Chapter 14

BEHAVIORAL HEALTHCARE AT LANDSTUHL REGIONAL MEDICAL CENTER

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INTRODUCTION

The mission of Landstuhl Regional Medical Center (LRMC) is to provide world-class comprehensive and compassionate care to the nation's warriors, their families, retirees, and all other patients as directed, while maintaining unit and personal readiness to meet the demands of the United States. This is accomplished by maintaining a trained and ready healthcare force that seeks, thrives on, and embraces change while accomplishing the healthcare mission, utilizing outcomes to drive medical decisions.

LRMC sits on a hill overlooking the German city of Landstuhl. The garrison belongs to the Kaiserslautern military community, which consists of several military bases scattered in the Kaiserslautern area. Landstuhl is a city of 20,000 located in the Rheinland-Pfalz province of Germany, about 30 miles east of the French border, near the town of Kaiserslautern and Ramstein Air Force Base. US Army outpatient psychiatric care in Germany catchment areas consists of the Wurzburg area in the southeast, the Heidelberg area in the south-central region, and LRMC, covering outpatient psychiatric care in southwest Germany (Figure 14-1).[1]

This US Army facility is the largest American hospital outside the United States and the only American tertiary (specialty) care hospital in Europe, serving 245,000 beneficiaries within the European command, of which 100,000 are primary care beneficiaries. Landstuhl also supports active duty service members, their family members, and other beneficiaries in Africa and Asia. About half of the LRMC permanent staff is civilian, with Army personnel making up the next largest group, and the remainder being US Air Force and small percentages of Navy personnel. Some personnel are borrowed from local units. There are also global war on terror augmentees (including civilians). In total, about 2,800 personnel are assigned to work at LRMC, with about 2,200 permanent party. A typical day at LRMC in Fiscal Year 2008–2009 will see 20 admissions, 14 operating room cases, an intensive care unit (ICU) census of 6.4, 2.5 births, and an average length of stay of 3.2 days.[1]

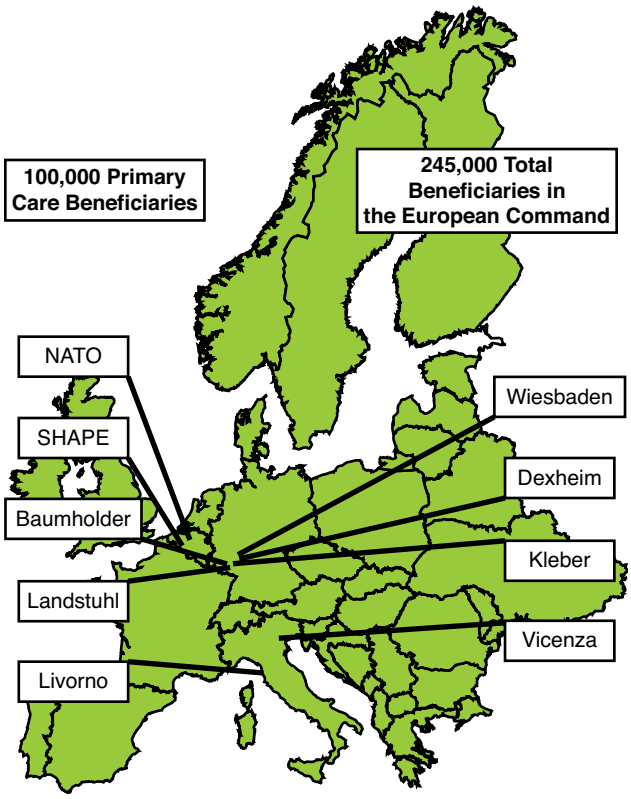

Figure 14-1. Landstuhl Regional Medical Center and outlying clinics as of 2007.
NATO: North Atlantic Treaty Organization
SHAPE: Supreme Headquarters Allied Powers Europe

ROLE OF LANDSTUHL REGIONAL MEDICAL CENTER IN WARTIME

LRMC serves as the primary evacuation center for Central Command, thus the majority of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) evacuees pass through LRMC. (Table 14-1 details the impact of OIF / OEF on the patient load at LRMC.[1]) Nearly every day a transport aircraft lands at Ramstein Air Force Base near the city of Frankfurt and unloads medical evacuees who are then transported to LRMC. As they arrive, medics, nurses, physicians, and other clinicians gather in front of the emergency room. The patients are unloaded from the back of the bus, some walking, others on stretchers. As of November 24, 2008, over 51,750 OIF and OEF service members have been treated at LRMC (10,575 battle injuries, 41,178 nonbattle injuries). Of these, 35,939 were outpatients; the remaining 15,814 were inpatients.[1] Over 9,000 were returned to duty in Central Command.[1]

Initial Assessments

Staff members triage the patients, taking the most seriously injured to the ICU or surgery. The less seriously wounded and injured are taken to the medical and surgical wards, where they share rooms with other, similarly injured patients. The psychiatric patients are quickly evaluated and either sent to the

TABLE 14-1

IMPACT OF OPERATIONS IRAQI FREEDOM AND ENDURING FREEDOM ON PATIENT LOAD: A TYPICAL DAY AT LANDSTUHL. COMPARISON BETWEEN 2001 AND 2006

	2001	2006	Change
Admissions	16	23	+ 43%
Operating Room Cases	9	16	+ 73%
Intensive Care Unit			
Census	3	9	+ 300%
Overall Acuity	2.7	5.01	+ 85%
Meals	800	1,178	+ 47%
Births	3	2.3	- 23%
Average Length of Stay (days)	4.6	3.4	- 27%
Pharmacy Products	1,026	1,589	+ 54%

outpatient clinic or seen in the emergency room by the mental health team after hours. All psychiatric evacuations are seen, evaluated, and have their dispositions determined the day of their arrival. Many are on medications; most have been traveling for hours, some for days, and may be tired and hungry.

While psychiatric patients are at LRMC, the Deployed Warrior Medical Management Center (DWMMC) tracks their progress and provides logistical support, including briefings, housing, food, finance, and other needed support. Each soldier is assigned a DWMMC case manager, a liaison from the service member's unit or service, and given access to primary care physicians. DWMMC has other staff members, nurses, and medics or corpsmen, to assist as needed. The case managers and liaisons manage service members with the full spectrum of illness, from the severely injured to stable routine patients.

Until 2007, outpatient evacuees from OIF/OEF usually stayed at another military base within the Kaiserslautern military community. Due to concerns about supervision and access to the hospital, a new facility known as the Medical Transient Detachment was opened in 2007, allowing many outpatients (especially psychiatric) to stay next to the hospital on the Landstuhl base. These patients fall under a military command organization with regular formations and accountability. During their free time they may engage in on- and off-post activities such as visiting the gym and the post exchange, or engaging in activities on the local economy. Patients treated at LRMC are usually discharged or complete their course of treatment within a week, thereafter returning to theater, the United States, or their home station. Many leave within 72 hours of arrival.

Medical and Surgical Evacuees

All patients evacuated to LRMC for medical and surgical reasons are screened for mental health issues by their primary physicians both downrange and upon arrival at LRMC. Most inpatients are briefly screened by members of the outreach team, which is separate from the consultation team and consists of multidisciplinary healthcare professionals, chaplains, and technicians trained to provide proactive mental health outreach to wounded warriors. Chaplains brief all arriving soldiers on combat operational stress awareness. Many primary care providers also include brief education and screening for combat-related emotional problems. Medical staff members are constantly trained to recognize and provide basic levels of care for combat stress and other combat-related symptoms. Few of these patients evacuated for medical or surgical reasons demonstrate significant psychiatric symptoms. Those demonstrating significant psychiatric symptoms are referred to behavioral health providers after ruling out medical etiologies. Inpatients in emotional distress or with symptoms secondary to emotional distress are referred to the behavioral health inpatient consultation team. Outpatients are referred to the outpatient behavioral health team. The inpatient consultation team consists of multidisciplinary behavioral healthcare workers (social workers, psychiatric nurses, psychologists, psychiatrists, counselors, and mental health technicians) who provide consultation and management suggestions to primary medical staff.

Psychiatric Evacuees

Most arriving psychiatric casualties are triaged through either the outpatient behavioral health clinic, consisting of a multidisciplinary team of technicians, psychiatrists, psychologists, and social workers, or the after-hours on-call emergency clinicians. After-hours services are provided through the combined efforts of the LRMC and Ramstein Air Force Base psychiatrists, social workers, psychologists, nurses, and mental health technicians.

Characteristics of Psychiatric Evacuees

Landstuhl supports various coalition countries. Foreign service members are rare in the outpatient

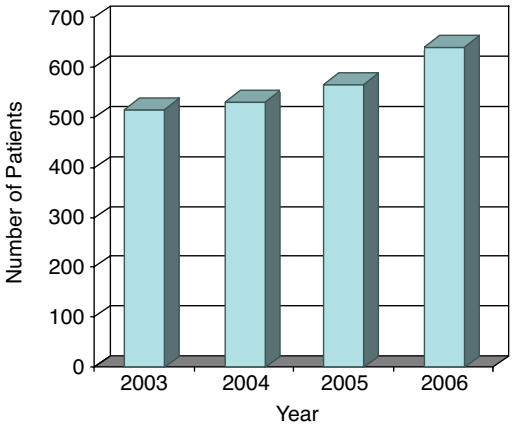

Figure 14-2. Operation Iraqi Freedom/Operation Enduring Freedom evacuations by year. Those seen in the Landstuhl Regional Medical Center outpatient clinics represent the majority, but do not include those admitted to the psychiatric ward in the evening or on the weekend.

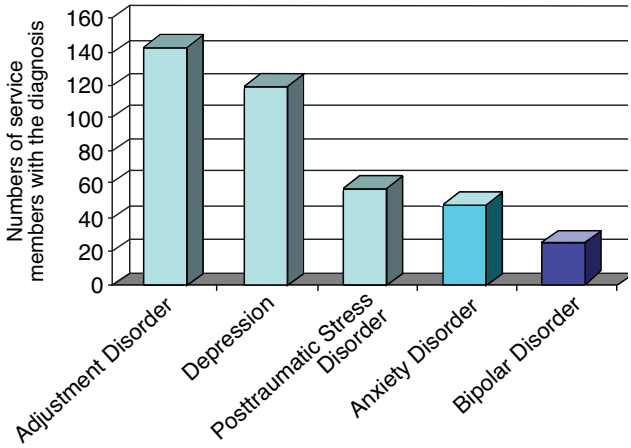

Figure 14-3. Top five Landstuhl Regional Medical Center outpatient psychiatry diagnoses for Operation Iraqi Freedom/Operation Enduring Freedom evacuations during 2005 (563 patients, diagnosis known on 507). Anxiety includes acute stress disorder/acute stress reaction.

mental health setting but are often seen in medical and surgical wards. The number of OIF/OEF patients evacuated to LRMC has steadily increased since the war began (Figure 14-2). This influx of battle-zone patients significantly affects the daily mission at LRMC. Figure 14-3 demonstrates the top five diagnoses given to OIF/OEF evacuees by outpatient psychiatry during a 1-year period: (1) adjustment disorder, (2) depression, (3) posttraumatic stress disorder (PTSD), (4) anxiety disorder, and (5) bipolar disorder.

Dangerous Patients

One notable characteristic of a majority of patients evacuated for psychiatric reasons is concern for dangerousness to self or others. Patient Movement Requests are the documents the evacuating physician completes in the combat theater when evacuating a service member from the combat environment. Each request contains a brief paragraph about the concerns leading to the evacuation. In a 3.5-month review of all available Patient Movement Requests of psychiatric patients evacuated to LRMC, the evacuating physician had concerns about suicidality or homicidality in nearly 60%. By the time of arrival at LRMC, however, active suicidal or homicidal thoughts diminish considerably. Less than 3% of OEF/OIF service members reported active suicidal or homicidal thoughts on presentation at LRMC in the psychiatric intake paperwork. Nevertheless, patient safety cannot be assumed; each evacuee receives a clinical assessment for dangerousness to self or others. When the evaluating provider deems a patient at-risk for harm to self or others, the patient is admitted to the inpatient psychiatry service.

CHALLENGES TO PROVIDING PSYCHIATRIC CARE TO EVACUEES

Patient Actions and Behaviors

Patients who are evacuated for psychiatric reasons often have behavioral components to their illness. As described above, a high proportion are evacuated because of potential for harming themselves or others. They may be in the midst of an emotional crisis when they arrive at LRMC. Sometimes their efforts are manipulative attempts to avoid combat or simply to go home.[2] They often do the unexpected. By policy, if the assessing clinician has doubt about the patient's ability to function in the outpatient setting, the pateint is admitted to LRMC Inpatient Psychiatry.

Minimally Supervised

Until the establishment of the Medical Transient Detachment , evacuees were minimally supervised. Now there is a chain of command that increases supervision substantially. However, determined service members have accessed alcohol and weapons. Case Study 14-1 describes the potential problem of an unsupervised patient stay at LRMC.

Case Study 14-1: Two service members in their early twenties were evacuated from theater with adjustment disorder symptoms and triaged to outpatient evacuation to

the United States. The evening after their evacuation they returned to the barracks and immediately booked a hotel in downtown Kaiserslautern, where they spent the next 2 days drinking local beer and missing medical and accountability formations. This resulted in delays in the soldier's treatment. The soldiers' down-range rear detachment commands were notified.

Potential Harm to Self or Others

Frequently by the time service members arrive at LRMC they expect to be sent home to the United States. They no longer consider returning to duty an option. When clinicians attempt to send such service members back to combat duty, it almost always leads to a worsening of symptoms with frequent acting out. Case Study 14-2 describes such a case.

Case Study 14-2: A 25-year-old active-duty male soldier became involved in a love triangle with his girlfriend and her other boyfriend in the deployment environment. An altercation ensued in which the patient was attacked. Shortly afterwards he described symptoms of acute stress disorder relating to the attack. He was evacuated to LRMC after mentioning suicidal thoughts. On arrival at LRMC he related that the treating clinicians in theater had told him he would be going home. By the time he arrived at LRMC he demonstrated no symptoms. When told he would be returning to duty he became extremely anxious and all his symptoms of flashbacks, reported dissociation, dreams, and jumpiness returned. The following morning he presented to the emergency room after superficially cutting both his wrists. The treating clinician continued the air evacuation to the continental United States (CONUS) for treatment and disposition there.

Case Study 14-3 describes the interaction of two soldiers who arrived at LRMC for different reasons requiring psychiatric evaluation and shared quarters while awaiting their evaluations.

Case Study 14-3: Soldier #1 is a 30-year-old seasoned veteran, family man with several young children, on his third deployment. In prior deployments he had been personally involved in some of the most notable battles with intense urban warfare, including hand-to-hand fighting. He witnessed multiple deaths and maimings of both friendly and enemy forces. He presented to Landstuhl cardiology for onset of chest pains. There were no medical findings and he was referred to psychiatry for evaluation.

His roommate, Soldier #2, a 24-year-old junior noncommissioned officer (NCO) on his first combat tour, had flown to the forward operating base on a helicopter, had never been outside the perimeter, never seen any combat action, nor witnessed trauma of any sort. He was anxious and reported vague suicidal ideation contingent on his return to theater.

The two soldiers arrived together at the psychiatry clinic. Soldier #2 was evaluated first. The clinician felt that he presented too much risk for acting out if returned to duty and decided to return him as an outpatient to the United States. On his way out he met Soldier #1, the veteran war fighter, and gloated over the psychiatrist's decision to send him home. He was happy and felt he got what he desired.

After Soldier #1's evaluation the clinician informed him he would be returned to duty. The chest pain was likely related to stress. Though he had some combat-related symptoms, the clinician felt he could be returned to duty with continued mental healthcare in theater. The veteran NCO pleaded with the evaluator not to send him back to combat. He cited past experiences, heroic actions, and circumstances contrasting with those of his "suicidal" roommate. He related how he knew his roommate was just lying to get out of duty. He stated he could never harm himself or lie about suicidality to get out of duty, but cited the unfairness of the situation where someone who had truly sacrificed and experienced much was returned to harm's way, while someone who had never faced any danger would be spared threat. He further stated that after doing more than his share of combat he had been having premonitions that he would be killed in action, leaving his family alone and his wife widowed. The provider empathized with the soldier, but could not justify removing him from combat. In the end, the heroic NCO, Soldier #1, was returned to duty while Soldier #2 (most likely malingering) was taken out of theater.

Similar situations repeat themselves nearly every day at LRMC and most likely throughout the military. Soldiers and other service members who have already sacrificed much are required to give more. Many other soldiers are returned to CONUS for suicidal ideation based solely on anxiety about returning to combat. Often the providers suspect malingering as a cause but are unable to act on mere suspicions and are unwilling to risk repercussions of a bad outcome due to the provider taking a risk returning such a patient to combat.

Because of such incidents and the lack of supervision and control of return-to-duty patients while they await return to their units, most clinicians are not willing to send such patients back to the combat environment. In many cases such service members are using statements of self-harm to manipulate the system or go home early.[3] An unfortunate aspect of their evacuation is that other soldiers, who will not go to the extremes of manipulation and may have some symptoms, will return to duty while those manipulating the system will achieve their exit from the situation. In this embroiled climate, clinicians are likely to continue exercising conservative judgment such that many patients will be sent to CONUS instead of returning to duty in Iraq or Afghanistan. The return-to-duty rate for OIF/OEF mental health evacuees at LRMC varies between 3% and 6%. Even when it is clear that a service member is malingering, the risks of that soldier acting out if forced to return to duty may necessitate continued air evacuation to the home station (Figure 14-4).

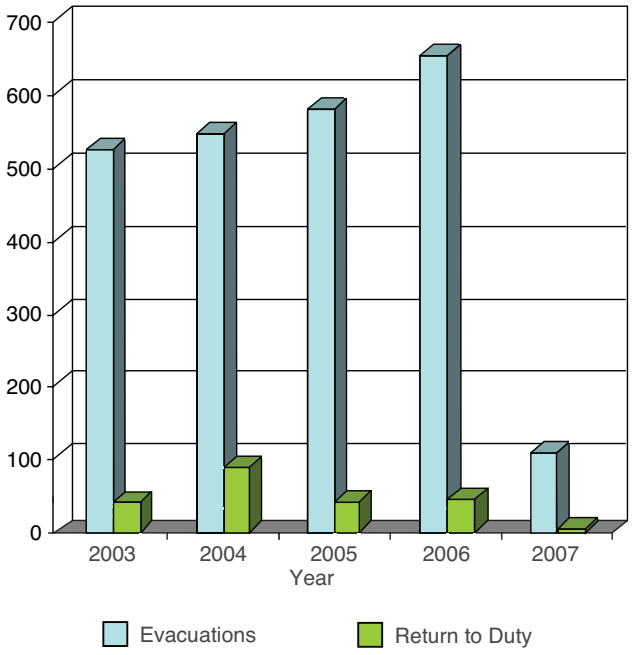

Figure 14-4. Operation Iraqi Freedom/Operation Enduring Freedom total evacuations compared to return to duty by year until February 2007. Those seen in Landstuhl Regional Medical Center outpatient clinic represent the majority, but do not include those admitted to the psychiatric ward in the evening or on weekends.

Circumvention of Evacuation Channels

Many service members are evacuated to LRMC for routine medical evaluation. Often they present to LRMC's behavioral health division as a self- or clinician referral. For the most part they have not yet been treated by behavioral health personnel in theater.[3] Clinicians noted that this population's return-to-duty rates were especially low. Often the mental symptoms increased after arrival at LRMC and even further after presenting to behavioral health. They are especially challenging to treat, given their isolation from sources of support and unit supervision.[4] Some were expecting to be sent to CONUS for treatment of their medical symptoms, but instead were found medically able to return to the combat zone. In essence, they skip in-theater mental health resources and become a rear-echelon psychiatric evacuation upon presentation at LRMC.

Clinicians observe that with this rear-echelon presentation, service members' chances of return to duty are considerably less than if they first presented in theater (95%–99% vs 3%).[5] It seems that with each passing moment at LRMC, it becomes more difficult to return such a soldier to the combat zone. Living in a safe environment, along with a lowered expectancy of returning to combat duty, decreases levels of vigilance and combat mind frame, and alters one's view of oneself. Often such service members develop ever-increasing psychiatric symptoms as their return-to-duty day draws near (see Case Study 14-2 and Case Study 14-3). One potential factor contributing to these mental symptoms is the loss of expectancy that they will return to duty. Such loss of expectancy has been found to be related to worse outcomes.[6]

One controversial approach, based on the assumption that these service members' units and social supports are better in theater, is to return such soldiers to their combat duty stations to receive their care. They are triaged for dangerousness, and evaluation and treatment at LRMC are minimized. They are expected to return to duty and get further care in theater. Appropriate mental health resources are usually available through combat stress control or other behavioral health personnel in theater. This approach not only maintains the fighting force but potentially improves the long-term prognosis for those treated in theater. In a sense, without the presence of fellow soldiers to provide social support and a leadership role in a service member's care, they will actually receive a lower level of care at LRMC than they would in theater with such peer support.[3,4,6–8] It is assumed that many service members with similar emotional symptoms are functioning in the combat zone. Their presentation at Landstuhl behavioral health, rather than at their in-theater mental health service, is determined solely by their need for a medical evaluation, which should not determine the level of mental healthcare required.

This approach, however, is not entirely without risk. Some of the potential hazards are that the service members may act out at LRMC, there may not be adequate care available for them in their combat duty stations, and they may perceive that they are being denied care at LRMC. The alternate approach of thoroughly evaluating and treating each such soldier is risky and may cause unnecessary delays in return to duty and thus lessen overall return-to-duty rates (Figure 14-5).

Staff Characteristics and Actions

Rotating Staff

To meet the additional duty of immediately evaluating all OIF/OEF mental health evacuees, LRMC is augmented with clinicians who have been rotating to LRMC for the majority of the wars. Though the augmentees are vital to performing the LRMC OEF/OIF mission, the rotations are not always predictable.

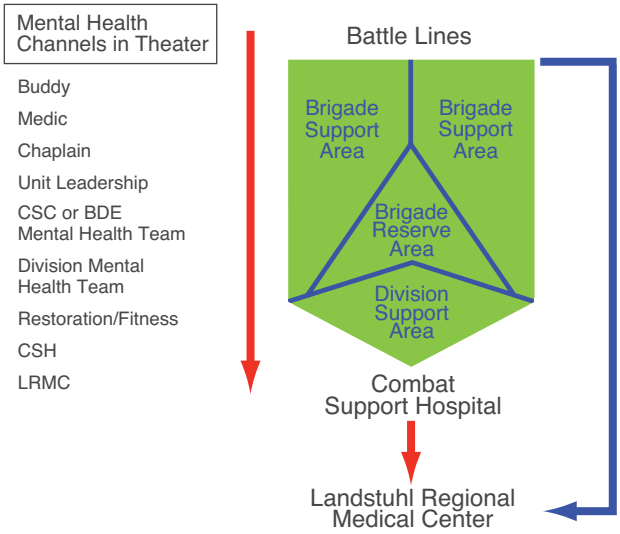

Figure 14-5. Circumventing mental healthcare in theater. Soldiers evacuated for medical reasons who then present at Landstuhl for mental health reasons may have skipped all mental health resources in theater and, in essence, become rear-echelon psychiatric casualties (with rear-echelon return-to-duty rates).
BDE: brigade; CSC: combat stress control; CSH: combat support hospital; LRMC: Landstuhl Regional Medical Center.

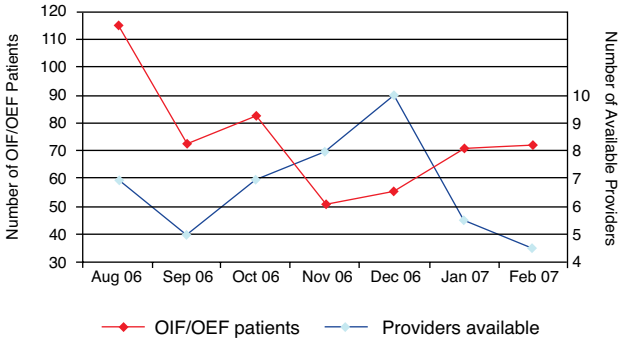

Figure 14-6. Comparison between Operation Iraqi Freedom / Operation Enduring Freedom evacuations and available clinicians at Landstuhl Outpatient Behavioral Health Clinic.

Sometimes the clinicians scheduled to arrive never show up. Usually this is due to an administrative or mobilization problem. Sometimes the rotation schedule is manipulated, bringing a clinician to LRMC either later or earlier than expected, thereby creating overlap or underlap and resulting in too many clinicians at some times and too few at others.

Augmentees are generally Army, Navy, or Air Force reservists. Usually they are clinically adept. They share the latest skills and knowledge from the civilian world, keeping the staff current. Some understand principles of combat operational stress control while others do not. They often need extensive training and supervision as they take on the relatively unique role of OIF/OEF evaluation and disposition. Figure 14-6 demonstrates a 5-month period in which the numbers of OIF/OEF patients are graphed compared with the number of available providers in the clinic. The number of clinicians available does not always correlate with the number of OIF/OEF evacuations. In some instances it is almost an inverse relationship. The unpredictable OIF/OEF load and the unpredictable augmentee support challenge the ability of the clinic to provide cohesive, continuous mental healthcare to those living in the local area.

The primary difficulty lies in maintaining adequate clinician availability to meet the surges of OEF/OIF patients without wasting clinician time or tying them down with excessive case loads. The need to maintain this reserve challenges measures of provider performance and productivity with the ever-looming threat that future personnel allocations will be based on that productivity.

Outreach to Wounded Warriors

As already mentioned, the majority of OIF/OEF evacuees sent to LRMC will stay only a couple of days. Concerned clinicians have consistently pondered the question, "What can we do to help the mental health of these patients?"[9] Concerns expressed by clinicians interacting with the wounded warriors include concern about harming the soldiers' mental recovery (perhaps by making them talk about their experience before they are ready, or by creating or worsening symptoms through conscious or unconscious suggestion during interactions) and concern about loss of follow-up care.

More than one soldier has stated that discussing the problem once was hard enough. There was no desire or intent to discuss it with another professional later. The relationship that is formed when a soldier discusses trauma is often intense and trusting, and may be ill-timed given that the soldier will leave within the next couple of days. Thus the mental health professional may have concerns about consciously or unconsciously pathologizing or labeling the patient's symptoms, or concerns about stigmatizing service members as either "crazy" or weak.[10]

Development of an Emergency Mental Health Model

The majority of clinicians serving in this capacity

at LRMC have supported an emergency mental health model with the following key components:

- **Avoid stigmatizing service members**. Avoid diagnostic labeling,[11] and do not single out any one soldier. For example, clinicians could say: "Hello, I'm a psychiatrist working with your medical team. Every patient gets 'top-to-bottom' care."
- **Look after basic needs**. Many patients are less than 2 days out from a major traumatic event, though many of them have been having traumatic events for months in the deployment setting. Ensure that their physical needs (rest, food, medical care) are being met.
- **Help them learn to ask for help and to communicate their needs**. Let them know that the more comfortable they are, the sooner they will heal. Observe comfort measures—pain control, room temperature, hydration, nutrition, sunlight, and privacy.
- **Ask about their pain and comfort**. Using a 0-to-10 pain scale (with 10 being the most pain possible and 0 being no pain), ask soldiers how they would rate the pain and at what level they would call the nurses. Catching the pain early may reduce the total amount of pain medication required.
- **Help them answer questions about what happened**. The most common questions asked by wounded service members at Landstuhl concern the status of their buddies, what happened, what weapons were involved, and whether they were personally responsible for what happened.
- **Connect them with their unit if indicated**. The unit may provide information to clarify the event and prevent solidification of false impressions or memories.
- **Normalize reactions**. Educate patients on symptoms they may experience.
- **Refrain from making statements indicating that they are ill,** or even that they scored higher than others on various screening tools.
- **Talk about normal things**—sports, football, or their hometown.
- **Assess them for posttraumatic stress symptoms.**
- **Help service members take charge of their medical care**. Ensure that they know what they need to about their condition and options, give them a sense of control, explore their knowledge of their injury, and help them understand the injury.
- **Help them know when they can expect to fly and where they will be transferred.** Many are anxious about the next step in their evacuation.
- **Follow up on their care**. Communicate to receiving physicians about service members demonstrating psychological symptoms.
- **Instill hope by discussing others who have recovered from similar events.**
- **Sincerely express appreciation for what they have gone through**. Add value and meaning to their experience.

Case Study 14-4: A 22-year-old soldier lost his vision in an explosion and was evacuated to LRMC. One of the outreach team members entered his room and noticed that the soldier's lips were parched and dry. The team member asked him if he was thirsty. The soldier replied "Yeah, I guess I could use a drink." There was a glass of ice water sitting a few inches away from where the soldier was resting his hand. The team member gave him the water then took his hand and showed him where the water was placed. During the ensuing conversation the team member mentioned that all the soldier needed to do is ring for a nurse to help him with his needs. The soldier replied, "I know that, but they are busy and there are a lot of us here."

Case Study 14-5: A 23-year-old soldier lost his leg in an explosion in Iraq. When he arrived at LRMC he was agitated and anxious to know if his gunner had survived the explosion. His primary physicians were unsure whether

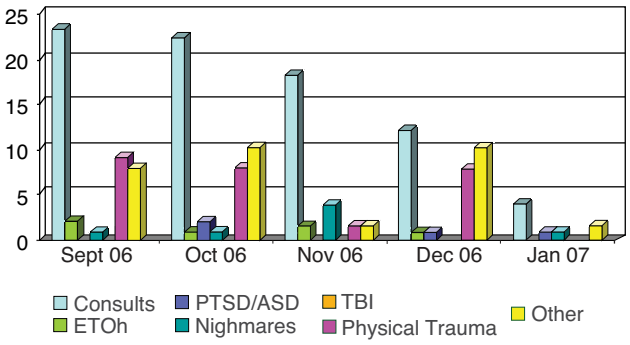

Figure 14-7. Landstuhl Regional Medical Center psychiatric consultation to medical and surgical wards, September 1, 2006, to February 1, 2007. By November 2006, the multidisciplinary Combat and Operational Stress/Staff Resiliency team and patient outreach teams were effectively established throughout the hospital. There was a significant drop in official consultations as informal, nonstigmatizing outreach efforts proceeded. Data are from 236 inpatient consultations. ETOh: ethanol (alcohol abuse); PTSD/ASD: posttraumatic stress disorder/acute stress disorder; TBI: traumatic brain injury.

they should tell him that the gunner, a close friend of his, had died. They contacted the behavioral health consultation team. In discussing his desire to know about his friend with the treating physicians, chaplains, and members of the soldier's unit (by telephone), the team decided on an appropriate time and place to let him know the bad news. The team arranged for the service member to speak to his unit members by telephone during the meeting. The soldier was notably saddened by the news but stated that the additional support of his unit by telephone helped him "drive on."

Case Study 14-6: A 25-year-old squad leader lost several squad members during a firefight and blamed himself for not reacting appropriately during the action. Regardless of what the physician and nursing staff told him, he continued to hold himself responsible for actions over which he had no real control. The outreach team arranged a telephone consultation with the soldier's command and fellow unit members. During the conversation, the events of the firefight were related and the squad leader realized that he did not cause the deaths of his subordinates, but rather that he acted as any other NCO would have done.

Local Area Support

One of the greatest challenges of the LRMC behavioral health division is to maintain consistent, continuous, mental health support to its catchment area despite unpredictable surges in staffing and patient load (Figure 14-7). Eight outlying clinics—(1) North Atlantic Treaty Organization, Holland; (2) Supreme Headquarters Allied Powers Europe, Belgium; (3) Vicenza, Italy; (4) Livorno, Italy; (5) Kleber, Germany; (6) Dexheim, Germany; (7) Wiesbaden, Germany; and (8) Baumholder, Germany—fall under the LRMC support area, which covers approximately 100,000 primary care beneficiaries (see Figure 14-1). In addition to the primary care mission, the tertiary care mission includes approximately 245,000 total beneficiaries in the European command. Many service members in the LRMC support area have served in OIF/OEF and experience ongoing sequelae of their time there,[1,12] resulting in additional combat-related patients for the psychiatry service.

INPATIENT PSYCHIATRY AT LANDSTUHL REGIONAL MEDICAL CENTER, 2003–2007

Increasing Patient Load

The inpatient psychiatry service maintains an 18-bed service for all active duty service members and beneficiaries throughout Europe, Asia, Africa, and the Middle East. Criteria for admission are similar to those in the civilian world. However, given the limited supervision of patients treated and evacuated in the outpatient setting, if an evaluating provider has concerns about safety, including the patient's potential to abuse substances, then the patient is admitted, usually for continued evacuation in the inpatient setting. In 2003 there were 382 OIF/OEF service members admitted; in 2004 there were 269; in 2005 there were 346; in 2006 there were 408; in 2007 there were 563; and as of October 2008 there were 481 OIF/OEF admissions. As for total admission numbers, which include OIF/OEF as well as other patient populations (family members, local military), there were 902 total in 2006, 990 total in 2007, and 822 (as of Oct 2008) in 2008.

The majority of OIF/OEF patients admitted remain in the inpatient setting for evacuation to the United States. Most OIF/OEF admissions continue their evacuation within a couple of days, leading to extremely rapid turnover on the ward. Contacting an accepting physician in the United States can be challenging, especially given the 6- to 9-hour time difference and sheer volume of turnaround. This is partially resolved by the ability to send patients on to Army hospitals with an "open OIF/OEF" status that does not require physician-to-physician discussion to establish an accepting physician. However, such is not the case with accepting hospitals from sister services, which often require physician-to-physician establishment of acceptance.

Prior to 2003, the 18-bed inpatient psychiatry service had averaged about 675 admissions per year. By June 2003, it was admitting 100 patients per month (1,200 annualized rate). As many of the admissions seemed inappropriate, a 100% screening was implemented for patients arriving from OIF. This helped, but in 2005, for example, 902 patients were still admitted (Figure 14-8 and Figure 14-9). The 100% screening, in turn, caused its own problems. It became necessary to change the psychiatry call schedule to accommodate the numbers of OIF patients who were arriving and needed screening. The inpatient psychiatrists were augmented by outpatient psychiatrists and further augmented by the local Air Force providers.

The ward itself was augmented by a succession of reservists. The nursing personnel came for a year at a time. Their "train up" required an intensive schedule of activities before they could begin to "orient." Even after the formal train-up activities, the nursing personnel required considerable time to make them comfortable in handling all the nuances of the inpatient ward.

The psychiatrists who came to augment LRMC were there for only 90 days. They varied greatly in experience levels, ranging from current active duty to reserv-

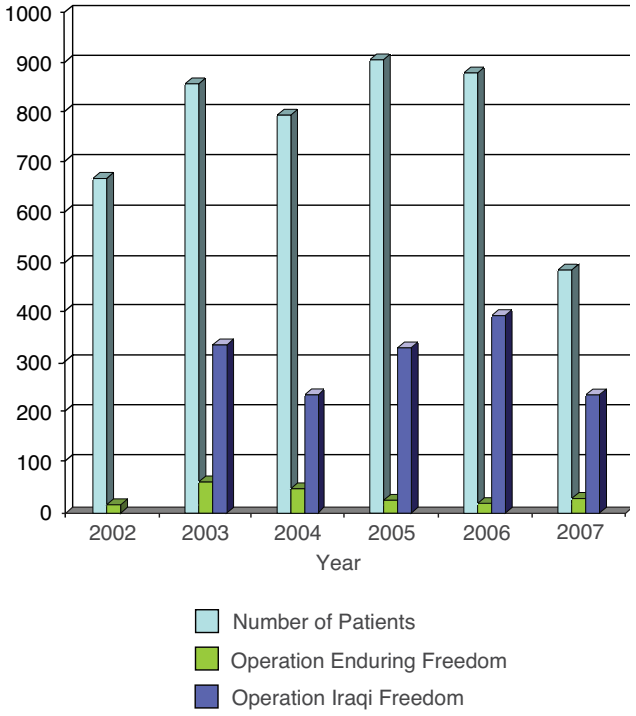

Figure 14-8. Landstuhl Regional Medical Center inpatient admissions, 2002 through July 2007.

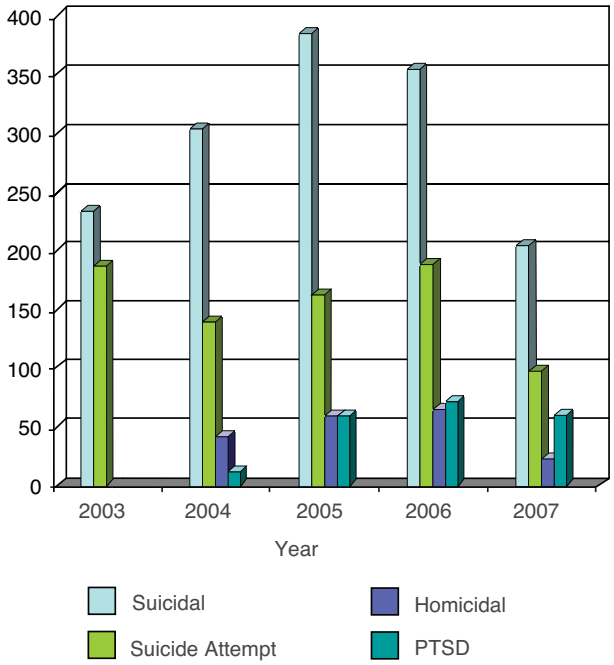

Figure 14-9. Landstuhl Regional Medical Center (LRMC) inpatient admissions, 2003 through July 2007. LRMC began tracking homicidal ideations and posttraumatic stress disorder (PTSD) in 2004.

ists who had never been activated. Some were quickly able to absorb the complexities of the rapid turnover of patients, while others could master only a portion of the tasks at hand. The Composite Health Care System electronic medical record used throughout the military proved to be a record-keeping system that many inexperienced physicians could not master.

The effect of the patient volume can be understood by dividing 902 admissions in 2006 by the number of inpatient beds available: 18. The result, 50.1, is the number of times that a bed was turned over during the year. Dividing that 50 into 365 yields a theoretical length of stay of slightly over 7 days.

Receiving patients, screening them, stabilizing them on the ward, and placing them on an aeromedical evacuation became the routine. With increased OIF/OEF workload, the ward was frequently too full to accept nonactive duty patients. The "available to nonactive duty" measure (over 90% on an annual basis during the pre-OIF period) decreased to approximately 60% once casualties from OIF began arriving (meaning that there were spaces available to nonactive duty personnel only 60% of the time.)

With the slowly increasing census of inpatients since 2003, air evacuation flights from Landstuhl to CONUS became more and more crowded. Beginning in November 2006 and continuing regularly over the next several months, the inpatient team encountered difficulties getting patients out on air evacuation flights fast enough to have beds available for incoming service members. Service members coming from garrisons in Europe were diverted to German hospitals. Such diversions of active-duty soldiers to German hospitals usually lasted only a few hours to a couple of days, but demonstrate that the 18-bed inpatient psychiatry ward is insufficient to handle both local support and air evacuation missions during wartime.

Psychological Stressors and Staff Resilience

The daily psychological stressors for LRMC team members are significant. A recent article in a German newspaper described LRMC's role as being at the outer perimeter of the Iraq battlefield.[13] Indeed, in previous wars many of the casualties arriving at LRMC would not have made it out of theater. Now, however, modern transportation and stabilization capabilities bring the battle to LRMC's front door,[13] exposing many LRMC staff to trauma of combat casualties on a daily basis. In previous wars the patients seen at LRMC would probably have been seen in a hospital much closer to

the battlefield. The Combat and Operational Stress Response/Staff Resilience Program at LRMC was developed to address the short- and long-term consequences of this experience with casualties.

Compassion Fatigue

In its present-day connotation, compassion fatigue refers to the deleterious effect on caregivers of repeated exposure to physically or psychologically traumatized patients. Compassion fatigue was initially construed as a secondary trauma experienced by those treating PTSD patients, who have experienced primary trauma.[14] The symptoms are similar. And although it has been called various things (secondary traumatic stress disorder or compassion stress), the main point is that anyone in a care-giving or helping profession—from psychotherapists to nurses to police—can experience acute and chronic stress reactions in the course of their duties. So, too, may they experience symptoms as a result of their own primary trauma or occupational burnout.

Specific to LRMC, compassion fatigue results from caregivers' repeated exposure to soldiers with severe burns, amputated limbs, or traumatic brain injury. With the exception of those staff who have worked in major metropolitan trauma centers, most have not been exposed to this frequency and severity of wounds. Because LRMC is the deployed location for many of its personnel (ie, the Navy and Army reservists who deploy to Landstuhl to help with the wartime mission), many staff who are actually deployed personnel will face deployment-related stressors such as being away from home and loved ones.

Combat and Operational Stress Reaction

Army Field Manual 4-02.51, *Combat and Operational Stress Control,*[15] redefines soldiers' negative reactions to combat and support operations (previously known as "battle fatigue") as combat and operational stress reactions (COSR). This new term considers soldiers who are not directly involved in battle but nonetheless develop stress-related symptoms (loss of appetite, increased irritability, or a desire to smoke), as having a normal reaction to a potentially hostile environment and the related demands that this entails (high operations tempo, living in austere conditions, and extensive separations from family).

Resiliency

Just as two soldiers can be involved in the same firefight and one develop COSR while the other does not, so, too, can two providers treat a similar number and type of patients and one develop compassion fatigue while the other remains intact. The mechanism that allows this has come to be called "resilience." *Combat and Operational Stress Control*[15] mentions resilience as something that is desirable and can be increased, but does not describe how this can be accomplished.

Resilience as a phenomenon has been studied in the civilian population, including in children who suffer physical and emotional abuse or neglect,[16] adult victims of crime,[17] and people exposed to natural disasters.[18] Proposed factors leading to individual resilience are physical (exercise, nutrition), emotional (social support, optimism), psychological (attributional style), and spiritual (a life meaning or purpose). Unit morale and cohesion are additional factors within the military social context that may lead to resiliency among troops.

DEVELOPMENT OF LANDSTUHL'S STAFF RESILIENCY PROGRAM

Precipitating Event and Command Response

Following a series of patient fatalities in LRMC's ICU in July 2005, the hospital commander contacted the on-call chaplain to discuss what could be done to alleviate some of the providers' stress. After that discussion (and the resulting actions taken to help reduce the effect of these ICU deaths on the staff), a team was formed to address this overlooked need among physicians, nurses, and their technical staff.

A consultative team approach was deemed the best way to deal with these operational stressors. Although various agencies (chaplaincy, employee assistance program, behavioral health) already existed to help LRMC staff cope with stress or PTSD symptoms, these services were not accessed by those in need for various reasons (eg, stigma, availability). The plan was to provide outreach by chaplains and behavioral health staff who typically worked in close proximity with LRMC staff to address their concerns and direct them toward the best resources.

Structure and Focus of Program

In November 2006, the compassion fatigue team changed its name to "Combat and Operational Stress/Staff Resiliency" (COSR/SR). This is not merely semantics. Rather, the scope of concern has been widened beyond compassion fatigue (trauma secondary to care giving) to include COSR, acute or chronic

reactions to primary trauma (ie, PTSD), burnout, and efforts to restore or improve resiliency. In addition to physicians and nurses in the ICU, COSR/SR consultation now includes all LRMC staff, from those who carry litters and help move patients, to the finance staff who hear soldier's stories as they help with pay and benefits.

Program Director

Prior to August 2006, LRMC's COSR/SR team utilized an informal committee led by a behavioral health provider. Funding was secured to hire a clinical psychologist to fill the position of program director. This individual leads the team and, more importantly, serves as the main point of contact for COSR/SR-related questions. This program director is tasked to conduct a majority of the brief consultations and office visits.

Team Membership

The COSR/SR team is composed of chaplains, nurses, and behavioral health providers in officer ranks or their civilian equivalent. Team members voluntarily take on—as an additional duty—reaching out to LRMC personnel who might not otherwise access services for symptoms that develop as a result of treating severely wounded soldiers and operations in support of this mission. They also make short presentations at various venues—newcomers' orientation, professional and clinic staff meetings, and for new leadership. Additional ways of "getting the word out" about the program include a trifold brochure that outlines the program. A business card listing online and local resources is also used. Finally, e-mail messages distributed to LRMC staff describe sponsored events (sleep hygiene or stress-management classes) and highlight the COSR/SR program.

Confidential Visits

In an attempt to circumvent the often-noted stigma associated with seeking help, LRMC's COSR/SR team allows for two consultation meetings that are highly confidential. If there is no diagnosis, there is no documentation. As always, domestic violence, child abuse, and intent to harm oneself or others must be reported. Although previously one "free" visit had been advertised, the hope was that a second such visit would allow for additional assessment of any advice or suggestions given. If the problems were continuing, this second visit would give the COSR/SR team member a better opportunity (because of increased rapport) to encourage entry into some form of treatment or referral to an appropriate resource.

The goal is for LRMC staff to feel comfortable in reaching out to COSR/SR team members, knowing they can get some advice on psychological or emotional symptoms they may experience as a result of their work at LRMC or from other situations. Some of the symptoms LRMC staff may experience include poor sleep, increased irritability, and hypervigilance. The key is that LRMC staff must have confidence that their personal affairs will remain private and their careers will not be put in jeopardy. In those cases where minor support and guidance is not enough, COSR/SR team members will point the LRMC staff member in the right direction and, perhaps, answer some questions of concern such that, in most cases, their anonymity is protected.

Hallway Consultation Versus Office Visit

In an attempt to track the utility of LRMC's COSR/SR program, short, informal consultations were differentiated from longer, sit-down sessions. This differentiation is useful to characterize support and minimal advice-giving from processing and intervention. For example, during October through December 2006, 65 LRMC staff were provided hallway consultation and four were seen in an office visit. Of these, 20% were later seen in formal treatment. Due to a multitude of changes from one month to the next, these visits fluctuate. In March and April 2007, for example, the COSR/SR team had 38 hallway consultations and 46 office visits. In part due to the increase in office visits, the follow-on to treatment rate dropped to 10%.

In addition to tracking hallway consultation versus office visits, COSR/SR team members collect information on the staff member's ward or clinic. By learning about the events and environment of wards and clinics throughout the hospital, the COSR/SR team is able to understand the experiences and conditions of most of the hospital workers. The COSR/SR team can then reallocate resources to those areas most needing them. When the mental health needs, working environment, or experience of the staff dictates, consultation with the clinic or service chief may prove beneficial.

Debriefs

Critical incident stress management defusings and debriefings appear to have fallen out of favor. However, hospital staff can still benefit from a chance to process their experiences in a safe, nonjudgmental setting. LRMC's COSR/SR team attempts to provide this environment. A prime example of where this ap-

pears to be helpful is with the personnel team, which provides litter bearers and evacuation personnel for the incoming and outgoing flights. Many of these team members are exposed to physically traumatized, wounded, maimed, and dying service members. These LRMC staff are at substantial risk for mental and emotional problems. At the end of each team's 1-month rotation, a debrief is held during which a chaplain, supported by another COSR/SR team member (typically a behavioral health staff member), leads the members through mental processing. Most of the manpower team members feel the experience is meaningful and generally positive. Often they develop a greater appreciation for the positive factors in their lives, such as health, well-being, and a supportive family. Occasionally problems with the system are discussed in the debriefings. Problems (with the personnel system or other units debriefed) that can be remedied by command action are anonymously conveyed to command staff who may act to correct the situation.

In the months of March and April 2007, 134 LRMC staff were debriefed in some capacity, either because of a critical event (death of a patient who was on the ward for an unusually long time) or a chronic stressor (higher than average number of amputees). One example of the latter is a young troop member who, while replacing equipment in a wounded soldier's room, was affected by the smell of the patient's burn wound. He said that on and off for several nights afterward he dreamt of the event. By addressing how the human brain processes trauma to self or others, and normalizing his reaction, he was able to quickly return to his previously high-functioning status.

DAILY OPERATIONS

Member Dispersal

Team members are dispersed throughout the hospital to consult on COSR/SR as needed. Additionally, members take part in hospital committees and functions to ensure that system-wide efforts are made to reduce stress or provide input to command staff on actionable items. The main point is that the COSR/SR team attempts to address issues not only on a one-on-one basis, but also at higher levels within the organization, by consulting with supervisors and commanders. In large part this is due to research suggesting that unit morale and cohesion are factors of resiliency, which should be addressed at all levels by everyone involved.

Committee Meetings

The multidisciplinary COSR/SR team convenes weekly to discuss consultation trends and upcoming issues, either in terms of wards or units affected, or the types of stressors reported. The meeting is vital to disperse information and provide emotional and leadership support to team members. Based on the feedback from the team members, an accurate picture can be developed of the emotional status throughout the hospital and resources can then be allocated to those areas needing them. A forum is provided where advice dealing with particular situations can be asked for and shared. Additional planning is also coordinated at these meetings to ensure continued advertising and coverage for clinic debriefs or presentations.

Surveys

In an attempt to keep pace with LRMC as a dynamic organization, the COSR/SR team periodically surveys various wards or sections on stress levels, morale, and general knowledge of the program.

CHALLENGES AND FUTURE DIRECTIONS

Program Director

Presently [in 2007], the COSR/SR program has funds for a 1-year program manager position, someone solely dedicated to advancing the program and working with staff. Although additional funds will be requested, it is difficult to find potential candidates willing to relocate to Germany, knowing their position is time-limited. Other options, such as using interns or community volunteers, are being considered. Additionally, there is some debate whether the ideal candidate for the position of COSR/SR program director should be a psychiatrist, psychologist, or social worker, with or without experience in community or system-wide interventions. Ideally the candidate would be familiar with the military and its deployment process as well as the healthcare system in general and work at a major medical hospital, specifically.

Personnel

The Mental Health Advisory Team II noted that

20% to 30% of behavioral health personnel reported burnout, low motivation, or some form of impairment related to deployment.[19] Thus, it will be important to assess COSR/SR team members and provide respite or resiliency support to avoid their becoming overwhelmed.[19] Consideration is being given to the use of enlisted medical technicians to work with enlisted LRMC staff seeking access to the COSR/SR program. Additionally, peer support personnel may be culled from LRMC's wards and clinics to help augment the COSR/SR team. Within the framework of focusing on building and supporting staff resiliency, clinic chiefs and NCOs may be encouraged to identify those subordinates they see as "resilient" and match them up with those deemed "at risk."

Central Point of Contact

One difficulty noted is that hospital staff may not know who to contact, especially given the need for team members to rotate on-call availability. Asking around to find the appropriate person may feel uncomfortable. It also decreases the anonymity of the person seeking help. Efforts are being made to simplify the process by establishing a designated cell phone number to be carried by the COSR/SR team member on duty. That cell phone number could be published throughout the hospital, thus ensuring that hospital workers know how to access the team.

Stigma

Recent surveys of LRMC staff show continued evidence of a stigma against seeking help from any official program. The COSR/SR team continues to advertise the difference between COSR help and being "crazy" (ie, psychotic), as well as the likelihood of career impact from voluntarily seeking behavioral health counseling versus being command directed to seek such help. These data collection points will be included on future surveys.

Data Collection

The aforementioned surveys used a modified form of the Secondary Trauma Cost-of-Caring scale[20] with unknown validity and reliability. Future efforts will go toward securing or developing a sound psychometric tool with which to assess COSR/SR. Ideally such measures would include objective indicators of the organization's health as a whole. For example, days missed from work or number of letters of counseling or reprimand might be useful signs of organizational distress, which could then be tracked.

Types of Stressors

In an effort to obtain more data to form more precise interventions, LRMC's COSR/SR team has begun to collect information about the types of stressors addressed—operational, organizational, occupational, home front, interpersonal, or other. The pace of one's duty is an example of an operational stressor. An organizational stressor could be the impact of staff turnover during the permanent-change-of-station season. Occupational stressors include burnout and the effect of a specific duty (working with amputees or burn victims). Home front and interpersonal issues are self-explanatory and take the form of relationship problems or parenting issues, and communication or teamwork in the workplace, respectively. Considered in the "other" category are attempts by COSR/SR team members to reassure staff that psychotherapy works, addressing how confidential sessions really are, or defining various diagnostic categories (ie, "Am I dealing with acute stress disorder or PTSD and what does that mean?").

SUMMARY

The COSR/SR team at LRMC has grown from a "psych–spiritual" dyad, consisting of a behavioral health provider and chaplain supporting ICU staff, to a full compliment of providers from several disciplines and branches dispersed throughout the hospital, to include the much-appreciated ancillary and support services such as finance and personnel teams. The scope of concern has been widened from provider secondary trauma (ie, compassion fatigue) to all stress reactions produced by operating in a major medical facility that receives nearly every OEF/OIF casualty. This adaptive contingent of professionals will be bolstered by additional direction and support from higher command levels (in terms of funding and personnel), and will lean towards becoming a proactive (rather than a reactive) force, perhaps through a newcomer's combat and operational stress assessment and resiliency development plan, yet to be created. Work remains to be done, but the underlying concept of the COSR/SR team approach is sound and of value to the LRMC staff and the patients they serve.

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