**Depressive Disorder Treatment in the Military Health System (MHS)**

**A National Quality Management Program Special Study**

"The MHS exceeds the National Committee for Quality Assurance (NCQA), Health Plan Employer Data and Information Set (HEDIS) 90th percentile on all antidepressant medication management metrics."

**Why study Depression?**

Depression is expected to be the second leading cause of disability worldwide in the 21st century (Wells et al., 2000). Depression affects one in ten Americans every year (Rubenstein et al., 1999). Due to the prevalence of depression in the United States population, this disorder will likely be encountered at all levels of the health care system, in both military and civilian facilities.

In September 2002, the Department of Defense (DoD) implemented Version 2.0 of the Major Depressive Disorder Clinical Practice Guideline (CPG) in the Military Health System (MHS) (VHA/DoD, 2002).

The purpose of this study was twofold. First, the study obtained baseline measurement rates for metrics developed with the Major Depressive Disorder CPG (the diagnosis codes for depression included non major depression diagnoses). Because electronic administrative data were used, only two of the four VHA/DoD Performance Measures for the Management of Major Depressive Disorder in Adults were examined. The Detection (screening metric) and the Effectiveness/Outcome metrics would have required data available through chart abstraction. The Assessment/Diagnosis metric and the Treatment metric provided an evaluation of the performance of the Direct Care System (DCS) prior to implementing Version 2.0 of the CPG. Second, the study measured Antidepressant Medication Management using Health Plan Employers Data and Information Set (HEDIS) 2002 Technical Specifications. MHS performance rates were compared to rates from HEDIS civilian managed care plans.

**What was the methodology?**

This study uses two measures from the VHA/DoD Performance Measures for the Management of Major Depressive Disorder CPG and a measure from the HEDIS 2002 Technical Specifications. The measures were:

1. CPG Assessment/Diagnosis Measure
2. CPG Treatment Measure
3. HEDIS Antidepressant Medication Management
   a. Optimal Practitioner Contacts
   b. Effective Acute Phase Treatment
   c. Effective Continuation Phase Treatment

An overview of the methodology and the results are described below.

**Measure 1 – CPG Assessment/Diagnosis Measure**

The CPG Assessment/Diagnosis Measure included beneficiaries:

- Age 18 or older, or Active Duty (AD)
- With one or more visits to a Military Treatment Facility (MTF) primary care clinic during 2001. The Scientific Advisory Panel (SAP) modified the three visit requirement in the Performance Measure to one visit.

The Assessment/Diagnosis measure was defined as the percentage of beneficiaries in the study population with a principle or secondary diagnosis of depression in a primary care or behavioral health clinic.

**Results.** Depression was diagnosed in 4.0 percent of the beneficiaries seen in an MTF primary care clinic. Among these beneficiaries, women were diagnosed at a rate of 6.7 percent while men were diagnosed at a rate of 1.9 percent. Non-Active Duty (NAD) beneficiaries had a rate of 5.7 percent, while AD beneficiaries had a rate of 2.2 percent. The highest rate by age group was for the 45 to 64 group at 5.5 percent, while the youngest age group, 17 to 24 years, had the lowest rate at 2.5 percent (Table 1).
Table 1: Percent of Beneficiaries Seen in Primary Care Clinics Diagnosed with Depression

<table>
<thead>
<tr>
<th>Beneficiaries Seen in Direct Care Primary Care Clinics</th>
<th>Percent Diagnosed with Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cohort</td>
<td>2,382,203</td>
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<tr>
<td>Gender</td>
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<tr>
<td>Women</td>
<td>1,032,444</td>
</tr>
<tr>
<td>Men</td>
<td>1,349,618</td>
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<tr>
<td>Unknown</td>
<td>129</td>
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<tr>
<td>Missing</td>
<td>12</td>
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<tr>
<td>Age Group</td>
<td>2.5</td>
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<tr>
<td>17-24</td>
<td>711,537</td>
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<tr>
<td>25-34</td>
<td>618,372</td>
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<tr>
<td>35-44</td>
<td>477,649</td>
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<td>45-64</td>
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<td>65 and Over</td>
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<tr>
<td>Non Active Duty</td>
<td>1,222,063</td>
</tr>
<tr>
<td>Non Active Duty</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Measure 2 = CPG Treatment Measure

The CPG Treatment measure population included beneficiaries:

- Age 18 or older, or AD
- With a first time primary diagnosis of depression (index visit, no diagnosis of depression in the prior 12 months)

And either

- Two or more visits to a direct care clinic with a diagnosis of depression (index visit included) or
- At least one prescription for a 30-day supply of antidepressant medication within 30 days of the index visit

The CPG treatment measure was defined as the percent of the study population with at least 90 days supply of antidepressants or eight visits for depression in either a primary care or behavioral health clinic.

Results. All three Services provided comparable treatment rates using the 90 days supply of antidepressant medication or eight visits criteria. However, the visit-only rate varied greatly. The Air Force visit-only rate was 11 percent, compared to 12 percent for both the Army and the Navy. The medication-only rate also varied, ranging from 40 percent for the Air Force, 35 percent for the Army,

and 36 percent for the Navy (Figure 1).

Figure 1: Depression Patients Treated with Follow-up Visits or Antidepressant Medication

Measure 3 = HEDIS Antidepressant Medication Management

This measure was based on HEDIS 2002 Technical Specifications. The specifications were implemented as written and no modifications were made.

The population intake period was May 1, 2000, to April 30, 2001. It was defined for all three HEDIS metrics by:

- Age 18 or older, or AD
- Continuously enrolled to an MTF for 11 of 12 months starting 120 days prior to the diagnosis to 245 days after diagnosis
- No diagnosis of depression 120 days prior to the index visit
- A prescription for antidepressant medication from 30 days prior to the index visit to 14 days after diagnosis.

And either

- A primary diagnosis of major depression in any setting or
- Two secondary diagnoses of major depression on separate occasions in an emergency room
setting or other outpatient setting

or

- One secondary diagnosis of major depression in an inpatient setting

3.a Optimal Practitioner Contacts

Optimal Practitioner Contacts was defined as the percentage of the HEDIS defined population with at least three follow-up visits, at least one of which was with a prescribing practitioner. The results were compared to HEDIS reporting plans using percentiles.

Results. The percentages for Optimal Practitioner Contacts ranged from 33 percent for the Army to 35 percent for the Navy and Air Force. The MHS rate was 34 percent. All rates exceeded the HEDIS 90th percentile for HEDIS reporting plans. The MHS performance was comparable to the top 10 percent of plans (Figure 2).

3.b Effective Acute Phase Treatment

Effective Acute Phase Treatment was defined as the percentage of the HEDIS defined population with at least 84 days supply of antidepressant medication in the 114 days following diagnosis. The results were compared to HEDIS reporting plans using percentiles.

Results. The percentages of Effective Acute Phase Treatment ranged from 82 percent for the Army to 86 percent for the Air Force. All rates exceeded the HEDIS 90th percentile for reporting plans. The MHS performance was comparable to the top 10 percent of plans (Figure 3).

3.c Effective Continuation Phase Treatment

Effective Continuation Phase Treatment was defined as the percentage of the HEDIS defined population with at least 180 days supply of antidepressant medication in the 231 days following diagnosis. The results were compared to HEDIS reporting plans using percentiles.

Results. The percentages of Effective Continuation Phase Treatment ranged from 86 percent for the Army and Air Force to 87 percent for the Navy. All rates exceeded the HEDIS 90th percentile for reporting plans. The MHS performance was comparable to the top 10 percent of plans (Figure 4).
Figure 4. Effective Continuation Phase Antidepressant Medication: 180 Days Supply Filled

**Study Limitations**
- This study did not explore depression screening in the MHS primary care system.
- The rate for depression may be higher than reported given that the denominator includes those not screened.
- The CPG Assessment/Diagnosis and the CPG Treatment measure were developed by the DoD and the VHA and are not comparable to any other organization.
- The HEDIS Antidepressant Medication Management Measure was based on HEDIS 2002 Technical Specifications. Therefore, results of this measure are not comparable to other studies using a modified HEDIS methodology.

**Conclusions and Recommendations**
- CPG defined depression treatment is largely met through the use of medication
- MTF enrollees’ Antidepressant Medication Management compares favorably to the top 10 percent of managed care HEDIS reporting plans, but in the case of Optimal Practitioner Contacts still seems too low at an MHS rate of 34 percent.
- There were significant differences in depression diagnosis and treatment based on duty status and gender.

Based on the results of the 2002 study, the following actions should be considered:
- Conduct a follow-up study on guideline adherence one year after implementing the CPG
- Conduct a follow-up study that includes the CPG Detection and the CPG Effectiveness/Outcome measures
- Study the reasons for the low rate of Optimal Practitioner Contacts

**References**


VHA/DoD. Management of Major Depressive Disorder in Adults in the Primary Care Setting (Version 2.0). Washington, DC: VA/DoD Evidence Based Clinical Practice Guideline Working Group, Veterans Health Administration, Department of Veterans Affairs, and Health Affairs, Department of Defense, May 2000. Office of Quality and Performance publication 10Q-CPG/MDD-00.


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Revised 22 May 2003