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## Transgender Youths' Perspectives on Telehealth for Delivery of Gender-Affirming Care

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### A B S T R A C T

**Purpose:** We aimed to examine transgender youths' interest in receiving gender-affirming care via telemedicine or through primary care with telehealth support.

**Methods:** We surveyed 12- to 26-year-old transgender youth receiving care in a multidisciplinary gender clinic. Descriptive statistics and bivariate analyses were used to assess relationships between demographic and gender-related characteristics and interest in receiving care via telemedicine.

**Results:** Almost half (47%) of the 204 youth surveyed expressed interest in receiving gender care via telemedicine. Additionally, youth with lower levels of perceived parental support were more likely to express an interest in utilizing telemedicine ( $p = .001$ ). Approximately half (45%) of youth were interested in receiving gender care in the primary care setting, with a majority expressing willingness to do so if their primary care provider had telehealth support.

**Conclusions:** Many transgender youth expressed interest in receiving gender care via telehealth, particularly for ongoing care and monitoring. Increased interest in telemedicine was seen among youth with lower perceived parental support.

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### IMPLICATIONS AND CONTRIBUTION

Telemedicine is an acceptable model for gender-affirming care delivery that should be considered, particularly for ongoing care and monitoring. Telehealth-supported gender-affirming care delivery in the pediatric primary care setting is desired by youth, and opportunities to expand its access should be explored.

Nearly 2% of high school and college-aged students in the U.S. identify as transgender [1–3], and this group experiences significant mental health disparities, including a four times higher rate of attempting suicide [3]. They also face barriers to accessing gender-affirming medical care, such as puberty blocking medications and gender-affirming hormones, which have been

associated with improved mental health and quality of life [4–8]. One significant barrier is the paucity of clinicians with expertise in providing gender-affirming care for minors; because these specialists often practice in academic medical centers, many youth also face transportation challenges [9,10].

As defined by the Health Resources and Services Administration, telehealth describes the use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration [11]. It includes two-way, real-time, synchronous,

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patient-to-clinician audio–video visits (telemedicine) and the use of video conference technology to connect pediatric specialists and primary care providers (PCPs) to provide education and consultation regarding patient management in a focused clinical area (tele-education) [11], both of which show promise as tools to improve access to specialty expertise in the primary care setting. In the context of the COVID-19 pandemic, health care systems have rapidly adopted these technologies to provide remote patient care. Both during and after the pandemic, telehealth has the potential to expand the reach of gender specialists. Data in adults suggest telehealth can reduce barriers to care by providing specialist support to PCPs [12,13], but this has only recently begun to be explored in youth for whom care is complex and assurances regarding privacy and confidentiality are essential [14]. The objective of this study was to examine transgender youth's interest in receiving gender-affirming care from gender specialists via telemedicine or from their PCP with telehealth support.

## Methods

### Study design and population

We recruited transgender youth aged 12–26 years to complete an online survey during their visit to a multidisciplinary gender clinic. Details regarding survey development, terminology, sample site, and recruitment methods have been published previously [15]. This study received institutional review board approval with a waiver of parental permission for participants aged <18 years.

### Measures

Two cognitive interviews with transgender young adults and content validation with seven transgender care experts informed survey development. To assess participant views about receiving care through different modalities, we inquired about their interest in receiving care from gender specialists via telemedicine and from their PCPs with varying levels of telehealth. We also inquired about what components of gender-affirming care youth would be most interested in receiving via telemedicine.

### Analyses

This analysis focuses on items related to telehealth, participants' use of primary care, and interest in PCP-based gender-affirming care. We used Stata version 14.2 (Stata Corp, College Station, TX) to perform descriptive statistics and bivariate analyses using chi-square (and Fisher's exact tests when expected cell sizes were <5) to explore associations between demographic and gender-related characteristics and interest in receiving gender care through telemedicine.

## Results

### Sample characteristics

Three fifths (59%) of the 204 youth identified as transmasculine, more than half (56%) were aged <18 years, and two-thirds (67%) traveled over 30 minutes to the gender clinic. A majority (59%) of youth reported a visit with a PCP outside of the gender clinic within the last year. Of these, 61% reported this visit

occurred in a pediatrician's office, and 57% indicated their provider knew their gender identity at that visit.

### Receiving gender care from gender specialists via telemedicine

Almost half ( $n = 94$ ) of the sample reported interest in gender-affirming care from gender specialists via telemedicine. Youth with greater interest in receiving care via telemedicine

**Table 1**

Bivariate analysis of factors associated with interest in receiving gender care via telemedicine ( $n = 204$ )

Overall sample interested in gender care via telemedicine			
	n (% <sup>a</sup> )	n (% <sup>b</sup> )	<i>p</i>
<b>Demographic characteristics</b>			
Gender identity			.918
Transmasculine	121 (59)	56 (47)	
Transfeminine	43 (21)	19 (44)	
Nonbinary	40 (20)	19 (49)	
Age (years)			.130
<18	105 (56)	44 (42)	
≥18	83 (44)	44 (53)	
Travel distance			.241
<30 minutes	64 (33)	36 (56)	
30 minutes to 1 hour	70 (36)	30 (42)	
>1 hour	59 (31)	26 (44)	
<b>Gender-related characteristics<sup>c</sup></b>			
Outness			.118
Out to everyone	82 (42)	33 (40)	
Out to most	68 (35)	31 (46)	
Out to some	28 (14)	18 (64)	
Out to few/none	17 (9)	10 (59)	
Time since first gender identity disclosure to anyone			.201
<1 year	23 (12)	13 (57)	
1–2 years	32 (17)	10 (31)	
2–3 years	63 (33)	31 (49)	
>3 years	72 (38)	37 (51)	
Time since first gender identity disclosure to parent			.095
<1 year	46 (24)	25 (54)	
1–2 years	44 (23)	14 (32)	
2–3 years	53 (28)	25 (47)	
>3 years	47 (25)	26 (55)	
Perceived passing as gender			<b>.049</b>
Pass all of the time	42 (22)	14 (33)	
Pass most of the time	58 (30)	35 (60)	
Pass some of the time	78 (40)	34 (44)	
Do not pass at all	17 (9)	7 (41)	
Gender expression			.737
Masculine	138 (70)	67 (49)	
Feminine	33 (17)	16 (48)	
Equally feminine/masculine	18 (9)	7 (39)	
Neither feminine/masculine	9 (5)	3 (33)	
Parental support			<b>.001</b>
10	77 (41)	24 (31)	
7–9	72 (39)	37 (51)	
1–6	37 (20)	25 (68)	

Bold values indicate  $p < .05$  in the bivariate analysis using chi-square (and Fisher's exact tests when expected cell sizes were <5). The following statement "Telemedicine is a way that healthcare providers talk with and treat patients through a computer or smartphone, similar to a video chat" was provided before asking about interest in receiving care via telemedicine: *How interested would you be in receiving some of your gender care from one of the gender clinic doctors via telemedicine?* Response options ranged on a five-point Likert scale, from "very interested" to "not interested," and affirmative responses were defined as "very interested" or "somewhat interested."

<sup>a</sup> Column percentage.

<sup>b</sup> Row percentage.

<sup>c</sup> Definitions of terminology in this section are referenced in our prior work [15].

included those with lower perceived parental support (68% vs. 31% with high reported parental support;  $p = .001$ ) and those who perceived themselves as passing “most of the time” (66% vs. 33% of those who felt they passed all the time;  $p = .049$ ; Table 1). No association was seen between interest in telemedicine and other demographic characteristics, including travel time to clinic.

Among youth who indicated they were “very interested,” “somewhat interested,” or “neutral” about receiving some gender care via telemedicine ( $n = 176$ ), most indicated a desire to receive refills for hormones (80%) and laboratory monitoring (72%) via this modality (Table 2), whereas very few (10%) desired sick visits with gender specialists through telemedicine.

#### Receiving gender care via PCP with varying levels of telehealth support

Overall, 44% of youth indicated they were somewhat or very interested in receiving gender-affirming care from their PCP, whereas 19% of youth expressed no interest. The percentage of youth willing or very willing to receive care from their PCP increased if PCPs could receive varying levels of telehealth support from gender specialists. Among the entire sample of youth ( $n = 204$ ), 85% were willing to receive care from PCPs “participating in regular trainings about trans health,” 76% from PCPs “able to communicate regularly over the phone with one of the doctors in the gender clinic,” and 68% from PCPs with “a gender clinic doctor present for the visit via telemedicine.”

#### Discussion

Among youth receiving care in a specialty gender clinic, a two-thirds (67%) reported an interest in receiving gender-affirming care through either telemedicine or from their PCP, suggesting clinicians and health systems should explore these strategies as ways to decentralize gender-affirming care.

Transgender youth with limited parental support are at higher risk of experiencing mental health disparities [16,17] and barriers to accessing gender-affirming care. Although youth in our sample reflect a subset actively receiving care, our finding that youth with lower perceived parental support were more likely to report interest in receiving care via telemedicine

**Table 2**

Specific services youth report interest in receiving from a gender clinic physician via telemedicine ( $n = 176^a$ )

	n	%
Refills for hormones	141	80
Knowing what labs to do to check my hormone levels	126	72
Regular check-ups	86	49
Counseling on surgical procedures	74	42
Counseling or therapy	69	39
Talking about starting medications for my mental health if I were to need them	59	34
Refills for nonhormone medications	55	31
Helping talk with my family about supporting my gender	49	28
Sick visits <sup>b</sup>	18	10

<sup>a</sup> Only individuals who responded “very interested,” “somewhat interested,” or “neutral” to the question, “How interested would you be in receiving some of your gender care from one of the gender clinic doctors via telemedicine?” were included in these analyses.

<sup>b</sup> Sick visits refer to urgent visits for concerns not related to gender like sore throat.

suggests it may be a promising strategy to reach this high-risk group of youth. Although efforts to expand access to telehealth have previously focused on patients in rural communities, our finding that youth who live in close proximity to a specialized gender clinic are similarly interested in telehealth highlights the need for its availability, regardless of geographic location.

As has been seen in nonclinical samples [2], most transgender youth in our study were also receiving care from PCPs outside of gender clinics. Our results build on this knowledge by finding that many of these youths were interested in receiving gender-affirming care in the primary care setting. The form of PCP support that garnered the most enthusiasm from youth was PCP participation in regular transgender health training, which could be achieved through webinars, learning collaboratives, or Project ECHO models [12]. Further investigation is needed to assess PCP interest and understand how currently centralized gender specialists can best support more decentralized care.

#### Conclusion

Our findings highlight telehealth’s potential to meet the needs of an underserved population of youth by increasing access to care among youth for whom barriers have previously prevented care receipt in specialty gender clinics.

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