PTSD Treatment Via Telemental Health Technology

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Objectives

• PTSD Prevalence
• Access & Barriers to PTSD Care
• A New Paradigm: Potential of Technology
• Clinical and Research Updates
• New Directions
Mental Health Care Demand

- 18.3% of American adults are diagnosed with mental health disorder (SAMHSA, 2016).

- Six in ten Americans living with psychiatric disorders are not getting mental health treatment.
PTSD Prevalence

- 23.5% prevalence rate of PTSD among veteran returning from Iraq or Afghanistan (Fulton et al., 2015).

- PTSD evidence-based psychotherapies (e.g., PE, CPT, EMDR) significantly reduce PTSD symptoms in veterans.
PTSD Treatments works but…

• Despite evidence of the efficacy of psychotherapy, it is substantially underutilized in the US and the VA (Lu et al., 2016; Mott et al., 2014 and Shiner et al., 2013).

• Access and utilization of EBP is even more limited in rural/geographically remote areas (Grubbs et al., 2017; Morland et al., 2013).

- Efforts to modify clinic structure, training efforts, and wider availability of EBPs have been successful in increasing utilization (Hundt et al., 2017).
PTSD Treatments works but…

- Low rates of new patients with PTSD begin psychotherapy in VHA. Those who start, receive low-intensity dose of treatment (Mott, 2014).

- Approximately half of OEF/OIF/OND veterans surveyed who may have a need for mental health care services do not use VA or non-VA mental health care services (Jan 2018, Consensus Study Report).

- The process of accessing VA mental health services has been burdensome and unsatisfying for many OEF/OIF/OND veterans. (Jan 2018, Consensus Study Report)
Veterans in need of Mental Health resources often face a number of barriers including:

- Geographic distance
- Physical mobility
- Time/schedule constraints
- Desire for Cost
- Privacy
- Cultural value of self-reliance
- Ambivalence
- Stigma

The newest cohort of Veterans increasingly expects “on-demand” services.
A New Paradigm of Care

• Need for flexible models of care delivery that meet patients where they are physically and psychologically (Hoge, 2011; Kazdin, 2011).

• Need for innovative way to “engage” patients clinically and allow for “patient-centered” care.

• Need to find a way to incorporate treatment gains and skills into everyday practices.
Why Use Technology

- Expand Access
- Improve Efficiency
- Increase Engagement
Technology Across the Continuum of Care for PTSD
Technologies of Interest their potential for PTSD Care

- Clinical Videoteleconferencing (CVT or TMH)
  - Access, ease of access, family involvement
- Web Based Interventions
  - Education, Awareness, Self-management & self monitoring
- mHealth Technologies - Mobile App
  - Between session work, allow for real time intervention
Telehealth and eHealth interventions for posttraumatic stress disorder
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This paper presents existing research describing how telehealth and eHealth technologies can be used to improve mental health services for trauma survivors, either by enhancing existing treatment approaches or as a stand-alone means of delivering trauma-relevant information and interventions. The potential ways in which telemedicine technologies aide in overcoming barriers to care is first addressed in terms of providing mental health treatment. We then outline how different telehealth and eHealth tools can be used for key therapeutic tasks, including the provision of self-guided interventions, remote delivery of psychotherapy, and augmentation of psychological treatments. We conclude by discussing key emergent issues that are shaping current and future use of telemedicine technologies as part of the continuum of care for trauma survivors.

The potential of technological approaches to overcome barriers to care
Accessing mental health services can be particularly challenging for people living with posttraumatic stress disorder (PTSD) or other trauma-related problems. To accommodate real world challenges, flexible models of care delivery are needed that meet trauma survivors...
Telemental Health for PTSD
Why use TMH for PTSD?

- Increased access
- Lower cost without lower quality
- Reduced patient burden
  - Travel time; transportation costs
  - Missed employment time
- Patient-centered model
- May reduce shame/stigma barriers
Evidence for TMH and PTSD: What do we really know?

- Clinical outcomes are similar to in-person across therapies and treatment settings (Backhaus et al., 2010)

- Established Efficacy of TMH for
  - CPT in group (Morland et al., 2014)
  - CPT Individual (Morland et al., 2015)
  - PE (Tuerk, et al, 2010)
  - Collaborative Care (Fortney et al., 2015)
Take Home Message: TMH modality works!

- Acceptability
- Equivalent clinical outcomes
- Virtually equivalent process outcomes
- Cost effective
- Comparable Treatment Fidelity
- Clinician training
Telemental Health Growth
FY02-16

Graph showing the growth of Uniques, Encounters, Rural Uniques, and Rural Encounters from FY02 to FY16.
Challenges to Traditional Office-Based TMH Model

• Increases access but not necessarily as efficient or engaging
• Geographical barriers still exist
• Cost associated with staff time
• Coordination requirements
• Space needs
• Sustainability?
Home-Based CVT Model of Care

VA Hospital (Provider)

Home (Veteran)

VA Clinic (Veteran)
Home-Based TMH
Home-based CVT

Benefits:
• Increases *access & convenience*
• Increase *engagement*
• Less stigma
• After hours flexibility
• Reduce no shows rates

Challenges:
• HIPAA, licensing
Veteran Case Example

Face to Face Appointment

- Veteran leaves home 7am
- Drives to clinic 7-8:30am
- Parking & shuttle 8:30-9am
- Check in 8:45-9am
- Session 9-10am
- Shuttle to parking 10-10:30am
- Drive home 10:30am-12pm

- **Total time: 5 hours**

HB-CVT Appointment

- 9am Veteran logs on and provider calls
- Session over 10am

- **Total time: 1 hour**
Evidence for HB-TMH and PTSD: What do we know?

- Feasible, safe, effective
  - Active Duty US Military (Luxton et al., 2015)
  - Veterans (Shore et al., 2014; Yuen et al., 2015)
- Comparable process outcomes to traditional office-based care
  - Satisfaction among patients undergoing Prolonged Exposure (Gros et al., 2016)
- Comparable clinical outcomes to traditional office-based care
  - BA & Exposure (Acierno et al., 2016)
  - Psychotherapy for dep. in older adults (Egede et al., 2015)
  - Prolonged Exposure (Acierno et al., 2017)
Big Picture

• New Model of Care in VA
• Established Clinical effectiveness of Home-Based CVT
• Potentially increased cost effectiveness?
  • Reduced no-shows?
  • Reduced travel reimbursement?
  • Reduced overhead costs?
  • Reduced “missed opportunities”? 
Frequently Asked Implementation Questions
Home-Based TMH Care

- Patient Selection
- Technology Availability
- Ability to assess risk
- Ability to establish safety and emergency plan
- Clinical guidelines & behavioral expectations
- Concern re collusion with “Avoidance”
What Do Veterans Want? A Preliminary Look at Veterans’ Preferences
Where do Veterans want their care?

Treatment Delivery Modality Preference

- In-Home In Person: 30%
- Home-Based Telemed: 42%
- Office-Based Telemed: 27%
Moving Forward: Future directions yet to be examined...

- What is the **optimal level** of therapist interaction with technology (web, mobile apps) - hybrid models of care

- How do we determine “the-fit” between the patient, the technology and the system of care? - patient preferences, safety concerns

- How can technology be best integrated into traditional care vs a “**new model of care**”?

- How can we capture utilization and reach?
  - Billing, safety, quality control
What is the Potential of Technology for PTSD

Technology has the potential to change the landscape of how we deliver mental health services, specifically for PTSD, and may offers a path toward improving the access, engagement and efficiency of trauma-related interventions.
mHealth Technologies

Engage

Educate
Raise Awareness

Self-monitor & self-manage
Summary

• Given the anticipated spread of these technologies around the world in the next decade, they hold promise of making a significant contribution to reducing the burden of mental health demand.

• Technology can allow for service provision across space & time and can be a game-changer for mental health care in the 21st century.
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**SAVE THE DATE: Third Wednesday of the Month from 2-3PM (ET)**

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<td>What We Know about PTSD and Opioids</td>
<td>Elizabeth Oliva, PhD &amp; Jodie Trafton, PhD</td>
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<td>April 18</td>
<td>Balancing Clinical Flexibility while Preserving Efficacy in Delivering EBPs for PTSD</td>
<td>Tara Galovski, PhD</td>
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<td>May 16</td>
<td>Brief Prolonged Exposure for PTSD</td>
<td>Sheila Rauch, PhD</td>
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<td>June 20</td>
<td>What the Latest Research Tells Us about Treating PTSD Nightmares</td>
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<td>An Evidence-Informed Approach to Helping Clients after Disaster or Mass Violence: Skills for Psychological Recovery</td>
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