Smartphones Apps and Mental Health: Clinical Use, Research, APA Initiatives

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Clinical / Research

Advocacy / Policy

Publishing / Initiatives

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AMERICAN PSYCHIATRIC ASSOCIATION

njp Digital Medicine

NIH National Institutes of Health
Part 1: Clinical / Research

• You are seeing a new patient. He tells you that she has felt ‘down’ for the last month. Sometimes he hears voices, but thinks this only happens only when he drinks alcohol or does not get enough sleep. It is hard for him to remember exactly...
Part 1: Clinical / Research

Part 1: Clinical / Research

Composite Digital Biomarkers for Disease States

No Cognition
No Physiology

Behavioral (GPS)
Social (Call Logs)
Self Report (Surveys)

Genes
Molecules
Cells
Neural

Mobility
Sociability
Self-report clinical outcomes
Hospitalization
Part 1: Clinical / Research
Part 1: Clinical / Research
Part 1: Clinical / Research
Part 1: Clinical / Research

Schizophrenia Tracker

Orange: Without Medication
White: Abilify 10 mg
Yellow: Abilify 15 mg
Blue: Abilify 20 mg
Part 2: Advocacy / APA

• Over 10,000 mental health apps

• Always in flux

• How do patients or clinicians find the good ones, and avoid the bad ones?
Part 2: Advocacy / APA

- App Rating Framework

- Live on psychiatry.org

[Diagram showing layers of app evaluation criteria such as Interoperability, Ease of Use, Evidence, Risk / Privacy / Security, Ground, Assessing potential risk and harm, Understanding the context of the app, etc.]

[Webpage from APA Psychiatry.org showing the App Evaluation Model with steps: Step 1: Gather Background Information, Step 2: Risk/Privacy & Security, Step 3: Evidence]
Part 2: Advocacy / APA

PsychPRO: APA's Mental Health Registry

- Presidential Task Force: Increasing Access to Care Through Innovation
  - Technology
  - Business Models
  - Educations
Part 3: Publishing / Initiatives

• What is the role of randomized controlled trials in an era of personalized medicine?

• Digital mental health is still nascent and studies are small.

• The academic publishing landscape is changing.
Part 3: Publishing / Initiatives

• The nature of digital psychiatry makes ethics a central issue

• CORE is a resource for all digital health efforts / projects to share and learn best practices

• https://thecore.ucsd.edu/
Part 3: Publishing / Initiatives

- NIH Precision Medicine Initiative
  - Will include a smartphone mood app component in nearly all studies

- Verily Baseline Study
  - 10,000 people using apps/wearables
Conclusion

Digital health should mature from disruptive screens to innovative environments

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