

Digital Technology Can Help Transform Mental Health in the U.S.

Position Paper

The COVID-19 crisis has disrupted traditional in-person delivery of mental health services and brought great suffering to many, but it has also revealed the potential of digital technology¹ to improve mental health in the U.S. and elsewhere around the world. Overnight, the mental health care delivery system has been transformed from a largely in-person model to a virtual one. This transformation has illustrated the potential of digital interventions, which have been primarily provided by teletherapy but are increasingly involving other modes of digital interventions. At the same time, fundamental problems of access to mental health care remain. Further, many populations are being left out of this digital revolution. Below, we briefly describe some of the limitations of the current mental health care system, suggest the potential of digital technology to improve it, and conclude with recommendations as to the way forward².

The Current Mental Health System is Struggling. According to the CDC, in a given year, 20% of all Americans experience mental health disorder yet fewer than half receive treatment, with much lower access rates for less resourced populations. We have unacceptable levels of veteran suicide rates, adolescent depression, opioid addiction, reported sexual assault, and disaster stress reactions. The inadequacies of our mental health delivery system create both a huge economic burden and needless suffering.

Reasons for this Failure. The need for the redesign and transformation of mental health is indicated by the many widely acknowledged limitations of the current system of in-person care. Mental health interventions have been largely designed by providers with inadequate partnership with consumers. Large proportions of those likely to benefit do not seek mental health care, and, among those who do, dropout from treatment is very high. Treatment systems fail to engage effectively with the natural support systems (e.g., family, friends, peers and neighbors) that sustain wellbeing for many individuals. There has been relatively little integration of health-related behaviors (e.g., exercise, nutrition, sleep hygiene) into mental health provision. Further, there is a widely acknowledged “science-practice gap” in that the therapies best supported by research evidence are not widely available and “measurement-based care,”³ often recommended in policy discussions, has not gained significant ground. While empirically supported interventions exist, there are simply not enough therapists to meet demand. Moreover, many rural communities lack local availability of providers, and there is a significant

¹ Digital technology refers to the use of computers, the Internet, mobile devices, apps, and additional digital devices provided as stand-alone self-help programs, guided/moderated programs, or blended programs with some face-to-face encounters in various combinations.

² Background documents are available if requested.

³ “Measurement-based care” refers to the routine monitoring of intervention outcomes to guide clinical decisions.

lack of diversity in the ranks of mental health professionals. Interventions are almost entirely treatment oriented, offered after problems have developed (and persisted for years); and services to prevent onset of clinical episodes are rarely available. The disaster mental health response system is poorly resourced, lacks an evidence base, and is relatively unprepared to deal with large-scale crises, as has been illustrated during the recent pandemic. Perhaps most important, mental health services focus primarily on individual help seekers, rather than larger populations, and there is little organized attempt to reduce distress, improve wellbeing, and increase the emotional resilience of entire populations in need.

Potential of Digital Technology. While digital technology will not solve all these problems, it can help address many of them in ways that are likely to be both efficacious and cost-effective. Research has demonstrated the effectiveness of Internet-facilitated interventions for a range of mental health difficulties, including depression, anxiety, eating disorders, trauma, and substance use disorders. Digital interventions can increase access to mental health self-help tools and educational programs, increasing reach to underserved populations and reducing disparities in access to expert support (e.g. to those living in rural areas.) Treatment with digital technology for individuals with mild to moderate symptoms can help many while reducing health care costs. With the emergence of revolutionary data generation capabilities associated with the new mobile technologies, digital mental health can greatly accelerate the move towards measurement-based care. These mental health technologies align seamlessly with the revolutions in informatics/big data analytics, personalized medicine, and emergent abilities of individuals to monitor their own needs and behavior. Digital services can be designed not to replace face-to-face (f2f) approaches, but to be integrated with them and to improve their effectiveness, such that digital and f2f services work in synergy. Nonetheless, in all these areas of challenge for mental health, digital approaches can be delivered at lower cost, while reducing the social stigma associated with seeking help via f2f services. Of note, the United States is well behind many other countries in providing digital services to their populations in need. Critical issues that need to be addressed are **reimbursement, licensing, training, infrastructure and regulation** of digital resources.

Current Obstacles and Issues. However, an adequate national-level scale-up of digital mental health services will need to confront a range of obstacles, including issues related to privacy and confidentiality; ownership and use of personal information; engagement of professionals in use of new methods; engagement of consumers and mental health providers in the co-design of prevention and intervention strategies; integration of commercial and academic efforts into a government-facilitated delivery system; and the ongoing resourcing of efforts required to achieve a population-level, digitally supported, mental health prevention and intervention system.

The Role of The Biden-Harris Administration in Redesigning the U.S. Mental Health Care System. To realize the potential of digital mental health for addressing the many limitations of current mental health services, some re-conceptualizing of mental health care will be needed. Digital technology should be integrated into practice at all levels, so that clinics, hospitals, community organizations, as well as the individual mental health professionals who work in them, embed digital tools and interventions as part of routine care. Prevention must become an inherent part of the system, with agencies and organizations implementing available digital interventions earlier in the development of problems. A new focus on population-level approaches to mental health, self-care and well-being will need to supplement existing approaches, and individuals, organizations, and systems of care will need to be reorganized and developed to take on this focus. Intervention choices should be guided by data, and outcomes should be monitored. Also important will be the creation of an intra-operable national platform, open to all, supporting digital mental health program provision so that mental

health professionals, helpers of all kinds, researchers, and consumers can use, adapt, evaluate, and improve upon existing systems and tools.

Primary Recommendation. We believe that only the government has the resources and incentives to provide digital mental health services for all. **We strongly encourage the Biden-Harris transition team to create a high level position and department related to digital mental health provision.** The role of this position/department would be to identify, implement, monitor and continuously improve digital interventions at a population level to reach all, including underserved, low resourced populations and those with serious mental illness and drug or alcohol abuse.

As experts and leaders in the field, we are ready and willing to support this initiative, and to provide further background and discussion as would be useful to move this foreword.

Co-chairs:

C. Barr Taylor, M.D. Professor of Psychiatry (emeritus), Stanford University; Research Professor and Director of m2Health, Palo Alto University; Past President, Society of Behavioral Medicine

Josef I. Ruzek, Ph.D., Adjunct Professor, Psychiatry and Behavioral Sciences, Stanford University; Co-Director of Center for m2Health, Palo Alto University; Professor of Psychology, University of Colorado, Colorado Springs; Former Director (Retired), National Center for PTSD Dissemination and Training Division.

U.S. Contributors:

Joseph Bankman, J.D., Psy.D., Ralph M. Parsons Professor of Law and Business, Stanford Law School

Patricia A. Cavazos-Rehg, Ph.D., Professor of Psychiatry, iCHASM, Health & Behavior Research Center; Director, Mentored Training Program in Clinical Investigation; Co-Director, LEAD Training Program, Washington University School of Medicine

Andrea K Graham, Ph.D., Assistant Professor of Medical Social Sciences and Preventive Medicine, Northwestern Medicine

David Mohr, Ph.D., Director, Center for Behavioral Intervention Technologies (CBITs); Professor of Preventive Medicine (Behavioral Medicine), Medical Social Sciences and Psychiatry and Behavioral Sciences

Ellen Fitzsimmons-Craft, Ph.D., Assistant Professor of Psychiatry, Washington University School of Medicine

Lee Ritterband, Ph.D., Professor of Psychiatry and Neurobehavioral Sciences, University of Virginia, School of Medicine; Past President International Society for Research on Internet Interventions

Michelle Newman, Ph.D., Professor of Psychology, Pennsylvania State University

Ricardo F. Muñoz, Ph.D., Distinguished Professor of Clinical Psychology, Palo Alto University and Founder, Institute for International Internet Interventions for Health (i4Health)

Stephen Schuller, Ph.D., Associate Professor of Psychological Science and Informatics, University of California, Irvine; Executive Director, One Mind PsyberGuide

Ruth Striegl Weissman, Ph.D., Professor of Psychology (emeritus) and past Academic Vice-President and Provost, Wesleyan University, Connecticut.

International Contributors

Angel Enrique, Ph.D. Digital Health Scientist, SilverCloud Health, Ireland

Corinna Jacobi, Ph.D., Professor for Clinical Psychology and E-Mental Health, Technische Universität Dresden; Chair, iCARE, Europe

David Ebert, Ph.D. Associate Professor for Clinical Psychology, VU University Amsterdam; Co-Founder, Co-Managing Director and Chief Scientific Officer of HelloBetter; President of the International Society for Research on Internet Interventions

Brian Oldenburg, Ph.D. Chair of Non-Communicable Disease Control Melbourne School of Population and Global Health; Director, NHMRC Centre for Research Excellence in Digital Technology to Transform Chronic Diseases; Director of the WHO Collaborating Centre for Implementation Research and Prevention and Control of NCD's, Australia

Derek Richards, Ph.D., Chief Science Officer, SilverCloud Health, Ireland

Shiri Sadeh-Sharvit, Ph.D. Clinical Psychologist; Chief Clinical Officer, Eleos Health, Israel

Nick Titov, Ph.D., Professor and Director of Psychology, Macquarie University; Director, MindSpot, Australia