The Pain Assessment Screening Tool and Outcomes Registry (PASTOR)

10-month Beta Test in an Army Interdisciplinary Pain Management Center; Lessoned Learned and Future Implications

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Introduction

Pain is a leading cause of disability and reduced quality of life among active duty service members. There is currently no DoD or VHA screening and outcomes repository to promote consistency in pain care delivery.

To address these concerns, in 2009 the Army Surgeon General chartered the Pain Management Task Force (PMTF) whose 109 recommendations formed the basis of the Comprehensive Pain Management Campaign Plan (CPMCP). The goals of the CPMCP include:

I. Establishment of Interdisciplinary Pain Management Clinics (IPMCs) at each Army Medical Center
   - Goal Accomplished: IPMCs are in operation at every Army medical center.

II. Research into non-pharmacological approaches to pain management using integrative therapies
   - In progress: Each IPMC offers several conventional and integrative pain therapy options. Outcomes research underway.

III. Development of an electronic Pain Assessment Screening Tool and Outcomes Registry (PASTOR)
   - The NIH-developed Patient Reported Outcomes Measurement Information System (PROMIS) was adapted to fulfill the PASTOR mandate.
   - PASTOR assists providers in assessing the biopsychosocial aspects of each patient’s pain experience.
   - Includes assessments of pain intensity, pain interference, sleep, function, quality of life, depression, anxiety, PTSD, alcohol and opioid abuse/misuse.
   - Web-based platform; patients may complete from home in preparation for upcoming office visit.

Methods

- During a 10-month beta test of PASTOR at one Army IPMC, each active duty patient was enrolled in a therapeutic plan which included medication management, interventional pain care and/or an interdisciplinary program (see IPMC Treatment Options Flowchart shown on right).
- Patients completed baseline PASTOR questionnaires and functional assessments, then measures were repeated at significant junctures throughout the therapeutic course. Preliminary data analysis is reported here.

Results

- 646 IPMC patients completed a baseline PASTOR assessment during the 10-month beta test, 353 (53%) completed at least one follow-up PASTOR assessment.
  - For most measures the number needed to treat (NNT) to yield meaningful improvement was 3-6, but pain intensity was the most resistant to change (NNT=10).
  - When outcomes were compared between different treatment approaches, the most impressive outcomes were observed among the 14 patients who completed both the six-week integrative modalities (IMPACT) program and the three-week functional restoration program.
  - In this group, the NNT for most measures was 2-3, except satisfaction with social roles and pain intensity (NNT 6-7).
  - Regardless of treatment approach, approximately 20% of patients reported worsening symptoms of depression, anxiety, fatigue, anger, sleep impairment and satisfaction with social roles during the course of their therapy.

Discussion

Preliminary descriptive analysis of PASTOR results among the patients who engaged in interdisciplinary care in an Army IPMC suggests that a combination of integrative therapies and intensive functional restoration yields the best outcomes. These data will inform future research efforts to determine prognostic factors to predict which patients are most likely to benefit from selected pain therapies.

Conclusions

The DoD and VHA PASTOR may serve as a model for outcomes-driven pain research, resource allocation, and decision support. PASTOR will collect and provide the necessary data for determining best pain practices, determining DoD and VHA pain care standards, and enhancing patient pain care. The opportunities for population-based research on pain treatments and safety-related issues are enormous and hold great potential for improving pain medicine.

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