self-care visits
Provider time saved by use of self-care	784	hours	Length of average TMC provider visit x total provider visits saved
Optimization			
Possible private-sector care recapture	3,136	visits	Provides time saved x 15-min appointment time
% FTE impact (6 months)	0.45	1,740 hours	Provider time saved/1,740 manpower FTE

FTE: full-time equivalent (employee)
TMC: troop medical clinic
Data source: Statistics provided by the five replication sites; calculations done by US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

data collection and analyses; training and marketing materials; individual self-care guides; labor; and computers and other equipment. The computers provided the necessary access to the Composite Health Care System and electronic training materials. Books and supplies primarily included costs of self-care guides, program marketing materials, and other training materials like class slide presentations.

Return on Investment: Replication

Table 23-6 provides details regarding training

TABLE 23-7

SOLDIER SELF-CARE PROGRAM 1-YEAR SUMMARY REPORT*

Metric	Start-up	Sustainment	Total
	Process		
Soldiers trained	5,352	5,280	10,632
Utilization	1,962	2,420	4,382
Utilization per soldiers trained	37%	46%	41%
Number of training classes	79	77	156
	Outcomes		
Soldier time conserved (hours)	3,566	4,674	8,240
Soldier time conserved per visit (hours)	1.82	1.93	1.88
Provider time conserved (hours)	410	590	1,000
Provider time conserved per visit (hours)	0.21	0.24	0.23
Soldier satisfaction	91%	83%	86%
Adverse events	0	0	0
	Costs		
Program cost average per site	$23,100	$8,493	$31,593
Soldier time cost *avoided*, average per visit	$71	$75	$73
Soldier time cost *avoided*, average per site	$46,434	$60,500	$106,934
Provider visit cost *avoided*, average per visit	$104	$104	$104
Provider visit cost *avoided*, average per site	$68,016	$83,893	$151,909

*Dates: August 2001 through July 2002
Sites: Aberdeen Proving Ground, Md; Fort Huachuca, Ariz; Fort Sill, Okla
Duration: start-up: August 2001–January 2002; sustainment: February 2002–July 2002
Return on investment: 820%
Data source: US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md.

benefits, medical benefits, and optimization for the 6-month replication study. The forecasted ROI for the first year was $2.59; the actual ROI for the replication phase was $2.67. The small difference between the forecasted and actual ROIs indicates a thorough understanding of the program, its components, and cost of replication site implementation. A summary report of the first year of the Soldier Self-Care Program at three of the five AIT sites, including a 6-month sustainment period following the replication period, is presented in Table 23-7.

SUMMARY

The Soldier Self-Care Program is founded on the fundamental principle of healthcare demand management. Thes program met its goals and objectives and succeeded in becoming a means to provide cost-effective healthcare services to soldiers who experience minor, nonemergent, self-limiting health symptoms (eg, stomachache, headache, diarrhea). As healthcare costs continue to outpace the rate of inflation and grow disproportionately from the rest of the economy, evidence-based solutions to address this trend should be implemented in a systematic, managed way.

Combining preventive health and clinical services in the form of self-care is a cost-effective solution to providing military medical services for minor health ailments. By providing both population-based education classes and individual clinical services, self-care focuses on population needs and stakeholder resources to optimize performance for both the target population

and the healthcare system.

The level of intervention in this stepped approach to healthcare service delivery is based on medically sound information. Within this self-care model, consumers ultimately decide when to seek healthcare. In this program, the decision-support tools are provided to assist in making an educated choice. This is an efficient use of staff and facility resources, reducing unnecessary costs for AMEDD while avoiding lost training time for the soldier.

Self-care benefits the soldier, the healthcare provider, and the healthcare system. Soldiers can do more for themselves when the tools, skills, support, and information are available. Finding avenues for making these resources readily available can result in better healthcare utilization and cost reduction.

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