

Practical Application of Behavioral Health Technology Tools in the Clinical Care of PTSD

May 28, 2015, 1-2:30pm (ET)

Presenters:

Greg Reger, Ph.D.
Clinical Psychologist,
Director of the Suicide Prevention Program
VA Puget Sound Health Care System
Seattle, Wash

Scott Hunt, Ph.D.
Clinical Psychologist
VA Puget Sound Health Care System
Seattle, Wash

Moderator:

Don Workman, Ph.D.
Director, Emerging Technologies Program
National Center for Telehealth & Technology (T2)
Joint Base Lewis-McChord, Wash.







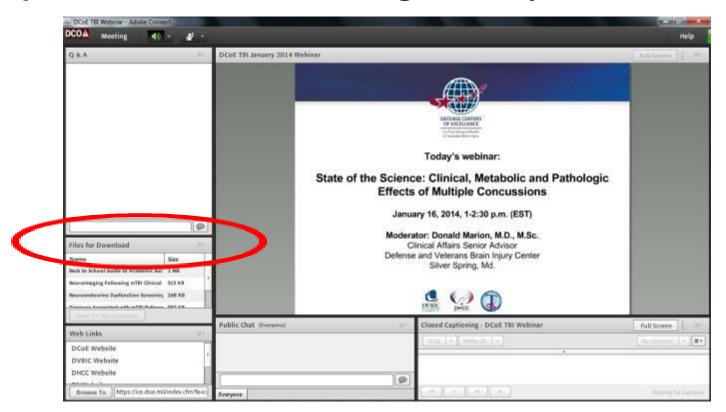
Webinar Details

- Live closed captioning is available through Federal Relay Conference Captioning (see the "Closed Captioning" box)
- Webinar audio is **not** provided through Adobe Connect or Defense Connect Online
 - Dial: CONUS 800-369-2075; International 312-470-7430
 - Use participant pass code: 9942561
- Question-and-answer (Q&A) session
 - Submit questions via the Q&A box



Resources Available for Download

Today's presentation and resources are available for download in the "Files" box on the screen, or visit http://www.dcoe.mil/Training/Monthly_Webinars.aspx





Continuing Education Details

- DCoE's awarding of continuing education (CE) credit is limited in scope to health care providers who actively provide psychological health and traumatic brain injury care to active-duty U.S. service members, reservists, National Guardsmen, military veterans and/or their families.
- The authority for training of contractors is at the discretion of the chief contracting official.
 - Currently, only those contractors with scope of work or with commensurate contract language are permitted in this training.



Continuing Education Accreditation

- This continuing education activity is provided through collaboration between DCoE and Professional Education Services Group (PESG).
- Credit Designations include:
 - 1.5 AMA PRA Category 1 credits
 - 1.5 ACCME Non Physician CME credits
 - 1.5 ANCC nursing contact hours
 - 1.5 APA Division 22 contact hours



Continuing Education Accreditation

Physicians

This activity has been planned and implemented in accordance with the essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME). Professional Education Services Group is accredited by the ACCME as a provider of continuing medical education for physicians. This activity has been approved for a maximum of 1.5 hours of *AMA PRA Category 1 Credits* TM. Physicians should only claim credit to the extent of their participation.

Physician Assistants

This activity has been planned and implemented in accordance with the essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME). Physician Assistants who attend can earn ACCME Category 1 PRA Credit.

Nurses

Nurse CE is provided for this program through collaboration between DCOE and Professional Education Services Group (PESG). Professional Education Services Group is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. This activity provides a maximum of 1.5 contact hours of nurse CE credit.

Occupational Therapists

(ACCME Non Physician CME Credit) For the purpose of recertification, The National Board for Certification in Occupational Therapy (NBCOT) accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credit TM from organizations accredited by ACCME. Occupational Therapists may receive a maximum of 1.5 hours for completing this live program.



Continuing Education Accreditation

Physical Therapists

Physical Therapists will be provided a certificate of participation for educational activities certified for AMA PRA Category 1 Credit ™. Physical Therapists may receive a maximum of 1.5 hours for completing this live program.

Psychologists

This Conference is approved for up to 1.5 hours of continuing education. APA Division 22 (Rehabilitation Psychology) is approved by the American Psychological Association to sponsor continuing education for psychologists. APA Division 22 maintains responsibility for this program and its content.

Other Professionals

Other professionals participating in this activity may obtain a General Participation Certificate indicating participation and the number of hours of continuing education credit.



Continuing Education Details

- If you wish to obtain a CE certificate or a certificate of attendance, please visit http://dcoe.cds.pesgce.com after the webinar to complete the online CE evaluation.
- The online CE evaluation will be open through Thursday, June 11, 2015.



Questions and Chat

- Throughout the webinar, you are welcome to submit technical or content-related questions via the Q&A pod located on the screen. Please do not submit technical or content-related questions via the chat pod.
- The Q&A pod is monitored during the webinar; questions will be forwarded to presenters for response during the Q&A session.
- Participants may chat with one another during the webinar using the chat pod.
- The chat function will remain open 10 minutes after the conclusion of the webinar.



Webinar Overview

As new areas of health care and clinical practice emerge, communication methods evolve and expand. This presentation will review practical issues related to the clinical decision to incorporate technology as part of PTSD treatment. The discussion will provide a general framework for considering technology integration into practice including patient and provider factors, logistical considerations, evaluation and selection of specific applications. A specific case example will demonstrate the use of mobile applications to support the treatment of PTSD and include special emphasis on ethical and privacy issues.

Webinar participants will learn to:

- Describe the relevance of technology to PTSD clinical practice
- ■Demonstrate an understanding of issues relevant to clinical decision making for the application of technology in practice
- Synthesize key privacy and ethical issues related to the use of technology in PTSD practice





Practical Application of Behavioral Health Technology Tools in the Clinical Care of PTSD

Greg Reger, Ph.D.

Clinical Psychologist
Director of the Suicide Prevention Program
VA Puget Sound Health Care System
Seattle, Wash







Greg Reger, Ph.D.

- Dr. Reger is a clinical psychologist and Director of the Suicide Prevention Program VA Puget Sound
- He is an Associate Professor of Psychiatry and Behavioral Sciences at the University of Washington School of Medicine.
- Dr. Reger has led research on the design, development, and evaluation of innovative technologies to support Service Members and Veterans with PTSD, including work as co-PI on a multisite clinical trial evaluating virtual reality exposure therapy, and leading a DoD/VA collaboration in the development of the PE Coach mobile application



Photo courtesy of: Department of Defense



Disclosures

- The views expressed in this presentation are those of the presenter, Dr. Reger, and do not reflect the official policy of the Department of the U.S. Army, U.S. Department of Defense, or the Department of Veterans Administration.
- Dr. Reger has no relevant financial relationships to disclose.
- Dr. Reger does not intend to discuss the offlabel/investigative (unapproved) use of commercial products or devices.



Overview

- This webinar will review practical issues related to the clinical decision to utilize technologies as part of PTSD treatment.
- Mobile applications will be utilized as a specific example for consideration in PTSD treatment.
- Emphasis will be on applied issues, including relevant privacy and ethical issues.



PTSD DSM-5 Diagnostic Criteria

- Criterion A: stressor
- Criterion B: intrusion symptoms
- Criterion C: avoidance
- Criterion D: negative alterations in cognitions and mood
- Criterion E: alterations in arousal and reactivity
- Criterion F: duration
- Criterion G: functional significance
- Criterion H: exclusion
- Specify if: With dissociative symptoms or delayed expression (American Psychiatric Association, 2013)



Evidence-based Cognitive Behavioral Treatments for PTSD

Cognitive Process Therapy (CPT)

(Chard, Schumm, Owens, & Cottingham, 2010; Monson, Schnurr, Resick, Friedman, Young-Xu & Stevens, 2006; Monson, Price, & Ranslow, 2005)

Prolonged Exposure Therapy (PET)

(Foa, Hembree, & Rothbaum, 2007)



How Far Have We Come?



Photo courtesy of: PhotoAtelier



Photo courtesy of: Nik Stanbridge



In the last 20 years, however...

Computer Age



Photo courtesy of: Blake Patterson

OIF/OEF



Photo courtesy of: US Army



Increased Risk of PTSD

- 5.5% PTSD rate all deployed
- 13.2% PTSD rate combat infantry

(Kok, Herrell, Thomas & Hoge, 2012)

8.0% lifetime rate national Veteran sample
 (Wisco, Marx, Wolf, Miller, Southwick & Pietrzak, 2014)



Computer Revolution

- American adults:
 - 85% use internet
 (Pew Research Center, 2013)
 - 64% own a smartphone in 2015
 - Up from 35% in 2011
 (Pew Research Center, 2015)
- Army Soldiers:
 - 89% owning a smartphone
 (Edwards-Stewart, Smolenski, Reger, Bush & Workman, under review)
- 90% internet users say the internet has been a good thing personally

(Pew Research Center, 2014)



Impact?



1. Do you personally own a smartphone?



2. Do you treat patients with anxiety disorders or PTSD?



3. Have you used technology (mobile apps, websites) in clinical care of anxiety or PTSD?



4. Do you feel the internet has a positive impact on your life personally, in general?



A Number of Practice Questions

- Should I use technology in my practice with PTSD?
- Which technologies are available for use in clinical treatment of PTSD?
- How do I know the quality of available technology resources to augment PTSD treatment?
- How can I know which patients engaged in PTSD treatment would benefit from technologies?
- What ethical and privacy issues should I consider before using a technology in PTSD practice?



A General Approach to Clinical Decision Making and Technology

- Can the same benefits be achieved without the technology approach?
- How well do the capabilities of the technology fit the clinical goals?

How well does a technology solution fit the characteristics of the patient population?

(Fernandez & Short, 2014; Reger, 2013; Rizzo, Buckwalter, & van de Zaag, 2002)



A Specific Case: Capabilities of Mobile Devices



Clinical Goals Facilitated by Mobile App Capabilities?

- Tracking Information
- Support Adherence with Difficult Homework
- Education



Clinical Goals Facilitated by Mobile App Capabilities?

- Social Support
- Rural Communication
- Non-EBP Treatment Options
- Mitigate Stigma



5. Do you think technology might help mitigate the stigma of help-seeking?



Considerations - Logistics

- Data connection at your facility
- Use in session and physical proximity
- App demonstration sharing patient's phone, provider's phone, use of tablet
- Time constraints

(Skopp, Reger, Edwards-Stewart, Lemus, Accepted, Military Psychology)



Anticipate Technology Problems

"The greatest evidence for the existence of the devil is computers."

- Richard Gorsuch, Ph.D.

(Gorsuch, 2001, personal communication)



Considerations - Experience

- Provider familiarity with the evidence-based treatment that the application is based on
- Provider familiarity with the application
- Provider familiarity with the patient's device
- Patient comfort and experience with smartphones



Mobile App Resources for PTSD

PTSD Coach Mobile App

- Android and iOS
- Patient facing tool with information about PTSD and how to manage symptoms



- Android and iOS
- To accompany Prolonged Exposure Therapy Manualized Treatment





Photos courtesy of: National Center for Telehealth & Technology (T2)



Mobile App Resources for PTSD

- Cognitive Processing Therapy Coach (CBT Coach) Mobile App
 - iOS, Android pending VA release
 - To accompany Prolonged Exposure Therapy Manualized Treatment
- T2 Moodtracker Mobile App
 - -Android and iOS
 - -Has rating categories for:
 - -Anxiety
 - -Depression
 - -General Well-being
 - -Head injury
 - -Post-traumatic stress
 - -Stress





Photos courtesy of: National Center for Telehealth & Technology (T2)



Web Resource for PTSD

Post-traumatic stress module of Afterdeployment website:

http://afterdeployment.dcoe.mil/topics-post-traumaticstress



Photo courtesy of: National Center for Telehealth & Technology (T2)



Mobile App Selection

Usability

- Quality of the App
 - APA website on apps with reviews
 - Division 56 (Trauma)
 - Division 46 (Media)
 - Division 29 (Psychotherapy)
- Privacy and Security Issues



Considerations – App Limitations

- What can't an app do?
 - Replace the clinician
 - Build therapeutic rapport
- The role of clinical judgement
 - Is a high quality app ever contra-indicated?





Practical Application of Behavioral Health Technology Tools in the Clinical Care of PTSD

Scott Hunt, Ph.D.

Clinical Psychologist
VA Puget Sound Health Care System
Seattle, Wash







Scott Hunt, Ph.D.

- Dr. Hunt is a Graduate Psychologist at the VA Puget Sound Health Care System-American Lake Division and a Senior Fellow at the University of Washington, Department of Psychiatry and Behavioral Sciences.
- He earned his PhD in Clinical Psychology from Fielding Graduate University, including an internship at the American Lake VA. He is completing a Research Fellowship at the University of Washington/American Lake VA.
- Dr. Hunt's time at the VA is divided between clinical work in the Psychiatric Assessment and Clinical Center and research into technological innovations that support psychological health.



Photo courtesy of: Scott Hunt, Ph.D.



Disclosures

- The views expressed in this presentation are those of the presenter, Dr. Hunt, and do not reflect the official policy of the Department of the U.S. Army, U.S. Department of Defense, or the Department of Veterans Administration.
- Dr. Hunt has no relevant financial relationships to disclose.
- Dr. Hunt does not intend to discuss the offlabel/investigative (unapproved) use of commercial products or devices.



Overview

- Identify common patient privacy and ethical concerns in the application of technology in clinical care of PTSD
- Provide accurate and easy to understand information to empower providers when integrating technology tools in clinical care of PTSD



Vignettes

- A new patient reports that he has gotten his first smartphone and has just downloaded a free app to manage his PTSD. He would like to incorporate the use of the app into his therapy.
- The app includes an assessment, articles on anxiety, PTSD, and panic attacks, and audio/guidance training, a diary to track anxiety, panic symptoms, suggested homework for alleviating PTSD symptoms, as well as links to "personality testing".
- How do you address the patient's request in an ethically responsible way?



Privacy and Ethical Issues



A Trusted Source



Permissions

Is this app from a trustworthy developer?

Do I understand why this app needs these permissions?

Does the developer explain to me why they need these

permissions?



Photo courtesy of: http://www.istockphoto.com



Password Protection

- Phone
- App



File Sharing Applications









Maintain Control

Install Remote
Wiping and/or
Remote Disabling



Public Wi-Fi

- When you are on the same network others may be able to steal usernames and passwords or see what you're doing.
- Recommendations:
 - Turn off sharing
 - Enable your firewall
 - Use https:// and secure sockets layer (ssl)
 - Turn Wi-Fi off when not using it (Gordon, 2014)



Technology Offers Us New Advantages in PTSD Treatment

 Our goal is to develop ethically responsible practices that incorporate technology to support the delivery of evidence-based treatments for PTSD

- How do we do this?
 - By understanding and following relevant ethical standards
 - Be prepared to clearly explain to patients



APA Code of Ethics

- "The Ethics code applies to these activities across a variety of contexts, such as in person, postal, telephone, Internet, and other electronic transmissions".
- 2.01 (c) Boundaries of Competence
- 3.10 (a) Informed Consent
- 4.02 (c) Disclosing the Limits of Confidentiality

(American Psychological Association, 2010, 2002a)



Risk

- Use of technology, unintended consequences (Eonta, Christon, Hourigan, Ravindran, Vrana, & Southam-Gerow, 2011)
- Assessing risk: "...the calculation that a particular treatment, intervention, or service will lead to a good or bad outcome and the outcome will have a positive or negative consequence."

(Bennett, Bricklin, Harris, Knapp, VandeCreek, & Younggren, 2006)



Associated Factors

- Patient Risk
- Context
- Disciplinary consequences
- Therapist factors

(Ragusea, 2012)



Responsible Practice

- Confidentiality
- Competence
- Emergency Response
- Disclosure



Evidence-base Regarding Efficacy

"Finally, there is a lack of evidence on the potential efficacy of mobile health care apps. The numbers of tested evidenced based apps is small and few studies report sustained effects of more than three months."

(Giota & Kleftaras, 2014, p. 23)

Recommendation:

 Mental health professionals should carefully evaluate the apps they recommend to patients



Vignette Follow-up

 Know your risks and your client's risks regarding bringing new technology into therapy



Tips for Providers

- Put evidence-based practices first
- Be competent, stay current
- Get supervision and training
- Develop a list of apps based on current best practices
- Monitor patient outcomes during use



Additional PTSD Resources

 DoD/VA Clinical Practice Guidelines for Management of Post-traumatic Stress

http://www.healthquality.va.gov/guidelines/MH/ptsd/cpg_PTSD-FULL-201011612.pdf

 Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE)

http://www.dcoe.mil/PsychologicalHealth/PTSD_Treatment_Options.aspx

- Deployment Health Clinical Center (DHCC)
 - http://www.pdhealth.mil/clinicians/ptsd.asp
- VA National Center for PTSD
 - http://www.ptsd.va.gov/
- A Guide to Guidelines for the Treatment of PTSD and Related Conditions, Journal of Traumatic Stress, Vol. 23, No. 5, October 10, pp. 537–552.
 - http://onlinelibrary.wiley.com/doi/10.1002/jts.20565/pdf



Summary

During this webinar, participants:

- Described the relevance of technology to PTSD clinical practice
- Demonstrated an understanding of issues relevant to clinical decision making for the application of technology in practice
- Synthesized key privacy and ethical issues related to the use of technology in PTSD practice



- American Psychological Association. (2010, 2002a). Ethical principles of psychologists and code of conduct. *American Psychologist*, *57*, 1060-1073.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*, (5th ed.). Washington, DC.
- Bennett, B. E., Bricklin, P. M., Harris, E., Knapp, S., VandeCreek, L., & Younggren, J. N. (2006). *Assessing and managing risk in psychological practice: An individualized approach.* Rockville, MD: American Psychological Association Insurance trust.
- Chard, K. M., Schumm, J. A., Owens, G. P., & Cottingham, S. M. (2010). A comparison of OEF and OIF veterans and Vietnam veterans receiving cognitive processing therapy. *Journal of Traumatic Stress*, *23*, 25-32.
- Edwards-Stewart, A., Smolenski, D., Reger, G., Bush, N. & Workman, D. (In print). An analysis of technology use by service members and military health providers.



- Eonta, A. M., Christon, L. M., Hourigan, S. E., Ravindran, N., Vrana, S. R., & Southam-Gerow, M. A. (2011).

 Using everyday technology to enhance evidence based treatments. *Professional Psychology: Research and Practice, 42*, 513-520, doi:10.1037/a0025825
- Fernandez, M. A., & Short, M. (2014). Wounded warriors with PTSD: A compilation of best practices and technology in treatment. *The Professional Counselor, 114*, 1-20.
- Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). Prolonged Exposure Therapy for PTSD: Emotional Processing of Traumatic Experiences, Therapist Guide. Oxford University Press, "Treatments that work".
- Giota, K. G., & Kleftaras, G. (2014). Mental Health Apps: Innovations, risks and ethical considerations. *E-Health Telecommunication Systems and Networks*, *3*, 19-23. doi.org/10.4236/etsn.2014.33003
- Gordon, W. (2014). How to stay safe on public Wi-Fi networks. Lifehacker. Available at http://lifehacker.com/5576927/how-to-stay-safe-on-public-wi-fi-networks



- Gorsuch, R. (2001). "The greatest evidence for the existence of the devil is computers." *Personal communication with Greg Reger, Ph.D.*
- Kok, B. C., Herrell, R. K., Thomas, J. L., & Hoge, C. W. (2012). Posttraumatic stress disorder associated with combat service in Iraq or Afghanistan: Reconciling prevalence differences between studies. *Journal* of Nervous & Mental Disease, 200, 444–450.
- Monson, C. M., Schnurr, P. P., Resick, P. A., Friedman, M. J., Young-Xu, Y. & Stevens, S. P. (2006). Change in posttraumatic stress disorder symptoms: Do clinicians and patients agree? *Journal of Consulting and Clinical Psychology, 74,* 898-907
- Monson, C. M., Price. J. L., & Ranslow, E. (2005). Treating combat PTSD through cognitive processing therapy. *Federal Practitioner*, *22*, 75-83.



Pew Research Center. (2014). Research Center's Internet & American Life Project. Mobile Tech Fact sheet, Washington, DC. Available at http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/

Pew Research Center. (2015). 6 facts about Americans and their smartphones, available at http://www.pewresearch.org/fact-tank/2015/04/01/6-facts-about-americans-and-their-smartphones/

Pew Research Center. (2012). Mobile Health Report. Washington, DC. Available at http://www.pewinternet.org/2012/11/08/mobile-health-2012/

Pew Research Center. (February 27, 2014). The web at 25 in the U.S., available at http://www.pewinternet.org/2014/02/27/the-web-at-25-in-the-u-s/

Pew Research Center. (September 25, 2013). Who's not online and why, available at http://www.pewinternet.org/2013/09/25/whos-not-online-and-why/

Ragusea, A. S. (2012). The more things change, the more they stay the same: ethical issues in the provision of telehealth. *APA Handbook of Ethics in Psychology*, Vol. 2 (183-198). Washington, DC: American



- Reger, G. M. (2013). Technology applications in delivering mental health services. In Moore, B. A. & Barnett, J. E. (Eds.), *Military psychologists' desk reference* (pp. 288-292). New York: Oxford University Press.
- Rizzo, A. A, Buckwalter, JG, & van de Zaag, C. (2002). Virtual environment applications in clinical neuropsychology. In Stanney, K. M. (Ed.), *Handbook of virtual environments: Design, implementation, and applications* (pp. 1027-1064). Mahwah, NJ: Erlbaum.
- Skopp, N., Reger, G. M., Edwards-Stewart, A., & Lemus, E. L. (Accepted with Revisions). Comparison of PE Coach to treatment as usual: A case series with two active duty soldiers. *Military Psychology.*
- Wisco, B. E., Marx, B. P., Wolf, E. J., Miller, M. W., Southwick, S. M., & Pietrzak, R. H. (2014).

 Posttraumatic stress disorder in the US veteran population: results from the National Health and Resilience in veterans study. *Journal of Clinical Psychiatry*, *75*, 1338-1346.



Greg Reger, Ph.D.

Greg.reger@va.gov

Scott Hunt, Ph.D.

Scott.hunt3@va.gov

http://t2health.dcoe.mil/



Questions?

- Submit questions via the Q&A box located on the screen.
- The Q&A box is monitored and questions will be forwarded to our presenters for response.
- We will respond to as many questions as time permits.





How to Obtain CE Credit

- 1. After the webinar*, go to URL http://dcoe.cds.pesgce.com
- 2. Select the activity: 28 May PH Webinar
- This will take you to the log in page. Please enter your e-mail address and password. If this is your first time visiting the site, enter a password you would like to use to create your account. Select Continue.
- 4. Verify, correct, or add your information AND Select your profession(s).
- 5. Proceed and complete the activity evaluation
- Upon completing the evaluation you can print your CE Certificate. You may also e-mail your CE Certificate. Your CE record will also be stored here for later retrieval.
- 7. The website is open for completing your evaluation for 14 days.
- 8. After the website has closed, you can come back to the site at any time to print your certificate, but you will not be able to add any evaluations.



Webinar Evaluation/Feedback

We want your feedback!

 Please complete the Interactive Customer Evaluation which will open in a new browser window after the webinar, or visit:

https://ice.disa.mil/index.cfm?fa=card&sp=134218&s =1019&dep=*DoD&sc=11

 Or send comments to <u>usarmy.ncr.medcom-usamrmc-</u> dcoe.mbx.dcoe-monthly@mail.mil



Chat and Networking

Chat function will remain open 10 minutes after the conclusion of the webinar to permit webinar attendees to continue to network with each other.



Save the Date

Next DCoE TBI Webinar:

Date/Time: Thursday June 11, 2015, 1-2:30pm ET

Title: Translational Neurorehabilitation Outcomes: Research Trends

and Person-centered Care

Next DCoE Psychological Health Webinar:

Date/Time: Thursday June 25, 2015, 1-2:30pm ET

Title: Assessing and Reducing violence in Military Veterans



DCoE Contact Info

DCoE Outreach Center
866-966-1020 (toll-free)
dcoe.mil
resources@dcoeoutreach.org

