

**RECOMMENDATIONS FOR MONITORING METRICS**  
**DoD/VA Practice Guideline for Post-Deployment Health Evaluation and Management**

Prepared by the Post-Deployment Health Guideline Expert Panel

6 July 2001

In December 2000, the expert panel for the DoD/VA Post-Deployment Health Evaluation and Management Guideline was charged to develop a set of indicators for monitoring implementation of the guideline. The DoD and VA intend to use a limited number of indicators to be monitored by all participating organizations, which will provide systemwide performance benchmarks to which local and organizational progress can be compared.

There was not an existing inventory of tested indicators for evaluation and management of patients with post-deployment health concerns that could be adapted to this guideline activity. Therefore, the first step in the selection process was to identify a comprehensive list of candidate indicators, from which a limited number would be selected for DoD/VA application. Guided by the priorities defined in the DoD/VA post-deployment guideline, the expert panel members participated in a three-stage process for indicator selection, with technical support provided by RAND:

1. ***Delphi process round 1*** – Panel members individually evaluated a preliminary list of candidate measures and suggested others to add to the list. Results were tabulated for use in Round 2.
2. ***Delphi process round 2*** – Panel members individually ranked each of the candidate measures from the round 1 list and each new measure suggested by the participants. Rating scores were summarized in preparation for a team teleconference of participating panel members.
3. ***Team teleconference*** – Participating panel members selected a final list of indicators, taking into consideration the average ranking scores for importance and feasibility as well as other issues (e.g., data collection burden, scope of concepts addressed).

During the first round of the Delphi process, the panel members were given a list of 26 candidate indicators grouped into three categories of process of care, clinical outcomes, and patient satisfaction. This list was increased by the panel members to a total of 59 indicators grouped into four categories of process of care, clinical outcomes, patient satisfaction, and provider satisfaction. Some of the additional indicators were new and others were modifications of the original candidate indicators. In addition, panel members submitted numerous comments regarding candidate indicators, monitoring issues, and measurement concerns, which were summarized by RAND and reported back to them for consideration during the second round of the Delphi process.

Working individually in the second round, each panel member rated each of the candidate indicators in the expanded list. Using a scale from 0 to 10 (where 0 is lowest and 10 is highest), each indicator was assigned a score for the degree of importance of the indicator for treatment of the patient and a separate score for the feasibility of measurement. The scores were tabulated and reported back to the participants for final deliberations during a teleconference held on 7 March 2001.

This report presents monitoring recommendations that are the culmination of the post-deployment guideline expert panel's selection process, including:

- four indicators that are recommended for use in systemwide monitoring by DoD and VA, and the team's rationale for selecting the recommended indicators,
- a list of additional indicators rated highly by the expert panel that individual Services, military treatment facilities, or VA health care facilities may consider for use in their local monitoring activities, and

- discussion of clinical or measurement issues to be addressed as the priority indicators are transformed into metrics for monitoring.

## GOALS OF THE POST-DEPLOYMENT HEALTH GUIDELINE

The post-deployment health practice guideline was designed to achieve appropriate care for patients with post-deployment health concerns who receive care in DoD and VA primary care clinics. Consistent with this purpose, the expert panel members identified the following goals to guide selection of monitoring indicators:

- Ensure that post-deployment patients have access to needed health care;
- Meet the needs of the patients being treated for post-deployment health concerns;
- Perform appropriate evaluations of patients with symptoms that may be deployment related; and
- Achieve improvements in functional status for post-deployment patients with symptoms

## RECOMMENDED INDICATORS FOR SYSTEMWIDE MONITORING

The expert panel recommends four *high priority indicators* that it believes most closely address the basic goals of the practice guideline regarding processes of care, clinical outcomes, and satisfaction for treatment of patients with post-deployment concerns. These indicators also were rated well on feasibility of measurement. In addition, the expert panel identified other highly rated indicators that can be used by the Services, VA, or individual MTFs/clinics to assess progress in achieving the practices recommended by the practice guideline.

### High Priority Indicators

The four priority indicators the post-deployment guideline panel recommends for adoption by DoD/VA are presented in Table 1, along with their average rating scores from the panel's selection process. The indicator ratings reflect the following priority considerations that shaped the guideline team's decisions on these indicators:

- ***Patient satisfaction with total care*** – One of the primary goals of the practice guideline is to address concerns regarding the responsiveness of military health care to the needs of patients with post-deployment health concerns. This recommended indicator was identified as the top priority indicator as a result of the high ratings given to several separate indicators of patient satisfaction, which are incorporated into it.
- ***Providers reporting adequate support*** – The practice guideline was established to provide a structure and process that military and VA primary care providers can use to treat patients with post-deployment health concerns, rather than routinely referring them elsewhere. The process includes establishment of a web-based resource that gives providers ready access to information regarding potential deployment-related health exposures or other issues. This indicator is intended to assess the extent to which providers perceive they have the informational and operational resources needed to provide this care effectively.
- ***Referred personnel receiving post-deployment care*** – Success in gaining access to post-deployment care is the first step to achieving the purpose of the practice guideline. The groups of interest include individuals who are given referrals to care during the redeployment process and others who have health concerns or develop symptoms later. This indicator focuses on the first group (those given referrals) to estimate the rates at which they actually obtain the care to which they were referred.
- ***Improvement in functional status*** – This outcome measure directly addresses the practice guideline goal of achieving improved outcomes for patients with symptoms that reduce their functional status.

The six-month timeframe was chosen to allow sufficient time for permanent change in functional status to occur while still providing timely information.

**Table 1. Highest Priority Indicators Recommended for Special Study Monitoring**

Guideline Element	Indicator	Indicator Type	Monitor Method	Average Score	
				Important	Feasible
Full Guideline	Average level of patient satisfaction with total care received for a post-deployment concern	Patient Satisfaction	Survey	8.75, 8.10, 7.73*	6.33, 7.20, 6.82
Full Guideline	Percentage of providers that reported having adequate information and support resources to manage post-deployment care	Provider Satisfaction	Survey	7.82	7.50
Initial Assessment	Percentage of personnel with referrals for post-deployment health care who had at least one clinic visit	Process of Care	Routine	7.91	7.00
Full Guideline	Average improvement in functional status within 6 months after first post-deployment clinic visit	Clinical Outcome	Special Study	7.83	5.08

\* This indicator was selected by the expert panel during the teleconference to represent three candidate indicators that all addressed the issue of patient satisfaction with post-deployment care. The scores reported are those for the original indicators.

The patient satisfaction indicator that received the highest rating for importance was the indicator for satisfaction with the information and education received for post-deployment health concerns (See Appendix B). Several other patient satisfaction measures also received high ratings. Furthermore, the highest rating of all candidates was received by a clinical outcome indicator for the percentage of patients whose concerns were adequately addressed. These ratings reflected the strong priority placed by the expert panel on being responsive to the health concerns of post-deployment patients. The participants decided to recommend one indicator that addresses patient satisfaction with the total care received, which encompasses the various aspects of satisfaction represented by several candidate indicators. In fielding a survey with the selected indicator, other questions also could be asked to address the more specific dimensions, such as satisfaction with access to care, information provided, or trust in the provider.

The panel members considered various approaches for defining an indicator to measure provider perspectives regarding their experiences in providing post-deployment health care. During the Delphi process, two candidate indicators for provider satisfaction were defined that would assess providers' perceptions of the usefulness of the guideline itself and of the DHCC services. Both indicators received high ratings for importance. The recommended indicator was designed to address how well prepared the providers feel they are, overall, for treating patients with post-deployment concerns, given the guidance from the guideline, web-based information, and other implementation support. This measure encompasses and extends beyond the two original candidate indicators. It would be measured using a provider survey, which also could include questions on other aspects of providers' perceptions of delivering post-deployment health care under the practice guideline.

The recommended indicator for entry into care by referred post-deployment personnel limits the group of interest to individuals who were identified during the redeployment evaluation process as potentially needing care. This is a revision to the original candidate indicator that had encompassed all post-

deployment personnel. The ability to measure this indicator will depend on the completeness of DoD data records for post-deployment referrals for care, which would be linked to SADR records of clinic visits to identify the occurrence of at least one visit post-deployment.

The recommended indicator for average improvement in functional status was chosen to represent what panel members believed to be the most important patient clinical outcome. This indicator will apply only for the subset of post-deployment patients who present with functional limitations. The indicator is defined as the difference between repeated measures of functional status for a given patient, first at the time of the initial evaluation visit and later after six months of treatment. Possible methods to measure the indicator were discussed, for example, the SF-36 or one health status question on a patient survey.

In narrowing the list of candidate indicators to the four being recommended, the participating panel members also considered the fact that other independent monitoring activities are likely to be performed by various interested organizations. For example, the DHCC is interested in monitoring progress in the aspects of care in which they are involved as well as assessing the effectiveness of its support linkages with primary care providers. In addition, Health Affairs, the Surgeons General of the Services, and the Inspector General are likely to track progress within their respective jurisdictions. These combined monitoring activities potentially could generate tracking information for a variety of indicators, in addition to the four priority indicators identified here.

### **Additional Indicators for Monitoring Activities**

After selecting the priority indicators for DoD/VA use, the expert panel members identified additional indicators that had been given high ratings, which are listed in Tables A.1 and A.2 in Appendix A. These indicators are offered for possible use by individual treatment facilities in their own monitoring processes as they implement the post-deployment health guideline. Several indicators are listed in each of four categories: process of care, clinical outcomes, patient satisfaction, and provider satisfaction. Also for reference, the worksheet with all the candidate indicators and the ratings of the expert panel participants, is presented in Appendix B.

## **MEASUREMENT METHODS FOR THE INDICATORS**

As the expert panel approached the task of selecting indicators, it recognized the strengths and limitations of three distinct methods and data sources for monitoring guideline implementation: routine monitoring, periodic or special studies, and surveys. All of these methods would be required for effective monitoring of the high priority indicators that address the goals of the post-deployment health guideline.

***Routine monitoring*** works with data contained in treatment facilities' automated information systems. Typically, these systems are limited to encounter records for outpatient visits, inpatient stays, prescription drugs, and use of ancillary services (e.g., laboratory, radiology), although the VA also has automated medical records. Encounter data provide timely feedback for treatment facilities to guide implementation actions and for monitoring performance systemwide. These data are not useful for measuring many outcomes of care, however, because they do not contain information on the patients' clinical status. Moreover, measures of the quantity and timing of services based on these data may be misinterpreted in the absence of direct information on the patient status or the clinical judgments that underlie the observed service activity.

***Periodic or Special studies*** collect non-automated information recorded in patients' medical charts, obtaining a rich level of detail about the patients' clinical status and clinicians' assessments of required interventions. These studies are time consuming and costly to perform, so they cannot generate data on a routine basis for timely monitoring of compliance with the guideline and its effects on service delivery profiles. A distinction is made between periodic studies and special studies, to highlight that special studies use complex data extraction methods and are performed infrequently whereas periodic studies are performed more frequently (e.g., monthly or quarterly)

with less complex methods. As medical records become automated (as in the case of the VA), the data they contain also will become available for routine monitoring of clinical measures and outcomes of care.

*Surveys* are the best way to collect information from individuals regarding their perceptions, attitudes, or experiences involved in a particular health service delivery process, including patients, primary care providers, and others. Fielding a survey is resource intensive in terms of both crafting effective survey questions and fielding the survey. Therefore, surveys usually are performed infrequently (e.g., annually or quarterly), and may be viewed as a specific type of special study. Once a decision is made to use a survey, it is possible to collect data on a wide range of topics or dimensions of the topic of interest by adding questions to the survey questionnaire.

## **ISSUES TO ADDRESS FOR EFFECTIVE MONITORING**

During the expert panel's deliberations on indicators and measurement processes, several issues were examined that influenced indicator choices and also will affect the monitoring process. These issues are presented here for consideration during the next steps of the monitoring process — establishing the measurement protocols and data collection procedures.

1. The DoD and VA share many of the same issues and priorities, which are reflected in the indicator ratings and choice of the top-rated recommended indicators. However, their operational definitions and measurement methods will differ for many of the indicators, given the differences in their facilities, organizational structures, populations served, and data systems. In many cases, the indicators were worded to reflect these differences, but each organization will tend to generate measures that work best for it. To ensure comparability for the measures monitored by both DoD and VA, it is recommended that a collaborative approach be taken in the design and execution of their respective measurement and data collection methods.
2. Many of the post-deployment health care practices specified in the practice guideline involve an active partnership between the provider and patient, including effective communication and educational activities. Reflecting this priority, two of the four recommended indicators are designed to gather information on the perspectives of patients and providers regarding post-deployment health care practices. The measurement implication is the need to collect this information through some form of patient and provider surveys. To minimize monitoring costs, pertinent questions should be added to already existing surveys wherever possible. For example, DoD data for patient satisfaction indicator(s) could be gathered through the Annual DoD Beneficiary Survey or the monthly MTF users survey. However, in the absence of an existing DoD provider survey, special surveys may be required for the provider perception indicator.
3. The first and most important step for all the recommended indicators is to identify the patients with post-deployment health concerns who have been seen in clinics. This population will be the denominator used to calculate many of the measures and will be the sampling frame for patient surveys. To make this identification, all clinics will need to ask patients if the reason for their visit is deployment-related. In addition, the visit records for identified patients need to be assigned diagnostic codes that document the visit was for a post-deployment concern.
4. Several functional status measures are available to measure the indicator for improvement in functional status. One of these is SF-36, which could be used in its paper form or through a web-based system. Alternatively, there are well-tested questions on global health status that could be added to beneficiary surveys to obtain patients' perceptions of their overall health or functional status. Choices among these different approaches will involve both substantive and cost considerations, and they should be made carefully because the various measures tend to address different aspects of the functional status concept being measured. In addition, for each patient included in the measurement

sample, complete data will need to be collected for both the initial and followup functional status measurements.

5. Data from medical records will be needed to measure many of the indicators identified, which MTFs/clinics would use to track how well they are achieving the intended practice changes. The VA should be able to generate these data using its automated medical record system. The DoD facilities, on the other hand, will need to use manual chart abstraction methods until automated medical charts are implemented. In some cases, local facilities may be able to use a limited chart extraction method to perform periodic studies that would generate data frequently enough to provide useful feedback to the providers delivering care. Facilities should take advantage of the information available to them in medical charts to enhance their monitoring activities.
6. The monitoring process needs to provide comparisons across MTFs/clinics as well as comparisons over time. The comparison across MTFs/clinics will document the extent of variation across facilities in performance on the indicators. The comparisons over time will track changes in average performance on the indicators as clinic modify practices in response to the guideline. Ideally, the changes in performance should lead to a reduction in practice variation across MTFs/clinics, which would be revealed in subsequent comparisons of the facilities.

## APPENDIX A

### Indicators Suggested for Use by Individual Services or Health Care Facilities

**Table A.1 Other Priority Process of Care or Clinical Outcome Indicators Identified**

Guideline Element	Indicator	Monitor Method	Average Score	
			Important	Feasible
<b><i>PROCESS OF CARE</i></b>				
Management of Patients	Percentage of post-deployment patients referred to DHCC (VA referral center) for evaluation and services	Periodic Study	7.58	7.42
Risk Communication	Percentage of MTFs that integrated Post-Deployment guideline algorithm into automated patient record system	Special Study	7.45	7.27
Initial Assessment	Percentage of post-deployment patients that were screened for common post-deployment conditions	Periodic Study	7.25	5.00
Management of Patients	Percentage of post-deployment patients where primary care provider used a DHCC (VA referral center) consult	Routine	7.09	6.64
<b><i>CLINICAL OUTCOMES</i></b>				
Full guideline	Percentage of post-deployment patients able to return to full duty (work)	Routine	7.58	6.75
Full guideline	Average improvement in patient quality of life within 6 months after first visit	Periodic Study	7.42	4.75
Full guideline	Number of duty days (work days) lost per patient with post-deployment concerns	Special Study	7.00	4.75

**Table A.2 Other Priority Patient or Provider Satisfaction Indicators Identified**

Guideline Element	Indicator	Monitor Method	Average Score	
			Important	Feasible
<b><i>PATIENT SATISFACTION</i></b>				
Full guideline	Average level of patient satisfaction with information and education received	Patient Survey	8.10	7.20
Full guideline	Average level of patient satisfaction with services provided by the DHCC	Patient Survey	7.80	7.00
Full guideline	Average level of trust in the provider based on services provided for post-deployment concern	Patient Survey	7.20	6.90
Full guideline	Average level of patient satisfaction with access to post-deployment care	Patient Survey	7.09	6.82
<b><i>PROVIDER SATISFACTION</i></b>				
Full guideline	Percentage of providers that found the DHCC services useful	Provider Survey	7.82	7.50
Full guideline	Percentage of providers that found the post-deployment guideline useful	Provider Survey	7.64	6.80

## **APPENDIX B**

### **Candidate Indicators for Monitoring of Guideline Implementation Post-Deployment Health Evaluation and Management**

Indicator	Guideline Element	Calculation of Measure		DoD Data Source	Type of Monitor*	Average Scores by Panel	
		Numerator	Denominator			IMPORTANT	FEASIBLE
<b>PROCESS OF CARE</b>							
<i>Percentage of post-deployment personnel with at least one visit related to post-deployment concerns</i>	Initial Assessment	Number of post-deployment personnel with at least 1 visit for post-deployment concern	Number of personnel returned from deployments	DoD records, Ambulatory Care (SADR)	Periodic Study	7.91	7.00
Percentage of post-deployment patients referred to DHCC (VA ref ctr) for evaluation and services	Management of Patients	Number of PD patients referred to DHCC for evaluation	Number of patients with at least one visit for post-deployment concern	SADR, DHCC data, chart review	Periodic Study	7.58	7.42
<i>Percentage of MTFs that integrated Post-Deployment guideline algorithm into automated patient record system</i>	Risk Communication	Number of MTFs that integrated guideline algorithm into patient record systems	Number of MTFs that are implementing the Post-Deployment guideline	IM/IT Review	Special Study	7.45	7.27
<i>Percentage of post-deployment patients that were screened for common post-deployment conditions</i>	Initial Assessment	Number of PD patients with documentation in chart of screening for conditions	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	7.25	5.00
<i>Percentage of post-deployment patients where primary care provider used a DHCC (VA ref ctr) consult</i>	Management of Patients	Number of PD patients for which provider documented at least 1 consult with DHCC	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR), DHCC data	Routine	7.09	6.64
<i>Number of visits to the Post-Deployment Health Web Site by providers</i>	Risk Communication	Number of visits to the web site by providers	None	Web Site Logs and User Surveys	Routine	6.58	7.75
<i>Percentage of follow-up primary care visits with the same provider the patient saw at the initial visit</i>	Management of Patients	Sum of percentage of followup visits with initial provider for PD patients	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	6.33	7.75
<i>Percentage of post-deployment patients for whom tool kit items were used during care</i>	Risk Communication	Number of PD patients with documentation of use of tool kit items	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	6.10	4.27
Percentage of post-deployment patients with baseline functional status at first visit	Initial Assessment	Number of PD patients with documentation in chart of baseline functional status	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	6.08	6.08
<i>Percentage of post-deployment patients for whom primary care provider provided risk communication</i>	Risk Communication	Number of PD patients with documentation of risk communication by provider	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	6.08	4.17
Percentage of post-deployment patients with documentation of signs or symptoms	Initial Assessment	Number of PD patients with documentation in chart of signs or symptoms	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	5.75	5.25
Percentage of post-deployment patients with documentation that guideline was followed for evaluation	Initial Assessment	Number of PD patients with documentation in chart that guideline was used	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	5.73	4.18

\* Routine - report on a periodic basis using administrative data  
 Special study - focused analyses at specified times; not repeated frequently  
 Periodic study - repeated rounds of limited chart reviews

Post-Deployment Evaluation and Management

\*\*\*Descending Rank Order Within Group\*\*\*

Percentage of patients with <b>defined</b> diagnosis that have treatment plans	Management of Patients	Number of patients in denominator with treatment plans in charts	Number of post-deployment patients with established diagnosis	Chart Review	Periodic Study	5.73	6.00
Number of primary care follow-up visits per post-deployment patient	Management of Patients	Sum of primary care follow-up visits for PD patients	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	5.64	7.30
<i>Number of <u>completed</u> primary care follow-up visits per post-deployment patient</i>	Management of Patients	Sum of completed primary care follow-up visits for PD patients	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	5.50	6.92
Percentage of post-deployment patients with full psychosocial assessment at first visit	Initial Assessment	Number of PD patients with documentation in chart of psychosocial assessment	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	5.42	5.42
<i>Percentage of post-deployment patients with unexplained symptoms referred to physician specialist</i>	Management of Patients	Number of patients in the denominator with no physician specialty referral	Number of post-deployment patients with unexplained symptoms	Ambulatory Care (SADR), Chart Review	Routine or Periodic Study	5.42	4.75
<i>Average time (days) between referral date and DHCC (VA ref ctr) visits for patients referred to DHCC</i>	Management of Patients	Sum of number of days from DHCC referral to DHCC visit for patients in denominator	Number of patients referred to DHCC	Ambulatory Care (SADR), DHCC data	Routine	5.40	6.18
Average time until referral to DHCC ( <b>VA ref ctr</b> ) for referred patients	Management of Patients	Number of months from first visit until DHCC referral for patients in the denominator	Number of patients referred to DHCC	SADR, DHCC data, chart review	Periodic Study	5.18	5.36
Percentage of post-deployment patients with documentation of <b>defined</b> diagnosis for a concern	Initial Assessment	Number of PD patients with documentation in chart of established diagnosis	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	4.75	4.50
<i>Percentage of <u>patients referred</u> for sleep study that were found to have disordered sleep</i>	Management of Patients	Number of patients in the denominator with positive results on a sleep study	Number of post-deployment patients referred for sleep study	Ambulatory Care (SADR)	Routine	4.73	4.64
<i>Percentage of post-deployment patients for which the primary care provider used a specialty consult</i>	Management of Patients	Number of PD patients for which provider documented at least one specialty consult	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	4.58	5.33
<i>Number of <u>scheduled</u> primary care follow-up visits per post-deployment patient</i>	Management of Patients	Sum of scheduled primary care follow-up visits for PD patients	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	4.33	6.75
<i>Percentage of <u>total patients</u> found to have disordered sleep</i>	Management of Patients	Number of PD patients with positive results on a sleep study	Number of patients with at least one visit for post-deployment concern	Chart Review	Special or Periodic Study	4.00	4.36
<i>Percentage of post-deployment patients with no referral to physician specialist</i>	Management of Patients	Number of PD patients with no physician specialty referral	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR), Chart Review	Routine or Periodic Study	3.92	6.08
<i>Percentage of post-deployment patients seen for 1st visit within 3 days of request</i>	Initial Assessment	Number of PD patients with first visit date within 3 days of date appointment made	Number of patients with at least one visit for post-deployment concern	CHCS appointment records	Routine	3.91	5.55

\* Routine - report on a periodic basis using administrative data

Special study - focused analyses at specified times; not repeated frequently

Periodic study - repeated rounds of limited chart reviews

Post-Deployment Evaluation and Management  
 \*\*\*Descending Rank Order Within Group\*\*\*

Percentage of post-deployment patients referred for sleep studies	Management of Patients	Number of PD patients with a sleep study referral	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.75	5.92
Percentage of post-deployment patients referred to <u>therapy services</u> after first primary care visit	Management of Patients	Number of PD patients with a referral to PT or OT after 1st visit, before 2nd visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.64	4.82
Percentage of post-deployment patients referred to <u>physician specialist</u> after first primary care visit	Management of Patients	Number of PD patients with physician specialty referral after 1st visit, before 2nd visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.50	5.17
Percentage of post-deployment patients with at least one <u>telephone consult</u>	Management of Patients	Number of PD patients with at least one telephone consult	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.33	6.08
Percentage of post-deployment patients referred to a <u>specialist</u> after first primary care visit	Management of Patients	Number of PD patients with <b>physician</b> specialty referral after 1st visit, before 2nd visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.27	4.64
Percentage of post-deployment patients referred to a <u>specialist</u> within 8 weeks	Management of Patients	Number of PD patients with a <b>physician</b> specialty referral within 8 weeks from 1st visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	3.18	4.91
Percentage of post-deployment patients referred to a <u>specialist</u> within 4 weeks	Management of Patients	Number of PD patients with a <b>physician</b> specialty referral within 4 weeks from 1st visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	2.91	4.91
Percentage of post-deployment patients with lab tests performed after first visit	Initial Assessment	Number of PD patients with lab tests ordered on day of first visit	Number of patients with at least one visit for post-deployment concern	CHCS records of laboratory test orders	Routine	2.83	7.17
Percentage of post-deployment patients referred to specialist after (##) primary care visits	Management of Patients	Number of patients with no specialty referral until after the ##th visit	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine		

\* Routine - report on a periodic basis using administrative data  
 Special study - focused analyses at specified times; not repeated frequently  
 Periodic study - repeated rounds of limited chart reviews

Indicator	Guideline Element	Calculation of Measure		DoD Data Source	Type of Monitor*	Average Scores by Panel	
		Numerator	Denominator			IMPORTANT	FEASIBLE
<b>CLINICAL OUTCOMES</b>							
<i>Percentage of post-deployment patients whose concerns are adequately addressed</i>	Full guideline	Sum of scores on a survey question on the adequacy of risk communication	Number of patients with at least one visit for post-deployment concern	Telephone or mail user survey	Periodic Study	8.75	6.33
<b>Average</b> improvement in functional status within ## months after first visit	Full guideline	Sum of changes in functional status (SF-36) for PD patients from 1st visit to ## months	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	7.83	5.08
<i>Percentage of post-deployment patients able to return to full duty (work)</i>	Full guideline	Number of patients in the denominator determined able to return to full duty (work)	Number of post-deployment patients unable to work at time of initial visit	SADR and inpatient (SIDR)	Routine	7.58	6.75
<b>Average</b> improvement in patient quality of life within ## months after first visit	Full guideline	Sum of changes in quality of life scores (standard form) from 1st visit to ## months	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	7.42	4.75
Number of duty days ( <b>work days</b> ) lost per patient with post-deployment concerns	Full guideline	Sum of lost duty days ( <b>work days</b> ) for a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	Records on lost duty days, SADR	Special Study	7.00	4.75
Percentage of post-deployment patients referred for MEB evaluation ( <b>workers compensation</b> )	Full guideline	Number of PD patients referred for MEB evaluation (workers compensation)	Number of patients with at least one visit for post-deployment concern	MEB records, Ambulatory Care (SADR)	Special Study	6.77	6.09
<i>Percentage of post-deployed veterans receiving 10% or greater service-connected disabilities</i>	Full guideline	Number of veterans receiving 10% or greater service-connected disability	Number of personnel returned from deployments	VBA, DoD personnel data	Special Study	6.50	6.10
<i>Number of suicide attempts per 100 post-deployment patients per specified time period</i>	Full guideline	Number of suicide attempts for a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	Personnel records and SADR	Special Study	5.55	4.27
Number of total inpatient admissions per 100 post-deployment patients per specified time period	Full guideline	Total inpatient admissions during a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	SADR and inpatient (SIDR)	Routine	5.45	6.09
Number of psychiatric inpatient admissions per 100 post-deployment patients per specified time period	Full guideline	Number of psychiatric admissions for a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	SADR and inpatient (SIDR)	Routine	5.45	5.64
Number of suicides per 100 post-deployment patients per specified time period	Full guideline	Number of suicides for a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	Personnel records and SADR	Special Study	5.18	5.73
<i>Percentage of post-deployment patients without substance abuse problems</i>	Full guideline	Number of PD patients with no visits or inpatient stays for substance abuse diagnosis	Number of patients with at least one visit for post-deployment concern	SADR and inpatient (SIDR)	Routine	5.09	3.18

\* Routine - report on a periodic basis using administrative data

Special study - focused analyses at specified times; not repeated frequently

Periodic study - repeated rounds of limited chart reviews

Post-Deployment Evaluation and Management

\*\*\*Descending Rank Order Within Group\*\*\*

<i>Percentage of post-deployment patients without emotional or behavioral problems</i>	Full guideline	Number of PD patients with no visits or inpatient stays for mental health diagnosis	Number of patients with at least one visit for post-deployment concern	SADR and inpatient (SIDR)	Routine	5.00	2.82
Number of ER visits per post-deployment patient per specified time period	Full guideline	Number of ER visits during a time period for all PD patients	Number of patients with at least one visit for post-deployment concern	Ambulatory Care (SADR)	Routine	4.55	5.82
<i>Percentage of post-deployment patients meeting weight and fitness standards after ## months of care</i>	Full guideline	Number of PD patients meeting weight, fitness standards after ## months	Number of patients with at least one visit for post-deployment concern	Chart Review	Periodic Study	4.45	4.18
Percentage of post-deployment patients using multiple medications	Full guideline	Number of PD patients with records for > ## different types of medications	Number of patients with at least one visit for post-deployment concern	SADR and pharmacy data	Routine	4.27	6.09

\* Routine - report on a periodic basis using administrative data

Special study - focused analyses at specified times; not repeated frequently

Periodic study - repeated rounds of limited chart reviews

Indicator	Guideline Element	Calculation of Measure		DoD Data Source	Type of Monitor*	Average Scores by Panel	
		Numerator	Denominator			IMPORTANT	FEASIBLE
<b>PATIENT SATISFACTION</b>							
<b>Average</b> level of patient satisfaction with information and education provided by the MTF	Full guideline	Sum of rating scores by survey respondents on satisfaction with information, education	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	8.10	7.20
<i>Average level of patient satisfaction with services provided by the DHCC</i>	Full guideline	Sum of rating scores by survey respondents, satisfaction with DHCC services	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	7.80	7.00
<b>Average</b> level of patient satisfaction with total care received for post-deployment concern	Full guideline	Sum of rating scores by survey respondents on satisfaction with total care	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	7.73	6.82
<b>Average</b> level of trust in the provider based on services provided for post-deployment concern	Full guideline	Sum of rating scores given by survey respondents on degree of trust in provider	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	7.20	6.90
<i>Average level of patient satisfaction with access to post-deployment care</i>	Full guideline	Sum of rating scores by survey respondents on satisfaction with access to care	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	7.09	6.82
<i>Average level of patient satisfaction with clinician interpersonal manner</i>	Full guideline	Sum of rating scores by survey respondents, satisfaction with clinician interpersonal manner	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	6.73	6.00
<i>Average level of patient satisfaction with clinician competence</i>	Full guideline	Sum of rating scores by survey respondents on satisfaction with clinician competence	Number of post-deployment patients responding to a patient survey	Patient Survey	Special Study	6.70	6.40
<b>PROVIDER SATISFACTION</b>							
<i>Percentage of providers that found the DHCC services useful</i>	Full guideline	Sum of rating scores by provider respondents on usefulness of DHCC services	Number of primary care providers responding to a provider survey	Provider Survey	Special Study	7.82	7.50
<i>Percentage of providers that found the post-deployment guideline useful</i>	Full guideline	Sum of rating scores by provider respondents on usefulness of the guideline	Number of primary care providers responding to a provider survey	Provider Survey	Special Study	7.64	6.80

\* Routine - report on a periodic basis using administrative data

Special study - focused analyses at specified times; not repeated frequently

Periodic study - repeated rounds of limited chart reviews