

Post Deployment Health

in the Military Health System

2003

The 46 percent referral completion rate for service members returning from deployment can be attributed to a combination of communication and operational issues that involve the service member, the provider, and the health care system.

Why study Post-Deployment Health?

Deployments of military personnel have become increasingly common. Since the first Gulf War researchers have accumulated a growing body of knowledge that links deployments with a variety of health conditions both in the immediate and the long term post-deployment period. These health conditions affect both service members and family members. This study examined two areas of post-deployment health care. The first area was the completion of follow up referrals for service members with a referral indicated during their health screening at the end of the deployment. The second area was implementation of the Post-Deployment Health Evaluation and Management Clinical Practice Guideline (PDH CPG).

The purposes of this 2003 study were to:

1. Measure the time to completion of primary care and specialty referrals that were indicated on the Post-Deployment Health Assessment Form (DD Form 2796) of service members (SMs) returning from deployment.
2. Describe the health conditions associated with deployment, based on the diagnosis coding guidelines for deployment related conditions developed by the Department of Defense (DoD).

3. Examine PDH CPG implementation at Military Treatment Facility (MTFs) not included in the FY02 study.

What was the methodology?

This study included four measures related to post-deployment health care:

1. Time to completion for referrals indicated for Active Duty (AD) SMs in their post-deployment health assessments.
2. Diagnosis patterns among the completed referrals in #1.
3. Use of the V70.5_6 diagnosis code in the Standard Ambulatory Data Record (SADR).
4. PDH CPG implementation among MTFs during FY03.

Each measure required a distinctly different data set for evaluation. All data were analyzed using SAS version 8.2 statistical software.

Measure 1 – Time to Completion For Deployment Related Primary Care and Specialty Referrals

This measure employed a sample of 500 Post-Deployment Health Assessment Forms (DD Form 2796) drawn from a population of 3738 DD Form

2796s, completed from February 1, 2002 through January 31, 2003. All DD Form 2796s were for SMS with a referral indicated. The random sample of forms was selected by the Army Medical Surveillance Activity (AMSA), the organization that maintains a database of these completed forms. The data on the photocopied forms were entered into an electronic database for analysis. The referrals were matched to the SMS record of outpatient visits to MTFs and civilian health care providers using the Military Health System Management Analysis and Reporting Tool (M2). For visits where the recommended referral and the visit matched, the time interval from the date of the referral recommendation to the visit was calculated. This time period became the time to completion for the referral.

Limitations of this study design and methodology include the inability to identify referral completion and incomplete data for referral completion. In many cases, the administrative data set does not supply sufficiently detailed information to determine whether the referral was completed. This applies to the large number of dental and VHA referrals that had to be excluded from analysis because no data were available. It may also apply to many referrals for which follow-up could not be documented with available data. The issue of incomplete data refers to ending data collection before some of the referrals were given a reasonable opportunity to be completed. Data collection ended January 2003, so clearly some of the SMS that were identified for referrals in January did not have much opportunity to complete the referral.

Measure 2 –Diagnosis Patterns of Deployment Related Referrals

This measure described the types of diagnoses seen for completed referral visits. The study sample consisted of the 202 referrals for which an outpatient visit was identified in a SADR or a paid claim.

Measure 3 –Use of the V70.5_6 Diagnosis Code In The SADR

The study population consisted of all outpatient visits during the first year of PDH CPG implementation that contained a V70.5_6 as a primary or secondary diagnosis for a visit. Visits were included from February 1, 2002 through January 31, 2003. M2 was queried to obtain the record of all visits.

Measure 4 –Post-Deployment Health Clinical Practice Guideline Implementation

The study sample included 79 MTFs with a parent Defense Medical Information System (DMIS) Identification (ID) code designation. All MTFs that did not implement the PDH CPG during FY 02 were included in the study as well as 9 MTFs, 3 from each Service that had implemented the PDH CPG during FY 02. Record abstractors reviewed 75 outpatient records at each site MTF. MTFs were given credit for CPG implementation if the question “Is this visit related to a deployment?” appeared on the SF 600 in any form. Data collection was conducted from April through June 2003.

What were the results?

Measure 1 – Time to Completion For Deployment Related Primary Care and Specialty Referrals

The final referral sample contained 477 forms out of a population of 3738 forms with a referral indicated. 57% of the referrals were completed within 30 days. The most frequently recommended referrals were “Other” (46%; n=243), orthopedic (20%, n=106), and dental (14%, n=76). Among the “Other” category, more than half (n=129) were for Primary Care Manager (PCM) referrals upon return to the home duty station. Ninety referrals were dropped from the sample analysis because they could not be followed. The 90 referrals included referrals to dental, the VHA and civilian providers after demobilization. Of the 443 referrals that

could be followed, 202 referrals (46%) had clinic visits matching the referral type indicated. For an additional 116 referrals (26%) that were seen for clinic visits that did not match the referral indicated, the issue may have been resolved at the primary care level.

Measure 2 –Diagnosis Patterns of Deployment-Related Referrals

Primary diagnoses for 202 referrals were identified. The ICD-9-CM diagnosis categories with the greatest numbers of referrals were in the sections: Factors Influencing Health Status and Contact With Health Services (34 %, n=68), Diseases of the Musculoskeletal System and Connective Tissue (29%, n=58), and Injury and Poisoning (6%, n=12). The most common individual diagnosis was “pain in joint of lower leg” (n=11).

Measure 3 –Use of the V70.5_6 Diagnosis Code In The SADR

CPG implementation examined the use of the V70.5_6 diagnosis code (“the V code”) as both a primary and secondary diagnosis code for beneficiaries seen in the Direct Care System (DCS) during the study period. The V code was used as a primary diagnosis in 2,796 outpatient visits and as a secondary diagnosis in another 928 visits. When the V code appeared as a primary diagnosis, 37% (n=1039) of the visits contained a secondary diagnosis, with diagnoses in the “Factors Influencing Health Status And Contact With Health Services” (V01-V82) diagnosis section being most frequent (36%, n=378). When the V code appeared as a secondary diagnosis, primary diagnoses in the “Mental Disorders” (ICD-9 codes 290-319) diagnosis section were most frequent (24%, n=224).

Measure 4–Post-Deployment Health Clinical Practice Guideline

A total of 5,629 outpatient records were reviewed at primary care clinics of 75 different MTFs. Beneficiaries identified visits as being deployment-related for 49 (0.9%) of the visits. Among the 75 MTFs where site visits were conducted, 68 MTFs provided documentation of CPG implementation. When the implementing MTFs from this years study were added to the implementing MTFs from last year’s study, the total number of implementing MTFs was 126 MTFs or 93.3% of the 135 sites available for survey.

Conclusions and recommendations

The Post-Deployment Health Care Study for FY03 concluded that:

- The 46 % referral completion rate for service members returning from deployment can be attributed to a combination of communication and operational issues that involve the service member, the provider, and the health care system.
- The DD Form 2796 and the administrative data used to track referral completion patterns cannot be used to measure and monitor deployment referral completions at this time. Neither the DD Form 2796 nor the administrative data provide sufficient detail to appreciate the clinical issues involved with each SM.
- The use of the V code for deployment-related concerns probably under-represents the true occurrence of deployment-related health visits in the DCS because use of the CPG, which is driving the use of the V-code, is still being implemented in the MTFs.

- Implementation of the PDH CPG has begun throughout most of the DCS.

Navy
CDR Ken Yew
ksyew@us.med.navy.mil

Recommendations based on the study findings included the following:

Air Force
Lt Col Kimberly P. May
kimberly.may@pentagon.af.mil

- Any follow-up to the referral completion portion of this study should capture sufficient detail to confirm referral completion, determine that the referral was unnecessary, or confirm that the condition generating the referral was treated.
- The chain of events that make up the referral process should be examined to identify steps that will facilitate referral completion and create shared responsibility between individual and the health care system.
- Any future study of the PDH CPG should change focus to compliance with its recommendations and the quality of care it creates.

R eference

- Post Deployment Health Evaluation and Management. Washington, DC: Office of Quality and Performance and the Veterans Affairs and Department of Defense Development Work Group, Veterans Health Administration, Department of Veterans Affairs; February 2001. OQP publication 10Q-CPG/PDH-01.

Where to go for more information?

Army:
COL Stacey Young-McCaughan
stacey.young-mccaughan@
cen.amedd.army.mil

Revised Date: February 2004