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Family Physician Scope of Practice for Gender-Affirming Care

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ABSTRACT

Background and Objectives: Physician scope of care for transgender and gender-diverse (TGD) patients is often lacking. To inform educational efforts to improve care for TGD patients, this study sought to better understand the scope of practice for family physicians who provide gender-affirming care (GAC) to TGD patients.

Methods: This was a secondary analysis of a previously published study, in which electronic surveys were sent to family physicians and third-year family medicine residents in North Carolina. The present analysis descriptively assessed responses from physicians who indicated providing GAC to TGD patients, to assess scope characteristics, perceived barriers to scope, and resources used when providing care for these patients.

Results: Of study participants, 100 physicians reported providing GAC. The majority offered gender-affirming hormone therapy such as estradiol and testosterone and other medications influencing hormones. Physicians also mentioned making referrals for surgical consultation and care coordination for other gender-affirming services. More than half indicated that they practiced GAC with age restrictions prior to the passage of legislation that required age restrictions. The most common perceived barrier to providing care to TGD patients was knowledge and experience. Several resources were cited to support care for TGD patients.

Conclusions: Elements of care for TGD patients are within the standard scope of practice for family physicians. Understanding scope details as well as perceived barriers to and resources for providing care for TGD patients among current providers can better inform medical education efforts.

INTRODUCTION

Practicing broad-scope primary care has been associated with stronger patient continuity and relationships,[1] greater physician job satisfaction and lower burnout,[2,3] and higher-value care, particularly for underserved populations.[4] Unfortunately, transgender and gender-diverse (TGD) patients frequently encounter providers whose scope is limited in, or does not include, transgender care.[5,6] While primary care providers may be willing to provide routine primary care to transgender patients, this is not consistent for all providers, nor for all elements of primary care (such as Pap smears in transgender men).[7] Among physicians who provide gender-affirming care (GAC) to TGD patients, insurance exclusions, prior authorizations, medication shortages, and care coordination across providers or health systems further limit health care for TGD persons.[8] Recent legislative challenges to GAC restrict outpatient primary care practices and are associated with negative impacts for both TGD patients and their providers.[9-11]

Family medicine is positioned to fill the gap in primary care and GAC provision for TGD patients. The World Professional Association for Transgender Health (WPATH) supports primary care providers having GAC within their scope of practice with additional training, and other major organizations have called for

increased training at the undergraduate medical education (UME) and graduate medical education (GME) level.[12] However, a Canadian survey found that while 71% of family medicine residents felt that GAC was in their scope of practice, only 10% felt competent by the end of their residency training,[13] indicating a deficiency in family medicine training to adequately include care for TGD persons. This deficiency has stark implications for how family physicians care for TGD patients, as physician practice and scope have been shown to be influenced by residency training environments.[14,15] An additional recent survey found that less than 30% of United States family medicine residents surveyed planned to continue GAC after graduation.[16]

To design family medicine training that fully supports both primary care and GAC for TGD patients, an understanding of current scope of practice is needed. In North Carolina, residency clinic research highlighted that family physicians engaging in whole-person care for TGD persons is a key aspect of enhancing patient experience for these individuals.[17] Until recently, North Carolina had the one of the largest percentages per capita of individuals who identify as TGD in the United States.[18] However, North Carolina also ranks as one of the top states TGD individuals move away from due to laws impacting TGD people.[19] In 2023, North Carolina House Bill 808 (NC HB 808) prohibited the initiation of GAC for those under age 18, thus limiting the scope of care family physicians could legally provide.

In prior work, we reported on a survey of North Carolina family physicians' training, beliefs, and practices regarding care of TGD patients.[20] Using data from that study, this report examines the scope of care provided by family physicians for TGD patients, including clinical approaches, perceived external barriers, and resources supporting care delivery. Understanding these factors may inform future educational efforts to improve care for TGD patients in North Carolina and beyond. Specifically, this work addresses three research questions:

1. What are the descriptive characteristics of the scope of practice among North Carolina family physicians who provide care to TGD patients?
2. What factors represent external barriers to scope of practice among these family physicians?
3. Which resources do these family physicians most frequently use when providing GAC to TGD patients?

METHODS

This article reports on data collected from a previously published observational study that surveyed licensed family physicians practicing in North Carolina regarding their education and practice around care for TGD patients.[20] This larger study recruited family medicine attendings and residents in their final year of residency from January 2024 to September 2024 through postcards mailed to North Carolina Medical Board roster addresses, notices emailed from statewide professional organizations (North Carolina Academy of Family Physicians and North Carolina Medical Society), and direct communication with authors' personal contacts across the state. Data were collected through Qualtrics; additional details about study recruitment have been previously described in-depth.[20] For this study, we included data from the participating physicians who reported providing GAC. Our study was evaluated and determined exempt by the University of North Carolina (#23–0105) and Novant Health Institutional Review Boards (#22–2185).

Instrument

The full contents of the survey have been previously reported.[20] These questions assessed details about provider approaches, resources, and perceived barriers related to providing GAC. These questions were largely posed in categorical format, and participants were prompted to provide additional qualitative details if they selected "other" as a response option. Additionally, if participants indicated that they used age limits for GAC prior to the passage of NC HB 808 or if NC HB 808 had affected their practice beyond the prohibition of GAC for minors, participants were directed to specify in qualitative format. Eleven-point Likert scales assessed providers' comfort with different aspects of GAC (specifically, diagnosing gender dysphoria, managing unwanted side effects of hormone therapy, and counseling about gender-affirming surgical options and referrals), with higher scores indicating greater comfort. Five-point Likert scales assessed participants' perceptions of the extent to which resource limitations created barriers to care for their TGD patients (specifically, limited access to support groups and peer support, care navigators, endocrinologists, fertility preservation specialists, legal counsel, mental health professionals, speech and voice therapy, and surgeons offering gender-affirming procedures), with higher scores indicating greater perceived barriers.

Data Analysis

We assessed and reported data descriptively. Categorical responses were summarized as frequencies and percentages of responses. We summarized continuous responses using means (M) and standard deviations (SD). We used means to summarize Likert-scale responses because the items used consistent, bounded response scales, and comparison of means and medians did not suggest outlier influence. We collected brief, open-text responses when respondents selected "other" for applicable survey items. We reviewed these responses and summarized descriptively; because responses were brief and item-specific, we did not conduct formal qualitative analysis. We used R software version 4.2.1 (R Foundation, Vienna Austria) to assess descriptive statistics.

RESULTS

A total of 100 participants reported providing GAC (48.31% of the larger study) and were included in the analysis. Within

this sample, 86% were attending physicians and 14% were in their final year of residency. Table 1 further describes the sample, which includes 60% of participants within 10 years of or in residency. The majority had received an MD (87%); the remainder had received a DO (13%). Most participants (81%) identified as White, while 9% identified as Asian or Asian American, 6% identified as Black/African American, and 4% identified as biracial or other. The largest age group was aged 36–45 years (38%), followed by 30–35 (24%), 46–55 (17%), 56–67 (10%), 29 or younger (6%), and 66–75 (5%); no participants were older than 75. The majority of the sample (65%) identified as cisgender women. The vast majority (92%) worked in a metro area.

Characteristics of Scope of Practice

Participant responses regarding scope of practice and approaches to primary care and GAC for TGD patients are presented in Table 2, which includes further stratification by time since training (less than or equal to 10 years since completing residency, or more than 10 years since completing residency). The form of GAC most participants reported that they had personally offered was gender-affirming hormone therapy (GAHT) such as estradiol or testosterone (90%) and other medications influencing hormones like androgen blockers or progesterone (72%). Participants who reported that they personally provided another form of GAC not otherwise listed (16%) were prompted to specify; write-in responses included referrals for surgical services, counseling on additional nonpharmaceutical practices such as vocal training or binding, or gender-affirming approaches to care for other concerns such as ADHD, obesity, or sexually-transmitted disease screening. These responses did not differ significantly based on time since residency.

More than half of the total respondents (58%) indicated that they practiced GAC with age restrictions, even prior to the passage of NC HB 808. When prompted to provide additional details qualitatively, most respondents (n = 33; 57%) indicated only providing gender-affirming medical treatment to adults (aged 18 years or older), while others described limits by age (eg, 14, 16), limits based on pubertal development, or limits according to practice policies without providing additional details. Several participants who noted such age limits specified that they referred patients younger than 18 to other clinics, such as pediatric endocrinology. A higher percentage of providers who were more than 10 years beyond residency indicated that they had age restrictions (62.5%, vs 55% of those within 10 years of residency).

The most frequently reported International Classification of Disease (ICD) -10 code used for GAC was gender dysphoria (F64._; 82%). Of those who reported they used another ICD-10 not otherwise listed (9%), the most frequently specified approaches were medication management or monitoring, or Z78.9 (other specified health status). Commonly reported methods for determining whether to start GAHT for a TGD patient were the informed consent model (77%), followed by

TABLE 1. Demographics of Sample

Variables	n (%)
Residency status	
Completed residency	86 (86.00)
Current third-year resident	14 (14.00)
Medical degree obtained	
MD	87 (87.00)
DO	13 (13.00)
Race/ethnicity	
Asian or Asian American	9 (9.00)
Black or African American	6 (6.00)
White	81 (81.00)
Other or biracial	4 (4.00)
Age group (years)	
<29	6 (6.00)
30–35	24 (24.00)
36–45	38 (38.00)
46–55	17 (17.00)
56–67	10 (10.00)
67–75	5 (5.00)
75+	0 (0.00)
Gender	
Cisgender man	33 (33.00)
Cisgender woman	65 (65.00)
TGD	2 (2.00)
Practice area	
Metro	92 (92.00)
Nonmetro	6 (6.00)
Physician area of residence	
Metro	81 (81.00)
Nonmetro	18 (18.00)
Practice size	
Solo	9 (9.00)
2–5 physicians	23 (23.00)
6–10 physicians	16 (16.00)
10–21 physicians	0 (0.00)
22–30 physicians	8 (8.00)
31–100 physicians	23 (23.00)
101 + physicians	7 (7.00)
No response	14 (14.00)
Involvement with teaching in the last 3 years	
Taught both medical students and residents	55 (55.00)
Taught medical students only	14 (14.00)
Taught residents only	2 (2.00)
None	15 (15.00)
Current resident – N/A	14 (14.00)
Years since residency	
Current resident	14 (14.00)
Less than 5	18 (18.00)
5-10	28 (28.00)
10–15	11 (11.00)
16–20	4 (4.00)

(*Continued*)

TABLE 1. Demographics of Sample (Continued)

Variables	n (%)
21–25	13 (13.00)
26–30	5 (5.00)
31–35	2 (2.00)
36–40	4 (4.00)
More than 40	1 (1.00)

Abbreviation: TGD, transgender and gender-diverse

baseline bloodwork (69%), and the WPATH criteria for GAHT (54%). Of the 10% who reported they used another method not otherwise specified, almost all indicated that they manage existing GAHT plans but do not initiate GAHT; some also noted that they also rely on the patients themselves in determining appropriateness to start GAHT.

External Barriers to Scope

Participant perceptions of barriers to providing care for TGD patients are presented in Table 3. One frequently perceived barrier to providing care to TGD patients was physician knowledge and experience (98%), although most also indicated that they believed that physician personal beliefs, legal concerns, and TGD patients' lack of health insurance also posed barriers. Write-in options included access to specialty referrals, time, and trust in the medical system. Participants identified a variety of factors that created barriers to care for TGD patients, with limited access to mental health professionals receiving the highest mean score (M = 3.71, SD = 1.13). While most participants (79%) did not report that NC HB 808 affected their practice other than no longer initiating GAHT for those under 18, others reported more wide-ranging impacts, including increasing distress and medical mistrust experienced by TGD patients, burden on providers, and complexity in providing or referring to remaining resources.

Resources Used

When asked to select resources most frequently used when providing GAC to TGD patients, participants endorsed, in descending order: UCSF Center for Excellence for Transgender Care (62%), WPATH Standards of Care (54%), American Academy of Family Physicians (40%), Fenway Health Protocols (32%), patients (24%), Transline consultation (10%), Endocrine Society (10%), and the Callen Lorde Protocols (2%). Write-in responses included UpToDate and expert professionals within the respondents' personal networks. Participants within 10 years of residency cited high rates (78.33%) of using the UCSF Center for Excellence for Transgender Care, while participants with more than 10 years since residency more often used the American Academy of Family Physicians.

DISCUSSION

The sample of physicians who practice GAC represents nearly half of participants from the parent study (n = 100; 48.31%), and most of the present sample (90%) stated that they offer hormone therapy. This finding is important for demonstrating the accessibility of primary care and GAC for TGD patients by family physicians across various environments and workplaces.[21] The participants reported commonly engaging in practices within their care of TGD patients that are considered essential and routine primary care services. These included screening for anxiety, depression, psychosocial issues, and reproductive health needs, as well as liaising with surgical colleagues and other specialists on behalf of the TGD patients. These services are all well within typical practice patterns of family physicians and are expected topics in residency education.[22] Residency programs should examine their current curricula through a gender-inclusive lens, particularly for core topics such as contraception, fertility preservation, and mental health.

Our results indicate that areas of GAC in which participants reported a need for additional training or experience include diagnosing gender dysphoria in minors (as opposed to adults), managing puberty blockers, and counseling or managing fertility preservation options for TGD patients. This is not surprising, as fewer family physicians are practicing pediatric care or reproductive care,[23–25] but also as NC HB 808 legally restricted physicians from prescribing GAHT among minors in 2023, just prior to release of our survey. Nonetheless, medical education curricula should take care to not overlook appropriate care for pediatric TGD patients or a TGD person's family planning needs.

Training around proper billing and coding is also essential as family doctors continue to provide primary care and GAC to TGD patients. Participants most commonly cited use of the F64.__ gender dysphoria ICD-10 diagnosis code (81%) to support GAC services, which is significant as this diagnosis code is often required by insurance companies to cover gender-affirming care services.[26] It is noteworthy that the use of E34.__ endocrine disorder ICD-10 diagnosis, cited by 33% of participants, has been frequently used by some physicians[27] to avoid "outing" the TGD patient or attaching the stigma of a disorder to gender identity.[26] However, this code has increasingly been noted to trigger insurance audits, denials, or even litigation when seen as a fraudulent way to circumvent insurance restrictions against GAC.[28]

Physician knowledge and experience was most commonly listed as a perceived barrier to offering care to TGD patients by participants in this sample, consistent with other research.[13] Notably, even though 74% of participants who offer GAC perceived physician personal beliefs to be a potential barrier to providing TGD care, only 3% of physicians surveyed who do not offer care to TGD patients cited personal beliefs as one of the reasons, as highlighted in our parent study.[20] In that study, insufficient training and not having TGD patients were the primary reasons for not providing primary care or GAC to TGD patients.[20] In our present study, physicians caring for TGD patients relied on a wide range of free and easily

TABLE 2. Scope of Practice and Approaches to TGD Primary Care and GAC

		Time since residency	
	All (n = 100)	≤10 years, or current resident (n = 60)	>10 years (n = 40)
Categorical variables	n (%)	n (%)	n (%)
Which types of gender affirming care have you personally offered to TGD patients?*			
Gender-affirming hormone therapy (GAHT; estradiol; testosterone)	90 (90.00)	58 (96.67)	32 (80.00)
Puberty blockers	9 (9.00)	6 (10.00)	3 (7.50)
Other medications that influence hormones (such as androgen blockers, progesterone)	72 (72.00)	47 (78.33)	25 (62.50)
Other	16 (16.00)	9 (15.00)	7 (17.50)
No response	1 (1.00)	0 (0.00)	1 (2.50)
For TGD gender-affirming care, which ICD-10 code(s) have you used?*			
Endocrine disorder (E34.9 OR E34._)	33 (33.00)	23 (38.33)	10 (25.00)
Gender dysphoria (F64._)	81 (81.00)	49 (81.67)	32 (80.00)
Long-term drug therapy (Z79._)	30 (30.00)	19 (31.67)	11 (27.50)
Other (please specify)	9 (9.00)	6 (10.00)	3 (7.50)
I don't know	6 (6.00)	3 (5.00)	3 (7.50)
In determining whether to start or continue GAHT for a TGD patient who possesses decision-making capacity but also certain underlying medical condition(s) that may pose a risk (such as ischemic heart disease, family history of venous thromboembolism, etc.), the following most describes my medical understanding:			
Medical contraindications are absolute for TGD patients	10 (10.00)	6 (10.00)	4 (10.00)
Medical contraindications are relative for TGD patients	90 (90.00)	54 (90.00)	36 (90.00)
What best describes how you have screened for anxiety and depression among TGD patients?			
Screen only initially and thereafter when it seems relevant	36 (36.00)	20 (33.33)	16 (40.00)
Screen rarely	1 (1.00)	0 (0.00)	1 (2.50)
Screen very frequently	62 (62.00)	39 (65.00)	23 (57.50)
No response	1 (1.00)	1 (1.67)	0 (0.00)
What best describes how you have screened for other psychosocial issues (including eating disorders, substance use, high risk behaviors, violence, bullying, self-injury, social connectedness) among TGD patients?			
Screen only initially and thereafter when it seems relevant	47 (47.00)	26 (43.33)	21 (52.50)
Screen rarely	6 (6.00)	3 (5.00)	3 (7.50)
Screen very frequently	47 (47.00)	31 (51.67)	16 (40.00)
How have you addressed the potential impact of GAHT on fertility with TGD patients?			
Counsel and/or manage myself	71 (71.00)	50 (83.33)	21 (52.50)
Refer for counseling and/or management	24 (24.00)	9 (15.00)	15 (37.50)
Do not address	4 (4.00)	1 (1.67)	3 (7.50)
No response	1 (1.00)	0 (0.00)	1 (2.50)
How have you addressed fertility preservation options with TGD patients?			
Counsel and/or manage myself	26 (26.00)	17 (28.33)	9 (22.50)
Refer for counseling and/or management	65 (65.00)	38 (63.33)	27 (67.50)
Do not address	8 (8.00)	5 (8.33)	3 (7.50)
No response	1 (1.00)	0 (0.00)	1 (2.50)
How have you addressed contraceptive needs (regardless of GAHT) with TGD patients?			

(*Continued*)

TABLE 2. **Scope of Practice and Approaches to TGD Primary Care and GAC (Continued)**

		Time since residency	
Counsel and/or manage myself	93 (93.00)	60 (100.00)	33 (82.50)
Refer for counseling and/or management	5 (5.00)	0 (0.00)	5 (12.50)
Do not address	2 (2.00)	0 (0.00)	2 (5.00)
How have you addressed risk reduction methods for STIs with TGD patients?			
Counsel and/or manage myself	97 (97.00)	60 (100.00)	37 (92.50)
Refer for counseling and/or management	2 (2.00)	0 (0.00)	2 (5.00)
Do not address	1 (1.00)	0 (0.00)	1 (2.50)
How have you addressed pre-exposure prophylaxis for HIV (PrEP) with TGD patients?			
Counsel and/or manage myself	92 (92.00)	57 (95.00)	35 (87.50)
Refer for counseling and/or management	5 (5.00)	1 (1.67)	4 (10.00)
Do not address	3 (3.00)	2 (3.33)	1 (2.50)
What best describes your interprofessional practice for TGD patients (including mental health professionals, speech therapists, surgeons, endocrinologists, care navigators, etc.)?			
I work along with other affirming providers, as part of an informal local network for TGD patients	59 (59.00)	37 (61.67)	22 (55.00)
I work independently, with few/no other gender-affirming providers locally available for my TGD patients	20 (20.00)	11 (18.33)	9 (22.50)
I work within a formally established local network of affirming providers for TGD patients	19 (19.00)	12 (20.00)	7 (17.50)
No response	2 (2.00)	0 (0.00)	2 (5.00)
In determining whether to start gender-affirming hormone therapy (GAHT) for a TGD patient, which of these have you utilized?[a]			
WPATH criteria for GAHT	54 (54.00)	38 (63.33)	16 (40.00)
Informed consent process (relying on your own psychosocial assessment of patient to determine that they have capacity to understand risks/benefits, and no other conditions that better explain their presentation)	77 (77.00)	54 (90.00)	23 (57.50)
Letter model (relying on a mental health professional to evaluate whether patient has gender dysphoria and capacity, with summative letter that patient brings with them to appointment)	23 (23.00)	16 (26.67)	7 (17.50)
Baseline bloodwork before starting GAHT	69 (69.00)	49 (81.67)	20 (50.00)
Other	10 (10.00)	3 (5.00)	7 (17.50)
No response	1 (1.00)	0 (0.00)	1 (2.50)
Which of the following resources have you most often turned to when providing gender-affirming care for TGD patients?			
American Academy of Family Physicians	40 (40.00)	20 (33.33)	20 (50.00)
Callen Lorde Protocols	2 (2.00)	1 (1.67)	1 (2.50)
Endocrine Society	10 (10.00)	6 (10.00)	4 (10.00)
Fenway Health Protocols	32 (32.00)	22 (36.67)	10 (25.00)
Transline consultation	10 (10.00)	8 (13.33)	2 (5.00)
Patients	24 (24.00)	15 (25.00)	9 (22.50)
UCSF Center of Excellence for Transgender Care	62 (62.00)	47 (78.33)	15 (37.50)
WPATH Standards of Care	54 (54.00)	34 (56.67)	20 (50.00)
Other	7 (7.00)	4 (6.67)	3 (7.50)
No response	2 (2.00)	0 (0.00)	2 (5.00)
Prior to North Carolina HB 808 (law prohibiting initiation of gender-affirming care for minors) being passed, did you have age limits for whom you prescribed gender-affirming medical treatment?			
Yes	58 (58.00)	33 (55.00)	25 (62.50)

(*Continued*)

TABLE 2. Scope of Practice and Approaches to TGD Primary Care and GAC (Continued)

		Time since residency	
No	41 (41.00)	27 (45.00)	14 (35.00)
No response	1 (1.00)	0 (0.00)	1 (2.50)
Continuous variables[b]	M (SD)		
Mark your comfort level in diagnosing gender dysphoria among TGD patients (children or adolescents)	4.96 (2.70)	-	-
Mark your comfort level in diagnosing gender dysphoria among TGD patients (adults)	7.40 (2.09)	-	-
What has been your comfort level in managing unwanted side effects of hormone therapy (such as polycythemia, hair loss, sexual dysfunction, acne, VTE, etc)?	6.63 (2.05)	-	-
What has been your comfort level in counseling about gender-affirming surgical options and referrals, for those who are interested?	6.60 (2.26)	-	-

[a]Question allowed for multiple selection of responses.
[b]Range: 0-10; higher scores indicate greater comfort.
Abbreviations: GA, gender-affirming; HIV, human immunodeficiency virus; ICD, (International Classification of Disease); PrEP, pre-exposure prophylaxis; STI, sexually transmitted infection; TGD, transgender and gender-diverse; UCSF, University of California – San Francisco; VTE, venous thromboembolism; WPATH, World Professional Association for Transgender Health

TABLE 3. Perceptions of Barriers to Providing Care for TGD Patients

Categorical variables	**n (%)**
What are the potential barriers to family physicians in NC providing TGD care?[a]	
Legal concerns	71 (71.00)
Physician knowledge/experience	98 (98.00)
Physician personal beliefs	74 (74.00)
TGD patients' lack of health insurance	70 (70.00)
Other	3 (3.00)
Other than no longer initiating GAHT for those under 18, has the passage of NC HB808, has the passage of NC H808 affected your practice?	
Yes	19 (19.00)
No	79 (79.00)
No response	2 (2.00)
Continuous variables	*M* (*SD*)
Which of the following, and to what extent, do you feel create barriers to care for your TGD patients?[b]	
Limited access to support groups/peer support	3.26 (1.01)
Limited access to care navigators	3.56 (1.04)
Limited access to endocrinologists	3.38 (1.20)
Limited access to fertility preservation specialists	3.56 (1.11)
Limited access to legal counsel	3.26 (1.14)
Limited access to mental health professionals	3.71 (1.13)
Limited access to speech/voice therapy	3.25 (1.21)
Limited access to surgeons that offer gender-affirming procedures	3.58 (1.19)

[a]Question allowed for multiple selection of responses.
[b]Range: 1-5; higher scores indicate greater agreement.
Abbreviations: GAHT, gender-affirming hormone therapy; TGD, transgender and gender-diverse

accessible resources for GAC that could be readily incorporated into family medicine training on TGD care. Interestingly, resource use differed by years of experience; for example, the UCSF Center of Excellence for Transgender Care is used by 78.33% of respondents 10 or fewer years since residency, compared with 37.50% of those more than 10 years from residency. These findings suggest a need for primary care and GAC training that promotes awareness and use of evidence-based resources across clinicians at different career stages. We did not ask about barriers to continuing medical education around primary care and GAC for TGD patients, but future work could explore this.

Finally, a subset of participants (20%) were practicing GAC independently, and many listed limited access to mental health professionals, fertility specialists, gender-affirming surgeons, and care navigators as barriers to caring for their patients. Forming collaborative and interdisciplinary teams to help provide comprehensive primary care and GAC for TGD persons can assist in providing whole-person care for TGD patients[17,29] and is supported by qualitative data describing the importance of interdisciplinary teams and colocated services to provide high-quality care for TGD persons.[30] This approach may serve as one effective model of comprehensive care coordination for family medicine resident education, which could increase graduating resident comfort with continuing to provide this care.

Limitations

Several study limitations should be considered. First, participation bias is possible, as respondents may have been more interested in primary care and GAC for TGD patients than non-respondents. This bias is compounded by a study design that excluded clinicians who do not provide GAC, which limits insights into how future access might be expanded.

Additionally, recruitment materials may not have reached all family physicians in NC.

Crucially, the timing of data collection presents a limitation given the rapidly evolving and politically charged landscape surrounding GAC. Specifically, the passage of HB 808 shortly before data collection may have influenced response rates and participants' willingness to accurately disclose their scope of practice. With the changing legislative and political environment, it is difficult to ensure that the snapshot captured during this data collection period fully represents the broader context at the time the survey was administered.

Furthermore, the sample limits generalizability. Respondents were predominantly cisgender white women, which does not reflect the broader gender and racial diversity of NC.[31] The results are also specific to physicians and may not generalize to advanced practice providers, nor to clinicians in other regions of the United States.

Finally, participants were not asked to compare the care they provide to TGD patients with the care they provide to cisgender patients, nor were they asked to identify factors that would facilitate a wider scope of care. Despite these limitations, the findings offer an important look at TGD-related scope of practice among family physicians in the state.

CONCLUSION

To our knowledge, this study is the first to examine the scope of practice among family medicine physicians who provide primary care and GAC to TGD patients in NC. Findings indicate that many components of GAC involve core services well within the scope of family medicine. Family physicians providing GAC provide a broader scope of care for TGD patients. Results identify specific areas for GAC-focused training that could be incorporated into medical education to support clinical application.

PRESENTATIONS

Data from this study were briefly summarized at the Symposium for Health Equity Research in Southeastern North Carolina in Wilmington, North Carolina (March 2025), as well as the GLMA's Annual Conference on LGBTQ+ Health in Minneapolis, Minnesota (October 2025).

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