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TITLE: Dissemination of Evidence-Based CBT Intervention Components: Online Self-Administered Training for Providers Treating Military Deployment-Related PTSD

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### 14. ABSTRACT

The purpose of this study is to design, implement and evaluate a web-based, self-paced training program to provide skills-oriented continuing education for mental health professionals. It is intended to reach a broad range of mental health providers presenting content that is highly relevant and easy to access. The program incorporates interactivity, practice, and modeling of three effective cognitive-behavioral skills components: goal-setting, motivation enhancement, and behavioral task assignment - as applied to treatment for Veterans with Posttraumatic Stress Disorder (PTSD). A randomized design will be used in which 120 participants will be randomly assigned to one of three conditions: (i) web-based training plus consultation, (ii) web-based training without consultation, and (iii) training as usual. The effectiveness of training will be evaluated by means of simulated patient interview assessment of core skills (primary outcome) and on-line questionnaire assessment of knowledge, perceived self-efficacy in skills use, and self-reported skills application with PTSD patients (secondary outcomes). Currently, project team, web programs for content delivery, protocol, simulated patient case, and evaluation materials have been developed. Study recruitment is planned to begin after local and DOD IRB approval, which is currently on schedule to occur in September, 2009.
INTRODUCTION

The purpose of this study is to develop, implement and evaluate a web-based, self-paced training program to provide skill-improvement oriented continuing education for mental health professionals. It is intended to reach a broad range of VA health professionals presenting content that is highly relevant and easy to access for practitioners. It follows adult learning principles and incorporates interactivity, practice, and modeling of effective treatment for Posttraumatic Stress Disorder (PTSD). Program evaluation will include a multi-dimensional assessment of cognitive, attitudinal and skills-based aspects of the CBT and motivational interviewing components. A randomized design will be used in which 120 participants will be randomly assigned to one of three conditions: (i) one group (n=40) will receive web-based training plus consultation, (ii) a second group (n=40) will receive web-based training without consultation, and (iii) a third control group (n=40) will receive neither the web-based training nor consultation. The effectiveness of training will be evaluated by means of simulated patient interviews and on-line assessment of core skills (primary outcome), knowledge, attitudes and self-efficacy (secondary outcomes). The development of this training program involves the expertise of two research partners with extensive knowledge and prior experience in PTSD, CBT, and development of educational training programs. The VA’s National Center for PTSD (NCPTSD) has designed dozens of training programs in the past for mental health clinicians on PTSD, and the New England Research Institutes, Inc. (NERI), a small business research firm that has designed a comprehensive, skills-oriented CBT training program as well as numerous other award winning CE and CME programs for health care practitioners.

BODY

Task 1: Create web-ready text for core components of PTSD-related CBT, drawing on all relevant training materials currently being used in the NCPTSD.

During the first year of the project, the content development task group has completed development of the three modules for the web-based training program (motivational enhancement, goal-setting and behavioral task assignment). Furthermore, the content of the training modules have been programmed and are currently accessible on a live website (website is currently under beta testing status). A team of carefully-selected expert content developers was assembled, comprised of the project investigators, in addition to Amy Naugle, Ph.D., Jennifer Sharpe Potter, Ph.D., J. Gayle Beck, Ph.D., and Brett T. Litz, Ph.D. These latter individuals were invited to serve as special consultants to the project based on their extensive experience and knowledge in the specific content areas.
**Task 2:** Translate this text into an innovative learning program that blends learner-paced, learner-initiated mastery of new materials using web-delivered interactive content.

Web programming for the training modules has been completed and is currently in the beta testing stage. The official launch of the website is planned for September, 2009.

**Task 3:** Develop evaluation materials to measure knowledge and self-efficacy of CBT skills pre/post intervention.

The evaluation design for the study has been approved by the local IRBs (Stanford and NERI) and is now being prepared for implementation. The study design includes a 3-arm design with a target sample size of 120 (n=40 Web training with consultation; n=40 Web training only; n=40 Control). See Figure 1.

- **Data Collection:** There are several points of data collection as defined in Figure.
  - **Accessing the Sample:** Postcards and email invitations have been developed. Postcards have been distributed at one national meeting and a second set will be distributed at conferences and other relevant in-person meetings closer to the time of recruitment. Email invitations will begin to be sent out in batches when recruitment begins (September, 2009). A registration site is available for interested individuals to access and provide an email address for recruitment.
  - **Web based Screening Instrument:** Interested users will access an online screening instrument to determine eligibility. Those eligible will be directed to an online informed consent and registration process. Those not eligible will be thanked for their interest and informed that they are not eligible for the study.
  - **Online informed consent:** The terms of the study will be clearly defined with an ‘accept’ (or decline) participation button. Those who accept will move to the next phase of the study. Those who decline will be thanked and informed that they have opted not to continue (the consent form has been approved by both the Stanford and NERI IRBs).
  - **Online registration:** This form includes basic demographics, type of practitioner (for CE/CME accreditation), number of years practiced, geographic location, etc.
  - **Pretest Evaluation:** Once registration is completed, users will be directed to an approximately 30-40 minute web-based pretest, which has been finalized and is currently being reviewed by the Stanford and NERI IRBs.
- **Simulated Patient Interview 1**: Following completion of the pretest evaluation, the data management system will identify participants as requiring an appointment with a simulated patient. The interview will be tape recorded and the simulated patient will record date and time of completion. Completion date will be entered into the data management system to trigger randomization. The assessment form will be identified as 'pending' and will also be data entered.

- **Randomization**: Once the participant has been entered into the system as having completed the interview, they will be randomized to one of the three arms. If selected for either of the web arms, a user name and password will be provided for the web course.

- **Completing the Course**: The online participants will have a 4 week window to complete the online training course at their pace in any order before being prompted to take the mid-point evaluation. After the evaluation has been completed, the course will be available to online participants again for use in daily practice.

- **Mid-point Evaluation**: Following the course review or completion of the four week period, participants will access a CE/CME quiz and mid-point evaluation. The control group will be sent an automatic email to complete a midpoint quiz (knowledge and self-efficacy only, no feedback on the web site).

- **Consultation**: For the Web plus Consultation group, this will also trigger the scheduling of consultation calls. The window for completing the consultation activities is 6 weeks. Consultants will be recruited from the National Center of PTSD’s staff of experienced clinicians.

- **Post Test Evaluation**: Once the 6 week window is closed (a total of 10 weeks for the control participants), the study participants in all three groups will be sent an email directing them to the post test, which is also web-based. This time period will be standardized across conditions.

- **Simulated Patient Interview 2**: After the post-test is completed, the data management system will identify participants as requiring their second appointment with a simulated patient.

- **Rater Forms**: Following completion of the interview, the audiotape will be transcribed and reviewed for skills rating by the interview rating staff. The completion date for the interview will be entered into the data management system and the rater form rater forms will also be data entered. At this time,
CE/CME credits will be awarded to participants. Control participants will also be given access to the web site once participation is completed.

**Figure 1.**
Diagrammatic Representation of Evaluation Design.

**Task 4:** Develop simulated case for evaluation of clinical skills and train actors to participate in the simulated patient evaluation.

During the first year of the study 5 actors have been selected to play the role of simulated patients for the evaluation interviews prior to and post training. A training manual was developed for the actors which provided them the procedures of the interviews, scripts, decision rules, and an overview of the simulated patient’s character. Actors have been trained during a two-day workshop that focused on the personality of the simulated patient, response patterns, decision rules, and levels of resistance. To limit the variability of evaluation scores, consistency across the actors was the primary focus of the training, as multiple actors are needed for scheduling purposes, and having more than one actor increases the probability of variation across actors.
Task 5: Filing of CE/CME applications

Currently, obtaining Continued Education (CE/CME) accreditation for prospective study participants is near completion and should be obtained in August, 2009. CME accreditation is being sought from two potential providers.

Task 6: Filing of local IRB applications (Stanford and NERI IRBs)

Submission to local IRBs (Stanford and NERI) with finalization of the study protocol was completed early in Quarter 3. Submission to local and DOD IRBs of all study materials is currently in process. Study recruitment is on pace to begin in September, 2009.

Task 7: Evaluate telephone consultation designed to ensure that the CBT skills learned are implemented by training participants in routine clinical care in a competent manner.

Currently, recruitment is on pace to begin in September, 2009, pending final Stanford, NERI, and DoD IRB approvals of all study materials. We anticipate receiving these final approvals by early September, 2009. Specific details of all study activities are described in this report.

Task 8: Measure the feasibility of the methodology and content of the training program.

Currently, recruitment is on pace to begin in September, 2009, pending final Stanford, NERI, and DoD IRB approvals of all study materials. We anticipate receiving these final approvals by early September, 2009. Specific details of all study activities are described in this report.

Task 9: Conduct a rigorous research study on the effectiveness of these training dissemination methods relative to the local training practices currently in place.

Currently, recruitment is on pace to begin in September, 2009, pending final Stanford, NERI, and DoD IRB approvals of all study materials. We anticipate receiving these final approvals by early September, 2009. Specific details of all study activities are described in this report.

Key Research Accomplishments

- Recruitment and training of the project team (including project staff and consultants)
- Development of the study protocol
- Development of the study evaluation materials
Development and pre-testing of core CBT content modules
Development and pre-testing of the web programs for content delivery
Development of a simulated patient case for evaluation of clinical skills
Recruitment and training of actors to participate in the simulated patient evaluation
Filing of local IRB applications (Stanford and NERI IRBs)
Filing of CE/CME applications

Reportable Outcomes
At this time there are no reportable outcomes as recruitment for the study has not yet begun. Recruitment has been planned to begin in September, 2009.

Conclusion
The first year of the study has yielded significant results: Protocol finalization and approval, training modules developed, finalized and integrated to the web-based training program, and development and finalization of the evaluation materials. The work planned for year 2 of the study is summarized as follows:

1) Obtain IRB approval: Final IRB approval of all study materials is needed at the local (Stanford and NERI) and DoD levels prior to initiation of the study. Currently, training and evaluation materials have been submitted to both of the local IRBs. After approval by the local IRB’s, submission to the ORP will occur for final approval.

2) Obtain CE/CME Accreditation: Since study participants cannot be compensated for their time with anything of monetary value, CE/CMEs will be given out for completion of the web-based training. CE/CME accreditation for the study is well underway. The site has been reviewed by both the CME and Social Work course directors and forms are pending final approval. These activities will be completed early in year two, prior to study recruitment.

3) Launch of web-based training program: The web-based training program is currently accessible on a live website; however, beta testing is still underway. The official launch of the website is currently planned for September, 2009.

4) Begin study recruitment: Study recruitment will begin with the launch of the web-based training program in September, 2009.

REFERENCES: None

APPENDICES: None