ANNEX C

EVACUATION ASSESSMENT

Operation Iraqi Freedom (OIF)
Mental Health Advisory Team (MHAT)

16 December 2003

Chartered by
US Army Surgeon General

This is an annex to the OIF MHAT Report addressing the behavioral health evacuation system in OIF (including Kuwait and Iraq). The findings were obtained from many sources to include surveys, interviews, DoD-supported databases, and "homegrown" databases.

This report is redacted to remove unit identifications, unit locations, and personal identity information in accordance with Army Regulation 25-55, *Department of the Army Freedom of Information Act Program*, and Army Regulation 340-21, *The Army Privacy Program*. Redacted information appears throughout this report blacked out, such as below.

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INTRODUCTION

      The MHAT Charter and the Behavioral Health Consultants to the OTSG sought to answer several questions related to Army OIF evacuations: 1) Was there a surge in behavioral health evacuations; 2) If so, why was there a surge in behavioral health evacuations; 3) Do minor behavioral health disorders and administrative issues account for the surge in behavioral health evacuations; 4) How many behavioral health evacuees return to duty in OIF; and 5) Do behavioral health evacuees receive follow-up care after returning to home station?

FINDINGS

DATA FINDING #1: **There was a surge in all Army OIF evacuations during July 2003. This surge was seen in the evacuation rates of the five leading medical-surgical specialties, to include behavioral health.**

In July 2003, the Army OIF evacuation rate per 100K Soldiers increased 1.8 times (668 evacuees in June to 1225 in July). The top five evacuating medical-surgical specialties demonstrated a similar rise in evacuation rates during the month of July. This surge was not unique to behavioral health.

Despite this one-month surge, the proportion of behavioral health evacuations to all Army OIF evacuations remained relatively stable. Behavioral Health accounted for only 7.1% of all OIF Army medical-surgical evacuations, which was substantially lower than the evacuation rates of the leading medical-surgical specialties.

Placed into a historical perspective, the Army OIF's behavioral health rate fell within range of previous military operations (see Table 1).

Table 1: Behavioral Health Evacuation Rates in Previous Military Operations*		
Military Operation	**Behavioral Health Evacuations/ All Evacuations** **	**%**
Gulf War	215/6316	3.4%
Somalia	22/538	4.1%
OIF	527/7415	7.1%
Afghanistan	10/119	8.4%
Kosovo/Bosnia	60/253	23.7%
* Provided by the AMEDD Center & School, Directorate of Combat Development and Doctrine		
** All services represented in these figures (Army, Air Force, Marines and Navy)		

DATA FINDING #2: **No single hypothesis adequately explained the surge in Army OIF evacuations during July 2003, to include behavioral health.**

Several hypotheses attempted to explain the surge in evacuations, but each failed to provide a satisfactory answer.

Backlog Hypothesis: The "backlog hypothesis" suggested that the surge in evacuations was a result of two coinciding developments: 1) after May 2003, Soldiers had time to address medical issues put on hold during the combat phase of operations; and 2) the availability and efficiency of medical services improved as the OIF theater matured. The observed increase in evacuations during June and July and return to baseline in subsequent months supported this hypothesis. Additionally, this hypothesis passed the "common sense test" because treatment can be postponed for many medical conditions. The hypothesis failed to explain, however, any delay in surgical treatment for accidents and injuries.

Shrinking Force Hypothesis: The "shrinking force hypothesis" suggested that as troop strength decreased in June and July, the remaining force was increasingly stressed by ongoing hostilities. Vulnerable Soldiers developed medical-surgical illnesses, thereby leading to an increased evacuation rate. This hypothesis was supported by the observed evacuation surge in July following the decrease in troop strength. It failed to explain, however, the continued decline in the evacuation rate in August and September, which also had reductions in the overall troop strength.

Unknown Redeployment Date Hypothesis: The "unknown redeployment date hypothesis" explained that the rumors generated in the absence of a firm redeployment date resulted in significant emotional stress on Soldiers, resulting in increased medical evacuations. This hypothesis was supported by the observation that the evacuation rate declined after the official announcement of the redeployment policy in August 2003. It failed to explain, however, the increases in non-behavioral health evacuations, particularly in surgical evacuations.

Home Front Stress Hypothesis: The "home front stress hypothesis" explained that the surge in behavioral health evacuations was the result of improved email and telephone communications with family members. Although it was true that communication systems became more available in June and July, this hypothesis failed to explain the surge in other non-behavioral health evacuations.

Trivial Evacuation Hypothesis: The "trivial evacuation hypothesis" suggested that the surge in behavioral health evacuations was the result of improper disposition of minor behavioral health disorders. The LRMC Chart Review did not support this hypothesis. Over 80% of all evacuations were diagnosed with Adjustment Disorders, Affective Disorders and Anxiety Disorders at LRMC.

Compared to all behavioral health charts in this sample, less than 7% of were diagnosed with Personality Disorders or V Codes, or given no diagnosis at all.

Administrative Evacuation Hypothesis: Similar to the "trivial evacuation hypothesis," the "administrative evacuation hypothesis asserted that the surge in behavioral health evacuations was the result of command pressure to quickly disposition Soldiers through behavioral health, rather than administrative channels. The LRMC chart review did not support this hypothesis. In this review, MHAT did not identify any evacuations prompted for strictly administrative reasons.

DATA FINDING #3: **The percentage of BH patients returned to duty was highest among BH units deployed forward, and was lowest among units in the rear.**

The high percentage of behavioral health patients returned to duty from DMHS and CSC units advocated for the forward deployment of behavioral health units. In accordance with Combat Stress Control doctrine (FM 8-51 and 8-55), Division Mental Health Sections and Combat Stress Control units were deployed forward to provide early assessment and treatment interventions to Soldiers experiencing combat stress reactions and neuropsychiatric disorders. The principle of "immediacy," or early identification and treatment, is among the four key principles of the military psychiatry (i.e., Proximity, Immediacy, Expectancy, and Simplicity).

As a result of the high return to duty rate, both units and Soldiers benefited. Units benefited from continued force sustainment. Soldiers avoided the stigma linked to evacuation for a behavioral health illness.

In contrast with high return to duty rates of behavioral health units in OIF, the LRMC chart review revealed that only 10 (3.6%) behavioral health evacuees were returned to duty in OIF from LRMC. Ninety-percent (90%) of these evacuees were treated as outpatients at LRMC.

Reasons for a lower percentage of behavioral health patients returned to duty at the Combat Support Hospital and Medical Center were not clearly evident from this analysis. The following factors may have contributed to the low return to duty rates:

First, patients who continued in the evacuation chain may have required hospitalization for severe conditions needing long-term treatment interventions.

Second, the evacuation policy promoted the evacuation of patients, not their return to duty. For many behavioral health patients, even those with transitory conditions like Adjustment Disorder, treatment may require more days than provided for in the CJTF-7 seven-day evacuation policy. In this light, many

hospitals postponed treatment to the next level of care, and invested resources to evacuate the patient instead. For example, LRMC Behavioral Health Services developed a "rest stop" strategy, particularly for outpatient evacuees.   The average outpatient behavioral health evacuee stayed at LRMC for only 5 days (including transportation days) before flying out to the next destination in the evacuation chain. Outpatients received a screening behavioral health evaluation, but were unlikely to receive any additional behavioral health contact given the brevity of the stay. No deployment-specific interventions were developed for behavioral health evacuees, and treatment was deferred to the next military treatment facility in the evacuation chain.

Third, while CJTF-7's evacuation policy directed that evacuations occur "only after a good faith effort to address the issue in theater failed," there were no standing operating procedures to guide clinicians how or when to consider returning an evacuee to duty in OIF. As a result, many evacuees continued their evacuation to the next military treatment facility, even though many showed improvement in their condition.

In fact, several factors indicated improving behavioral health status in the evacuee population. First, the number of evacuees with high suicide risks precipitously dropped from 89 (32%) in OIF to 22 (7%) at LRMC. Second, there was a similar drop in the number of evacuees with elevated homicide risks from 25 (9%) in OIF to 7 (3%) at LRMC. Third, nearly one-third of OIF and LRMC evacuees did not require psychotropic medications, suggesting that their conditions could be adequately addressed through psychotherapeutic means only.

Of the 4 evacuees who did not have a clinical diagnosis, only half were returned to duty in OIF. Of the 2 evacuees diagnosed only with a V Code, none was returned to duty in OIF.

***DATA FINDING #4:* Over 80% of Army OIF evacuees with behavioral health diagnoses redeployed to Ft Stewart received follow-up for their conditions—most within one week after arrival.**

Although 41 (84%) of these evacuees received follow-up at WACH, it was concerning that 8 (16%) evacuees were lost to follow-up. Failure to closely monitor evacuees' follow-up at home station unnecessarily elevated the risk for a bad clinical outcome.

Adjustment Disorder was most frequently diagnosed in evacuees returned to duty after follow-up (33%), and in evacuees who failed to follow-up after return to home station (38%).

DATA FINDING #5: **Clinical charts were inconsistently maintained, and documentation did not reliably accompany patients through the evacuation chain.**

Procedures for documenting patient visits varied among the behavioral health units. Procedures fluctuated with available resources, environmental conditions, operational tempo, type of behavioral health unit (e.g. DMHS, CSC, or CSH), and unit policy. Treatment interventions were inconsistently recorded in convenience files. Even at LRMC, outpatient evacuee charts were disorganized and stapled, contained inconsistent documents, and kept in an accordion file.

Clinical documentation did not reliably arrive at the receiving facility. Although all OIF behavioral health providers claimed to send clinical documentation to the receiving facility in the evacuation chain, only 44.8% of LRMC charts actually had OIF clinical documentation within the chart. Nearly 38% of reviewed charts had neither OIF clinical documentation, nor Patient Movement Request (TRAC2ES) information. In some cases, the OIF behavioral health provider relied upon the patient to hand-deliver his/her clinical documentation to the next echelon of care.

Evidence showed that clinical documentation was sent to the next receiving facility for 93% of all evacuees leaving LRMC.

DATA FINDING #6: **No Database adequately tracked evacuees or provided reliable clinical information**

No DoD-supported or homegrown database system adequately tracked evacuations from OIF to CONUS to home station, thereby limiting usefulness in medical planning and patient-accountability.

Although TRAC2ES provided the most useful system for patient tracking, it had many limitations. MHAT encountered considerable difficulty using TRAC2ES during in OIF because 1) TRAC2ES could only be reached via a SIPRNET connection; 2) online TRAC2ES information was "stripped" of evacuee names and social security numbers; and 3) online TRAC2ES information only extended back 60 days.

In lieu of receiving reliable clinical documentation from OIF, behavioral health providers have relied on TRAC2ES to make initial clinical decisions about incoming evacuees. For example, LRMC used the TRAC2ES in triage, deciding which patients needed immediate evaluation and which patients could wait until the next duty day.

<u>RECOMMENDATIONS</u>

Immediate Implementation:

Clinical Information Between Levels of Care: The flow of clinical documentation is essential for continuity of care. Reliance on TRAC2ES is insufficient for clinical information given the limitations in its design and purpose. As such, MHAT recommends the following processes to ensure proper flow of clinical documentation and information between levels of care:

1) CJTF-7 and CFLCC surgeons should jointly establish a standard clinical documentation packet for behavioral health evacuations (see AR 40-66, medical record administration and health care documentation, 10 march 2003).

2) Similarly, CJTF-7 and CFLCC surgeons should jointly establish standard procedures for transfer of this clinical documentation packet to the receiving military treatment facility (see AR 40-66, medical record administration and health care documentation, 10 March 2003).

3) Behavioral health consultants to the CJTF-7 and CFLCC surgeons should develop, promote, and monitor administrative and clinical communication among levels of care in the evacuation chain to ensure adequate feedback and coordination. At a minimum, the behavioral health consultants in CJTF-7/cflcc and BH service/department chiefs should promote communication through the following methods:

Email addresses and telephone numbers for point-of-contacts should be developed, maintained, and made accessible to all behavioral health providers in the evacuation chain. Points-of-contact should include the deployment cycle system (DCS) care managers, located at the final MTF destination.

- Prior the evacuee's departure for the next level of care, the evacuating care provider should notify the Rear Detachment, final MTF disposition, and corresponding Deployment Cycle System care manager(s).

- Receiving BH providers will provide feedback to the sending BH provider regarding the value, accuracy, and integrity of transported clinical documentation.

4) CJTF-7 and CFLCC Surgeons should encourage behavioral health providers to use sanctioned clinical databases and tracking systems (DNBI, JMeWS, TRAC2ES) in favor of homegrown systems.

Tracking System: Accurate evacuation data is critical for medical planning, but also essential for commanders and family members who are trying to find their Soldiers' whereabouts. Although TRAC2ES provides reliable tracking information, it is not designed for clinical information. To improve the transmission of clinical data, MHAT recommends the following steps:

1) At each MTF, PAD/MRO should establish quality improvement review procedures to minimize errors in TRAC2ES data entry.

2) The evacuating provider should indicate the evacuee's DSM-IV diagnoses (in addition to ICD-9) to include in the TRAC2ES narrative for greater clinical clarity.

3) To encourage utilization of TRAC2ES (and JMeWS), CJTF-7 and CFLCC Surgeons should improve behavioral health provider access to the SIPRNET.

4) Prior to deployment, all behavioral health providers should establish SIPRNET accounts.

5) CJTF-7 and CFLCC Surgeons should establish a procedure with TRAC2ES database managers at Scott AFB to allow behavioral health providers access to data greater than 60 days old.

6) Behavioral Health Consultants in CJTF-7/CFLCC and BH Service/Department Chiefs should develop, maintain, and monitor feedback among MTFs about the quality, accuracy, and value of TRAC2ES information.

Standards of Care: Evacuees, like all patients, deserve quality medical care. Given the transient nature of evacuees, it is particularly challenging for care providers to maintain routine standards of care. As such, MHAT recommends the establishment of the following procedures:

1) Quality Improvement
- Monitor the quality of evacuee charts throughout the evacuation chain through locally developed and regulated QI program.

- Monitor implementation of evacuation policy through locally developed and regulated QI program (i.e., do the evacuees satisfy the evacuation policy requirements).

- Jointly develop CJTF-7 and CFLCC policy on escort utilization and responsibilities, and monitor through QI program.

2) Improve RTD by emphasizing treatment for evacuees
- Implement a BH reconditioning program for CJTF-7 BH evacuees with Adjustment Disorder and/or Combat Stress Reactions;

- Implement treatment initiatives at MTFs for evacuated outpatients, particularly for Soldiers with Adjustment Disorder, with the intent to return Soldiers to full duty;

- Develop SOPs for all Medical Centers in the evacuation chain to govern behavioral health evacuee evaluation, treatment, disposition, and accountability processes.

3) Promote treatment initiatives by extending the Evacuation Policy for behavioral health patients
- Extend CJTF-7 Evacuation Policy from 7 days to 14 days for Soldiers with Adjustment Disorders or Combat Stress Reactions;

- Consider full use of available days in evacuation policy to treat evacuees with Adjustment Disorder or Combat Stress Reactions.

FUTURE IMPLEMENTATION

Tracking Systems: To best oversee the movement of patients throughout the evacuation chain and to identify emerging evacuation trends, an automated evacuation tracking system must be developed.

1) MEDCOM should establish a joint process action committee to work on an evacuation database system capable of clinical, tracking, and analytical functions. It must be readily available, secure and tailored to the needs of line commanders, medical personnel, medical regulating planners, and medical planners.

METHODS

To answer these questions, the MHAT examined Department of Defense-supported databases, examined "homegrown" evacuation tracking databases of behavioral health units, conducted surveys and interviews of OIF and LRMC behavioral health providers, and reviewed OIF Army behavioral health evacuee charts at LRMC and Ft. Stewart. In addition, the MHAT examined the command and control, communication system, resource support, and policies governing behavioral health evacuations from OIF.

I. Evacuation Tracking Systems

Source of Data: MHAT evaluated four major patient care/evacuation databases designed and maintained by DoD agencies: TRAC2ES, PARRTS, JMeWS, and the evacuation database used by the OTSG. MHAT chose to rely on the OTSG Evacuation database, which combined information from other DoD databases: TRAC2ES, PARRTS, and MODS. For the purposes of calculating the evacuation rate, MHAT did not use "homegrown" databases because they were inconsistently maintained and contained errors (e.g., misspelled names, incorrect dates, and missing diagnoses). A list of all databases examined can be found in Appendix A; further description of all DoD-sponsored databases can be found in the Appendix B.

Inclusion Criteria for OIF Army Evacuations: To prepare the OTSG Evacuation database for analysis, MHAT subjected all entries to specific inclusion criteria. To be included in the OIF Army Evacuation database, entries had to satisfy the following inclusion criteria: 1) must have Army as the branch designator; 2) must have Iraq as the operational event designator; and 3) must have a date between 1 Mar –30 Sep as the date designator. MHAT used PARRTS to fill in blank service branch, operational event, or date entries, and eliminated any updated entries that did not satisfy the inclusion criteria. Remaining blank entries were assumed to fulfill the inclusion criteria. The final database contained all OIF Army Evacuations from 1 March to 30 Sep 2003.

Inclusion Criteria for Behavioral Health Evacuations: To prepare the OIF Army Evacuee database for behavioral health evacuation analysis, MHAT subjected all entries to inclusion criteria. To be included in the OIF Army Behavioral Health Evacuee database, all entries must have satisfied either of the following inclusion criteria: 1) must have Psychiatry as the medical-surgical specialty designator; or 2) must have a history highlighting behavioral health reasons for evacuation (e.g., intentionally self-inflicted wounds, overdose, or psychiatric diagnosis). MHAT team members reviewed the histories of those entries without a psychiatry medical-surgical designator for inclusion in the database. MHAT reviewed all entries with a Psychiatry designator, and included only those with a history consistent with a behavioral health condition. The final

database contained all Army OIF Behavioral Health Evacuees between 1 Mar and 30 Sep 03.

Evacuation Rate per 100,000 Soldiers: To determine the evacuation rate per 100,000 Soldiers, the number of evacuations was divided by the average force population in OIF from 1 Mar – 30 Sep 03, and then multiplied by 100,000.

To determine the evacuation rate per 100,000 Soldiers by month, evacuations with known dates were sorted by month, divided by the force population during that respective month, and then multiplied by 100,000. The total number of evacuations with known dates was 82% (the top five evacuating medical-surgical specialties ranged from 79-86%). This resulting rate was the *unadjusted* evacuation rate per 100,000 Soldiers per month.

To correct for the missing evacuations, it was assumed that the evacuations with unknown dates were proportionally distributed among those with known dates. To make the correction, every unadjusted evacuation rate per 100,000 Soldiers per month was then divided by its corresponding percent value of known dates. The resulting higher rate was the evacuation rate per 100,000 Soldiers per month.

Because evacuees were not systematically given a Reserve Component or Active Component designation in TRAC2ES, it was not possible to compare the rates of these two groups.

II. Evacuee Chart Review

Source of Data: MHAT used TRAC2ES to identify Army behavioral health evacuees who were transferred from OIF to LRMC. To that list, MHAT reviewed the LRMC Behavioral Health homegrown database, and added other Army OIF medical-surgical evacuees who sought behavioral health care at LRMC. All of these behavioral health charts, both inpatient and outpatient, were requested by the MHAT for review. MHAT personnel reviewed the charts for information considered relevant to Army OIF behavioral health evacuations, and entered this information into a Microsoft Access file. The list of data points collected in this chart review appears in the Appendix C.

Method of Analysis: Analysis of the LRMC Chart Review database utilized tools in Microsoft Access and Excel. Sorting results were compared to the total number of database entries for the purpose of generating a ratio or percent value.

III. Workload Tracking Systems

Source of Data: MHAT reviewed several DoD-supported databases and homegrown databases for the purpose of calculating the percentage of

behavioral health patients returned to duty. No single workload collection system was in place at the beginning of hostilities. Units initially reported workload data using either the MEDCOM-supported Disease and Non-Battle Injury (DNBI) report, or the experimental Combat/Operational Stress Control Workload and Reporting System (COSC-WARS). Many behavioral health units relied on "homegrown" databases for closer workload and patient tracking.

On 10 Jul 03, the CJTF-7 Surgeon ordered that all units use the new JMeWS system for reporting workload and patient-specific data. As of Oct 03, however, OTSG reported that there is less than 50% participation in JMeWS by OIF units due to rapid implementation and minimal user training. As such, MHAT relied on other tracking systems for return to duty calculations.

The DNBI reporting system was widely used by Division Mental Health. Unlike the COSC-WARS system, DNBI reports are mandatory, familiar, and well integrated into the Army medical system. To improve its value in CJTF-7 medical planning, the two behavioral health lines of the DNBI were expanded to nine (see Table 2). MHAT utilized the 101st ABN 9-line DNBI reports and evacuation records to calculate the percentage of behavioral health patients returned to duty.

Table 2: 9-Line Disease and Non-Battle Injury Report	
Line	**Description**
1	CSC Casualty, New*
2	CSC Casualty, Follow-up*
3	Psychiatry Patient, New*
4	Psychiatry Patient, Follow-up*
5	Critical Incident Stress Debriefing
6	Non-Mission Capable Casualty
7	Hold Status Casualty
8	Suicidal Patient
9	Homicidal Patient
From unmodified DNBI	

The COSC-WARS system was a new workload tracking system specifically developed to capture combat stress control interventions on the battlefield. Although Combat Stress Control units reported workload information by COSC-WARS, implementation proved difficult because users did not receive formal training in data entry, and few had access to the 32-page COSC-WARS instruction manual. Despite these difficulties, COSC-WARS provided sufficient information to calculate the percentage of behavioral health patients returned to duty for CJTF-7 Combat Stress Control units.

To compare with results from DMHS and CSC units, MHAT analyzed the homegrown databases of two Combat Support Hospitals: ███ I ███

Kuwait), and ██ ████, Iraq). Both databases contained patient contact information and evacuation records.

Inclusion Criteria: Prior to calculating the return to duty ratio, the entries of each workload database was assessed by the following inclusion criteria: 1) all entries were Army, Army National Guard, or Army Reserve components; and 2) all entries were diagnosed with or had histories compatible with a behavioral health disorder. Entries that had no information regarding component or behavioral health condition were assumed to satisfy the inclusion criteria.

Calculation of the Rate: The rate of behavioral health patients returned to duty was calculated by dividing the number of patients returned to duty by the total number of patients evaluated during the same time period. When the number of patients returned to duty was not readily available, it was calculated by subtracting the number of patients evacuated from the total number of patients evaluated during the same time period.

III. Behavioral Health Surveys and Interviews

Instrument Development: MHAT developed survey and interview instruments to test the hypotheses established in the charter. Questions focused on Command and Control of MH units and sections, communication among MH units and sections throughout the echelons of care, resources necessary to support evacuation of Soldiers, and evacuation polices.

The following questions appeared in the Behavioral Health Provider Survey:
- What has been the monthly return to duty rate for Soldiers seen by your behavioral health team?
- Please rank order the most frequent reasons that your patients are evacuated to higher levels of care.
- There has been sufficient holding capability for behavioral health patients in my area of operations?
- Patient transport among levels of care in my area of operations has been adequate?
- Supervision and support from higher levels of care has been adequate?
- Many of the Soldiers who we evacuated should not have been deployed due to prior mental health or other problems?

The Behavioral Health Provider Interview posed this question:
- Is your clinical documentation: electronic/paper/none; **and** is it stored with you/stays with Soldier?

Survey Method: Units selected for the survey were Division Mental Health Sections, Combat Support Hospitals, Combat Stress Control Medical Detachments and Companies, and Area Medical Support Battalions. Behavioral Health Officers, Mental Health NCOs, Mental Health Specialists, and

Occupational Therapy Technicians were selected to participate in the survey. Surveys required approximately 45 minutes to complete. A non-attributional environment was provided for participants. Surveys were collected by MHAT personnel and later entered into a database for analysis. No error analysis was conducted to assess mistakes made during data entry.

Interview Method: Units selected for the survey were Division Mental Health Sections, Combat Support Hospitals, Combat Stress Control Medical Detachments and Companies, and Area Medical Support Battalions. Behavioral Health Officers, Mental Health NCOs, Mental Health Specialists, and Occupational Therapy Technicians were selected to participate in the interviews. Interviews were conducted in small groups, comprised of 3-5 personnel. Whenever possible, officers and enlisted groups were interviewed separately. Interviews were conducted by 1-2 MHAT personnel, and required approximately 1 to 1½ hours to complete. A non-attributional environment was provided for the interview participants. MHAT personnel took interview notes during the session, and later entered these notes into a database for analysis. No error analysis was conducted for to assess mistakes made during data entry.

Analysis of Surveys and Interviews: Analysis of the surveys and interview database utilized tool in Microsoft Access. Results were compared to the raw number of database entries for the purpose of generating a ratio or percent value.

IV. Ft Stewart Behavioral Health Evacuee Follow-up:

Source of Data: MHAT sought to determine the proportion of Army OIF behavioral health evacuees who followed-up for treatment after return to Ft Stewart.

To accomplish this, Army OIF evacuees were identified from two Patient Administration Division databases at Winn Army Hospital Center. MHAT entered the names of evacuees with behavioral health diagnoses into a Microsoft Access database, and then reviewed their clinical appointments in PARRTS. Arrival dates at Ft Stewart, diagnoses, and subsequent behavioral health appointment dates were added to this Microsoft Access database. For the purpose of this analysis, all Substance Abuse, Family Advocacy Program, Social Work, Psychology, Psychiatry and Mental Health entries were considered behavioral health appointments. MHAT contacted the WACH Behavioral Health Services to identify which patients were still in treatment, had completed treatment, and had received administrative separations or medical evaluation boards.

Method of Analysis: Analysis of this database utilized tools in Microsoft Access and Excel. Sorting results were compared to the total number of database entries for the purpose of generating a ratio or percent value.

RESULTS

I. Evacuation Tracking Systems:

Total Army OIF Evacuations: The Army OIF Evacuee database contained entries for 7,415 Soldiers evacuated from OIF from 1 March to 30 Sep 03 (214 days; 7 months). On the average, 35 evacuees were evacuated per day, and 1,059 evacuees were evacuated per month.

Chart 1 shows the number of evacuations by month. The spike in July's evacuations (a 1.6x increase from June) subsided in following months.

Chart 1
Army OIF Evacuees by Month
N=6053 (known evac dates)
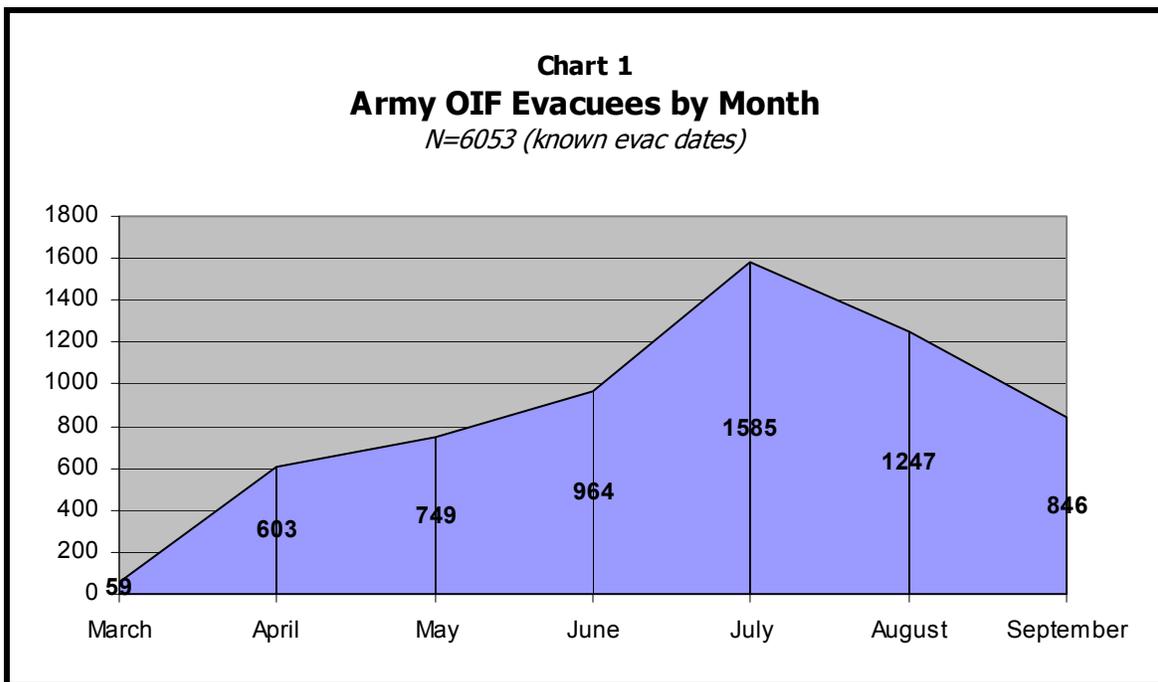
Behavioral Health Evacuations: Analysis of the Army OIF Evacuee database showed that 527 Soldiers were evacuated from OIF for behavioral health reasons from 1 March to 30 September 2003.

Of this total, 513 Soldiers were designated as *psychiatry* evacuations (i.e., entries with the psychiatry medical-surgical specialty designator). Of the 513 psychiatry evacuations, 11 were eliminated because their histories were not consistent with a behavioral health issue. Review of the history fields from other medical-surgical specialty evacuations revealed that 25 entries were related to behavioral health issues (see Table 2); these entries were included in the final dataset, bringing the total number of entries to 527.

Table 2: Behavioral Health Evacuees Given A Non-Psychiatric Designator		
Medical-Surgical Specialty	**Behavioral Health Issue**	**Number of Evacuations**
General Surgery	Intentionally Self-Inflicted Gunshot Wound	5
	Depressive Disorder	1
Internal Medicine	Overdose	4
	Sleepwalking Disorder	1
Orthopedics	Intentionally Self-Inflicted Gunshot Wound	5
Neurology	Various psychiatric disorders	5
Pulmonary	Manic Episode	1
Obstetrics	Overdose	1
Gastrointestinal	Overdose	1
Thoracic	Intentionally Self-Inflicted Gunshot Wound	1
Total		**25**

Based on 527 behavioral health evacuations, on the average, 2.5 behavioral health evacuees were evacuated per day, and 75 behavioral health evacuees were evacuated per month (see Table 3 for all medical-surgical specialty evacuations).

Table 3: All Medical-Surgical Specialty Evacuations

| Medical-Surgical Specialty	Total Evacuees	Ave. Daily Evacuations	Ave. Monthly Evacuations
Orthopedic	2,007	9.4	288
General Surgery	1,049	4.9	150
Psychiatry **(Behavioral Health)**	513 **(527)**	2.4 **(2.5)**	73 **(75)**
Neurology	490	2.3	70
Neurosurgery	346	1.6	49
Gynecology	304	1.4	43
Cardiac	298	1.4	43
Urology	276	1.3	39
Internal Medicine	269	1.3	38
Pulmonary	252	1.2	36
Gastrointestinal	239	1.1	34
Ear Nose Throat	214	1	31
Dermatology	191	.89	27
Ophthalmology	171	.80	24
Obstetrics	116	.54	17
Oncology	97	.45	14
Burn Surgery	89	.42	13
Infectious Disease	69	.32	9
Metabolic	68	.32	9
Renal	58	.27	8
Endocrine	51	.24	7
Podiatry	44	.21	6
Dental	41	.19	6
Rheumatology	35	.16	5
Audiology	31	.14	4
Oral Surgery	28	.13	4
Hematology	19	.09	3
Maxofacial Surgery	14	.07	2
Thoracic	7	.03	1
Vascular Surgery	6	.03	1
Unknown	23	.1	3

Chart 2 shows a spike in evacuations during July 2003 for the top three evacuating medical-surgical specialties. The chart only includes evacuations with known evacuation dates (80-83% of entries).

Chart 2
Monthly Evacuations
N=2910 (known dates)
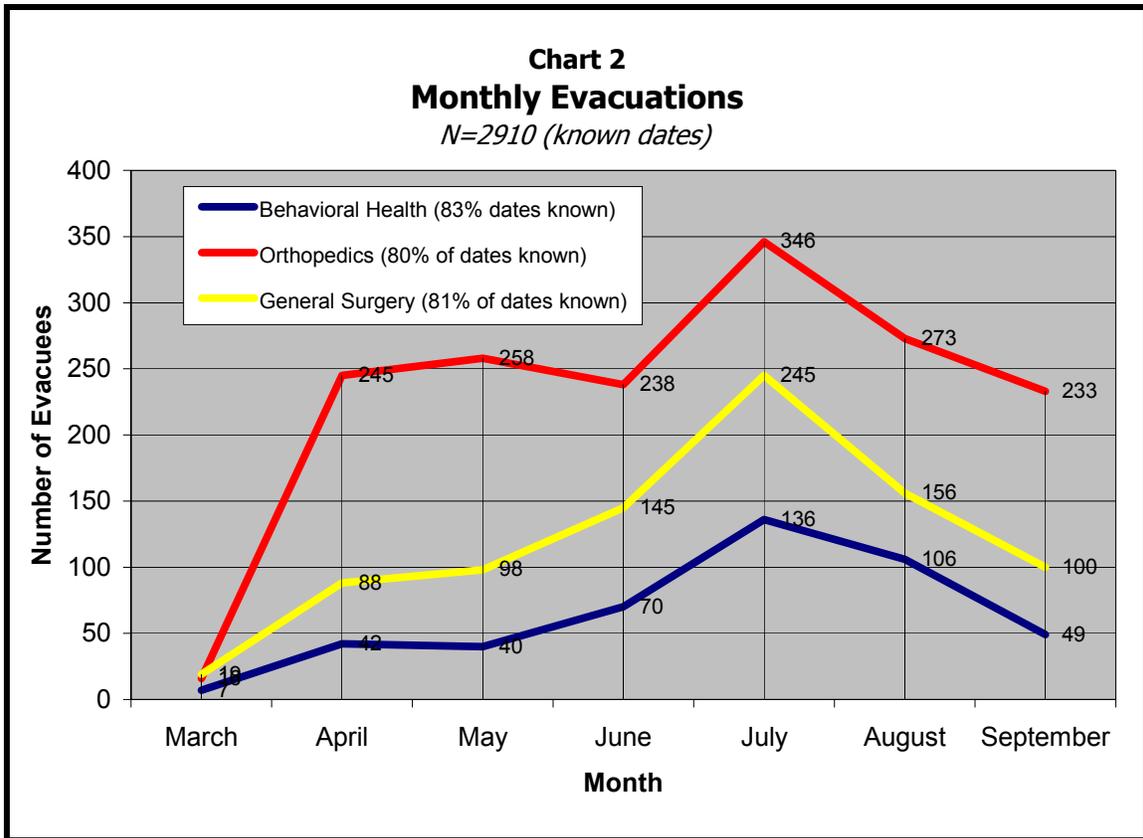
Relative Evacuations: On average, behavioral health represented 7.1% of all Army OIF evacuations. Table 4 shows the average percentages of the top five evacuating medical-surgical specialties to all Army OIF evacuations.

Table 4: % of Medical-Surgical Specialty Evacuations/All Evacuations	
Medical-Surgical Specialty	**%**
Orthopedics	27.1
General Surgery	14.1
Behavioral Health	7.1
Neurology	6.7
Neurosurgery	4.3

Chart 3 shows that proportion of behavioral health evacuations to all Army OIF evacuations has remained relatively stable.

Chart 3
Monthly Ratio of Medical-Surgical Specialty Evacuations to All Army OIF Evacuations
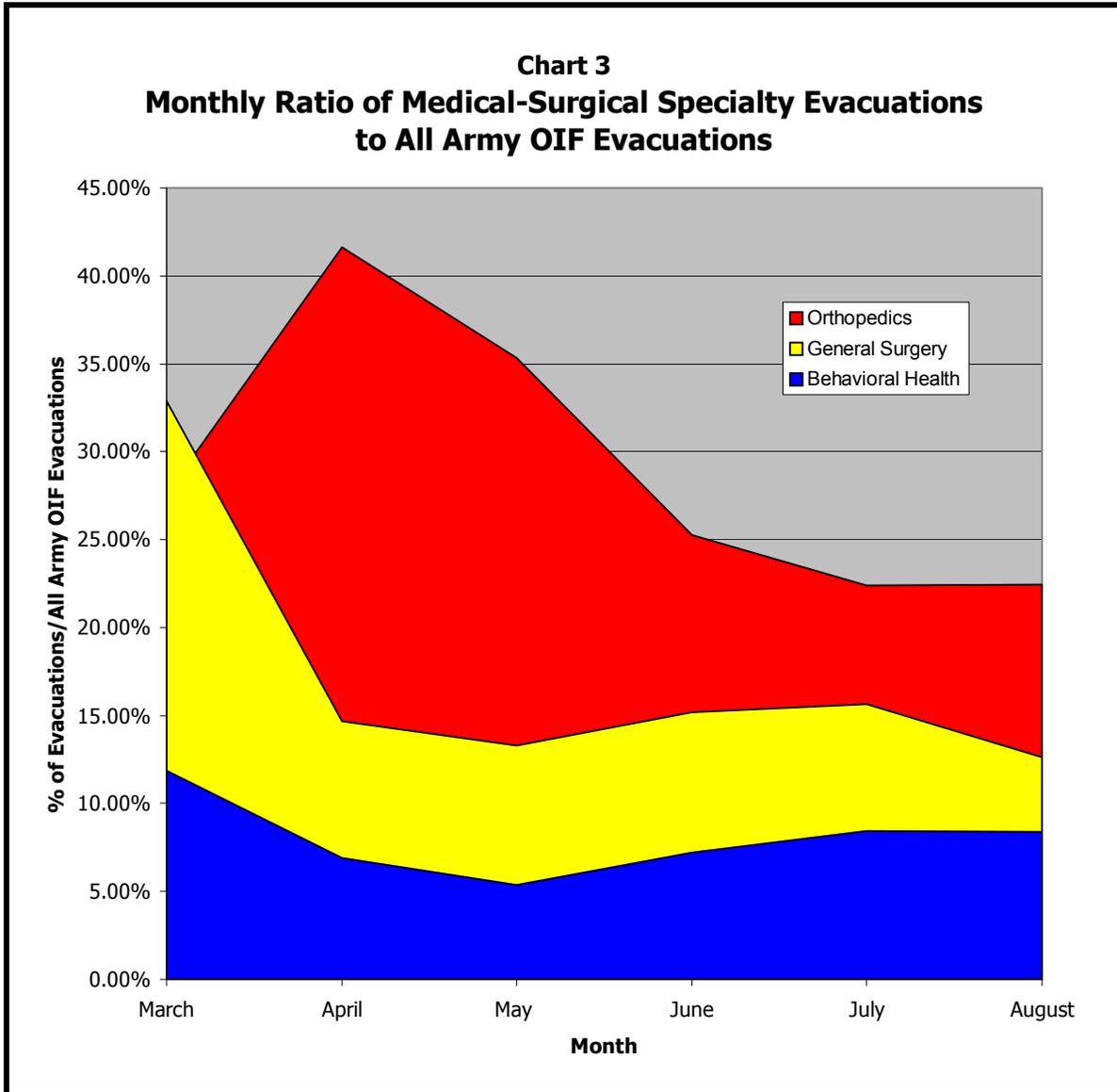
Evacuation Rates per 100K Soldiers: The Army OIF evacuation rate per 100,000 Soldiers equaled 4,877 evacuations per 100K Soldiers (7415 evacuees/152,030 average Soldier number x 100K). Chart 4 shows the Army OIF evacuation rate per 100K Soldiers.

Chart 4
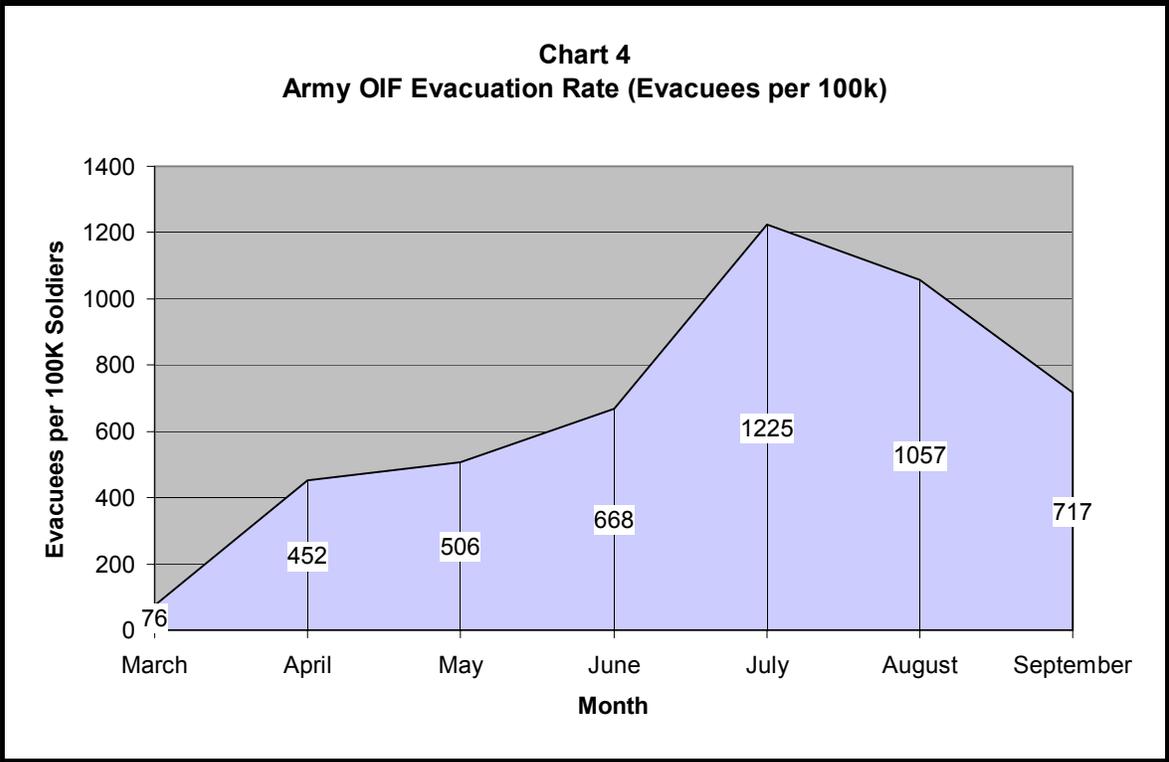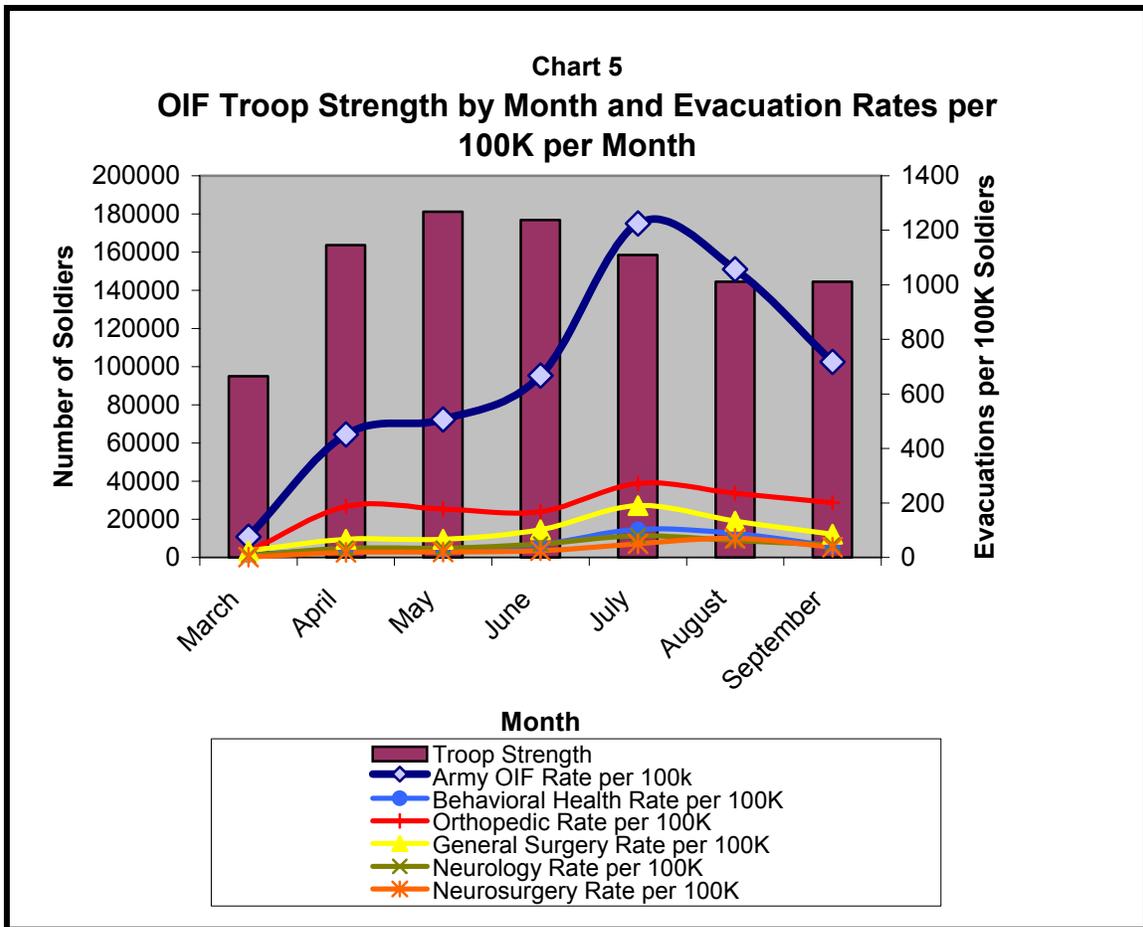**Army OIF Evacuation Rate (Evacuees per 100k)**

Chart 5 shows the evacuation rates per 100K Soldiers for the top five evacuating medical-surgical specialties, and the total Army OIF troop strength from 1 March to 30 Sep 2003.

Chart 5
OIF Troop Strength by Month and Evacuation Rates per 100K per Month

II. Evacuee Chart Review

LRMC Chart Review: According to the LRMC Evacuation database, LRMC evaluated 661 Army OIF evacuees for behavioral health issues from 1 March to 30 Sep 03. This total included behavioral health evacuees and other medical-surgical evacuees, who received behavioral health services during their stay at LRMC.

LRMC provided 279 behavioral health charts for review (42% of all charts; 54 inpatient; 212 outpatient; and 13 both in- and outpatient charts). Fourteen percent (14%) were charts of Soldiers evacuated out of OIF for non-behavioral health reasons. MHAT preferentially selected outpatient charts for review given that Soldiers evacuated for minor behavioral health conditions were more likely maintained as outpatients at LRMC.

LRMC outpatient charts were maintained by the behavioral health outpatient service. Each record was comprised of various administrative and clinical documents – stapled together and stored in an accordion file. Chart content was inconsistent across the sample.

Tables 5, 6, 7a, 7b, 8, and 9 summarize the demographic characteristics, estimated evacuation rates for Active and Reserve Components, diagnosed behavioral health disorders, prescribed medications, and return to duty in OIF rates respectively.

The estimated BH evacuation rates for Active and Reserve Components have a 1: 2.8 ratio (see Table 6). Data was unavailable to compare AC and RC evacuation rates for other medical-surgical specialties.

Table 5: Demographics

Category	#	%
Enlisted	267	95.7%
Officer	11	3.9%
Warrant Officer	1	.4%
Male	234	83.9%
Female	45	16.1%
Active Component	161	57.7%
Reserve Component	110	39.4%
Unknown Component	8	2.9%

Table 6: Estimated Evacuation Rates for Active and Reserve Components

Component	% Of LRMC Charts	Estimated # of Evacuations (% of LRMC Charts x 527 BH Evacuations)	Average Monthly Force Population	Rate per 100K Soldiers (Est. # of Evacuations/Force Population x 100K)
Active	57.7%	304	122,565	248.1
Reserve	39.4%	208	29,465	705.2
AC: RC Evac Rate Ratio	1: 2.8			

TABLE 7A: Diagnosed Behavioral Health Disorders

Category	#	%
Adjustment Disorders	110	39.43%
Affective Disorders	70	25.09%
Anxiety Disorders	54	19.35%
Other	14	5.02%
Personality Disorders	13	4.66%
Psychotic Disorders	5	1.79%
No Diagnosis	4	1.43%
Unknown	4	1.43%
Substance Abuse Disorders	3	1.08%
V Codes	2	0.72%

Table 7b: Expanded List of Behavioral Health Disorders

Diagnosis	#	%
Adjustment Disorders	**110**	**39.43%**
Affective Disorders	**70**	**25.09%**
Bipolar Disorder	(10)	(3.58%)
Depressive Disorder NOS	(20)	(7.17%)
Dysthymic Disorder	(5)	(1.79%)
Major Depressive Disorder	(34)	(12.19%)
Mood Disorder NOS	(1)	(0.36%)
Anxiety Disorders	**54**	**19.35%**
Acute Stress Disorder	(24)	(8.60%)
Anxiety Disorder NOS	(2)	(0.72%)
Generalized Anxiety Disorder	(4)	(1.43%)
OCD	(1)	(0.36%)
Panic Disorder	(6)	(2.15%)
PTSD	(17)	(6.09%)
Other	**14**	**5.02%**
ADHD	(2)	(0.72%)
Asperger's Disorder	(1)	(0.36%)
Conversion Disorder	(4)	(1.43%)
Dissociative Disorder	(1)	(0.36%)
Intermittent Explosive Disorder	(2)	(0.72%)
Narcolepsy	(1)	(0.36%)
Post Concussive Disorder	(1)	(0.36%)
Presenile Dementia	(1)	(0.36%)
Sleep Disorder NOS	(1)	(0.36%)

Psychotic Disorder NOS	**5**	**1.79%**
No Diagnosis	**4**	**1.43%**
Unknown	**4**	**1.43%**
Substance Abuse	**3**	**1.08%**
V code: partner relational prob.	**2**	**0.72%**
Total	**279**	**100.00%**

Table 8: Medications Prescribed to Evacuees

		LRMC			# OIF	% OIF
		Yes	No	Unknown		
OIF	Yes	82	8	19	**109**	39.07%
	No	24	72	5	**101**	36.20%
	Unknown	46	17	6	**69**	24.73%
	# LRMC	**152**	**97**	**30**	**279**	
	% LRMC	54.48%	34.77%	10.75%		

Table 9: Return to Duty in OIF Rates

Patient Status	# RTD	%
Inpatient Only	1 (out of 54)	1.9%
Outpatient Only	9 (out of 212)	4.2%
Both	0 (out of 13)	0%
Total	10 (out of 279)	3.6%
Diagnosis	**# RTD**	**%**
Adjustment Disorder	6 (out of 110)	5.5%
Dysthymic Disorder	1 (out of 5)	20%
No Diagnosis	2 (out of 4)	50%
PTSD	1 (out of 17)	5.9%

Table 10 shows that 31.9% of all Army behavioral health evacuees in the LRMC chart sample were evacuated from OIF for concerns related to elevated suicidal risk factors. Following evaluation at LRMC, only 7.9% of all evacuees were considered at elevated risk.

Table 11 shows that 9.0% of all Army behavioral health evacuees in the LRMC chart sample were evacuated from OIF for concerns related to elevated homicidal risk factors. Following evaluation at LRMC, only 2.5% of all evacuees were considered at elevated risk.

Table 10: Suicidal Concerns Prompting Evacuation to Next Echelon of Care

		LRMC				
		Yes	No	Unknown	# OIF	% OIF
OIF	Yes	20	68	1	**89**	31.9%
	No	1	160	0	**161**	57.7%
	Unknown	1	7	21	**29**	10.4%
	# LRMC	**22**	**235**	**22**	**279**	
	% LRMC	7.9%	84.2%	7.9%		

Table 11: Homicidal Concerns Prompting Evacuation to Next Echelon of Care

		LRMC				
		Yes	No	Unknown	# OIF	% OIF
OIF	Yes	5	20	0	**25**	9.0%
	No	2	231	1	**234**	83.9%
	Unknown	0	9	11	**20**	7.2%
	# LRMC	**7**	**260**	**12**	**279**	
	% LRMC	2.5%	93.2%	4.3%		

Table 12 shows that only 44.8% of LRMC charts had clinical documentation accompany evacuees from OIF. The following documents were considered clinical documentation for the purpose of this analysis: AF Form 3899, SF 600, DA 3822, SF 539, and memorandum.

Table 12: Documentation in LRMC Charts

OIF Clinical Documentation	#	%
Yes	125	44.8
No	154	55.2
LRMC Clinical Documentation Forwarded to Next Echelon of Care		
Yes	258	92.5
No	21	7.5
Patient Movement Request (or TRAC2ES)		
Yes	109	39.1
No	170	60.9
OIF Clinical Documentation and TRAC2ES		
Both present	64	22.9
Neither present	105	37.6

Return to Duty: The percentages of behavioral health patients returned to duty ranged from 11% to 97%, depending on the type of behavioral health unit. All results appear in Table 13.

Table 13: Return to Duty					
Type of Unit	**Unit**	**Dates**	**# Of Patients**	**# Of RTD**	**% RTD**
Division Mental Health Section	101 ABN	30 Mar – 6 Sep 03	495	479	97
Combat Stress Control units	All CJTF-7 CSC units	26 Jul – 27 Sep 03	2008	1919	96
Combat Support Hospital (Iraq)	███████	1 Apr – 31 Jul 03	301	209	69
Combat Support Hospital (Kuwait)	███████	12 Mar – 1 Sep 03	229	26	11
Regional Medical Center	LRMC	1 Mar – 30 Sep	279*	10	3.6
* # Of charts reviewed					

III. Behavioral Health Surveys and Interviews

Evacuation Policy of CFLCC and CJTF7: The CONPLAN for CJTF7 (██ CSC to ██ Medical Bde Conplan ██) addressed evacuation policy and related procedures.

Battle fatigue casualties triaged as DUTY, were returned to duty to their unit. REST cases were sent to rest in their unit CSS unit element. REFER and HOLD cases (requiring observation greater than 24 hours), received CSC Restoration services as far forward as the tactical environment permitted. First line Restoration (1-3 day treatment) for battle-fatigued Soldiers was the FSMC/ASMC responsibility, but if workload was high, then Soldiers were to be referred for transport to the nearest second-line restoration center. CSC Reconditioning extended CSC Restoration up to 14 days of treatment in the Corps area, and may require an exception to Corps evacuation policy. The second line Reconditioning was provided by a 3rd MEDCOM Field Hospital or CSC Company located in the COMMZ. This was the exception as most Soldiers were sent to their local CSH and were often evacuated from theater by psychiatry in the CSH.

The CJTF-7 Evacuation Policy stated that evacuations out of theater were made only after a good faith effort to address the issue in theater failed, or if Soldiers were unable to adequately contribute to the mission or were dangerous to self or others. The Soldier's Rear Detachment Command was to be made aware of their Soldier's circumstances and was to coordinate mental health follow-up in CONUS.

Each behavioral health activity was directed to report their workload via the Combat and Operational Stress Control Workload Activity Report System to the ███ Medical Bde who then consolidated and submitted the results to the V Corps Surgeon's cell in the CREAR HQ. A part of this report provided evacuation statistics from each behavioral health activity.

MHAT requested but did not receive CFLCC written reference to review their evacuation policy, but verbal confirmation by CFLCC staff did indicate CFLCC was following theater evacuation policy that was 72 hours at level II, and 7 days at level III.

To initiate the medical evacuation process, the patients' medical information was entered into TRAC2ES to reserve space for travel and provide the Air Force with the necessary information needed to transport the patient safely. Earlier in the deployment, some patients used commercial air, thereby bypassing the TRAC2ES system and making patient tracking difficult. At the time of the MHAT visit, all patients were medically evacuated from LRMC to CONUS via the Air Force evacuation system.

LRMC Evacuation Procedures: Patients arrived through the Air Force medical evacuation system to Ramstein AFB. They were shuttled immediately to the Deployed Warrior Medical Management Center (DWMMC) located at LRMC during duty hours or to the LRMC emergency room after duty hours for medical screening.

DWMMC was an operation cell established to help OIF/OEF Soldiers navigate through the medical system at LRMC. DWMMC staff was comprised of physicians, triage nurses, case managers, and patient administrators who follow each patient until they depart LRMC. DWMMC staff members provided physical exams and medical screening, assess medical needs and schedule same-day appointments (or next workday appointments if the patient arrived at night or on the weekend). DWMMC staff members were ultimately responsible for tracking evacuees throughout their stay at LRMC.

Patients with psychiatric diagnoses, as identified in TRAC2ES' narrative history, were screened in the psychiatry outpatient clinic during the duty day, or in the ER by the psychiatry staff on call during evenings and weekends.

During the initial screening, psychiatry staff assessed the patient's safety risks (i.e., suicidal and homicidal risks) and determined whether the patient would be maintained as an inpatient or outpatient. No standing operating procedures were developed. LRMC behavioral health staff reported that admission criteria for OIF evacuees did not differ from routine admissions.

Originally outpatients were originally housed on a minimal care wing in LRMC, but were billeted at Klaber Caserne at the time of the MHAT visit. Outpatients are monitored and supervised by a DWMMC's First Sergeant. Daily roll call and check-in visits at DWMMC provided evacuee accountability. Shuttle service was provided to and from LRMC. LRMC discouraged alcohol use by evacuees, but it was readily available in the local economy.

Diagnostic and therapeutic interventions for inpatients included: a psychiatric evaluation, medication management, one-on-one contact with ward staff, and an occupational therapy evaluation. Occupational therapy provided a conditioning group and life skills group for inpatients each day. A psychologist, social worker and chaplain provided daily group therapy. Typical length of stay for inpatients was 5-7 days.

Outpatient services included: a psychiatric evaluation, medication management, and one or two clinical visits prior to departure to CONUS. Because the typical length of stay for outpatients was 5 days, LRMC did not emphasize outpatient treatment services for evacuees. No SOPs outline criteria for determining which evacuees remained at LRMC for treatment, which evacuees returned to duty in OIF, and which evacuees went to the next level of care.

LRMC behavioral health staff members characterized their role in the evacuation process as analogous to a "rest stop in the desert." Staff members believed that treatment and final disposition responsibilities fell to military treatment facilities at the major hubs or home station. No medical boards or administrative boards were initiated for OIF/OEF evacuees stationed in CONUS.

Beginning in July 03, each evacuee was given a behavioral health POC with phone number at the next level of care. Active duty Soldiers went back to their home station and received their medical care at their local MTF. National Guard and reservists were evacuated to the medical center "hubs" (WRAMC, EAMC, BAMC and MAMC), which was nearest to their original mobilization site. Once returned to their home station, there was no system to track NG and RC evacuee participation in behavioral health care.

Given logistical restraints, LRMC did not alert home units about further evacuation to CONUS. Instead, this notification was left to the next echelon of care at the home station or the MTF hub.

Once the patient completed all medical appointments and was cleared by the case manager, a Air Force Form 3899 was completed by the case manager and was sent to the Air Evacuation clerk, who manifested the patient for a MEDEVAC flight to the next level of care in CONUS. The patient departed to Ramstein AFB for the flight via military shuttle. A psychiatric technician escort accompanied high-risk patients to CONUS.

IV. Ft Stewart Behavioral Health Evacuee Follow-up

The Winn Army Medical Center databases identified 49 Army OIF evacuees with behavioral health diagnoses, who were returned to Ft Stewart from 19 Mar to 8 Oct 03. Of those evacuees, 43 (88%) were behavioral health evacuees, and 6 (12%) were medical-surgical evacuees who had secondary behavioral health diagnoses.

Of the 49 evacuees, 41 (84%) followed up with behavioral health services at WACH. Of the 41 evacuees, 19 (46%) were evaluated on the same day they arrived at WACH; 34 (83%) were seen within one week. Twenty-two percent of all these evacuees received only one follow-up visit; and 31 (75%) received six or fewer follow-up visits (range 1-25 visits; median 4).

Table 14 shows the WACH behavioral health evacuees' treatment status as of 1 Nov 03. Of the 8 evacuees who failed to follow-up, 3 were diagnosed with Adjustment Disorder; 3 were diagnosed with Depressive Disorder Not Otherwise Specified; and 2 were diagnosed with Acute Stress Disorder. WACH Behavioral Health Services was unable to provide the current treatment status of 12 (24%) of the evacuees.

Table 14: WACH BH Evacuees' Treatment Status

Treatment Status	#	%
Chart Closed	**18**	**37%**
RTD	9	18%
MEB	2	4%
Admin. Separation	5	10%
Other	2	4%
Ongoing Treatment	**11**	**22%**
Unknown	**12**	**24%**
No Follow-up	**8**	**16%**
TOTAL	**49**	**100%**

Table 15 shows the percent of evacuees returned to duty by diagnosis and by follow-up at WACH. WACH records showed 9 evacuees were returned to duty after follow-up, and 8 failed to follow-up. For the purposes of this analysis, evacuees who failed to follow-up were considered "returned to duty" by default.

Of all diagnoses, Adjustment Disorder accounted for 35% of all behavioral health evacuees who returned to duty with or without follow-up (6 out of 17 evacuees). Adjustment Disorder was diagnosed most frequently among evacuees returned

to duty after follow-up (33%, 3 out of 9 evacuees), and among evacuees who failed to follow-up after return to home station (38%, 3 out of 8 evacuees).

Table 15: Evacuees Returned to Duty at Ft Stewart			
Diagnosis	**# F/U**	**# No F/U**	**% RTD**
Adjustment DO	3	3	35.3
Acute Stress DO	1	1	11.8
Depressive DO NOS	0	2	11.8
Major Depressive DO	2	0	11.8
PTSD	1	1	11.8
Malingering	1	0	5.9
Primary Insomnia	1	0	5.9
V Code: Partner Relational Problem	0	1	5.9
TOTAL	**9**	**8**	**100**

APPENDIX 1 (Sources of Data) to ANNEX C to OIF MHAT REPORT

The following sources of information were utilized in this assessment:
1. DoD-Recognized Patient Care/Evacuation Database
    a. TRAC2ES
    b. PARRTS
    c. JMeWS

2. Force Population Numbers
    a. CJTF-7 C1
    b. CFLCC C1

3. Homegrown Patient Care/Evacuation Databases
    a. Landstuhl Regional Army Medical Center Evacuation Database
    b. Landstuhl Regional Army Medical Center Outpatient Evacuee Database
    c. ███ CSH Evacuation Database
    d. ███ Med Bde Evacuation Database
    e. ███ CSH (B) Evacuation Database
    f. ███ CSC Med Det Evacuation Database
    g. WACH PAD databases

4. Other Patient Care/Evacuation Data Sources
    a. ███ CSC Med Det COSC-WARS evacuation roll-up

5. Patient Records
    a. Landstuhl Regional Army Medical Center In-Patient and Outpatient Records

6. Historical and Scholarly References
    a. FM 8-51
    b. AMEDD Journal
    c. DSM-IV
    d. ICD-9
    e. Behavioral health evacuation rates in other military operations (Directorate of Combat Development and Doctrine)

7. CJTF-7 Interviews
    a. Theater Surgeon
    b. ███ Med Bde behavioral health Clinical Ops (G3)
    c. ███ CSC Med Det behavioral health personnel
    d. ███ CSC Co behavioral health personnel
    e. ███ CSC Med Det behavioral health personnel
    f. ███ CSH behavioral health personnel
    g. ███ CSH behavioral health personnel

h. 101st AA DMHS behavioral health personnel
i. 4 ID DMHS behavioral health personnel
j. 1 AD DMHS behavioral health personnel
k. MRO ▇ Med Bde
l. C1

8. CFLCC Interviews
   a. Theater Surgeon
   b. Clinical Ops (G3)
   c. ▇ CSH behavioral health personnel
   d. ▇ ASMB behavioral health personnel
   e.
   f. ▇ CSH behavioral health personnel

9. Landstuhl Regional Medical Center
   a. Behavioral health personnel
   b. PAD
   c. DWMMC Case Managers

10. The following resources were requested, but were not available at the time this document was written:
    a. CJTF-7 Casualty Estimates
    b. CFLCC Casualty Estimates
    c. Deployed Warriors Medical Management Center (DWMMC) SOPs
    d. Landstuhl Regional Army Mental Center SOPs
    e. Landstuhl Regional Army Medical Center In-patient records

APPENDIX 2 (Description of Department of Defense-Supported Databases) to ANNEX C to OIF MHAT REPORT

JOINT MEDICAL WORKSTATION (JMeWS)

The Joint Medical Workstation (JMeWS) is one of the latest technological advances employed during Operation Iraqi Freedom (OIF). It allows commanders and medical planners to monitor the physical well being of their service members and medical treatment facilities (MTF) capabilities. The information collected can also be used to look for health trends and data analysis. Several organizations in conjunction with the Deployment Health Support Directorate, worked together and created JMeWS to meet the need of a system that could compute and analyze information from the military service's medical surveillance tools already in place. JMeWS provides a real-time medical snapshot of what is going on in a specific theater or operation down to the unit or joint task force level. Data analysis tools then use the data derived from the patients records and disease and non-battle injury reports to determine and alert for spikes in specific areas. The Web-Based workstation has been functional since January 2003 and is currently being used by the United States Central Command (CENTCOM).

Transportation Command Regulating Command and Control Evacuation System (TRAC2ES)

Transportation Command Regulating Command and Control Evacuation System (TRAC2ES) IS A Web tool that tracks and manages casualty evacuations and patient movement. The present system was deployed nearly two years ago to monitor the movement of causalities out of a combat zone. The Transportation Command took over the responsibility for TRAC2Es IN 1993, the casualty-evacuation management software was developed in response to widespread complaints following the 1991 Persian Gulf War that it was difficult to track and locate wounded service members being treated at military care centers and hospitals. Typical scenarios for the applicability for TRAC2ES, commanders on the ground determine that causalities need to be evacuated and transported to a medical facility. The command will contact the so-called "patient movement requirement center," a facility set up to support a specific conflict. The center in turn will request the aircraft and crews to transport those patients.

Patient Accounting & Reporting Real-time Tracking Data Record (PARRTS)

The purpose of the Patient Accounting & Reporting Realtime Tracking Data Record (PARRTS) is to report special interest patients as required by MEDCOM Regulation 40-7, Reporting of Special Interest Personnel. It is an interactive web-based data entry system used by Army Medical Treatment Facilities and deployed medical assets. Manually data inputted via the PASBA Restricted Wed Site. Users of the PARRTS are senior staff members of the OTSG and MEDCOM, patient administration personnel at MTF's, and PASBA Input Sections are PARRTS clients.

Medical Occupational Data System (MODS)

Medical Occupational Data System (MODS) is a database that helps personnel managers, special pay clerks, PROFIS managers; manpower managers and medical readiness managers make operational data simpler. MODS provide AMEDD human resource and SRP site managers with a responsive and reliable information management data system for all categories of military and DA civilian medical support personnel. The data that is the basis for MODS is pulled from 18 different major Army and Department of Defense databases.

APPENDIX 3 (LRMC Chart Review Data Points) to ANNEX C to OIF MHAT REPORT

MHAT reviewed LRMC behavioral health charts for the following data. MHAT team members entered this information into a Microsoft Access database. No data entry error analysis was performed. The following list contains the specific data points in this review:

1. Name
2. Social Security Number
3. Inpatient and/or outpatient status at LRMC
4. Number of non-behavioral health OIF Army evacuees who were referred to Behavioral Health while at LRMC
5. Presence or absence of clinical documentation (originating in OIF) in LRMC chart
6. Type of form used for clinical documentation (originating in OIF) on the LRMC chart
7. Presence or absence of TRAC2ES documentation on LRMC chart
8. Presence or absence of suicidal concerns in OIF
9. Presence or absence of suicidal concerns in LRMC
10. Presence or absence of homicidal concerns in OIF
11. Presence or absence of homicidal concerns at LRMC
12. MEBs initiated by LRMC BH
13. Administrative Separations initiated by LRMC BH
14. Discharge diagnosis at LRMC
15. Presence or absence of post-discharge treatment plan
16. Disposition (e.g., evacuation to another MTF, Return to Duty in CONUS, or Return to Duty in OIF)

Evacuation rates were derived from the Total Army OIF Evacuee and Total Army OIF Behavioral Health Evacuee databases. The average monthly rate equaled the number of database entries divided by the number of months (covered by the database). The average daily rates equaled the number of entries divided by number of days (214 days in the database). The evacuee per deployed force rate equaled the number of entries divided by the average number of deployed Soldiers. The relative behavioral health to total medical evacuation rate equaled the Total Army OIF Behavioral Health Evacuees by the Total Army OIF Evacuees.