Digital Mental Health

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Disclosures

Honoraria/Consulting fees
Otsuka Pharmaceuticals
Optum Behavioral Health

Ownership Interest
Actualize Health

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National Institute of Mental Health
P20 MH090318
R01 MH100482
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Verizon Foundation
Mental Health

12 Month Prevalence:
• >61 million (20-25%) American adults will meet criteria for a mental health disorder in any given year.
  • 24 million (9.5%) Mood Disorders
  • 44 million (18%) Anxiety Disorders

Workforce is Inadequate:
• 21% receive “minimally adequate” care in any given year.
• 350,000+ mental health professionals needed (>twice what we have).

Geography:
• 90 million Americans live in federally-designated Mental Health Professional Shortage Areas (55 million for primary care, 45 million for dentistry)
What is Digital Mental Health:

CBT delivered via different platforms

Didactic Content

Homework Exercises

Human Support
Research and Practice

Lots of Validation

~100 RCTs show that

• Self-directed digital treatment are at best minimally helpful.
• Coach-supported web-based interventions
• Appear to be as effective as standard treatments (ds=.56 – 1.08)
• Coaches do not have to be mental health professionals

Research-to-Practice Gap

Digital mental health technologies are poorly designed
IntelliCare Platform
www.intellicare.northwestern.edu

Apps in
www.cbits.northwestern.edu

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Diagnostic Status at End of Treatment


**DEPRESSION**
- Full Remission: 14.00%
- Recovery: 40.00%
- Symptomatic: 22.00%
- Total: 37.00%

**ANXIETY**
- Full Remission: 14.00%
- Recovery: 45.00%
- Symptomatic: 22.00%
- Total: 42.00%
Average App Launches over 8 weeks: 195
Average time: 1.1 min (Median = 17 seconds)

Average # of App Launches Per Week

www.cbits.northwestern.edu
New Directions in Digital Mental Health

Value-Burden Ratio
Personal Sensing


Sleep
Abdullah, Choudhury. UbiComp; 2014
Saeb... Mohr. J Med Internet Res. 2017 Apr 18;19(4):e118

Social
Min, J-M... Zimmermann, J. CSCW, 2013
Murnane... Choudhury. UbiComp; 2015

GPS & depression
Saeb... Mohr. J Med Internet Res 2015;17(7):e175
Saeb... Mohr.. PeerJ. 2016;4(e2537)

Challenges
• Lack of reproducability
• Variability

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Thanks to our funders and team!

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