

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Impact of the COVID-19 pandemic on transgender and gender diverse health care



Transgender and gender diverse individuals experience pervasive invalidation and discrimination in our society. Gender-minority stressors, including gender-related stigma and discrimination, increase vulnerability to health problems (as compared with cisqender peers) resulting in disparities in virtually every domain of life, from higher rates of victimisation and mental health problems, including suicidality, to inadequate access to public accommodations, housing, and necessary health care.¹ Although the full effects of the COVID-19 pandemic will take years to elucidate, especially as we face waves of multiple SARS-CoV-2 variants (eq, delta [B.1.617.2]), it is apparent that the pandemic has resulted in exacerbated disparities for transgender and gender diverse people across several crucial determinants of health.² Thankfully, necessity has bred ingenuity, including the widespread adoption of telehealth, a practice that can better meet the needs of transgender and gender diverse people beyond the scope of the current public health crisis. Building on previous correspondence,² we review lessons learned from 2020 to see how health care for transgender and gender diverse individuals might be improved in the coming years.

For transgender and gender diverse individuals with intersecting marginalised identities (eg, transgender women of colour), structural or systemic inequity and discrimination became particularly pronounced during the COVID-19 pandemic: higher proportions of individuals in unstable housing and employment, and greater financial difficulties were reported.³ In a US poll of 7000 lesbian, gay, bisexual, transgender, and gueer adults from April to May, 2020, the Human Rights Campaign found 19% of transgender and gender diverse people and 26% of minority ethnic transgender and gender diverse people of colour became unemployed due to the pandemic, compared with 12% of the general population.⁴ Economic hardship disproportionately affected minority ethnic transgender and gender diverse people, with 59% of transgender and gender diverse people and 67% of minority ethnic transgender and gender diverse people stating they were very concerned they could not pay their bills, compared with 15% of the general population. Recent policy efforts, such as the Fair Housing Act in the USA, are intended to reduce housing discrimination related to transgender and gender diverse individuals, yet the impact remains to be seen.

Although the COVID-19 pandemic compounded many existing disparities, the most notable was markedly reduced access to expert clinical care. As public health authorities called for appropriate measures to mitigate the spread of COVID-19, delays occurred in accessing gender-affirming health services. For example, the cessation of non-emergent surgeries in the USA and many other countries effectively closed the door on all gender-affirming procedures and further delayed access to medically necessary procedures for transgender and gender diverse people.⁵ Additionally, access to even the most basic health services became difficult. Finding a new health-care clinician for evaluation for gender-affirming hormone therapy became more challenging as healthcare systems had limited enrolment and prioritised patients already established in their system. While the pandemic severely curtailed access for existing patients within health systems, it left many new patients without recourse.

As health-care systems adapted to the new realities of care and integrated telemedicine, transgender and gender diverse people newly seeking gender-affirming health care were faced with a patchwork of practice approaches. Given limited guidance across practice settings, health professionals adept at gender-affirming care either adapted their approach to hormone initiation, forgoing in-person physical examinations, or were adamant that a physical examination was essential before prescribing. Without clear guidance from transgender health societies and organisations, clinicians were not able to provide congruent policies and messaging across clinics, leaving new patients to search for clinicians who felt most comfortable initiating gender-affirming medical interventions while foregoing in-person assessment.

Mental health disparities experienced by transgender and gender diverse people were notably exacerbated during the pandemic, as COVID-19 precautions reduced access to social support.⁶ For transgender and gender diverse people, this reduced access meant



Published Online September 24, 2021 https://doi.org/10.1016/ S2213-8587(21)00266-7 losing a crucial source of resilience against the effects of gender-minority stress. A *Washington Post* review of calls to Trans Lifeline—a crisis telephone line staffed by transgender and gender diverse people—indicated that 24% of calls from March to July, 2020, specifically mentioned the absence of a transgender community during this time.⁷ Relatedly, transgender and gender diverse people had fewer opportunities to spend time socially acknowledged in their affirmed gender during the COVID-19 pandemic when in-person gatherings were forbidden. In response to reduced access to care and decreased social connectedness, mental health indicators among transgender and gender diverse people worsened, with increased rates of depression, anxiety, and suicidality.⁶

Coping with the treatment of and recovery from COVID-19 itself might be challenging for transgender and gender diverse individuals given decreased inperson support during this time and worsened mental health indicators. In addition to persistent physical symptoms (breathlessness, early fatigue, etc), COVID-19 often also involves a psychological toll including mental health impairments (cognitive impairment, posttraumatic stress disorder, and anxiety), which might compound existing stressors.⁸ Furthermore, after diagnosis with COVID-19, one must often undergo an isolation process at home or in a hospital room while contemplating questions about recovery and coping with the impact of limited in-person social support.

As the USA continues to recognise the destabilising effects of the COVID-19 pandemic, the health-care system is challenged to learn from these temporary fixes to best address longstanding as well as pandemicrelated barriers to delivery and access of equitable health care for transgender and gender diverse people. As such, while ongoing efforts need to be focused on reducing structural, systemic, and interpersonal gender-minority stress, racism, and other forms of oppression, continuing insurance coverage of telemedicine and improving necessary infrastructure (eq, high-speed internet) would allow people in rural areas, older people, and people with restricted mobility and transport to have access to quality health care.9 Additionally, updating crossstate licensing regulations to allow expanded forms of interstate practice would demonstrate clear benefits in improving access to gender-affirming health care. There are already free-market solutions using existing efforts

to reduce barriers to interstate licensing regulations and telemedicine: private health technology companies such as Plume and Solace have gained momentum as a mechanism of obtaining health information and gender-affirming hormone therapy virtually.

The COVID-19 pandemic continues to stress healthcare systems and underscores systematic deficiencies that transgender and gender diverse individuals face in seeking care. With the rapid proliferation of telemedicine in this time of need as well as innovative virtual resources, patients and clinicians have experienced a system that can more equitably serve patients where they live. Rather than return to that status quo of patchwork systems with numerous coverage and access barriers to gender-affirming care, there is an opportunity to create a novel, improved standard to ensure everyone, especially transgender and gender diverse people, can benefit from increased access to quality and compassionate health care, inclusive of primary, mental, and specialty care.

AWB declares the National Institute on Drug Abuse/National Institutes of Health (K23DA043418-04) supported her salary. CGS declares that the National Heart, Lung, and Blood Institute/National Institutes of Health (1K01HL151902-01A1), American Heart Association (20CDA35320148), and Boston University School of Medicine Department of Medicine Career Investment Award supported his salary. CGS is an unpaid board member of the US Professional Association for Transgender Health. CMB, MI, and CAS declare no competing interests. The views reflected herein are those of the individual authors and are not those of the respective institutional affiliations of the authors or the US Government.

*Claire M Burgess, Abagail W Batchelder, Colleen A Sloan, Michael leong, Carl G Streed Jr claire.burgess@va.gov

Department of Mental Health, VA Boston Healthcare System, Boston, MA 02301, USA (CMB, CAS); Harvard Medical School, Boston, MA, USA (CMB, AWB); National TeleMental Health Center, VA Connecticut Healthcare System, West Haven, CT, USA (CMB); Fenway Health, Boston, MA, USA (AWB); Behavioural Medicine Program, Department of Psychiatry, Massachusetts General Hospital, Boston, MA, USA (AWB); Department of Psychiatry (CAS) and Department of Medicine (MI, CGS), Boston University School of Medicine, Boston, MA, USA; Pulmonary Critical Care Unit (MI) and Center for Transgender Medicine and Surgery (CGS), Boston Medical Center, Boston, MA, USA

- Testa RJ, Habarth J, Peta J, Balsam K, Bockting W. Development of the gender minority stress and resilience measure. *Psychol Sex Orientat Gend Divers* 2015; **2:** 65–77.
- 2 Wang Y, Pan B, Liu Y, Wilson A, Ou J, Chen R. Health care and mental health challenges for transgender individuals during the COVID-19 pandemic. *Lancet Diabetes Endocrinol* 2020; 8: 564–65.
- 3 James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality, 2016.
- 4 Human Rights Campaign Foundation. The economic impact of COVID-19 intensifies for transgender and LGBTQ communities of color. June 15, 2020. https://assets2.hrc.org/files/assets/resources/COVID19-EconImpact-Trans-POC-061520.pdf?_ga=2.171216672.1406623264.1631538215-145658596.1631538215 (accessed June 1, 2021).
- 5 van der Miesen AIR, Raaijmakers D, van de Grift TC. "You have to wait a little longer": transgender (mental) health at risk as a consequence of deferring gender-affirming treatments during COVID-19. Arch Sex Behav 2020; 49: 1395–99.

- 6 Jarrett BA, Peitzmeier SM, Restar A, et al. Gender-affirming care, mental health, and economic stability in the time of COVID-19: a multi-national, cross-sectional study of transgender and nonbinary people. PLoS One 2021; 16: e0254215.
- 7 Fowers A, Wan W. Coronavirus pandemic is worsening transgender mental health to alarming levels. Washington Post. Aug 18, 2020. https://www. washingtonpost.com/health/2020/08/18/coronavirus-transgender/ (accessed April 20, 2021).
- 8 De Lorenzo R, Conte C, Lanzani C, et al. Residual clinical damage after COVID-19: a retrospective and prospective observational cohort study. PLoS One 2020; 15: e0239570.
- 9 Mehrotra A, Nimgaonkar A, Richman B. Telemedicine and medical licensure—potential paths for reform. N Engl J Med 2021; **384**: 687–90.