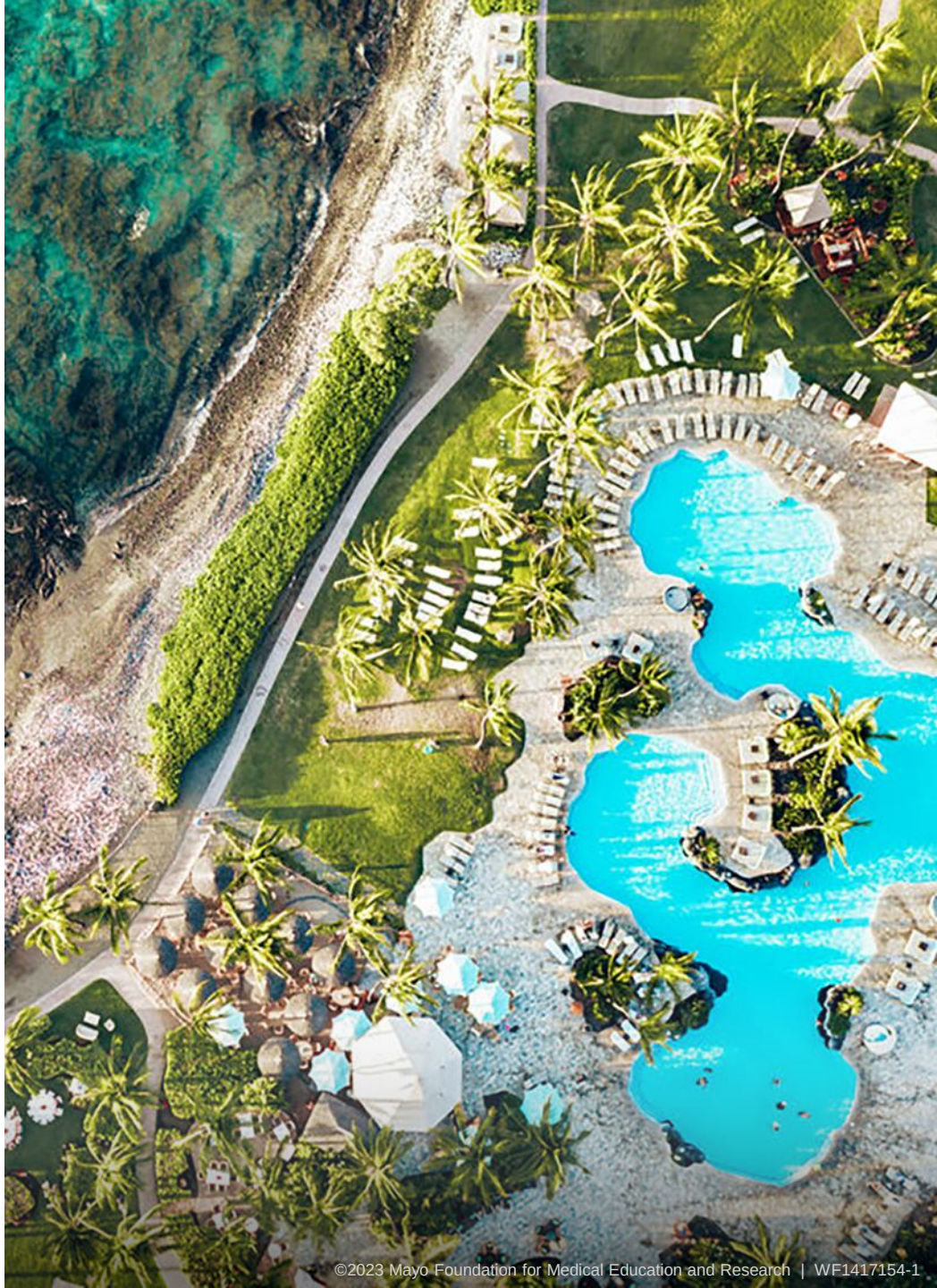
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PSYCHIATRY CLINICAL UPDATES 2023

March 7-10, 2023
Fairmont Orchid
Kohala Coast, Big Island, Hawaii



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MENTAL HEALTH APPS AND PLATFORM THERAPIES FOR ANXIETY

Craig N. Sawchuk, PhD, ABPP
Co-Chair Clinical Practice and Integrated Behavioral Health, Department of Psychiatry and Psychology
Mayo Clinic, Rochester

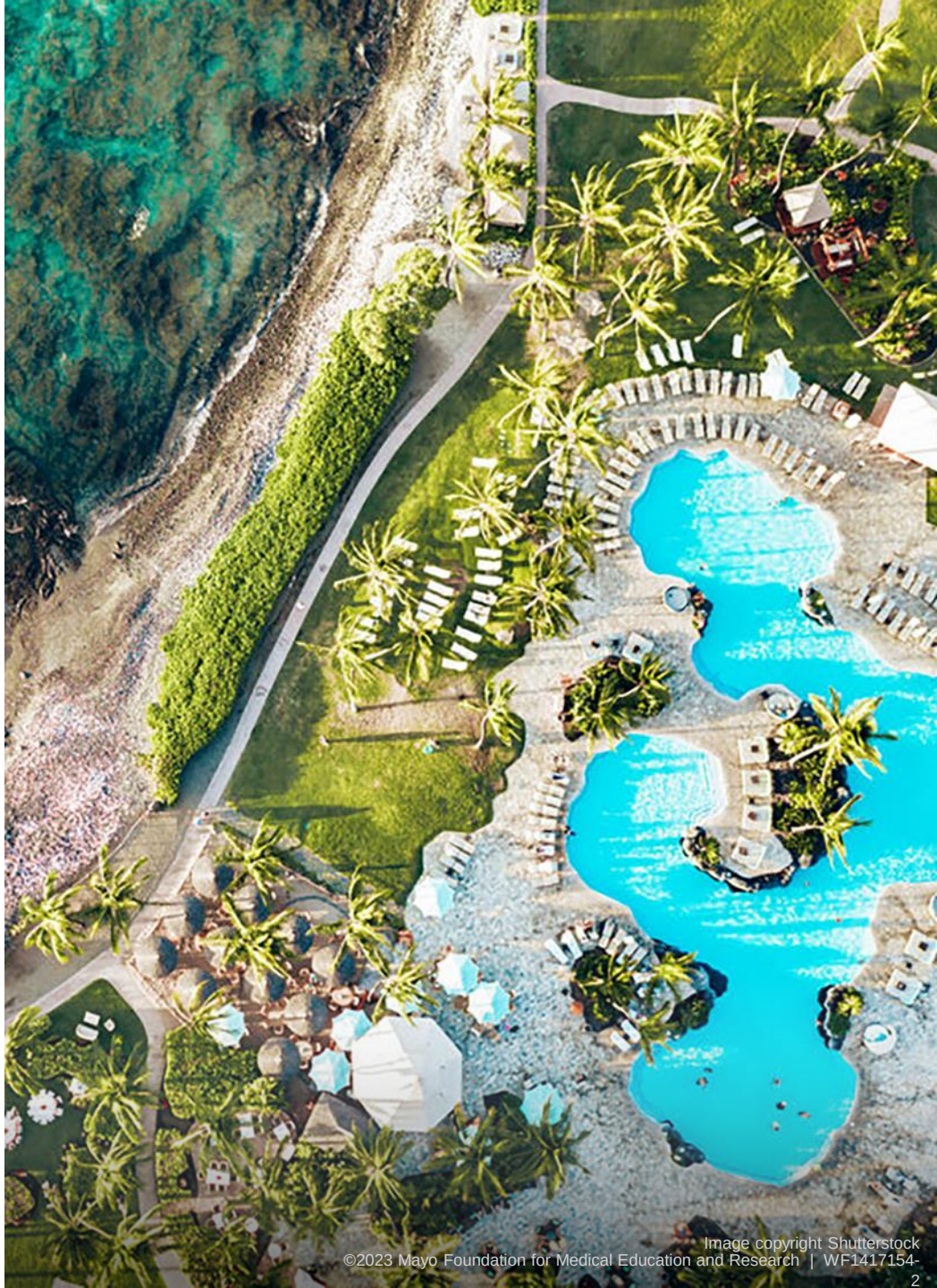


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DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIP(S) WITH INELIGIBLE COMPANIES

- Nothing to disclose

REFERENCES TO OFF-LABEL USAGE(S) OF PHARMACEUTICALS OR INSTRUMENTS

- Nothing to disclose

- Will discuss Ginger platform; pilot with Mayo Clinic FL not covered

All relevant financial relationships have been mitigated.

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LEARNING OBJECTIVES

- Name a resource for evaluating mental health apps
- Identify at least one mental health app with evidence for its effectiveness
- Describe features of platform therapies that may contribute to their effectiveness

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ANXIETY IS:

COMMON

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ANXIETY IS:

COSTLY

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ANXIETY IS:

TREATABLE

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COGNITIVE BEHAVIORAL THERAPY FOR ANXIETY

- Substantial evidence from RCTs
- Delivered in a variety of formats and doses
- Effectiveness of adapted protocols in primary care
- Highly preferable treatment of choice
- Reduced relapse CBT with or without medications
- Increasing evidence for ACT and Mindfulness

Kaczkurkin & Foa, 2015; Katzman et al., 2014;
Roy-Byrne et al., 2010; Twohig & Levin, 2017

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SECRET SAUCE OF CBT

- Exposure therapy
  - Situational
  - Imaginal
  - Interoceptive
- Cognitive therapy
  - Challenging thoughts
  - Building flexibility



ISSUE OF QUALITY CONTROL

- Strategies known to be the **least effective** for treating anxiety are used **most frequently**
- Strategies known to be the **most effective** for treating anxiety are used **least frequently**

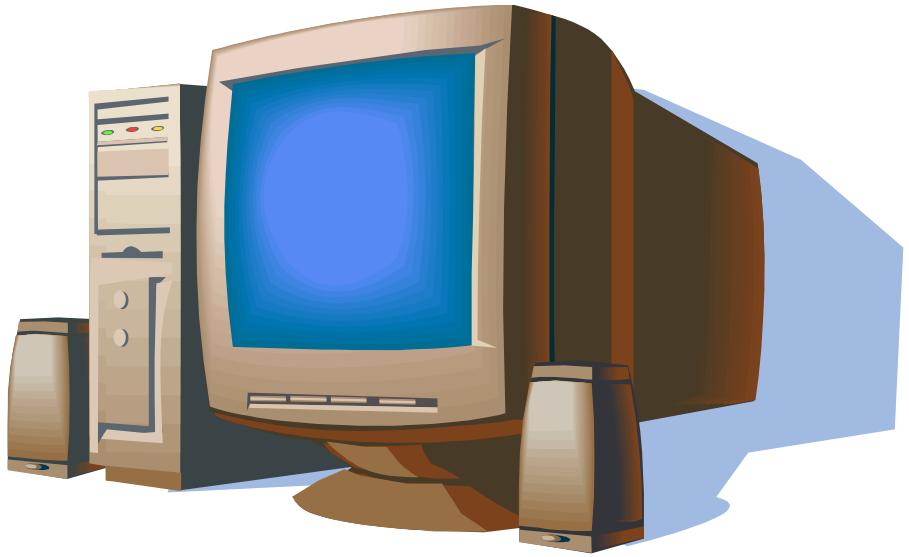
"All patients being treated with pharmacotherapy should be instructed to gradually face their fears (exposure to decrease avoidance)."

Katzman et al., 2014

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ACCESSING EVIDENCE-BASED CARE

- **Quality Control Therapist Locators**
  - Association of Behavioral and Cognitive Therapies
  - Anxiety and Depression Association of America
- **Primary Care Models**
  - Integrated Behavioral Health
  - Collaborative Care
  - Primary Care Behavioral Health
- **Technical Solutions**
  - Apps
  - Platform



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MENTAL HEALTH APPS

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There are a LOT of Apps for That

- 318,000+ health apps
- @200+ developed per day
- 90,000,000 downloads annually
- 20,000+ mental health content
- Expanding range of clinical problems



Lecomte et al., 2020; Pew Research Center, 2018; Statista, 2017; Torous & Roberts, 2017

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Ideas for Incorporating Apps in Medical Settings (Primary Care)

- Create an “App RxP” pad
- Push out options via EHR patient messaging
- Recommended options on external website
- Formal/informal part of care coordination program
- Offer as bridge option while waiting for care
- **Need to keep up to date!**

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Potential Benefits During the Pandemic

- Safe delivery and real-time access
- Borderless dissemination; cost-effectiveness
- Enhance communication with provider
- Ability for tailoring to individual needs
- Implementation options:
  - Stand alone, waitlist
  - Enhance, compliment existing treatment
  - Step-down, relapse prevention, maintenance of gains

Lecomte et al., 2020; Mohr et al., 2017; Satre et al., 2021; Sucala et al., 2017

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General MH-App Content

- Multi-modal education/information
- Self-monitoring
- Assessment; tracking
- Engagement reminders
- Suggestions, coaching
- Support, social networking
- Basic to higher-order skill-building
- High-step/crisis interventions

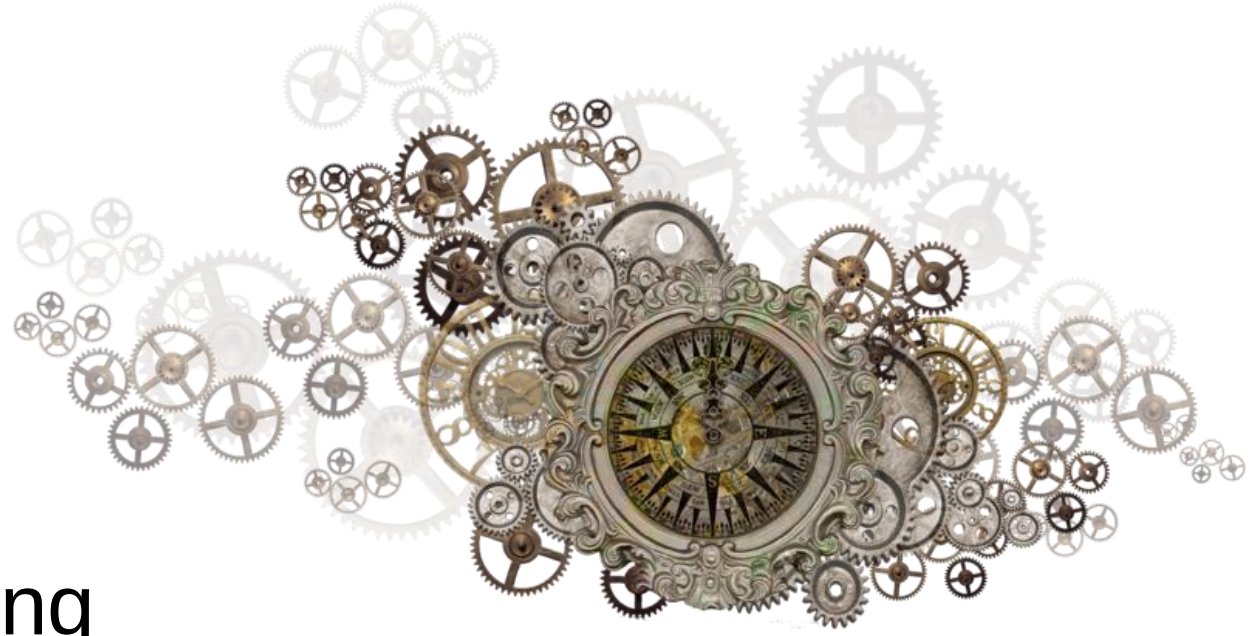


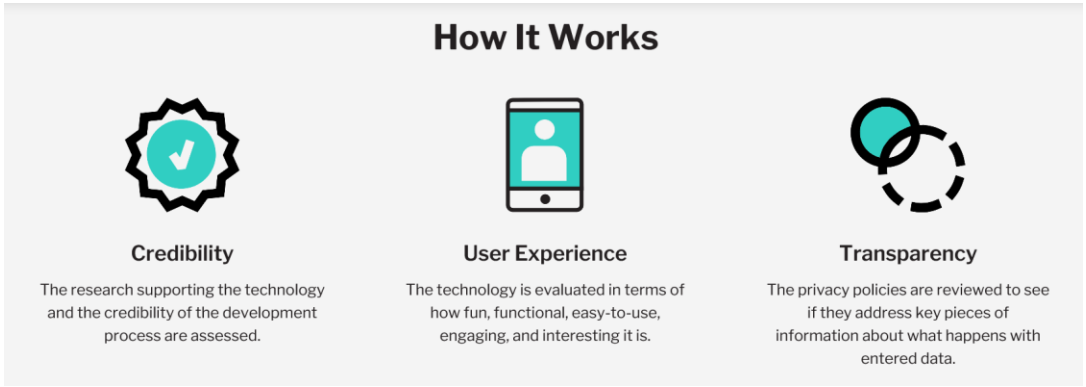
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PsyberGuide

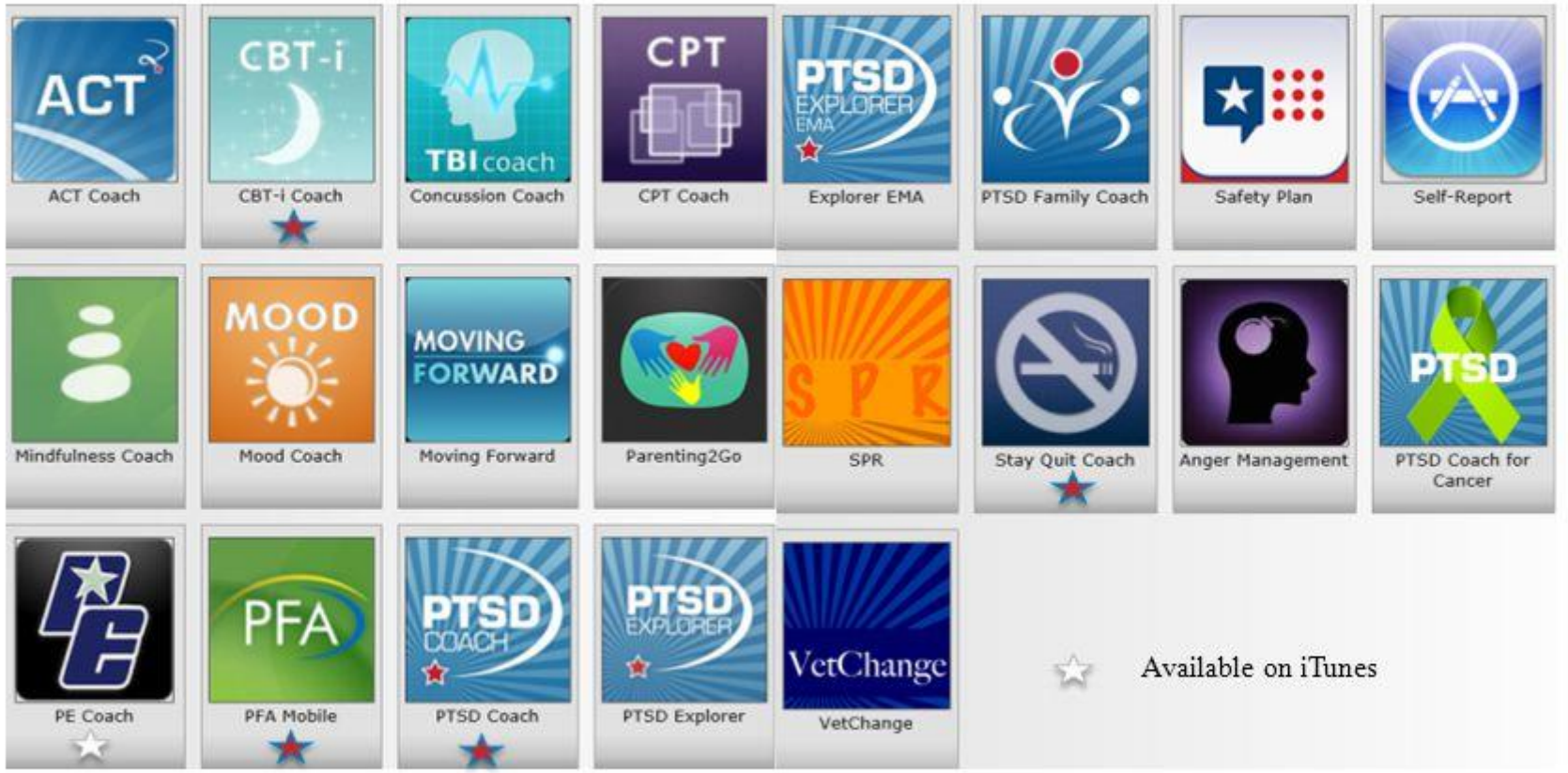
https://onemindpsyberguide.org



https://onemindpsyberguide.org/covid-19-mental-health-apps-pdf/

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VA-DoD Stand Alone Apps

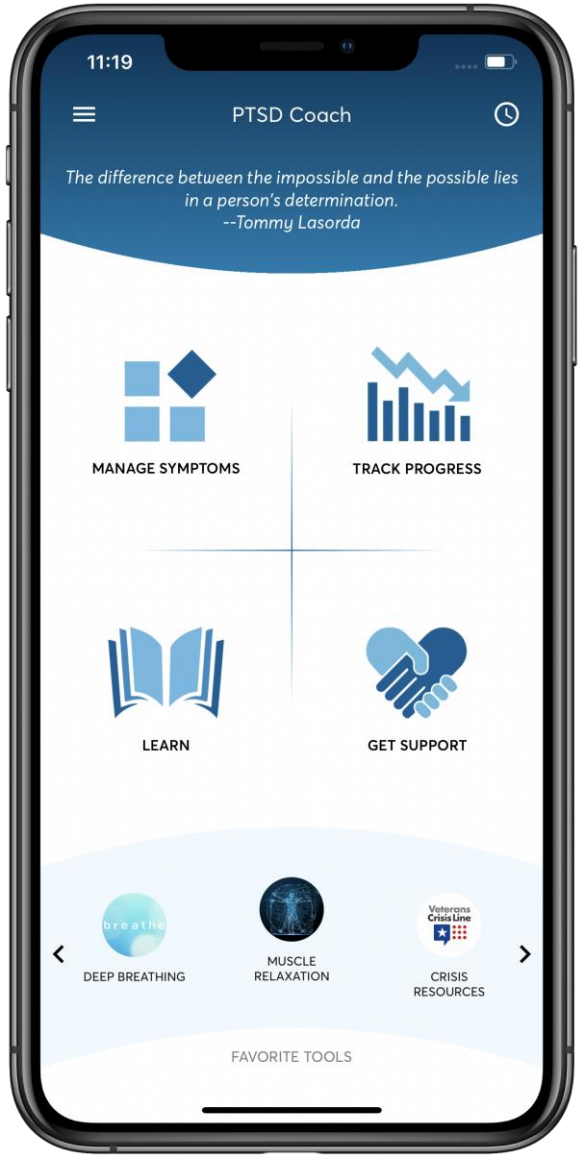


Apps are native and do not connect to the VA network.

https://mobile.va.gov/appstore

Anxiety/Depression: PTSD Coach (v.3.1)

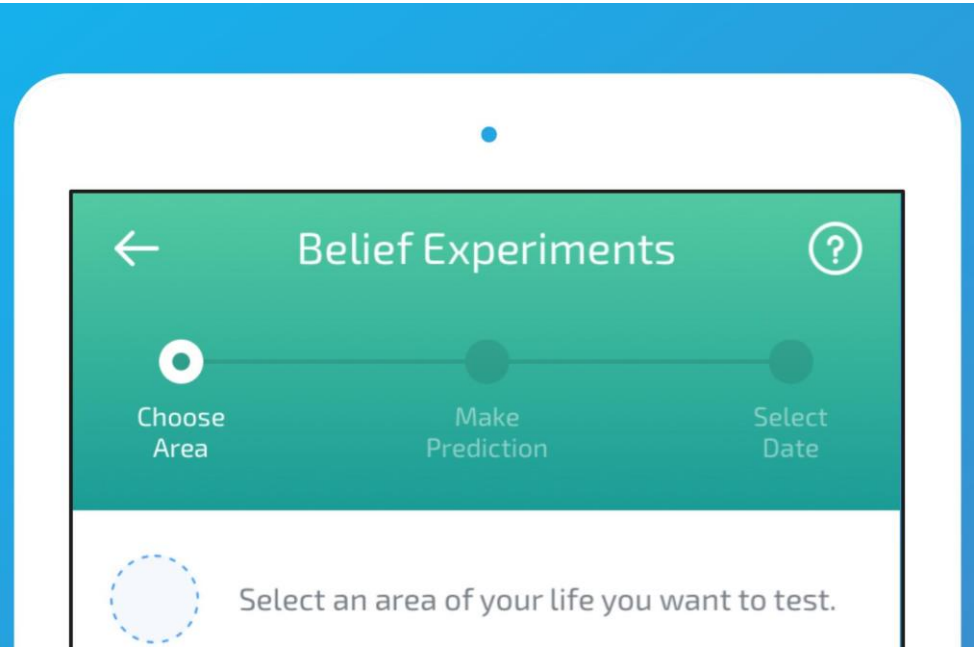
- Routine assessment using PCL
- Symptom management strategies
  - Exposure; cognitive challenging
  - Social support; sleep
- App > WL; clinician support > alone
- Substantial evidence; translations
- https://mobile.va.gov/app/ptsd-coach



Hallenbeck et al., 2022; Kuhn et al., 2017; Possemato et al., 2016

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Anxiety/Depression: MindShift CBT

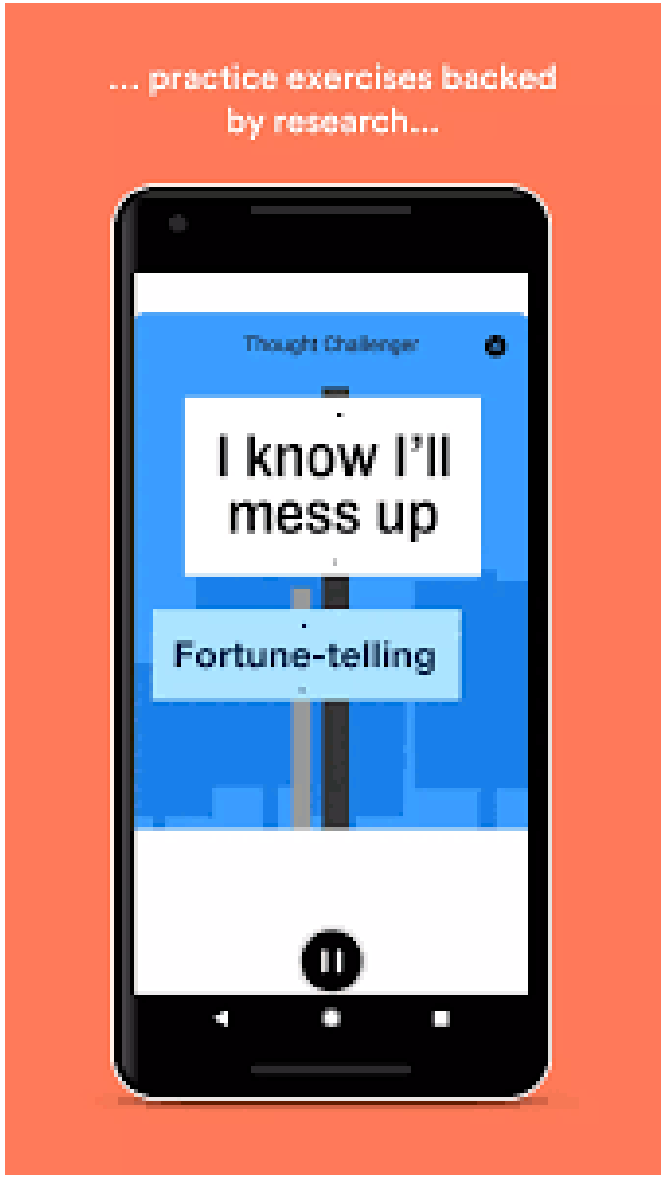
- Population health approach: Anxiety Canada
- Built on evidence-based principles for anxiety disorders (including perfectionism)
- Healthy Thinking, Chill Zone, Taking Action
- Basic education modules; community forum
- https://anxietycanada.com/resources/mindshift-cbt/

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Anxiety/Depression: Daylight 2.0

- Tailored evidence-based principles for anxiety disorders (exposure, challenging thoughts, conditioning, relaxation)
- Routine assessment (GAD-7)
- Significant improvements in anxiety, mood, and sleep; cost savings analyses
- https://www.bighealth.com/daylight/



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Carl et al., 2020; Miller et al., 2021

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ANXIETY (& DEPRESSION) APPS

- MindShift CBT
- PTSD Coach
- CPT Coach
- DBT Coach
- Mood Mission
- Daylight 2.0
- Woebot (chatbot)
- T2 Mood Tracker
- CBT Thought Diary
- Virtual Hope Box

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PLATFORM THERAPIES

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INTERNET-BASED CBT (ICBT)

- **Basic components of CBT**
  - Education, self-monitoring, relaxation, challenging thoughts, exposure, homework exercises
- **Online self-help**
  - Passive, unguided → active, guided
  - Increased sophistication, usability, graphics, tailoring, multi-modal education, moderated forums
- **Summary of evidence**
  - Moderate to large effect sizes for panic disorder, social anxiety, GAD, PTSD, and OCD; limited evidence for phobias
  - Moderate to large effect sizes for transdiagnostic conditions and anxiety symptoms
  - Low to moderate quality evidence (Cochrane)

Andersson & Carlbring, 2017;
Cochrane Review, 2016

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PLATFORM THERAPIES

- Phone, text, computer/tablet
- Support (24/7), coaching, treating
- Complimented digital tools
- Direct to consumer; organizational
- Stepped-cost and insurance options
- Subcontracted therapists (network)
- Therapists employed by company



NOCD (TREATMYOCD.COM)

- Exposure with Response Prevention (ERP) for OCD
- Trained ERP therapists; live interventions
- App support
  - Track progress, feedback
  - Goal setting
  - Skill-building
  - Reinforce learning
  - Push notifications



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17:11

For obsession

I will run over a person while driving

Add exercises from the following exposures:

Trigger - Driving

- Drive near the park at night with the radio on
- Drive near the park at night
- Drive near the park
- Drive around the block in my neighborhood
- Drive on a street without many trees

0 exposures selected

Done

17:10

Obsession

I will run over a person while driving

Triggers

People, things, and places that set off your obsession

8 Driving

+ Add a trigger

Exposures

Intentionally using triggers to face your obsession and get used to the distress

Driving

9 Drive near the park at night with the radio on

8 Drive near the park at night

7 Drive near the park

6 Drive around the block in my neighborhood

17:12

00:33

End Exercise

Drive near the park at night with the radio on

HOW TO USE SUDS TRACKING

Last SUDS rating 6/10

Did your discomfort increase? It's okay if it did. Try to stay with the ERP exercise without using compulsions. We recommend ending the exercise when your SUDS (Subjective Units of Distress Scale) tracking gets to below 50% of the initial rating or if you get bored and don't feel as uncomfortable.

17:19

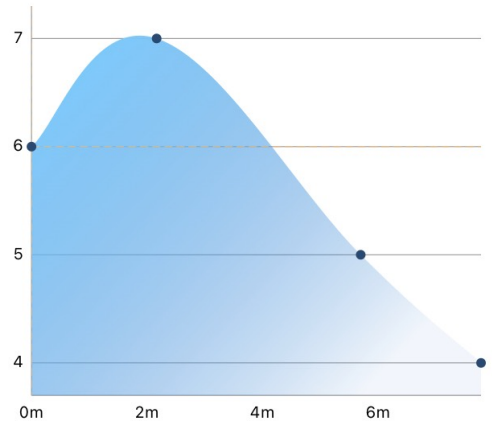
07:55

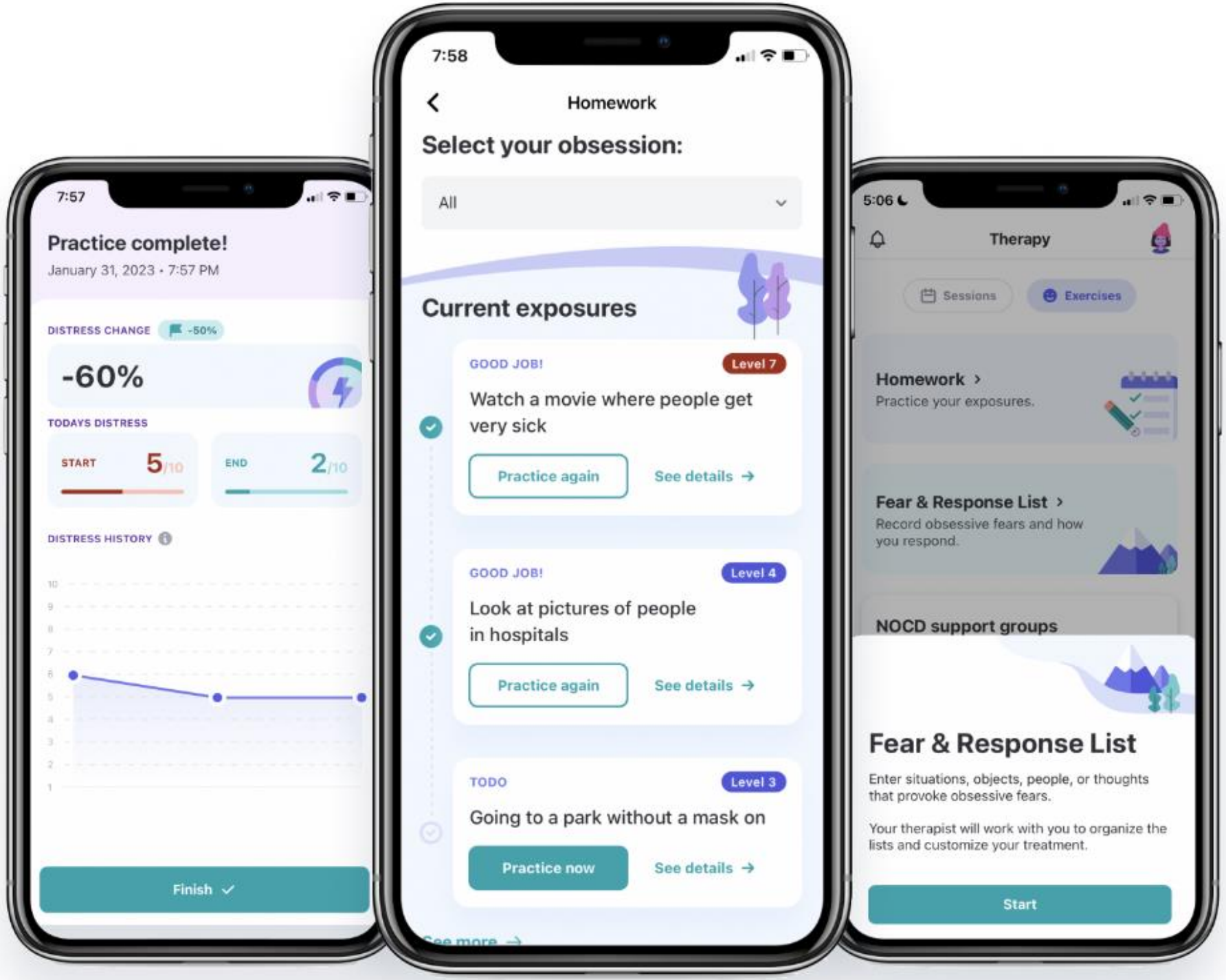
End Exercise

Drive near the park at night with the radio on

SUDS TRACKING

Continue the exercise until your discomfort decreases to 50% of the initial rating or below, we will ask you to rate your distress every two minutes.




7:57
Practice complete!
January 31, 2023 • 7:57 PM
DISTRESS CHANGE
-50%
-60%
TODAYS DISTRESS
START
5/10
END
2/10
DISTRESS HISTORY
Finish
7:58
Homework
Select your obsession:
All
Current exposures
GOOD JOB!
Level 7
Watch a movie where people get very sick
Practice again
See details
GOOD JOB!
Level 4
Look at pictures of people in hospitals
Practice again
See details
TODO
Level 3
Going to a park without a mask on
Practice now
See details
See more
5:06
Therapy
Sessions
Exercises
Homework
Practice your exposures.
Fear & Response List
Record obsessive fears and how you respond.
NOCD support groups
Fear & Response List
Enter situations, objects, people, or thoughts that provoke obsessive fears.
Your therapist will work with you to organize the lists and customize your treatment.
Start

NOCD OUTCOMES

- Naturalistic study (N = 3,552)
- 43.4% reduction in OCD symptoms; 62.9% response rate
- Time to achieve results = 10.6±1.1 hours
- Improvements in depression, anxiety, and quality of life
- Effect size similar to in-person ERP
- 12-week duration; maintenance of gains at 12 months



Feusner et al., 2022

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GINGER (HEADSPACEHEALTH.COM)

- Continuum of care to tailor needs
  - Behavioral health coaching
  - Evidence-based therapy
  - Medication management
  - Self-guided care
- Enhancing access and choice
  - Clinical session scheduler
  - Returning use as needed
  - Diversity in coaching and clinician staff
- Fidelity in training
  - Evidence-based practices
  - Cultural competency

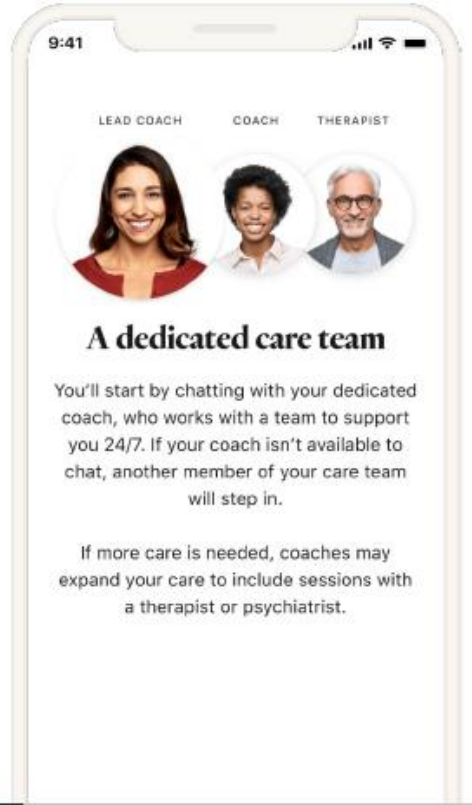


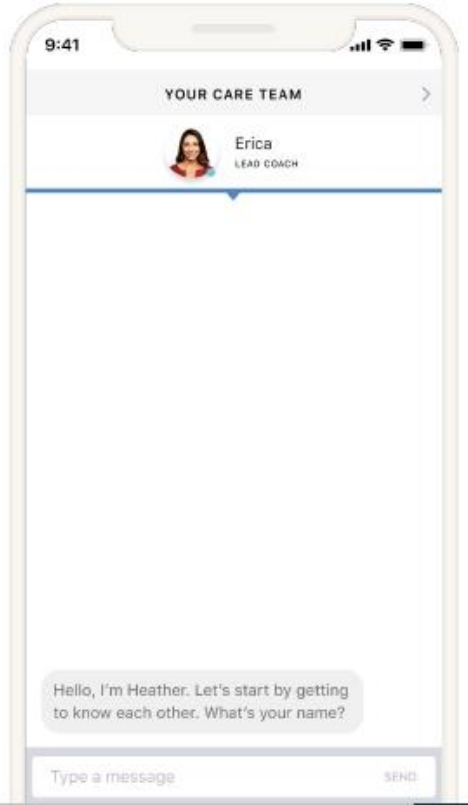
Used with permission by Headspace Health

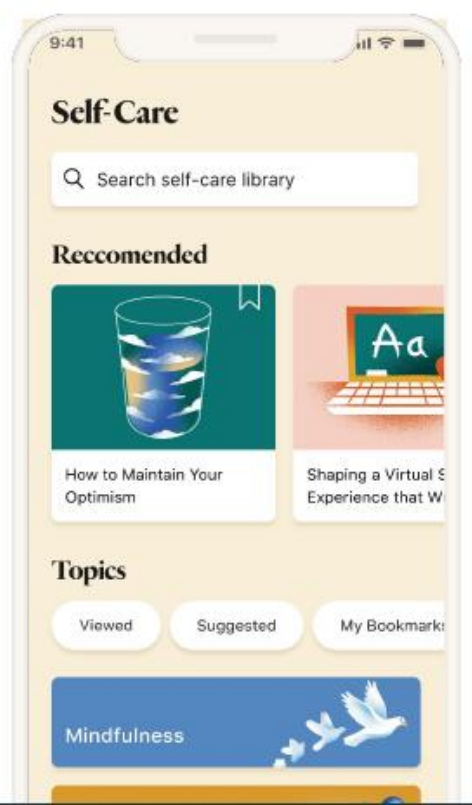
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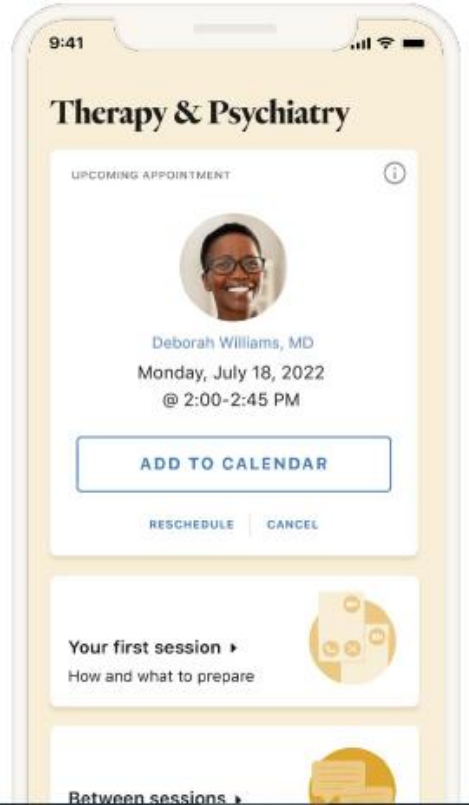
GINGER (HEADSPACEHEALTH.COM)

- 51 seconds to connect with a behavioral health coach
- 2.2 business days to first therapy appointment offered
- 3.1 business days to first clinical appointment offered
- High user satisfaction





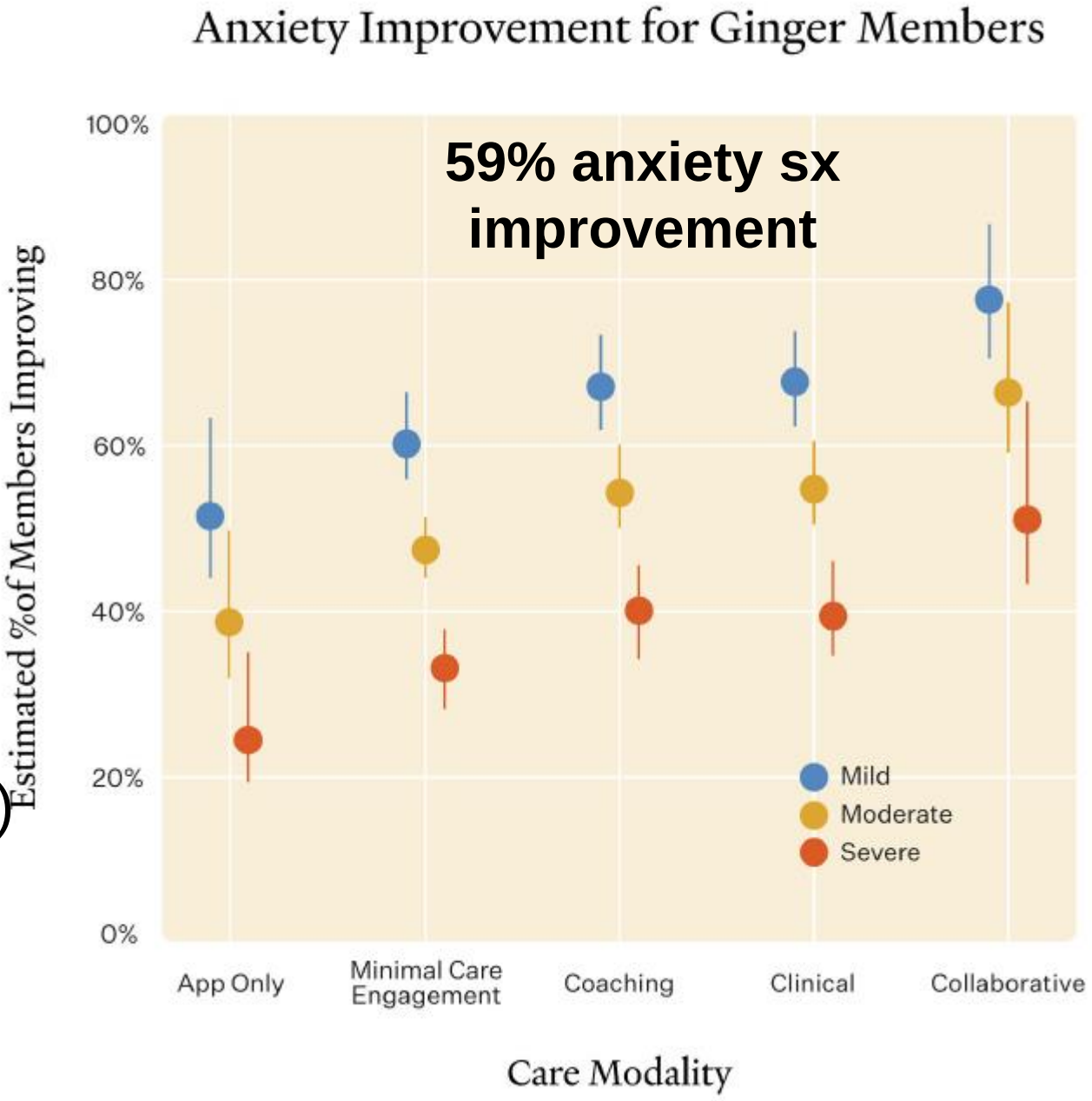






GINGER OUTCOMES

- Naturalistic study (N = 1,611)
- GAD-2 / GAD-7 outcome measures
- 85% moderate to severe range
- 47% reduction in anxiety symptoms
- 11.9% clinically significant change
- Predictors of improved outcomes
  - Combined care (text and therapy)
  - 13+ weeks of engagement



Kunkle et al., 2021

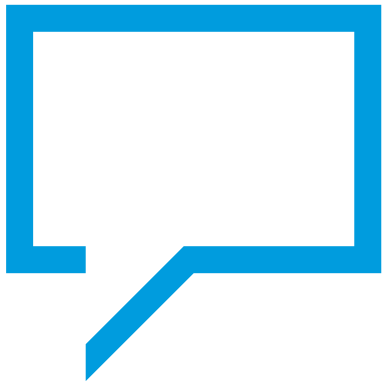
Next Steps: Reducing the Digital Gap

- Underrepresentation of content for underserved and diverse populations
- Adaptive, tailored content for individuals (AI)
- Real-world evidence (low effort data collection)
- Predictors of improvement
- Tailoring the dose to the population
- Cost effectiveness; minimum sufficiency
- Insurance coverage

Friis-Healy et al., 2021

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QUESTIONS & DISCUSSION



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