Screening for Gender Identity in Adolescent Well Visits: Is It Feasible and Acceptable?

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ABSTRACT

Purpose: This study aimed to pilot systematic gender identity screening during adolescent well checks and examine perceptions of feasibility and acceptability of screening from adolescents, parents/guardians, and clinicians.

Methods: Adolescents aged 12–18 years with a well visit between July 1, 2018, and June 30, 2019 (n = 134,114; 817 pilot and 133,297 usual care) in Kaiser Permanente Northern California (KPNC) pediatric primary care clinics. “What is your gender?” was added to the previsit questionnaire in pilot clinics; all other KPNC clinics provided usual care. Additional anonymous surveys were administered to adolescents and parents/guardians in the pilot clinics and to all KPNC pediatric clinicians. Multivariable logistic regression examined associations between clinics and patients reporting as transgender and gender diverse (TGD). Descriptive statistics summarized patient, parent/guardian, and clinician perceptions of gender identity screening.

Results: Adjusting for age and race/ethnicity, adolescents had higher odds of reporting as TGD in pilot clinics than in usual care (odds ratio = 6.91, 95% confidence interval = 3.76–12.74). Two thirds of adolescents, 75.5% of parents/guardians, and 92.5% of clinicians felt it was important to screen for gender identity in primary care. Less than 2% of adolescents found the question confusing, offensive, or uncomfortable, and 2.8% of parents/guardians felt it was offensive. In addition, 36.4% of clinicians and 3.6% of parents/guardians were concerned it would affect visit workflow/time.

Conclusions: Most adolescents, parents/guardians, and pediatric clinicians viewed systematic gender identity screening as both feasible and acceptable. Standardized gender identity screening during adolescent well checks could facilitate and increase identification of TGD adolescents and the delivery of gender-affirming care for adolescents and families in need.

Recent years have seen rapid cultural shifts in attitudes toward transgender and gender diverse (TGD) people and a concomitant push for improving health care for TGD people. TGD people include those who have gender identities that do not match their assigned sex and those with gender identity, expression, or perception of their gender that do not conform to...
the norms and stereotypes of their assigned sex [1]. As more people identify as TGD at a younger age, multiple medical and health care professional organizations have issued clinical guidance and policy statements supporting the need for comprehensive and developmentally appropriate gender-affirming care [1–5]. This movement is reflected in the increasing number of referrals to pediatric transgender clinics for gender-affirming treatments across the U.S. [6–9]. From a clinical standpoint, awareness of a patient’s gender identity and preferred pronoun allows clinicians to provide appropriate care, including gender-affirming medical and psychological supports, if appropriate [4,10]. From a health services planning standpoint, understanding the diversity of our patients’ gender is critical to support the development of services and programs that tailor to everyone’s needs.

Based on national population-based and local school-based surveys, 7%–3.2% of the U.S. adolescent population is estimated to be TGD [6,11–14]. However, the majority of population-based health risk assessment surveys in the U.S. do not assess for gender identity [15], and no study to date has examined the prevalence of adolescents reporting as TGD among primary care patients.

Pediatric primary care providers are well-positioned to screen adolescents for their gender identity and intervene. They often have a longitudinal relationship with the adolescent and their family and are seen as trusted professionals. Currently, discussions about gender identity in pediatric primary care settings are not often part of routine clinical practice. In most cases, disclosures, if they occur at all, happen through unsystematic conversations between parents, patients, and clinicians during clinic visits. A critical factor to consider before implementing gender identity screening in adolescents is confidentiality [10]. Studies suggest that adolescents want their medical providers to ask them questions about gender, such as preferred names and pronouns, but only confidentially, without their parents present [16]. This is especially true when parents/guardians may not be aware or are not accepting of the adolescent’s gender identity; screening or discussing gender identity may cause or exacerbate emotional distress and conflict between the adolescent and their parent/guardian.

Few studies have examined approaches to gender identity screening in adolescents. Using a previﬁst questionnaire to ask adolescents about their sexual health and to screen for psychosocial issues has been found to help normalize and promote discussions of sensitive topics [17,18]. A recent study found that adding a standardized gender identity screening question to a previﬁst questionnaire increased the documentation of gender identity for adolescents presenting for annual adolescent physicals [19]. However, no study has examined whether increased documentation of gender identity will result in more TGD adolescents being identiﬁed. Other studies have found that adult patients are comfortable reporting their gender identity as part of previﬁst data collection [20–23]. In fact, adult patients felt that routine collection of gender identity information was important, allowed for recognition of individual identity, and improved therapeutic relationships with clinicians [24,25]. However, whether these sentiments hold true among adolescent patients, families, and pediatric providers is unknown.

This mixed-methods study aimed to address this knowledge gap. We conducted a 12-month pilot where two primary care clinics in a large, integrated health care delivery system systematically administered a previﬁst gender identity screening. We also administered surveys to adolescents, parents/guardians, and pediatric clinicians (physicians and nurse practitioners) to assess perceptions of feasibility and acceptability of implementing systematic gender identity screening into primary care. We hypothesized that (1) systematic screening would result in more patients reporting as TGD and (2) adolescents, parents/guardians, and pediatric clinicians would view gender identity screening within primary care as both feasible and acceptable.

Methods

Study participants

The study sample included all adolescents aged 12–18 years who presented for a well check appointment in a Kaiser Permanente Northern California (KPNC) primary care clinic between July 1, 2018, and June 30, 2019 (n = 134,114). KPNC is a large, not-for-proﬁt integrated health care delivery system serving 4.3 million members, which represents about one third of Northern California’s population. The membership is insured through employer-based plans, Medicare, Medicaid, and health insurance exchanges and is highly representative of the U.S. population with access to care [26]. Adolescents seen by clinicians within two of the Pediatric Clinics in the San Francisco Bay Area (Oakland and San Leandro) piloted clinical workﬂows to systematically screen for gender identity at all Teen Well Check visits during the study period (“Pilot”). All other adolescent patients seen in other KPNC Pediatric clinics outside of the two pilot clinics in Oakland and San Leandro were provided treatment and entered data per usual care (“Usual Care”).

Procedures: gender identity screening

A standardized previﬁst “Teen Well Check Questionnaire” (TWCQ) is administered universally at each well check visit in the health system except among adolescents with intellectual/developmental disabilities. The TWCQ is a comprehensive health screening instrument created by health system clinical leaders based on Bright Futures guidelines [27] and consists of a parent and an adolescent component. The paper-and-pencil instrument is distributed by the receptionist at check-in separately to the adolescents and parents and collected by the clinic staff during the rooming process.

The pilot clinics added three gender identity questions to the adolescent portion of the TWCQ: (1) “What is your gender?” with possible responses of “female,” “male,” “transgender female,” “transgender male,” “non-binary/genderqueer,” “unsure/questioning,” “decline to answer,” “other,” and “don’t understand the question”; (2) “What sex were you assigned at birth?” with possible responses of “female,” “male,” “decline to answer,” and “other”; and (3) “If your gender is different from your assigned sex at birth, have you discussed this with your parent(s)/guardian(s)?” with possible responses of “yes,” “no,” “other,” and “don’t understand the question.” The ﬁrst two questions are gender identity screening questions that were adapted from a previous study that examined gender identity documentation [19]. The third question was added to facilitate discussions between clinicians and adolescents based on the answers to the screening questions. Responses to the TWCQ and gender identity screen were entered into the electronic health record (EHR) by clinic staff before the clinician seeing the patient. Responses to
the gender identity screen were then discussed in detail during the confidential portion of the visit before the parents entered the examination room. In the usual care clinics, gender identity information was assessed through interactions and discussions with the patient and their family and documented per usual practice into the EHR.

Measures

Gender identity. The gender identity questions (gender and sex assigned at birth) were extracted from the EHR. An indicator was created to determine if an adolescent identified as TGD by comparing the sex assigned at birth (female, male, and other/unknown) with the patient’s gender identity (female, male, transgender female, transgender male, nonbinary/genderqueer, unsure/questioning, decline to answer, and other). If the responses differed, then the patient was coded as being TGD, 0 otherwise.

Other EHR and administrative data. Patient’s age, EHR-assigned sex, and race/ethnicity were extracted from the EHR. EHR-assigned sex is directly provided by the purchaser of a health insurance policy; this information is provided by the health insurance plan subscriber at enrollment.

Surveys. Anonymous surveys to assess patient and parent views on the feasibility and acceptability of gender screening were administered in English and Spanish, consisting of six items and five items, respectively. Survey items were informed by instruments used in similar pilot and quality improvement efforts in the health system. The surveys were administered along with the TWCQ at check-in and collected by the clinic staff.

Adolescent survey

1. Did you find the gender question confusing?
2. Did you feel that doctors should ask all patients?
3. Is there anything else we should be asking you about in addition to your gender identity?
4. Did any of the questions make you feel uncomfortable?
5. Did you find any of the questions offensive?
6. Do you think screening and discussions about gender identity are helpful to you?

Parent/guardian survey

1. Do you think this question is worthwhile to ask teens?
2. Do you think asking this question will interfere with the timing of your child’s doctor visit?
3. Does the question make you feel uncomfortable?
4. Do you find this question offensive?
5. Do you think screening and discussions about their gender identity will be beneficial for teens and families?

Pediatric clinician survey

1. Do you think asking teens to complete this gender identity screening question will affect your visit workflow in any way?
2. Do you think systematic gender identity screening will help us direct more teens to receive gender-affirming treatment?
3. Do you think it is important to screen for gender identity during Teen Well Check?
4. What impact do you think it might have on the conversation and visit length if your patient self-identified as gender nonconforming?
5. How do you think patients will react to the gender identity screening question?
6. How difficult do you find it to discuss gender identity issues with patients?
7. How difficult do you find it to discuss gender identity issues with parents/guardians?

A 7-item anonymous online survey was sent to all pediatric physicians and nurse practitioners in KPNC to assess pediatric clinicians’ views of acceptability and feasibility of gender identity screening during well checks. All questionnaires included multiple-choice and open-ended responses.

The analysis of EHR data and the patient and parent/guardian survey components were reviewed and approved by the KPNC Institutional Review Board. The clinician survey component was determined to be a quality improvement project.

Analysis. Analyses were performed using SAS statistical software, version 9.3 (SAS Institute Inc.); significance was defined at \( p < .05 \). Pearson’s chi-square tests were used to examine differences in patient age, race/ethnicity, and proportion of patients identifying as TGD between the pilot and usual care clinics. Multivariable logistic regression models were used to examine differences in patients reporting as TGD in the pilot and usual care clinics adjusting for patient age and race/ethnicity. Descriptive statistics were used to present the patients’, parents’, and clinicians’ perceptions of gender identity screening.

Results

Gender identity screening in primary care

During the study period, 134,114 adolescents (\( n = 817 \) pilot clinics and \( n = 133,297 \) usual care clinics) presented for well check visits. Ninety-nine percent of those presenting for a well check visit completed the TWCQ (\( n = 133,215/134,114 \)). More adolescents reported as TGD in the pilot clinics compared with the usual care clinics (1.3% vs. .2%; \( p < .001 \)). Compared with the usual care clinics, pilot clinics had higher proportions of Latino (31.9% pilot vs. 27.7% usual care), black (18% pilot vs. 9.1% usual care), American Indian/Alaska Native (.9% pilot vs. .8% usual care), and Other/Unknown Race/Ethnicity (9.5% pilot vs. 5.5% usual care; \( p < .001 \)). The pilot clinic had a smaller proportion of white (19.7% pilot vs. 33.4% usual care) and Asian/Native Hawaiian/Pacific Islander (20.0% pilot vs. 23.4% usual care) adolescents (\( p < .001 \)). The pilot clinics had a smaller proportion of adolescents whose EHR-assigned sex was male (47.5% vs. 51.1% in usual care; \( p < .001 \)) and a high proportion of older adolescents (\( p < .001 \); Table 1).

In multivariable logistic models, odds of reporting as TGD were higher in the pilot clinics compared with usual care (adjusted odds ratio [aOR] = 6.91, 95% confidence interval [CI] = 3.76–12.74). Older patients had higher odds of reporting as TGD (aOR = 1.27, 95% CI = 1.19–1.36). Compared with white adolescents, odds of reporting as TGD were lower for all other race/ethnicities (Asian/Native Hawaiian/Pacific Islander: aOR = .19, 95% CI = .13–.29; black: aOR = .38, 95% CI = .24–.60; Latino:
Discussions about gender to be helpful. A small percent of parents/guardians reported that it was worthwhile to ask adolescents about gender, and 63.1% thought screening and discussions about gender would be beneficial for teens and families. One parent commented, “Thank you[,] this is so vital and important,” and another noted that, “with times like these, doctors and parents need to be as open with kids as possible.” A small percentage of parents/guardians reported that asking the question could interfere with the timing of their child’s doctor visit (3.6%), was offensive (2.8%), or made them feel uncomfortable (4.4%). One parent indicated that they “prefer [red] to have these discussions with my child in my home” (Table 3).

Perspectives from pediatric clinicians. Among the 800 KPNC pediatric clinicians invited to participate, 228 (28.5%) completed the online survey. Most respondents (92.5%) reported that it was somewhat important/important/critically important to screen for gender identity during well checks, and 84.6% felt that systematic gender identity screening would help direct more adolescents to receive gender-affirming care. However, adolescents (2.6%) felt that doctors should be asking more questions around gender in addition to the three screening questions. Several adolescents suggested adding questions to assess parental views of their gender identity, including how parents feel about their child’s gender. Others did not find the screening question to be personally helpful but felt it may benefit others. Only a small percentage of adolescents found the gender screening question confusing (2.3%), offensive (.3%), or made them feel uncomfortable (.6%).

The majority (75.5%) of parents reported that it was worthwhile to ask adolescents about gender, and 63.1% thought screening and discussions about gender would be beneficial for teens and families. One parent commented, “Thank you[,] this is so vital and important,” and another noted that, “with times like these, doctors and parents need to be as open with kids as possible.” A small percentage of parents/guardians reported that asking the question could interfere with the timing of their child’s doctor visit (3.6%), was offensive (2.8%), or made them feel uncomfortable (4.4%). One parent indicated that they “prefer [red] to have these discussions with my child in my home” (Table 3).

Table 1
Demographics and prevalence of transgender and gender diverse (TGD) among adolescents seen for well check visits at Kaiser Permanente Northern California in Pilot versus Usual Care Clinics between July 1, 2018, and June 30, 2019 (n = 134,114)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Pilot Clinics (n = 817)</th>
<th>Usual care clinics (n = 133,297)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>12</td>
<td>75</td>
<td>9.2</td>
<td>22,711</td>
</tr>
<tr>
<td>13</td>
<td>125</td>
<td>15.3</td>
<td>20,528</td>
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<tr>
<td>14</td>
<td>153</td>
<td>18.7</td>
<td>24,399</td>
</tr>
<tr>
<td>15</td>
<td>176</td>
<td>21.5</td>
<td>22,555</td>
</tr>
<tr>
<td>16</td>
<td>144</td>
<td>17.6</td>
<td>21,824</td>
</tr>
<tr>
<td>17</td>
<td>135</td>
<td>16.5</td>
<td>19,197</td>
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<tr>
<td>18</td>
<td>9</td>
<td>1.1</td>
<td>2,083</td>
</tr>
<tr>
<td>Race/ethnicity</td>
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<td></td>
<td></td>
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<tr>
<td>White</td>
<td>161</td>
<td>19.7</td>
<td>44,531</td>
</tr>
<tr>
<td>Asian/Native Hawaiian/Pacific Islander</td>
<td>163</td>
<td>20.0</td>
<td>31,254</td>
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<tr>
<td>Black</td>
<td>147</td>
<td>18.0</td>
<td>12,090</td>
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<tr>
<td>Latino</td>
<td>261</td>
<td>31.9</td>
<td>36,955</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>7</td>
<td>9.</td>
<td>1,085</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>78</td>
<td>9.5</td>
<td>7,382</td>
</tr>
<tr>
<td>Male*</td>
<td>387</td>
<td>47.4</td>
<td>68,096</td>
</tr>
<tr>
<td>TGD</td>
<td>11</td>
<td>1.3</td>
<td>290</td>
</tr>
</tbody>
</table>

Table 2
Multivariate logistic regression model: odds of adolescents identifying as transgender and gender diverse among adolescents seen for well check visits at Kaiser Permanente Northern California in Pilot versus Usual Care Clinics between July 1, 2018, and June 30, 2019 (n = 134,114)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Adjusted odds ratio (95% confidence interval)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Clinics (reference: Usual Care)</td>
<td>6.91 (3.76, 12.74)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Age</td>
<td>1.27 (1.19, 1.36)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Race/ethnicity (reference: white)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Native Hawaiian/Pacific Islander</td>
<td>.19 (.13, .29)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Black</td>
<td>.38 (.24, .60)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>.34 (.25, .46)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>.54 (.33, .86)</td>
<td>.010</td>
</tr>
</tbody>
</table>

\* aOR = .34, 95% CI = .25—.46; and other/unknown: aOR = .54, 95% CI = .33—.86; Table 2).
36.4% of respondents felt that asking adolescents to complete a gender identity screening question would affect visit workflow, and 54.0% felt that it will significantly impact visit length if a patient self-reported as TGD. One clinician noted that, “while asking these questions may prolong a visit, it could potentially open up an opportunity to provide lifesaving and life affirming care...any extra time or initial discomfort is more than worth it.”

When asked about adolescents’ reaction to the screening question, 65% reported that adolescents would feel neutral/not care, 53% reported that adolescents would be relieved to be asked, 42.4% would react positively and 16.2% felt that adolescents would be offended. Pediatric clinicians found it harder to discuss gender identity issues with parents/guardians than with adolescents: 53.1% found it very difficult/difficult to talk to parents, whereas only 30.7% found it very difficult/difficult to talk to adolescents. Two respondents suggested administering the gender identity screener verbally to help ensure patients understand the questions, particularly younger adolescents (Table 4).

**Discussion**

This was among the first studies to pilot systematic gender screening in adolescent primary care and examine perceptions of its feasibility and acceptability based on adolescent, parent, and clinician views. Although this was a small pilot, patients in the pilot clinics were almost seven times as likely to report as TGD as those in usual care clinics, suggesting that a significant number of TGD adolescents may be underidentified and thus underserved in usual care. Systematic screening may help clinicians identify TGD patients more effectively and earlier, allowing them to connect these vulnerable patients to appropriate care. However, some still consider gender diversity a sensitive topic, creating concerns about the acceptability of asking adolescents about their gender in the clinical setting.

Adolescents and parents alike overwhelmingly found the screening questions appropriate and worthwhile and did not think they would interrupt the visit flow. To our knowledge, this is the first study to evaluate the parents’ perceptions of
acceptability of gender identity screening in pediatric primary care. Understanding parental opinions is essential given that parents are a critical partner in supporting gender-affirmative care, and we know parental support is associated with improved mental health and a higher quality of life for transgender adolescents [28]. Protecting confidentiality and understanding the level of family acceptance from the adolescent's perspective are paramount. Adolescents expressed high comfort levels with questions about their gender, but only if their confidentiality could be assured.

The pediatric clinician respondents largely supported systematic screening and felt it would help direct patients to appropriate care. Although the majority felt it did not disrupt their clinic workflows, more than half acknowledged that screening can lengthen the visit time. In adolescent health service delivery, this concern is not unique to gender identity screening. When adolescents answer “yes” to a screening question pertaining to sensitive and confidential topics such as depression, substance use, or sexual activity, clinicians often feel that patients/parents would be uncomfortable discussing the issue together or are concerned that the visit duration will be lengthened. Future work should examine these and other barriers to gender screening and potential strategies, which might be used by pediatric clinicians and health systems to prioritize this topic during an adolescent well-care visit. This may include change in clinic workflows and replacement of discussions of existing adolescent health maintenance topics to allow more time for the clinician to discuss gender identity or other sensitive topics with their patients.

Among our adolescent sample, we found a discordance between clinicians’ and patients’/parents’ comfort levels with gender identity screening compared with previous studies in the adult populations. Although patients/parents do not mind being asked, clinicians are not comfortable asking [24,25,29]. Pediatric clinicians should feel encouraged by the recent American Academy of Pediatrics Policy Statement supporting pediatricians in this critical role of connecting patients to gender-affirming health care. That being said, many clinicians may not feel that they are well-equipped to have discussions with their patients about gender. In addition, clinicians may have been miseducated about “reparative” treatment models aimed to prevent children from identifying as transgender, which has been described as not only ineffective but also harmful, unfair, and deceptive [30]. This research calls for working with pediatric practice leaders to implement systematic gender identity screening and to provide more training opportunities among pediatric clinicians, residents, and medical students in gender-affirming care models, with the goals to improve skills and comfort in providing care, as well as to ensure that TGD adolescents are treated with respect and dignity.

Our study found that the TGD reporting among adolescents differed by age. Similar to self-report of sexual attraction and orientation, younger adolescents may be less likely to report as TGD because they are exploring their gender identity, unwilling to answer, or simply do not understand the question [18,31]. Tailoring of questions about gender identity by age may be warranted, as well as exploring how best to ask the question about gender to ensure both comfort and gender affirmation (e.g., allowing a patient to identify as “male” or “female” while also indicating they are “transgender”).

This study has several limitations. It was conducted in a single integrated health care system with an insured population and may not be generalizable to other populations. In addition, the pilot clinics are located in the San Francisco Bay Area, which may be considered more accepting of TGD issues, and thus, findings may not generalize to other parts of the country. However, adolescents in communities with less acceptance for TGD individuals would likely greatly benefit from using primary care visits as an opportunity to discuss their gender identity and get connected to support and services. Another limitation is that this was a small pilot study including only two clinics with specific providers who were not randomly selected. Although we did not survey these providers in the pilot as follow-up survey to the study, it would have been useful to learn about their views of feasibility of doing gender screening in the office visit based on their experience in the pilot. Also, the low response rate (28%) on the clinician survey may be a limitation because responders may have stronger or different views on the topic than non-responders. However, this low response rate was similar to the previously reported online survey response rates among pediatricians [32]. Regardless, further work is needed to better characterize provider perceptions around barriers and facilitators of integrating gender screening into clinical practice. Additionally, clinicians’ race/ethnicity and religious affiliation were not collected; these factors are likely associated with views on TGD and should be examined in future studies.

Conclusion

The study is an important step in demonstrating the feasibility and acceptability of systematic gender screening in adolescent primary care. Although it was a small pilot study, we found that patients were more likely to report being TGD when screened, suggesting TGD may be underreported in usual care. Furthermore, our results show that adolescents, parents, and pediatricians felt gender identity screening in primary care was beneficial and necessary, providing a unique opportunity for collaboration and education among parents, adolescents, and pediatricians. Further research is needed to better understand parental perspectives on discussing gender identity with their adolescents and how pediatricians can best partner with the parent and adolescent to improve communication around gender identity.

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