Improving Behavioral Health Treatment Outcomes for U.S. Army Personnel

PREDICTORS OF TREATMENT OUTCOMES

The Army strives to provide the highest-quality behavioral health care possible to ensure the psychological readiness of every soldier. In support of this effort, the Army asked RAND researchers to identify factors associated with changes in outcomes for soldiers who receive Army behavioral health specialty care.

The Army tracks outcomes of soldiers who receive Army behavioral health care

The Army tracks the percentage of soldiers whose symptoms improve during behavioral health care using treatment outcome measures. Specifically, the Army monitors changes in symptoms for posttraumatic stress disorder (PTSD), depression, and anxiety. Outcome measures include response to treatment (whether symptoms have improved by a specified amount) and remission (whether symptoms have improved and are below a set threshold). Identifying factors associated with improved outcomes can guide the Army's continued quality improvement efforts.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Response to treatment</th>
<th>Remission</th>
<th>Response or remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>35%</td>
<td>13%</td>
<td>45%</td>
</tr>
<tr>
<td>Depression</td>
<td>35%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>14%</td>
<td>27%</td>
<td>41%</td>
</tr>
</tbody>
</table>

NOTE: The definitions of response to treatment and remission used by the Army result in response and remission populations that are exclusive for depression and anxiety but overlap for PTSD.

Two treatment factors—therapeutic alliance and receipt of benzodiazepines—were associated with treatment outcomes

A stronger therapeutic relationship, or alliance, with providers was consistently associated with improved PTSD, depression, and anxiety outcomes. Soldiers are asked to report on their “working relationship” with their providers during their care.

Receipt of more than a 30-day supply of benzodiazepines was associated with poorer PTSD, depression, and anxiety outcomes.
RAND recommends key changes to support continued improvements in behavioral health care

Provide feedback and guidance to providers to help strengthen therapeutic alliance
Knowledge of how soldiers perceive their working relationship with providers may help improve the therapeutic alliance between providers and patients and address patients’ concerns about treatment. The Army can encourage providers to routinely assess their therapeutic alliance early in treatment and deliver provider training to help minimize treatment dropout and improve outcomes.

Expand tracking and feedback on benzodiazepine prescribing
The clinical practice guideline for PTSD from the Veterans Health Administration and Department of Defense cautions against using benzodiazepines as monotherapy or augmentation therapy. RAND results support the Army and Defense Health Agency continuing their efforts to monitor benzodiazepine use and provide feedback to providers.

Increase provider use of measurement-based behavioral health care
The Army continues to expand and monitor outcomes for patients who receive behavioral health care. The Behavioral Health Data Portal, an online system that allows for the collection of multiple patient- and clinician-reported measures, is widely used to track PTSD, depression, and anxiety symptoms, but there are opportunities to expand symptom tracking. The Army can support more-frequent collection by providers of patient-reported symptom measures during their behavioral health care. Training on how to routinely use the information from symptom measures to guide treatment decisions and discussions with patients would support increased use of measurement-based care.

The Army and Department of Defense continue their efforts to improve outcomes for soldiers who receive behavioral health care
In 2018, the Defense Health Agency initiated a program to track benzodiazepine prescribing among providers who treat PTSD and acute stress disorder—the PTS Provider Prescribing Profile. Results are monitored and shared with military treatment facility commanders. The Army’s Behavioral Health Service Line is also tracking benzodiazepines and atypical antipsychotic prescriptions for PTSD.

RAND’S APPROACH
RAND researchers identified three samples of active-component soldiers who received Army behavioral health care with a diagnosis of PTSD (N = 3,264), depression (N = 3,801), or anxiety (N = 4,282). To be included, soldiers had to have (1) received specialty behavioral health care for PTSD, depression, or anxiety in 2016–2017; (2) no specialty behavioral health care with the diagnosis in the six months prior, indicating the start of a new episode of treatment; (3) an initial symptom score indicating significant symptom severity; and (4) a second symptom score one to six months later. The research team evaluated 57 pretreatment variables (e.g., demographic characteristics, treatment history) and 84 treatment variables (e.g., visits, medications) by examining their association with symptom outcomes using a multistep process. All models were adjusted for initial symptom severity and soldier characteristics.

This brief describes work done in RAND Arroyo Center and documented in Improving Behavioral Health Care for U.S. Army Personnel: Identifying Predictors of Treatment Outcomes, by Kimberly A. Hepner, Carol P. Roth, Eric R. Pedersen, Sujeong Park, and Claude Messan Setodji, RR-2829-A (available at www.rand.org/t/RR2829), 2020. This research was funded by the Office of the Surgeon General, U.S. Army Medical Command. To view this brief online, visit www.rand.org/t/RR10068. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2020

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