DoD Mobile Health Provider Training
How to Use Health Technologies with Your Patients in Primary Care

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28 May 2020
1045-1145 ET
Presenters

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Dr. Julie Kinn is a clinical and research psychologist specializing in the use of health technology to improve patient outcomes. She has worked in the Department of Defense for a decade, and now leads DHA Connected Health Education and Training (https://health.mil/mHealthTraining). Dr. Kinn has unique expertise in User Experience and Usability (UX); podcasting; and statistics and measurement. Under her leadership and direction, DHA Connected Health has produced four innovative podcasts for MHS patients and their care teams, which can be found at https://health.mil/podcasts.
Renee Cavanagh graduated from Pacific University with a doctorate in Clinical Psychology with a concentration in Health Psychology. Her clinical experiences have focused on addressing the impact of illnesses and physical health conditions on psychological well-being in medical settings providing care for veterans and civilian populations. While working at the VA, Dr. Cavanagh began integrating VA/DoD mobile apps into the clinical care she provided in a primary care setting. She continued to use these apps in clinical care with civilians in a primary care and outpatient treatment settings. Dr. Cavanagh has been providing contract support to DHA Connected Health since 2017 and has presented workshops on integrating mobile apps into clinical care throughout the world.
Welcome

- Introductions
- Housekeeping
  - Devices and/or apps to download
- Who is Connected Health?
Disclosures

- Dr. Renee Cavanagh and Dr. Julie Kinn have no relevant financial or non-financial relationships to disclose relating to the content of this activity.
- The views expressed in this presentation are those of the author and do not necessarily reflect the official policy or position of the Department of Defense, nor the U.S. Government.
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Learning Objectives

At the conclusion of this CE workshop, participants should be able to:

1. Describe the value, opportunities, and barriers in provider adoption of mobile health.
2. Explain and apply the core competencies regarding mobile health in clinical care.
3. Illustrate and apply the five steps for clinical integration of mobile health technology.
4. Outline and articulate security and privacy concerns and solutions related to using technology in clinical practice.
5. Identify and articulate cultural concerns and considerations in clinical practice.
Today’s Agenda

- Welcome and Introductions
- What is Mobile Health and Why it is Important?
- Understanding Benefits and Barriers for Integrating Mobile Health Into Clinical Practice
- Understanding Best Practices for Integrating Mobile Health Into Clinical Practice
- Security and Privacy Issues When Using Mobile Health in Clinical Practice
- Cultural Considerations When Using Mobile Health in Clinical Practice
- Mobile Health for Support of Evidence Based Treatments for Stress
- CE Evaluations and Sign out
What Was the Last App You Used?

Source: Defense Health Agency
What is Mobile Health?

Source: Defense Health Agency
Polling Question #1

How often have you used Mobile Health (mHealth) when treating service members (SM), their family members or veterans?

- Very frequently
- Frequently
- Occasionally
- Rarely
- Never
Understanding Benefits and Barriers for Integrating Mobile Health Into Clinical Practice
### Service Member and Provider Tech Use Comparison

<table>
<thead>
<tr>
<th>Service Members</th>
<th>Providers</th>
</tr>
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<tbody>
<tr>
<td>89% own a smartphone</td>
<td>96.5% own a smartphone</td>
</tr>
<tr>
<td>58% own an Android</td>
<td>64% own an iPhone</td>
</tr>
<tr>
<td>Majority (72%) were age 30 and below</td>
<td>Majority (73%) were age 34 and older</td>
</tr>
</tbody>
</table>

Edwards-Stewart, A., et.al. (2016)
Value of Mobile Health

What are the Benefits of Mobile Health?

Image by: Tero Vesalainen, Pixabay.com
Research Evidence of the Benefits of Mobile Health in Clinical Care (1 of 2)

Can effectively supplement medical care

Overcome barriers to accessing care

Increase compliance/engagement

Research Evidence of the Benefits of Mobile Health in Clinical Care (2 of 2)

- Increase efficiency of care
- Facilitates case management for geographically dispersed patients
- Extend health care beyond face-to-face visits

75.9% of providers use mobile devices in their practice

69.3% for staff communication
51.1% for patient communication

41.0% for patient secure messaging
38.5% for patient portal

31.6% worried about HIPPA
21.0% don’t have the time
How Digital Tools Improve Primary Care

- Increase patient adherence (75%)
- Reduce stress and burnout (66%)
- Increase patient safety (80%)
- Improve physician-patient relationship (73%)
- Improve diagnostic ability (79%)

Digital Health Study - Physicians’ motivations and requirements for adopting digital clinical tools. (n.d.).
What are the Potential Barriers Impacting Provider Adoption?

Image by: Jan Persiel, Flickr.com
Polling Question #2

Based on your experiences what is the biggest barrier to utilizing mHealth in your practice?

- Technology issues at workplace
- Security and privacy concerns
- Lack of knowledge on use of apps
- Lack of time
- Lack of confidence in effectiveness of apps
- Unsure of policies regarding use of apps
- Other
Behavior Health Potential Barriers

Typical Barriers from Past Workshops

- Don’t think they will work
- Costs too much
- Security and Privacy Concerns
- Don’t know how
- Unclear about policies regarding their use
- Stuck in tradition
- Too busy
- No Wi-Fi in clinic
- Don’t know what to use
- Don’t think they will work
- Costs too much
- Security and Privacy Concerns
- Don’t know how
- Unclear about policies regarding their use
- Stuck in tradition
- Too busy
- No Wi-Fi in clinic
- Don’t know what to use

Top 3 Barriers from Past Workshops

- Unclear about policies regarding their use
- Security and privacy concerns
- Don’t know how
Evidence Regarding Barriers to Clinician Adoption

Behavioral health provider adoption lags behind patient adoption

Current technology structures at many treatment facilities may not fully support

Image by: Patricia Deal, U.S. Army

Evidence Regarding Barriers to Clinician Adoption

What clinicians want from mobile health

- Fit within existing IT systems
- Data privacy assured by experts
- Linked to electronic health record (EHR)
- Procedures for billing/reimbursement

Digital Health Study - Physicians’ motivations and requirements for adopting digital clinical tools. (n.d.).
Benefits and Barriers - Key Takeaways

Understand the research showing benefits of mobile health in clinical care

Understand the barriers inherent in clinical adoption of mobile health
Understanding Best Practices for Integrating Mobile Health Into Clinical Practice
Core Competencies for Mobile Health in Clinical Care

1. Evidence Based

2. Clinical Integration

3. Security & Privacy

4. Ethical Issues

5. Cultural Considerations

Mobile Health Clinical Integration

Bringing Apps into Clinical Workflow

Are you bringing mobile apps into your clinical workflow?
Polling Question #3

Does your clinic have a process for incorporating the use of mHealth into its workflow?

☑ Yes
☑ No
☑ Not sure
How Would You Bring Apps into Your Clinical Workflow?

All clinics are unique so think ahead before integrating mobile health.

Does workflow support patient access to and use of clinical support tools?

What questions should you consider when bringing apps into your clinical workflow?

Images by: Petty Officer 3rd Class Cameron T. Pinske, U.S. Navy; Reynaldo Ramon, U.S. Army; Lori Newman, U.S. Army
Best Practices - Key Takeaways

1. Evidence Based
2. Clinical Integration
3. Security & Privacy
4. Ethical Issues
5. Cultural Considerations

Understand the five Core Competencies of Mobile Health

Understand the five steps of Clinical Integration
Security and Privacy Issues When Using Mobile Health in Clinical Practice
Key Security and Privacy Issues

- Trusted Source
- Permissions
- Passcode Protection

Image by: Steven Taschuk, Flickr.com
How can you protect and secure health information when using a mobile device? / Providers & professionals / HealthIT.gov. (2013, January 24).
Security and Privacy - Key Takeaways

- **For all apps:**
  - Only download apps from trusted sources
  - Always use a passcode
  - Pay attention to permissions
  - Know how data will be shared
  - Know how to protect data on mobile device

- **For DOD/VA apps:**
  - DOD/VA have no access to the data
  - User has control over data on the encrypted app
Cultural Considerations When Using Mobile Health in Clinical Practice
Meet your patients where they are at by:

- Assessing patient use and familiarity with apps
- Understanding cultural considerations
Cultural Considerations

- Understand the cultural variables
- Identify your own potential biases
- Use a framework to better understand how you experience these differences
- Increase cultural competency
- Determine your patient’s relationship with technology (meet them where they are at)

Image by: SPC Nathan Thome, U.S. Army
Cultural Variables

- Military
- Geographic location
- Ethnic, racial, linguistic and culturally diverse populations
- Technology
- Access to technology
- Socioeconomic status
Technology Biases

- What biases do you have regarding technology?
  - Native vs. Immigrant

- How about with technology in clinical care?

- How might these biases support/inhibit delivery of care?
Cultural Considerations - Key Takeaways

1. Understand the cultural considerations associated with technology use.
2. Understand your biases about technology.
Ethical Dilemmas with Technology

Image by: Lance Cheung, USDA
Mobile Health in Support of Evidence-Based Treatments for Stress (COVID-19 Pandemic)
Polling Question #4

How often do you engage with service members, their family members, or Veterans about stress-related concerns?

☑ Very frequently
☑ Frequently
☑ Occasionally
☑ Rarely
☑ Never
Some Causes of Stress

- Work
- Financial
- Emotional
- Family
- COVID-19
- Chronic Pain
Coping with Stress

Maladaptive Methods

Effect of Maladaptive Methods

Stress Management

Image by: Pfc. Paige Behringer, U.S. Army
Effects of Reducing Stress

On Mind

On Mission

On Body

On Relationships

Image by: Jeremy Thomas, Unsplash.com
Search of mobile apps for “Stress”

- Initially found 284
- Reduced to 93
- Then, 69
- To 47
- 31

Prioritized Top 10 apps

Reviewed public description, excluded 191 apps which did not pertain to stress and incurred cost

Excluded 24 apps that focused on education on stress only

Removed 22 apps that provided meditation for stress management

Removed 16 stress assessment and music generating apps
### Connected Health – Clearinghouse

#### Top Apps for Stress*

<table>
<thead>
<tr>
<th>App Rating Inventory</th>
<th>Market Research</th>
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<tbody>
<tr>
<td></td>
<td>Total ARI Score</td>
</tr>
<tr>
<td>Pacifica - Stress &amp; Anxiety</td>
<td>21</td>
</tr>
<tr>
<td>Youper - AI Therapy</td>
<td>20</td>
</tr>
<tr>
<td>MoodTools - Depression Aid</td>
<td>20</td>
</tr>
<tr>
<td>Moodpath - Depression &amp; Anxiety Test</td>
<td>19</td>
</tr>
<tr>
<td>Headspace: Medication &amp; Mindfulness</td>
<td>18</td>
</tr>
</tbody>
</table>

*Table rankings do not reflect an endorsement of any one app or developer.
Virtual Hope Box Research

Randomized Controlled Trials (RCT)

- $n = 118$ Veterans at high risk for suicide
- 63 behavioral health providers
- 13 treatment programs within the VA Portland Health Care System

Virtual Hope Box (1 of 2)
Virtual Hope Box (2 of 2)

- Emergency Contact
- Remind Me
Relax Me – Controlled Breathing
Muscle Relaxation
Mindfulness Coach

- Self-guided program designed to help you understand and adopt a simple mindfulness practice
- Effective for:
  - Reducing stress
  - Improving emotional balance
  - Increasing self-awareness
  - Helping with anxiety and depression
  - Coping with chronic pain
Mindfulness Coach Functions

1. Twelve audio-guided mindfulness exercises
2. Catalog of additional exercises available for free download
3. Goal-setting and tracking
4. Mindfulness mastery assessment to track progress over time
5. Access to support and crisis resources

Images by: U.S. Department of Veterans Affairs
Questions?

“Medically Ready Force...Ready Medical Force”

Image by: qimono, www.pixabay.com
Next Steps

Image by: Senior Airman Kelsey Tucker, U.S. Air Force

“Medically Ready Force...Ready Medical Force”
DoD and VA Mobile Health Apps and Provider Training

DHA Connected Health
https://health.mil/connectedhealth

DoD Mobile Health Training Program
https://health.mil/mhealthtraining

VA Mobile Health Apps
https://myvaapps.com

VA Mobile Health Provider Program
https://mobile.va.gov/providers
Contact Information

Connected Health Branch, Defense Health Agency
U.S. Department of Defense
Dha.connected-health@mail.mil
https://health.mil/mhealthtraining
References

Image by: Pexels, Pixabay.com
References (1 of 5)


Thank You

Image by: Ryan McQuire from Pixabay.com
How to Obtain CE/CME Credit

To receive CE/CME credit, you must register by 0825 ET on 29 May 2020 to qualify for the receipt of CE/CME credit or certificate of attendance. You must complete the program posttest and evaluation before collecting your certificate. The posttest and evaluation will be available through 11 June 2020 at 2359 ET. Please complete the following steps to obtain CE/CME credit:

2. Click on the REGISTER/TAKE COURSE tab.
   a. If you have previously used the CEPO CMS, click login.
   b. If you have not previously used the CEPO CMS click register to create a new account.
3. Follow the onscreen prompts to complete the post-activity assessments:
   a. Read the Accreditation Statement
   b. Complete the Evaluation
   c. Take the Posttest
4. After completing the posttest at 80% or above, your certificate will be available for print or download.
5. You can return to the site at any time in the future to print your certificate and transcripts at https://www.dhaj7-cepo.com/
6. If you require further support, please contact us at dha.ncr.j7.mbx.cepo-cms-support@mail.mil