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Remote Voice Treatment with Transgender Individuals: A Health Care Equity Opportunity

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Telehealth has long been considered a promising option to advance access to specialized services such as voice therapy,^{1,2,3} and the coronavirus disease (COVID-19) pandemic has expanded the use of this technology substantially throughout the health care system.^{4,5} Growing experience with remote voice assessment⁶ and treatment⁷ suggest that telehealth will remain an important tool, even as in-person interventions resume. Moving forward, the health equity implications of telehealth practice require consideration. The authors aim to describe how the remote delivery of voice therapy is uniquely situated to promote healthcare equity for Transgender and Nonbinary (TGNB) individuals.

TGNB people have historically been marginalized in society,⁸ a problem which has been exacerbated by the social and economic upheaval of the COVID-19 pandemic. A 2020 survey identified that more than 50% of self-identified TGNB respondents were at a high-risk of developing COVID-19 and had restricted access to gender-affirming healthcare services.⁹ Telehealth is poised to address limitations in health care access for TGNB individuals as it has already been implemented in other fields, including surgery and behavioral health.^{10,11} Prior to the pandemic, access to voice therapy for TGNB people represented an important gap in care. The World Professional Association for Transgender Health (WPATH) has identified gender-affirming voice training as a necessity for many TGNB individuals.¹² However, in the largest survey of transgender people to date, 46% of transfeminine respondents indicated that they have not yet received behavioral voice therapy but wanted to pursue that option.⁸ Given that TGNB people may make up as much as 2% of the population,¹³ this represents a significant unmet need.

TGNB people living in rural environments are particularly vulnerable to healthcare access limitations. Currently, one in four (27%) TGNB people living in rural locations travel more than 75 miles to access gender affirming medical care.¹⁴ While this travel distance may be feasible for other gender-affirming healthcare needs that require intermittent

medical visits (ie, hormone replacement therapy), long travel times are likely to prevent access to voice therapy altogether. In order to be maximally effective, voice therapy requires frequent sessions, creating a barrier to care access for individuals who live a long distance from a qualified practitioner. The costs incurred for traveling long distances include lost wages, lodging and fuel, and diminished safety being in an unfamiliar community. The use of telehealth technologies such as those presented by Schneider et al.⁶ (ie, remote voice recording) hold important promise for addressing these barriers to voice therapy access.

While geographic barriers are considered frequently for use of telehealth, TGNB people also face unique social barriers to healthcare access. Due to a long history of marginalization by healthcare systems, as well as the rigid gender categorization which frequently accompany them, many TGNB distrust healthcare spaces.^{15,16} Telehealth provides an important opportunity for individuals to engage with voice therapy in a more comfortable environment. It also may empower TGNB individuals to participate in a client-centered approach to care that is often lacking in many spaces.¹⁷ Many TGNB people experience social anxiety as a result of harassment and mistreatment in public spaces due to their gender identity.⁸ This means that actions that many cisgender people might find routine, such as checking in to an appointment, can be sources of substantial stress for TGNB people.¹⁸ Gender affirming voice therapy can play an important role in alleviating some of this stress by modifying both gender attribution and self-perceived femininity.^{19,20} However, this benefit cannot be realized if patients do not have access to care. Telehealth presents an important opportunity for TGNB people to engage more comfortably with this care. Telehealth voice therapy for TGNB individuals may help to reduce gender misattribution in public, and therefore increase trust in accessing future healthcare which requires in-person intervention.

Telehealth also may be a uniquely successful intervention for many transfeminine patients. For instance, one common metric used to identify the success of both voice therapy and voice surgery for transfeminine patients is whether patients are perceived correctly as women while speaking on the telephone.²¹ The telehealth format provides an opportunity to simulate that scenario. That has the potential to give the therapist and patient a more realistic view of how the TGNB individual may be perceived in daily life when communicating in a virtual format or over the phone. TGNB patients also are likely to have the technology necessary to obtain good recordings as there are high rates of internet and video game use in this population.²² Many TGNB individuals have access to head-mounted microphones and

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internet at home that would further support the use of a virtual platform. In Schneider et al., the authors sought to validate the use of less accurate recording technology, such as cell phone microphones, in the capture of voice samples for analysis.⁶ They note that a head-mounted microphone positioned at 45-90 degrees away from the mouth is the gold standard for recording voice outcomes.⁶

While telehealth has long been considered a promising option to advance access to specialized services in many fields, ie, gender affirmation care,^{22,23} voice therapy, etc., in our opinion, the remote delivery of voice therapy is uniquely situated to promote healthcare equity for TGNB patients. Further study and implementation of virtual recording technology for voice therapy in the TGNB populations may address not only existing health disparities, but also may offer important additional information on the overall implications of telehealth in the field of voice.

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