Engaging Equity for Digital Mental Health Technology

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Pandemic

- Major shift to telehealth & apps for addressing mental health needs
  - In US, expanded options for reimbursement for tele-options & lowered liability for mental health professionals in case of privacy breach
  - Several popular mental wellness apps lowered or eliminated fees during pandemic
  - Positives: many people were able to still access mental health care
    - Many people find they prefer remote care options (less burdensome on time/resources)

Digital Divide & Access

- Lack of infrastructure in some communities: high-speed connections; up-to-date tech
- Marginalized, low-income groups less likely to have resources for access
  - Community mental health – fewer resources
- Difficult to address needs of people with more severe mental health issues
- Quality of service (& oversight of effectiveness)
  - Are some groups/people in the position of receiving lower quality or less effective digital services
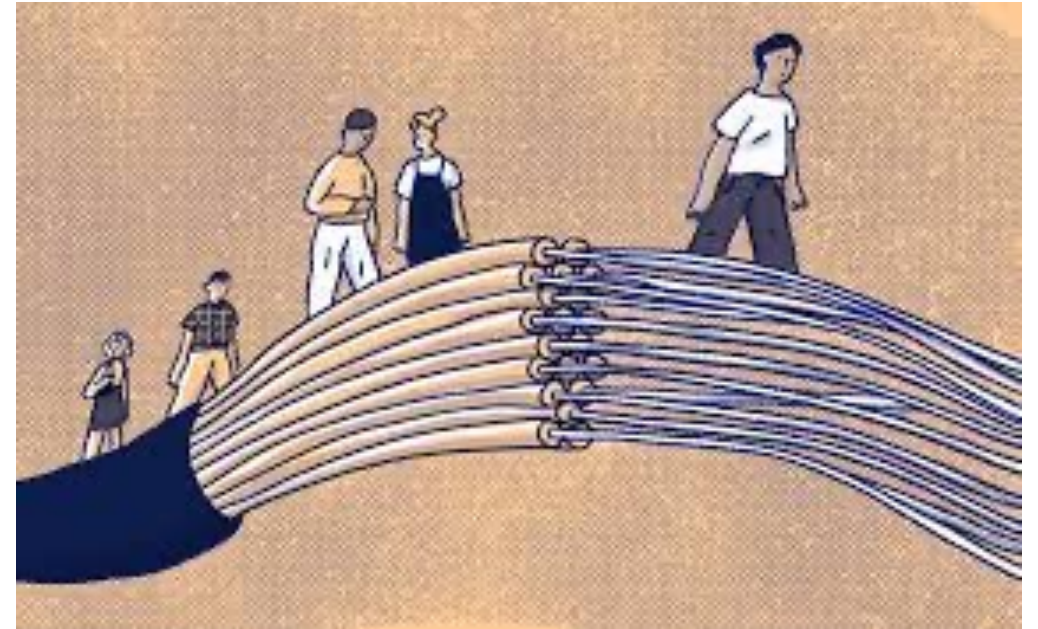
Interviews with Mental Health
Technology Developers & Clinicians

- Semi-structured interviews
- 50 developers interviewed
  - 24 women; 26 men
  - Computer science
  - Mental Health/Psychiatry
  - App design
  - UX research
  - Business/entrepreneurs
- 48 MH professionals interviewed

Interview:
Developer of Digital Mental Health re:
bias

"One of the biggest issues we know is that our team is primarily comprised of people who are from the Bay Area or at least who have lived in the Bay Area for a significant amount of time, and so that generates a significant amount of bias in how we do our product development, our content, etc., and so we're making extreme efforts in order to do user testing from all over the country with a diverse set of participants"

Gaming Mental Health: Gender & Age

- "So I tend to find males more interested in the technology aspect in it somehow feels like a gaming kind of thing to them and it can be helpful to have them share some of their personal information more externally." - A10

- "I think demographically the most represented group seems to be mothers in their 30s to 50s which I guess I...going into it, for some reason I expected that it would be a younger demographic primarily because...I don't know why, honestly, that's probably just my unbiased...I just kind of assumed that a newer app would be more popular among the younger demographics but it seems like sort of middle age primarily moms who might have...I think in at least one interview they kind of elaborated that it was a convenient sort of way that they could manage their symptoms like while waiting for kids or something." A07

Access and business

In terms of race, gender, location, etc., yeah, our user profile is very skewed to a very particular demographic.

"We are limited a bit when it comes to [diversity]…if we
ever get profitable, then we do have explicit plans
To more actively reach out to communities that we're
not reaching. But it takes money, essentially."

"The people who can afford to pay for our app, are unfortunately at
the top of the income spectrum. We can't really go downmarket
even though we'd like to, because our services are expensive, so we
have a lot of affluent patients…"

Mental Health Professional

"Certainly socioeconomic in part just because of the issue of accessibility. Being particularly aware of it with the school issues during COVID...it's almost an assumption that everybody's got a phone, everybody's got a smart phone, everybody's got a Zoom and everybody's got whatever...some people don't have computers and high speed internet and access to some of the technologies..."

"It can be hard to get my low-income Latina and Black clients to try the meditation apps. They say – that's for white yoga moms, it's not meant for me."

Meditation apps

App addressing Maternal Mental Health for Underserved communities

- "So we're definitely looking at leveraging technology to make the current structure of mental health care more accessible to underserved communities. And in large part, our focus is on minority populations who are disproportionately impacted by specifically looking at perinatal population. They are disproportionately insured through Medicaid but it also includes the privately insured. We are also looking at minority populations that are disproportionately impacted by maternal mortality and infant mortality. But it's hard because I'm having to figure out everything – how to build the app, how to get it out there, how to make sure it works for our communities when the research just isn't out there for what works best for us." - B41

Path Forward

- During development: engaging questions regarding purposes are tools designed to address and the developers' responsibilities
- Addressing context & systems in which apps are implemented/used
- Inclusivity in research & development
- Stakeholder involvement
- Apps focused on specific communities/subpopulations
  - Need more support/funding

Thank you!

- Funding
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