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Envisioning a Path toward Equitable and Effective Digital Mental Health

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Digital mental health technologies have been promoted with the promise of delivering wide-scale access to more efficient and effective mental health diagnosis and care. During the pandemic, the rapid and largescale shift to telemental health, and increased use of digital mental health tools and apps, tested that promise. While there were some digital mental health tools that provided safe and effective care (Marshall, Dunstan, and Bartik 2021); there were also many organizations, communities, and individuals that had insufficient infrastructure or resources to access or utilize effective digital mental health tools (Abraham et al. 2021). Skorburg and Yam (2022) outline important issues regarding safety, effectiveness and equity in digital mental health tools, with justifiable skepticism. In order to consider whether and how digital mental health tools may be used toward building an improved system of mental health care, it is useful to engage the broader social and systemic challenges in digital mental health.

Safety and effectiveness have been longstanding concerns, with ethicists and digital health researchers pointing out the harms that come from a digital health ecosystem in which the majority of mental health apps are not backed by evidence that they work (Anthes 2016; Martinez-Martin et al. 2020). The frameworks for establishing safety and oversight for digital mental health depend upon the context for which the digital mental health tool is developed and used, such as whether the tool is meant for direct-to-consumer, clinical or research applications. Digital mental health tools that would be used for clinical purposes generally are categorized as medical devices, subject to regulatory oversight and clinical validation to establish safety and accuracy, as is the goal with digital therapeutics (Martinez-Martin 2021).

Many of the safety concerns raised by the target article are most applicable to mental health apps that are directed at consumers and that are in the “wellness” category, not subject to regulatory oversight for establishing safety. While there are ethical arguments that would support the need for these consumer mental health apps to be evaluated by government agencies, there are also practical concerns regarding how to regulate an area that includes tens of thousands of apps.

Recommendations for safe and effective use of mental health apps often involves some human oversight, with a focus on tools that support specific skills or goals, such as using

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an apps that aid people with mindfulness practices. People may look to mental health care organizations with an established track record in digital mental health, such as the Veteran's Administration in the US, as trusted sources for evidence-based mental health apps (Jaworski et al. 2021). We may also look to models like that in Germany, in which a digital health tool must establish its effectiveness in order to be eligible for health insurance reimbursement (Gerke, Stern, and Minssen 2020). At the same time, in the US, mechanisms that rely on clinical oversight or health insurance for establishing efficacy could likely reinforce existing inequities in mental health care access and services.

Safety and efficacy issues go beyond the technical aspects of the digital tools, and encompass systemic issues, as well as what the tools are being used for and in what contexts. For example, telehealth platforms can provide remote mental health care effectively, with indications that some people even prefer the ease of telemental health (Abraham et al. 2021). However, areas lacking robust infrastructure for telehealth technology, such as LMICs and low-resourced areas, are often less able to implement effective telemental health care.

There are also different types of mental health apps, with some that directly connect people to therapy with another person, some focus on providing mental health education, some function as digital versions of therapy "workbooks," while others do seek to provide digital substitutes for therapeutic interactions. An overarching concern for both telemental health and apps is how to deal appropriately with people with an acute mental health crisis who need urgent attention that goes beyond what the digital tool offers. Crafting appropriate approaches to handling this challenging issue will likely require coordination and collaboration between a range of stakeholders in digital mental health.

Shaw and Donia (2021) set forth an approach to equity in digital health that orients "ethical attention to the question of what kind of world we hope to bring about through the design and deployment of a given technology." Given the profound inequities of the mental health care system, that include racial disparities as well as structural barriers to treatment and care, one must envision how the mental health system must be changed—not just the digital tools—in order to bring about improvements in care. Then, one might consider the opportunities for developing digital mental health tools that can help bring about that better world of mental health care.

The Covid-19 pandemic did generate an expected increase in mental health problems worldwide. A significant portion of the increase in mental health issues has been attributed to social problems such as job loss or food insecurity that led to depression and anxiety (Moreno et al. 2020; Martinez-Martin et al. 2020). An approach to digital mental health equity must also allow for recognizing when digital mental health tools provide a useful and needed form of intervention, and when funding other types of interventions—such as economic and social support for people impacted by the pandemic—is more appropriate and useful.

Moreno et al. (2020), set forth recommendations for changing mental health care to better coordinate services, mitigate health disparities, For example, technologies like digital phenotyping could too easily be applied toward mental health practices that are experienced

as invasive surveillance or efforts to control the behavior of marginalized people (Martinez-Martin et al. 2018). However, with input and oversight from relevant stakeholders, such as community mental health advocates or people with lived psychiatric experience, digital phenotyping practices could be used to assist with public mental health screenings or better understand mental health needs in a community (Moreno et al. 2020). The foundation for an equitable approach to digital mental health must include the involvement of mental health stakeholders and communities in the process of design and implementation of digital mental health tools. One may look to LMICs for examples of designing digital mental health services compatible with local resources and infrastructures in order to deliver mental health information and services (Moreno et al. 2020).

There are opportunities for digital mental health tools to address the needs of specific populations in new and impactful ways. For example, there are apps that have developed by in order to meet specific needs within their communities, such as addressing maternal mental health among people of color or providing culturally-grounded mental health assistance. Addressing equity and effectiveness of digital mental health tools remains a significant concern. Paths forward for digital mental health should involve interdisciplinary researchers as well as diverse groups of stakeholders in order design a more equitable mental health system in which to use these tools.

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