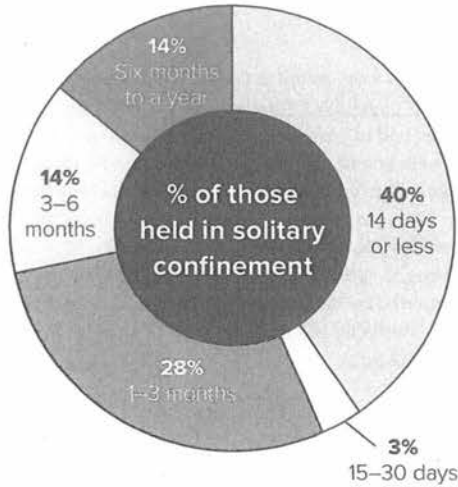


Figure 14.20: Duration of solitary confinement (n=9, unweighted)



** Due to the small sample size, these findings should be interpreted with caution.*

III. Mistreatment and Assault in Immigration Detention

Those who were placed in immigration detention were asked about any mistreatment they faced while they were there, such as being physically or sexually assaulted, threatened with sexual assault, or denied access to hormones or gender-appropriate clothing. Of the twenty-nine respondents who answered these questions, 45% reported one or more of these experiences from their time in immigration detention.

Approximately one-quarter (23%) were physically assaulted and 15% were sexually assaulted by staff or detention officers or by other detainees or inmates, while 19% were threatened with sexual assault. Nearly one-third (29%) were denied access to hormone treatment (Table 14.2).

Table 14.2: Mistreatment and assault in immigration detention

Form of mistreatment or assault (n=29, unweighted)	% of those detained
Denied access to hormones	29%
Physically assaulted	23%
Denied gender-appropriate clothing	22%
Threatened with sexual assault	19%
Sexually assaulted	15%
One or more experiences listed	45%

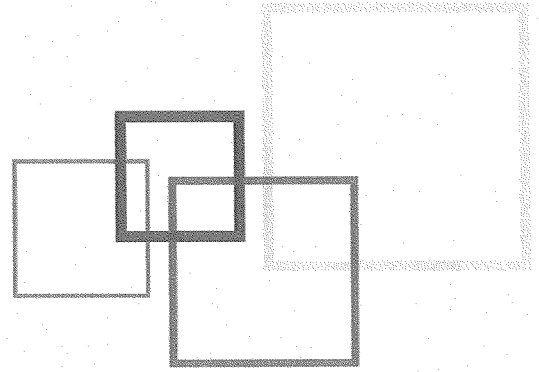
** Due to the small sample size, these findings should be interpreted with caution.*

Conclusion

Respondents reported frequent contact with the law enforcement and criminal justice systems, as well as high rates of mistreatment by police, physical and sexual abuse in jails and prisons, and denial of medical treatment while incarcerated. Experiences with law enforcement varied by demographic groups, with transgender people of color, those who have experienced homelessness, people with disabilities, and low-income transgender people reporting higher rates of discomfort with and mistreatment by police and other law enforcement officers. Results also indicated substantial levels of mistreatment and abuse in jail, prisons, and juvenile detention centers. Additionally, the experiences of respondents who were placed in immigration detention included harmful conditions and mistreatment, such as lengthy periods of solitary confinement and physical and sexual assault by detention staff and other detainees.

ENDNOTES | CHAPTER 14: POLICE, PRISONS, AND IMMIGRATION DETENTION

- 1 Center for American Progress & Movement Advancement Project. (2016). *Unjust: How the Broken Criminal Justice System Fails LGBT People*. Available at: <http://www.lgbtmap.org/file/lgbt-criminal-justice.pdf>.
- 2 Center for American Progress & Movement Advancement Project. (2016). *Unjust: How the Broken Criminal Justice System Fails LGBT People*. Available at: <http://www.lgbtmap.org/file/lgbt-criminal-justice.pdf>; Lydon, J. (2015). *Coming out of Concrete Closets: A Report on Black & Pink's National LGBTQ Survey*. Available at: <http://www.blackandpink.org/wp-content/uploads/Coming-Out-of-Concrete-Closets.-Black-and-Pink.-October-21-2015.pdf>.
- 3 Beck, A. J. (2014). *Sexual Victimization in Prisons and Jails Reported by Inmates, 2011–12: Supplemental Tables: Prevalence of Sexual Victimization Among Transgender Adult Inmates*. DC: Bureau of Justice Statistics. Available at: https://www.bjs.gov/content/pub/pdf/svpjri1112_st.pdf.
- 4 Human Rights Watch. (2016). "Do You See How Much I'm Suffering Here?": Abuse Against Transgender Women in US Immigration Detention. NY, New York: Human Rights Watch. Available at: https://www.hrw.org/sites/default/files/report_pdf/us0316_web.pdf; Jeanty, J. & Tobin, H. J. (2013). *Our Moment for Reform: Immigration and Transgender People*. DC: National Center for Transgender Equality. Available at: http://www.transequality.org/sites/default/files/docs/resources/OurMoment_CIR_en.pdf.
- 5 Respondents who are "living in poverty" represent those who are living at or near the poverty line. See the *Income and Employment Status* chapter for more information about the poverty line calculation.
- 6 "Respondents with disabilities" here refers to respondents who identified as a person with a disability in Q. 2.20.
- 7 Respondents received the following answer choice in Q. 28.5: "I experienced unwanted sexual contact from an officer (such as fondling, sexual assault, or rape)."
- 8 Respondents were asked in Q. 28.10 and Q. 28.12 whether they were "physically forced, pressured, or made to feel that [they] had to have sex or sexual contact" with facility staff or with another inmate. This question was based on the language used by the Bureau of Justice's National Inmate Survey to allow for comparison with the general incarcerated population. Beck, A. J., Berzofsky, M., Caspar, R., & Krebs, C. (2013). *Sexual Victimization in Prisons and Jails Reported by Inmates 2011–12*. DC: Bureau of Justice Statistics. Available at: <https://www.bjs.gov/content/pub/pdf/svpjri1112.pdf>.
- 9 Beck et al. See note 8. The Bureau of Justice Statistics (BJS) presents data separately for people incarcerated in state and federal prisons and people incarcerated in jails, but they do not present data for those held in juvenile detention facilities. USTS data includes the experiences of those who were incarcerated in jail, prison, and juvenile detention. Therefore, data from the U.S. incarcerated population in this section is provided as a benchmark for experiences among USTS respondents and should be interpreted with caution.
- 10 The National Inmate Survey does not ask about physical assault that does not involve sexual violence.
- 11 Beck et al. See note 8.
- 12 Beck et al. See note 8.
- 13 This section discusses the specific experiences of those held in immigration detention. General information about citizenship and immigration status, including experiences with applications for asylum, is provided in the *Portrait of USTS Respondents* chapter.
- 14 Although a small number of respondents in the sample (n=30, unweighted) had been held in an immigration detention facility, it was important to highlight their experiences in this report. Due to the small sample size, unweighted frequencies are presented alongside weighted percentages in this section to be clear that the percentages reflect the experiences of a small number of respondents. While it is important to present these experiences in this report, the findings presented in this section should be interpreted with caution due to the small sample size.



CHAPTER 15

Harassment and Violence

The freedom to participate in public life without fear of discrimination, harassment, and violence has been shown to have wide-ranging impacts on health, economic stability, and other key aspects of life.¹ Transgender people, however, are often vulnerable to mistreatment in public spaces, resulting in barriers to civic and economic participation.² Transgender people also face high rates of violence, including physical attacks, sexual assault, and intimate partner violence.³

Respondents were asked about their experiences in the past year with unequal treatment or service⁴ in businesses, government agencies, and other public places (more broadly than just in public accommodations, which are covered in the *Places of Public Accommodation and Airport Security* chapter), as well their experiences with verbal harassment.⁵ They also received questions about experiences with being physically attacked or sexually assaulted in a variety of settings. Finally, they were asked about experiences with intimate partner violence. Questions were informed by several national surveys, including the National Crime Victimization Survey and the National Intimate Partner and Sexual Violence Survey.⁶ Notable differences in respondents' experiences based on demographic and other characteristics are reported throughout the chapter.

KEY FINDINGS

- ▶ Nearly half (48%) of all respondents in the sample reported being denied equal treatment, verbally harassed, and/or physically attacked in the past year because of being transgender.
 - One in seven (14%) respondents reported that they were denied equal treatment or service in a public place in the past year because of being transgender.
 - Nearly half (46%) of respondents reported that they were verbally harassed in the past year because of being transgender.
 - Nearly one in ten (9%) respondents reported that they were physically attacked in the past year because of being transgender.

- ▶ Nearly half (47%) of respondents have been sexually assaulted at some point in their lifetime.

- ▶ One in ten (10%) respondents in the survey were sexually assaulted in the past year.

- ▶ More than half (54%) of respondents experienced some form of intimate partner violence.
 - More than one-third (35%) experienced physical violence by an intimate partner, compared to 30% of the U.S. adult population. Nearly one-quarter (24%) experienced severe physical violence by current or former partner, compared with 18% of the U.S. population.

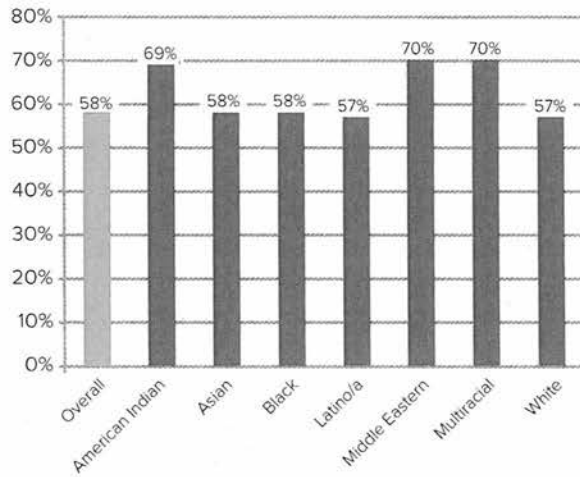
I. Overall Experiences of Unequal Treatment, Harassment, and Physical Attack

Respondents were asked if they had been denied equal treatment or service, verbally harassed, or physically attacked in the past year for any reason, regardless of whether it happened because they were transgender. This section of the chapter will examine respondents' overall experiences in the past year, and is followed by separate sections

examining denial of equal treatment, verbal harassment, and physical attacks in greater detail.

Fifty-eight percent (58%) of respondents said that they were denied equal treatment or service, verbally harassed, and/or physically attacked in the past year for any reason. Respondents who were currently working in the underground economy, such as sex work, drug sales, or other work that is currently criminalized (82%), and people with disabilities⁷ (69%) were more likely to report one or more of these experiences. Middle Eastern (70%), multiracial (70%), and American Indian (69%) respondents were also more likely to report one or more of these experiences (Figure 15.1).

Figure 15.1: Unequal treatment, verbal harassment, and/or physical attack for any reason in the past year RACE/ETHNICITY (%)



Respondents who had one or more of these experiences were then asked what they believed the reasons were for that treatment. Eighty-four percent (84%) believed that it happened because of their gender identity or expression. This means that 48% of all respondents in the survey reported that they were denied equal treatment or service, verbally harassed, and/or physically attacked because of being transgender in the past year (Table 15.1).

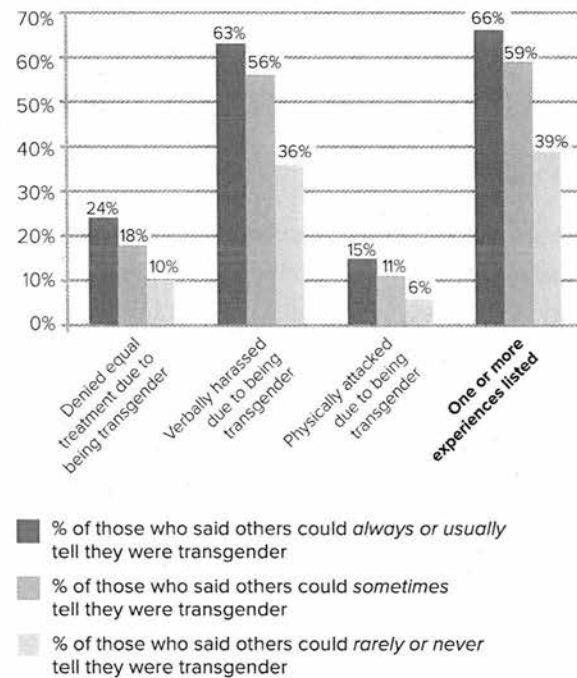
Table 15.1: Denial of equal treatment, verbal harassment, and physical attack in the past year

	Had experience for any reason (% of respondents)	Had experience because of being transgender (% of respondents)
Denied equal treatment	16%	14%
Verbally harassed	54%	46%
Physically attacked	13%	9%
One or more experiences listed	58%	48%

Nearly half (48%) of respondents reported that they were denied equal treatment or service, verbally harassed, and/or physically attacked because of being transgender in the past year.

Those who said that others could usually or always tell that they were transgender (66%) were more likely to report having one or more of these experiences because of being transgender, in contrast to those who said that others could rarely or never tell that they were transgender (39%) (Figure 15.2).

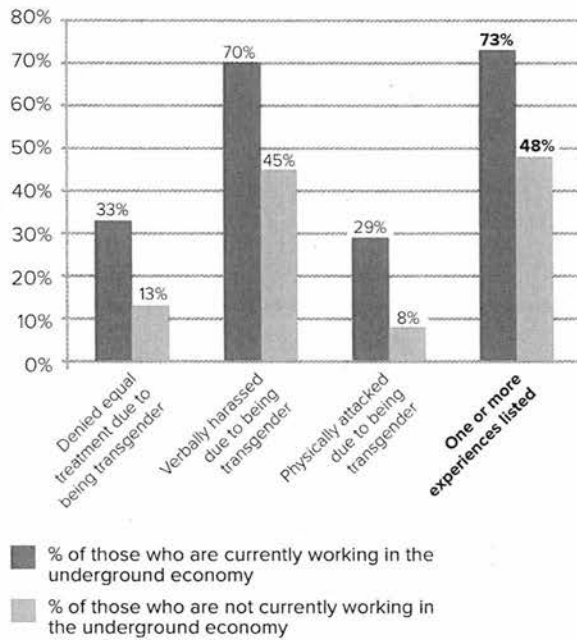
Figure 15.2: Denial of equal treatment, verbal harassment, and physical attack in the past year OTHERS' PERCEPTION OF TRANSGENDER STATUS (%)



- % of those who said others could *always or usually* tell they were transgender
- % of those who said others could *sometimes* tell they were transgender
- % of those who said others could *rarely or never* tell they were transgender

Almost three-quarters (73%) of respondents who were currently working in the underground economy reported being denied equal treatment, verbally harassed, and/or physically attacked in the past year because of being transgender (Figure 15.3).

Figure 15.3: Unequal treatment, harassment, and physical attack in the past year
CURRENT PARTICIPATION IN THE UNDERGROUND ECONOMY (%)

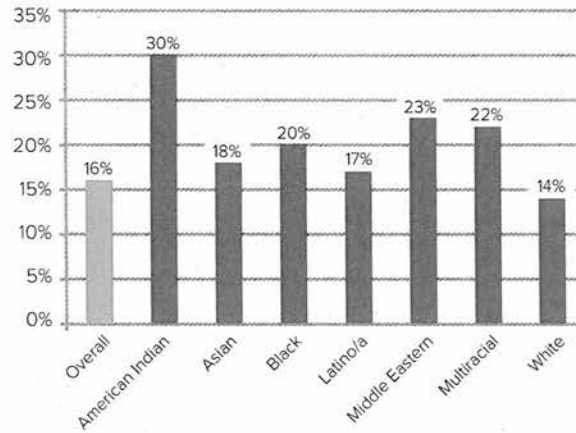


II. Unequal Treatment or Service

Sixteen percent (16%) of respondents were denied equal treatment or service in the year before taking the survey, such as at a place of business, government agency, or other public place, for any reason, regardless of whether it was related to being transgender.

People of color were more likely to have experienced unequal treatment or service. Almost one-third (30%) of American Indian respondents reported being denied equal treatment or service at a public place in the past year. Middle Eastern (23%), multiracial (22%), and Black (20%) respondents also reported higher rates (Figure 15.4). Undocumented residents (39%) were more than twice as likely to have been denied equal treatment or service as those in the overall sample, in contrast to documented non-citizens (20%) and citizens (16%).

Figure 15.4: Denial of equal treatment or service for any reason in the past year
RACE/ETHNICITY (%)



Respondents who were denied equal treatment or service were asked what they believed the reasons were for that treatment, and they selected one or more reasons from a list, such as age, race or ethnicity, and gender identity or expression (Table 15.2).

Table 15.2: Reported reasons for denial of equal treatment or service

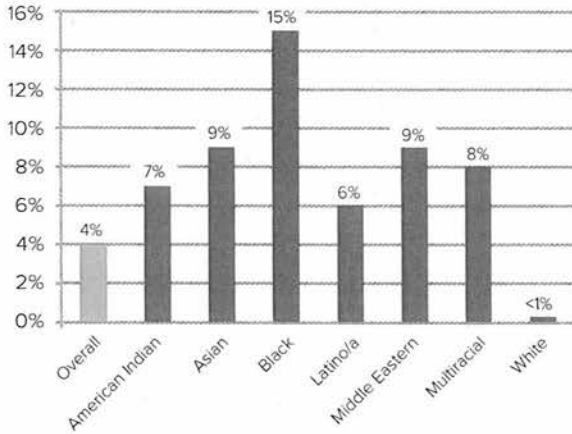
Reason for experience ⁹	% of those denied equal treatment	% of whole sample
Age	14%	2%
Disability	14%	2%
Income level or education	13%	2%
Gender identity or expression	88%	14%
Race or ethnicity	24%	4%
Religion or spirituality	5%	1%
Sexual orientation	36%	6%
None of the above	2%	<1%

Fourteen percent (14%) of all respondents said they had been denied equal treatment or service in the past year because of their gender identity or expression.⁹

Respondents also reported that they had been denied equal treatment or service because of their race or ethnicity. Among people of color, Black (15%), Asian (9%), and multiracial (8%) respondents were

most likely to report being denied equal treatment or service because of their race or ethnicity (Figure 15.5).

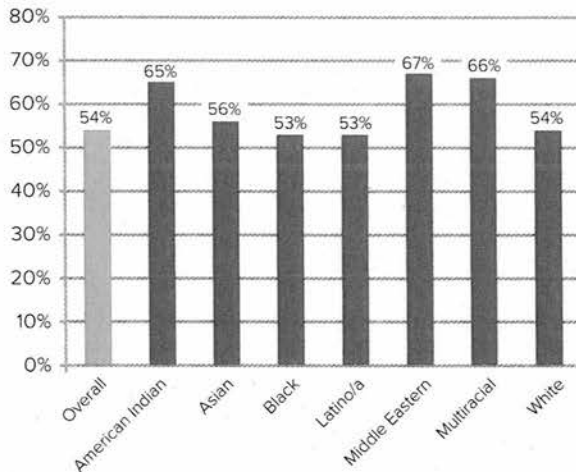
Figure 15.5: Denial of equal treatment or service in the past year because of race or ethnicity
RACE/ETHNICITY (%)



III. Verbal Harassment

Respondents were asked if anyone had verbally harassed them in the past year for any reason, regardless of whether it was related to being transgender. More than half (54%) reported that they had experienced verbal harassment. Those who were currently working in the underground economy (77%) were more likely to experience verbal harassment. Among people of color, Middle Eastern (67%), multiracial (66%), and American Indian (65%) respondents were more likely to have been verbally harassed in the past year (Figure 15.6).

Figure 15.6: Verbal harassment for any reason in the past year
RACE/ETHNICITY (%)



In Our Own Voices

“When people have tried to grope me in the street or have verbally harassed me, it’s usually either because they see me as a sexual target or because they can’t figure out whether I am a ‘man’ or a ‘woman’ and they think they have the right to demand an explanation.”

“I was sexually assaulted at my university. I was also attacked and stalked. The university didn’t do anything to help me. Instead, it threatened to punish me. I lived in terror the entire time I was on campus. I was denied a rape kit because I was transgender and the police were completely uninterested.”

“I was found in a ditch after being brutally raped for three days. I was taken to an ER. There I met an officer who told me I deserved it for attempting to be a woman and should have died. He also refused to take a report.”

“I was a victim of spousal abuse for over ten years. This grew worse when I transitioned, as [my transition] became an easy justification for verbally, emotionally and physically abusing me.”

“My trans status was used as a tool to [make me] stay with my former partner. She would say things such as ‘no one else would ever love you.’”

Respondents who were verbally harassed were asked what they believed the reasons were for that treatment (Table 15.3).

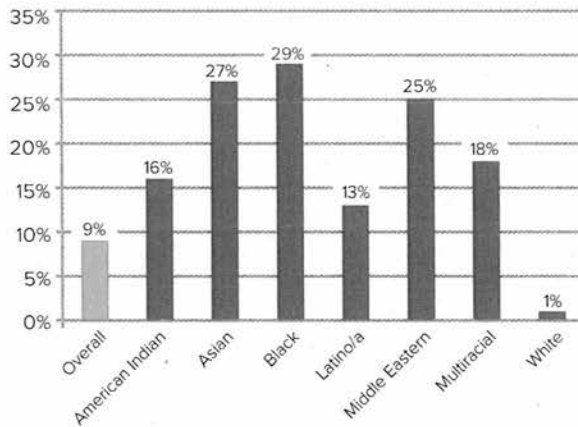
Table 15.3: Reported reasons for verbal harassment

Reason for experience	% of those verbally harassed	% of whole sample
Age	10%	5%
Disability	10%	5%
Income level or education	7%	4%
Gender identity or expression	84%	46%
Race or ethnicity	16%	9%
Religion or spirituality	5%	3%
Sexual orientation	42%	23%
None of the above	8%	4%

Nearly half (46%) of respondents in the overall sample reported they were verbally harassed in the past year because of being transgender.

Among people of color, Black (29%), Asian (27%), Middle Eastern (25%), and multiracial (18%) respondents were most likely to report being verbally harassed because of their race or ethnicity (Figure 15.7).

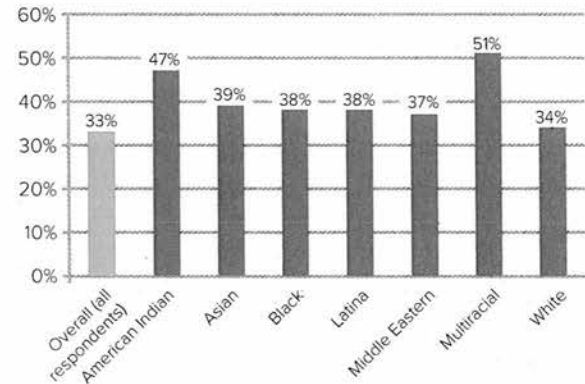
Figure 15.7: Verbal harassment in the past year because of race or ethnicity
RACE/ETHNICITY (%)



Respondents were asked if they had been verbally harassed in public by strangers because of being transgender in the past year.¹⁰ One-third (33%) of all respondents reported having this experience in

the past year. Transgender women of color were more likely to be harassed by strangers because of their gender identity or expression, particularly multiracial (51%) and American Indian (47%) women (Figure 15.8). Those who said that others could always or usually tell that they were transgender, even without being told (55%), were substantially more likely to have been verbally harassed by strangers, in contrast to those who said that people could rarely or never tell that they were transgender (22%).

Figure 15.8: Verbal harassment in public by strangers in the past year among transgender women
RACE/ETHNICITY (%)



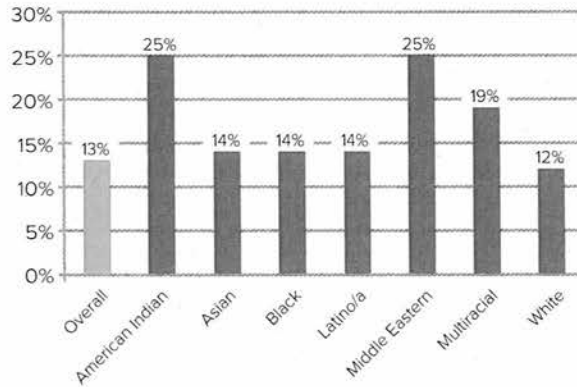
IV. Physical Attack

Thirteen percent (13%) of respondents said that someone had physically attacked them in the past year, such as by grabbing them, throwing something at them, punching them, or using a weapon against them for any reason.

Those who were currently working in the underground economy (41%) were more than three times as likely to report being physically attacked in the past year. Undocumented residents (24%) were almost twice as likely to report being physically attacked. Experiences of physical attack also varied by race and ethnicity, with American Indian (25%), Middle Eastern (25%), and multiracial

(19%) respondents being more likely to report a physically attack in the past year (Figure 15.9).

Figure 15.9: Physical attack for any reason in the past year
RACE/ETHNICITY (%)



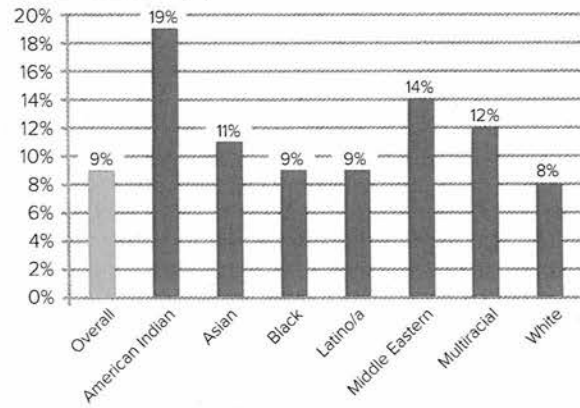
Those who had been physically attacked in the past year were asked what they believed the reasons were for that attack (Table 15.4).

Table 15.4: Reported reasons for physical attack

Reason for experience	% of those physically attacked	% of whole sample
Age	7%	1%
Disability	8%	1%
Income level or education	5%	1%
Gender identity or expression	66%	9%
Race or ethnicity	11%	1%
Religion or spirituality	3%	<1%
Sexual orientation	32%	4%
None of the above	25%	3%

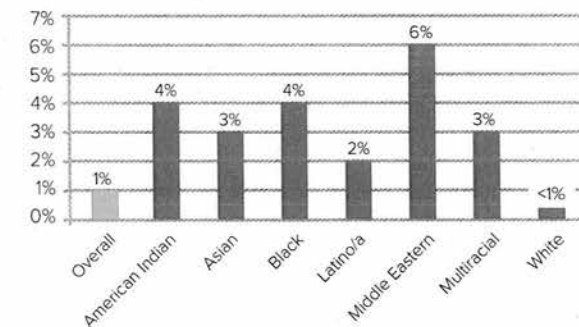
Nearly one in ten (9%) respondents in the overall sample reported being physically attacked in the past year because of being transgender. American Indian (19%), Middle Eastern (14%), multiracial respondents (12%), and Asian respondents (11%) were more likely to report being attacked because of being transgender (Figure 15.10), as were undocumented residents (23%).

Figure 15.10: Physical attack in the past year because of being transgender
RACE/ETHNICITY (%)



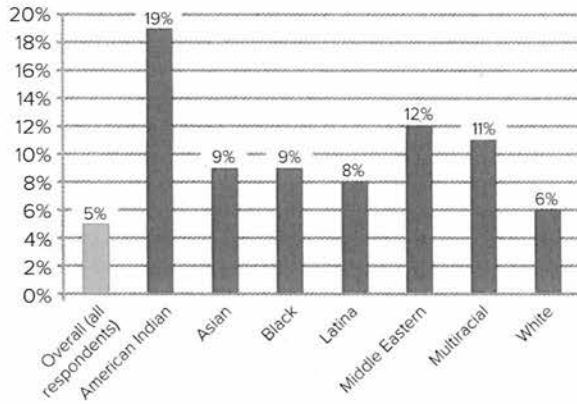
Respondents also reported that they had been physically attacked because of their race or ethnicity. Among people of color, Middle Eastern (6%), American Indian (4%), Black (4%), and Asian (4%) respondents were most likely to report being physically attacked because of their race or ethnicity (Figure 15.11).

Figure 15.11: Physical attack in the past year because of race or ethnicity
RACE/ETHNICITY (%)



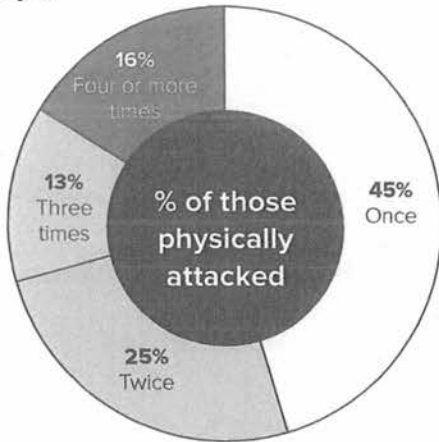
Five percent (5%) of respondents in the overall sample were physically attacked in public by strangers because of being transgender.¹¹ Undocumented residents (20%) and respondents currently working in the underground economy (20%) were four times more likely to report this experience than the overall sample. Transgender women of color were also more likely to report this experience, particularly American Indian (19%), Middle Eastern (12%), and multiracial (11%) women

Figure 15.12: Physical attack in public by strangers in the past year among transgender women RACE/ETHNICITY (%)



Respondents who were physically attacked for any reason in the past year were asked how many times they had been attacked. Forty-five percent (45%) were attacked once that year, and 25% were attacked twice. Thirteen percent (13%) were attacked three times, and 16% were attacked four or more times that year (Figure 15.13).

Figure 15.13: Number of physical attacks in the past year



These respondents were also asked to specify how they were attacked. Nearly three-quarters (73%) of those who were physically attacked in the past year reported that someone had grabbed, punched, or choked them. Twenty-nine percent (29%) reported that someone threw an object at them, like a rock or a bottle. Nearly one-third (29%)

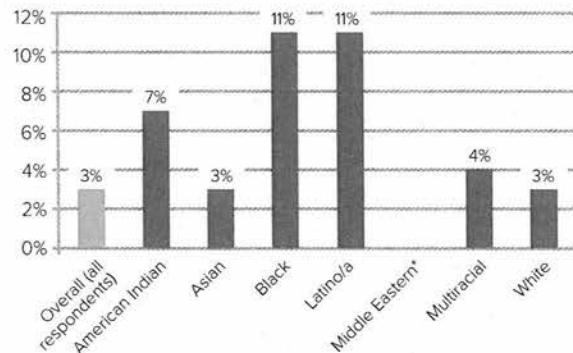
of those who reported being physically attacked were sexually assaulted.¹² (Table 15.5).

Table 15.5: Means of physical attack in the past year

Type of physical attack	% of those physically attacked
By being grabbed, punched, or choked	73%
By having something thrown at them (such as a rock or bottle)	29%
By being sexually assaulted	29%
With another weapon (like a baseball bat, frying pan, scissors, or stick)	7%
With a knife	5%
With a gun	3%
Not listed above	9%

Three percent (3%) of respondents who were physically attacked reported being attacked with a gun in the past year. Transgender women of color, particularly Black (11%) and Latina (11%) women, were nearly four times as likely to report that they were attacked with a gun (Figure 15.14). Respondents currently working in the underground economy (10%) were more than three times as likely to have been attacked with a gun, and those whose only source of income was from underground economy work (16%) were more than five times as likely to have been attacked with a gun.

Figure 15.14: Attacked with a gun among transgender women who were physically attacked in the past year RACE/ETHNICITY (%)



*Sample size too low to report

Nearly half (47%) of respondents have been sexually assaulted at some point in their lifetime.

V. Sexual Assault

In addition to questions about being physically attacked in the past year, respondents were asked questions about their experiences with sexual assault during their lifetime and in the past year,¹³ informed by questions from the National Intimate Partner and Sexual Violence Survey (NISVS).¹⁴

Nearly half (47%) of respondents have been sexually assaulted at some point in their lifetime. This included any experiences with “unwanted sexual contact, such as oral, genital, or anal contact, penetration, forced fondling, or rape.”^{15,16}

Respondents who have participated in sex work (72%), those who have experienced homelessness (65%), and people with disabilities (61%) were more likely to have been sexually assaulted in their lifetime. Among people of color, American Indian (65%), multiracial (59%), Middle Eastern (58%), and Black (53%) respondents were most likely to have been sexually assaulted in their lifetime (Figure 15.15). Experiences also varied across gender, with transgender men (51%) and non-binary people with female on their original birth certificate (58%) being more likely to have been sexually assaulted, in contrast to transgender women (37%) and non-binary people with male on their original birth certificate (41%) (Figure 15.16). Among transgender men and non-binary people with female on their original birth certificates, rates of sexual assault were higher among people of color, particularly American Indian, Middle Eastern, and multiracial people (Figure 15.17 & Figure 15.18).

Figure 15.15: Lifetime sexual assault RACE/ETHNICITY (%)

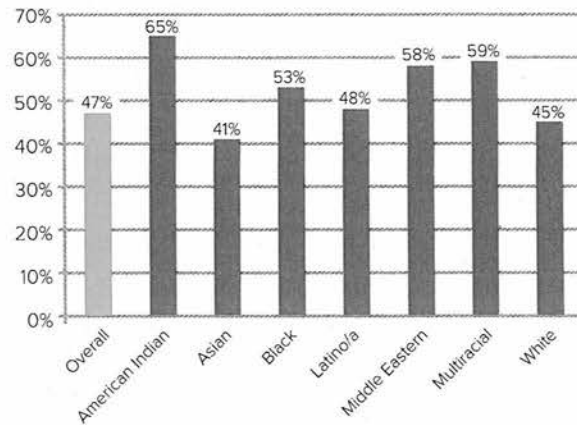


Figure 15.16: Lifetime sexual assault GENDER IDENTITY (%)

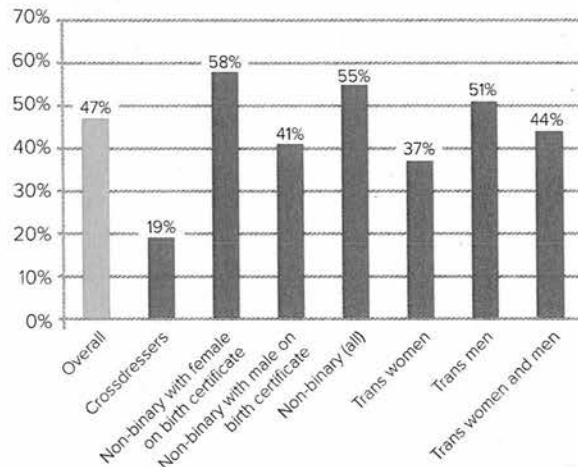


Figure 15.17: Lifetime sexual assault among transgender men RACE/ETHNICITY (%)

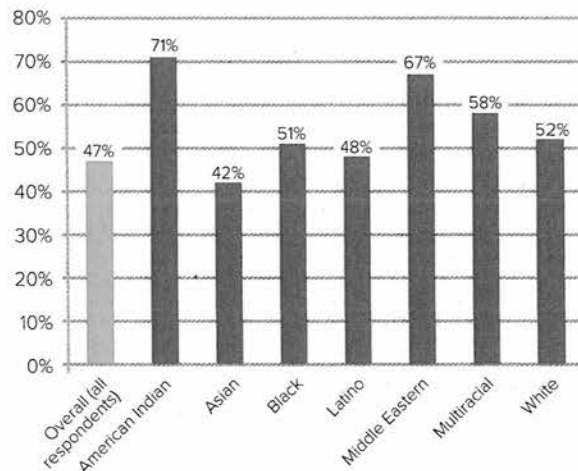
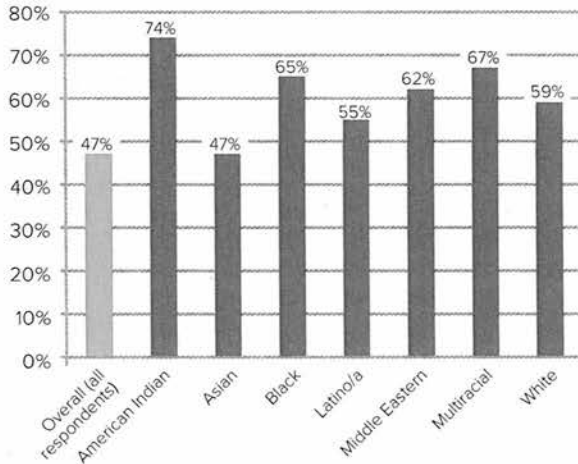


Figure 15.18: Lifetime sexual assault among non-binary people with female on their original birth certificate RACE/ETHNICITY (%)



Respondents who reported this experience were then asked who had committed the sexual assault. Approximately one-third (34%) of those who were sexually assaulted said that a current or former partner had sexually assaulted them. One-quarter (25%) of sexual assault survivors reported that a relative was the perpetrator. Nearly one-third (30%) of sexual assault survivors reported that a stranger committed the assault (Table 15.6).

Table 15.6: Person who committed sexual assault

Person who committed sexual assault	% of respondents who have been sexually assaulted
A friend or acquaintance	47%
A partner or ex-partner	34%
A stranger	30%
A relative	25%
A coworker	5%
A health care provider or doctor	4%
A teacher or school staff member	3%
A law enforcement officer	2%
A boss or supervisor	2%
A person not listed above	12%

One in ten (10%) respondents in the survey were sexually assaulted in the past year.

One in ten (10%) respondents in the survey were sexually assaulted in the past year.^{17,18} Respondents who were currently working in the underground economy (36%) were more than three times as likely to have been sexually assaulted in the past year.

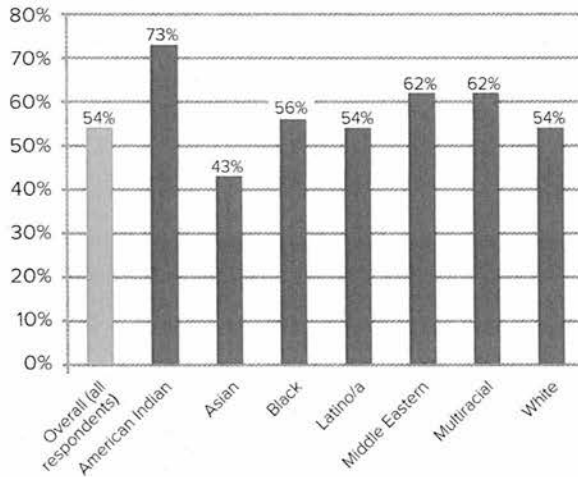
VI. Intimate Partner Violence

a. Overall Intimate Partner Violence

Respondents who reported ever having had a romantic or sexual partner received questions about their experiences with harm involving a current or former intimate partner, including physical, emotional, or financial harm, many of which were based on questions in the National Intimate Partner and Sexual Violence Survey (NISVS).¹⁹ Such acts of harm as described in the survey are defined as “intimate partner violence.”²⁰

Overall, more than half (54%) of all respondents experienced some form of intimate partner violence in their lifetime. Over three-quarters (77%) of respondents who have done sex work and nearly three-quarters (72%) of those who have been homeless experienced intimate partner violence. Undocumented residents (68%), people with disabilities (61%), and people of color, including American Indian (73%), multiracial (62%), and Middle Eastern (62%) respondents, were also more likely to report this experience (Figure 15.19).

Figure 15.19: Intimate partner violence RACE/ETHNICITY (%)



b. Intimidation, Emotional, and Financial Harm

Respondents received two sets of questions covering a range of experiences with intimate partner violence. The first set of questions involved experiences with coercive control, including intimidation, emotional and financial harm, and physical harm to others who were important to respondents. Sixteen percent (16%) of respondents reported that they had been stalked, compared to 6% in the U.S. population.²¹ One in four (25%) respondents were told that they were not a “real” woman or man by a partner, 23% were kept from seeing or talking to family or friends, and 15% were kept from leaving the house when they wanted to go (Table 15.7).

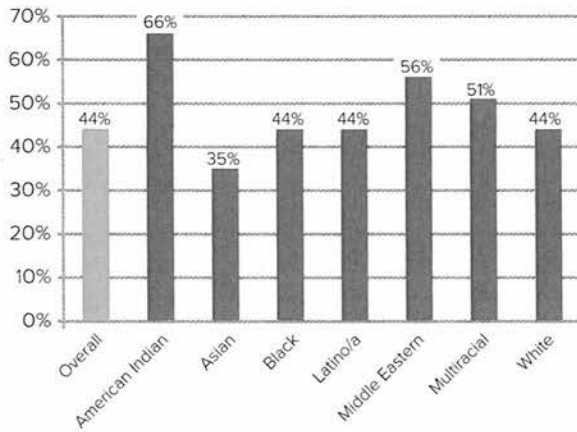
More than half (54%) of all respondents experienced some form of intimate partner violence in their lifetime.

Table 15.7: Intimate partner violence involving coercive control, including intimidation, emotional and financial harm, and physical harm to others

Type of intimate partner violence involving coercive control	% of respondents
Told them that they were not a “real” woman or man	25%
Tried to keep them from seeing or talking to family or friends	23%
Stalked	16%
Kept them from leaving the house when they wanted to go	15%
Threatened to call the police on them	11%
Threatened to “out” them	11%
Kept them from having money for their own use	9%
Hurt someone they love	9%
Threatened to hurt a pet or threatened to take a pet away	6%
Would not let them have their hormones	3%
Would not let them have other medications	3%
Threatened to use their immigration status against them	1%
One or more experiences listed	44%
One or more experiences related to being transgender listed	27%

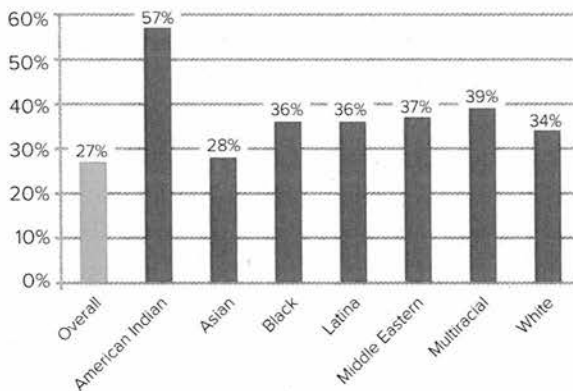
Overall, nearly half (44%) of respondents in the sample experienced some form of intimate partner violence involving coercive control, including intimidation, emotional, and financial harm. Experience with this type of intimate partner violence differed by race, with American Indian (66%), Middle Eastern (56%), and multiracial (51%) respondents reporting higher rates of these experiences (Figure 15.20). Respondents who have done sex work (66%), have experienced homelessness (62%), or were undocumented (60%) were also more likely to have experienced intimate partner violence of this form.

Figure 15.20: Intimate partner violence involving intimidation, emotional, and financial harm
RACE/ETHNICITY (%)



Furthermore, more than a quarter (27%) of survey respondents reported acts of coercive control related to their transgender status, including being told that they were not a “real” woman or man, threatened with being “outed” by revealing their transgender status, or prevented from taking their hormones. Transgender women of color, including American Indian (57%) and multiracial (39%) women, were more likely to report acts of harm related to their transgender status (Figure 15.21).

Figure 15.21: Intimate partner violence related to transgender status among transgender women
RACE/ETHNICITY (%)



c. Intimate Partner Violence Involving Physical Harm

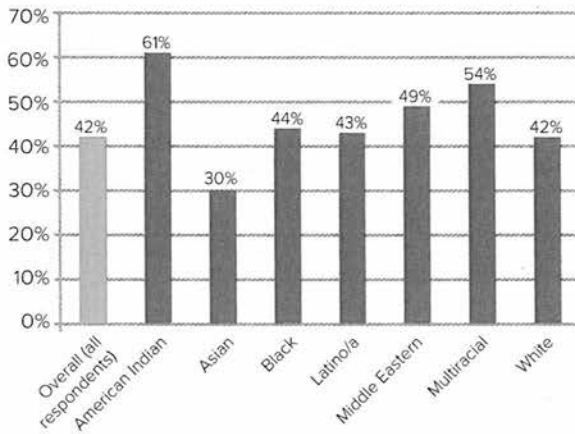
Respondents received additional questions about experiences of intimate partner violence involving physical harm inflicted on them (Table 15.8).

Table 15.8: Intimate partner violence involving physical harm

Type of intimate partner violence	% of USTS respondents	% in U.S. population (NISVS)
Pushed or shoved	30%	23%
Slapped	24%	19%
Made threats to physically harm them	20%	--
Forced them to engage in sexual activity	19%	--
Hit them with a fist or something hard	16%	12%
Slammed them against something	14%	9%
Hurt them by pulling their hair	11%	6%
Kicked	10%	6%
Tried to hurt them by choking or suffocating them	7%	9%
Beat them	6%	6%
Used a knife or gun against them	3%	3%
Burned them on purpose	2%	1%
Any physical violence	35%	30%
Any severe physical violence	24%	18%
One or more experiences listed	42%	---

Overall, 42% of all survey respondents reported experiencing some form of intimate partner violence involving physical harm, including the threat of physical violence, over their lifetime. Respondents who have done sex work (67%) or who have experienced homelessness (61%) were more likely to report intimate partner violence involving physical harm, as were undocumented (59%), American Indian (61%), multiracial (54%), and Middle Eastern (49%) respondents (Figure 15.22).

Figure 15.22: Intimate partner violence involving physical harm
RACE/ETHNICITY (%)



More than one-third (35%) experienced some form of physical violence by an intimate partner, as defined by the National Intimate Partner and Sexual Violence Survey,²² compared to 30% of the U.S. adult population.²³ Moreover, nearly one-quarter (24%) of respondents reported having experienced severe physical violence from a partner, compared to 18% in the U.S. population.²⁴

Conclusion

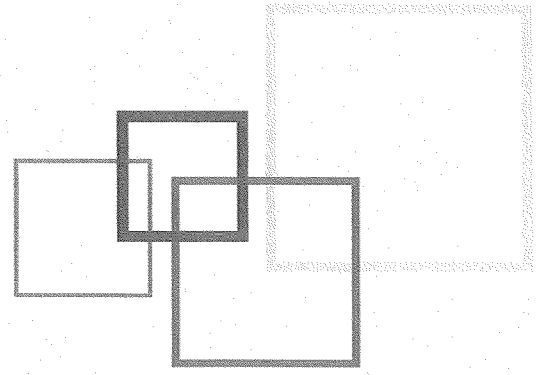
The findings indicated that respondents faced high levels of unequal treatment, harassment, and physical attacks in the past year, with higher rates of these experiences reported among people of color, respondents currently working in the underground economy, and those who reported that others can tell that they are transgender. Respondents also experienced high rates of sexual assault in their lifetime and in the past year, and were more likely than the U.S. population to experience physical intimate partner violence. People of color and undocumented residents were more likely to report experiences of sexual assault and intimate partner violence, as were respondents who have worked in the underground economy or who have experienced homelessness.

ENDNOTES | CHAPTER 15: HARASSMENT AND VIOLENCE

- Langton, L. & Truman, J. (2014). *Socio-Emotional Impact of Violent Crime*. DC: Bureau of Justice Statistics. Available at: <http://www.bjs.gov/content/pub/pdf/sivc.pdf>; Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, (8)521. Available at: <http://pps.sagepub.com/content/8/5/521.full.pdf+html>.
- See e.g., Grant, J. M., Mottet, L. A., Tanis, J., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. (pp. 124–135). DC: National Center for Transgender Equality & National Gay and Lesbian Task Force.
- See e.g., Grant et al., 100, 127; Beemyn, G. & Rankin, S. (2011). *The Lives of Transgender People*. New York, NY: Columbia University Press.
- This chapter discusses general experiences with unequal treatment in public places in the past year, which includes both public accommodations as well as other public spaces. For findings related to unequal treatment in specific public places, such as stores, restaurants, and government agencies, see the *Places of Public Accommodation and Airport Security* chapter.
- This chapter discusses overall experiences with verbal harassment in the past year. Findings related to verbal harassment in specific settings are discussed in other chapters, such as the *Experiences at School, Employment and the Workplace*, and *Health* chapters.

- 6 Truman, J. L. & Morgan, R. E. (2016). *Criminal Victimization, 2015*. DC: Bureau of Justice Statistics; Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—National Intimate Partner and Sexual Violence Survey, United States, 2011. *MMWR*, 63(8). Available at: <http://www.cdc.gov/mmwr/pdf/ss/ss6308.pdf>.
- 7 "People with disabilities" here refers to respondents who identified as a person with a disability in Q. 2.20.
- 8 Respondents were asked to select all the reasons that applied to their experience.
- 9 The survey included both "transgender status/gender identity" and "gender expression/appearance" as answer choices so that respondents could select what they felt best represented their experience. Because there was a substantial overlap of respondents who selected both reasons, and because these terms are commonly used interchangeably or with very similar meanings, responses of those who selected one or both of these reasons are collapsed for reporting as "gender identity or expression."
- 10 Only respondents who reported that they were verbally harassed because of their transgender status, gender identity, gender expression, or appearance received this question (Q. 17.6), which asked: "In the past year, did strangers verbally harass you in public because of your trans status, gender identity, or gender expression?" Results are reported out of the full sample.
- 11 Only respondents who reported that they were physically attacked because of their transgender status, gender identity, gender expression, or appearance received this question (Q. 17.10), which asked: "In the past year, did strangers physically attack you in public because of your trans status, gender identity, or gender expression?" Results are reported out of the full sample.
- 12 In Q. 17.8, respondents were asked if they were physically attacked with "unwanted sexual contact (such as rape, attempted rape, being forced to penetrate)."
- 13 Q.18.1 asked if respondents had ever "experienced unwanted sexual contact, such as oral, genital, or anal contact, penetration, forced fondling, or rape."
- 14 Breiding et al. See note 6.
- 15 Respondents were asked if they had ever "experienced unwanted sexual contact, such as oral, genital, or anal contact, penetration, forced fondling, or rape" in Q. 18.1. This definition of sexual assault encompassed several categories of sexual violence as outlined in the National Intimate Partner and Sexual Violence Survey (NISVS). See note 16.
- 16 Due to differences between Q. 18.1 and the NISVS questions about sexual violence, a direct comparison to the U.S. population was not feasible for this report. However, as context for USTS respondents' experience with sexual assault, NISVS findings indicate that an estimated 11% of adults in the U.S. population have been raped in their lifetime, 19% have experienced unwanted sexual contact, 10% have experienced sexual coercion, and 4% were forced to penetrate someone. Breiding et al. See note 6. The figures for the prevalence of sexual violence during one's lifetime in the U.S. population were calculated by the research team to present a combined percentage for the experiences of men and women using 2011 data from the NISVS, as reported by the Centers for Disease Control. Since NISVS respondents could report experiences with multiple forms of sexual violence, an NISVS respondent's experiences could be reflected in several categories of sexual violence. The research team was unable to avoid double counting respondents who reported more than one experience in the NISVS, and therefore, were unable to combine the percentages of NISVS respondents who experienced *any* form of sexual violence to match the broader USTS category of "unwanted sexual contact," and make a direct comparison. Therefore, findings for the U.S. population in regard to rape, unwanted sexual contact, sexual coercion, and being forced to penetrate are presented separately, and comparisons between the NISVS and USTS findings should be interpreted with caution.
- 17 The 10% rate of sexual assault in the past year reported in this section was based on Q. 18.3. This differs from the rate of sexual assault in the past year reported in the "Physical Attack" section of this chapter (4%), which was based on Q. 17.8. This difference is likely due to the number of respondents in the sample who received each question based on skip-logic patterns. While all respondents in the sample received Q. 18.3, a limited number of respondents received Q. 17.8 based on their answer to Q. 17.3. Respondents who indicated that they had been physically attacked in Q. 17.3, received a follow-up question asking how they were physically attacked (Q. 17.8), which included an answer choice of "unwanted sexual contact." Those respondents who did not identify their experience of unwanted sexual contact as a form of physical attack would not have received the follow-up question regarding the method of the attack, if they had not reported another form of physical attack. Additionally, the difference in reporting may partly result from the more inclusive examples of unwanted sexual contact provided in Q. 18.3 ("such as oral, genital, or anal contact, penetration, forced fondling, or rape"), in contrast to the definition of unwanted sexual contact in Q. 17.8 ("such as rape, attempted rape, being forced to penetrate").

- 18 Due to differences between Q. 18.3 (sexual assault in the past year) and the NISVS questions about sexual violence, a direct comparison to the U.S. population was not feasible for this report. However, as context for USTS respondents' experience with sexual assault, NISVS findings indicate that an estimated 1.9% of adults in the U.S. population experienced unwanted sexual contact in the past year and an estimated 1.7% experienced sexual coercion in the past year. These figures were calculated by the research team to present a combined percentage for the experiences of men and women using 2011 data from the NISVS. Additionally, an estimated 1.6% of women were raped in the past year. Due to the small number of men who reported being raped in the past year, a reliable estimate was not available for men. An estimated 1.7% of men were forced to penetrate a perpetrator in the past year, while the number of women who were forced to penetrate a perpetrator was too low to produce a reliable estimate. Breiding et al. See note 6. Since NISVS respondents could report experiences with multiple forms of sexual violence, an NISVS respondent's experiences could be reflected in several categories of sexual violence. The research team was unable to avoid double counting respondents who reported more than one experience in the NISVS, and therefore, were unable to combine the percentages of NISVS respondents who experienced *any* form of sexual violence to match the broader USTS category of "unwanted sexual contact," and make a direct comparison. Therefore, findings for the U.S. population in regard to rape, unwanted sexual contact, sexual coercion, and being forced to penetrate are presented separately, and comparisons between the NISVS and USTS findings should be interpreted with caution.
- 19 Breiding et al. See note 6.
- 20 See Q. 19.2 and Q. 19.3 for a list of acts described as forms of intimate partner violence.
- 21 Breiding et al. See note 6.
- 22 The NISVS measure for "any physical violence" includes all of the actions listed in Table 15.8, except for forced sexual activity and threats of physical violence.
- 23 The figures for the prevalence of intimate partner violence involving physical violence and/or severe physical violence in the U.S. population was calculated by the research team to present a combined percentage for the experiences of men and women using 2011 data from the NISVS, as reported by the Centers for Disease Control and Prevention. See Breiding et al. See note 6.
- 24 According to the NISVS, "severe physical violence" includes being hurt by having one's hair pulled, being hit with a fist or something hard, kicked, slammed against something, choked or suffocated, beaten, burned, or attacked with a knife or gun.



CHAPTER 16

Places of Public Accommodation and Airport Security

Public accommodations are places of business or other locations generally open to the public and provide essential services that allow people to meet basic needs and participate in civic life, including government agencies, retail stores, and restaurants.¹ For transgender people, places of public accommodation are potentially unwelcoming or unsafe. Prior research has found that transgender people may face unequal treatment or harassment in public settings such as retail stores.² The survey explored respondents' experiences in specific types of public accommodations in the past year and found that respondents were denied equal treatment, verbally harassed, and physically attacked in several of these locations.

Respondents were also asked questions about their experiences in airports related to their gender identity or expression in the past year, given numerous reports of transgender people being subjected to excessive scrutiny and searches by Transportation Security Administration (TSA) officers when going through airport security screening.³ Widely used body scanners often flag transgender people's bodies and gender-related clothing or items for additional screening, which can lead to unnecessary searches and make them vulnerable to harassment and discriminatory treatment by TSA officers and bystanders.⁴

Notable differences in respondents' experiences based on demographic and other characteristics are reported throughout the chapter.

KEY FINDINGS

- ▶ Of respondents who said that staff or employees at a place of public accommodation they visited thought or knew that they were transgender, nearly one-third (31%) experienced at least one type of negative experience, including being denied equal treatment or service (14%), verbally harassed (24%), and/or physically attacked (2%) in the past year.
 - Among those who visited a retail store, restaurant, hotel, or theater and said that staff or employees thought or knew that they were transgender, 31% were denied equal treatment, verbally harassed, and/or physically attacked there.
 - Approximately one-third (34%) of respondents had one or more of these negative experiences in the past year when using public transportation where employees thought or knew they were transgender.
 - Nearly one-quarter (22%) of respondents had one or more of these experiences in the past year when visiting a domestic violence shelter or program or a rape crisis center where employees thought or knew they were transgender.
-
- ▶ One in five (20%) respondents did not use one or more places of public accommodation in the past year because they thought they would be mistreated as a transgender person.
-
- ▶ Additionally, 43% of respondents who went through airport security in the past year experienced a problem related to being transgender, such as being patted down or searched because of a gender-related item, having the name or gender on their ID questioned, or being detained.

I. Overall Experiences in Places of Public Accommodation

Respondents received questions about their experiences in places of public accommodation, such as hotels, restaurants, or government agencies in the past year. They were first asked whether they had visited or used services in specific kinds of public accommodations, and they then received follow-up questions based on their responses. For each type of location that they had visited in the past year, respondents were asked whether they thought that staff or employees at the location knew or thought they were transgender. They were also asked whether

they had been denied equal treatment, verbally harassed, or physically attacked at the selected type of location because they were transgender.

Nearly all respondents in the sample (96%) had visited or used services in at least one of the places of public accommodation outlined in this chapter in the past year. Of those who had visited or used services, 50% reported that they thought the staff or employees knew or thought they were transgender at one or more of the locations. Nearly one-third (31%) of those who said that staff or employees knew or thought they were transgender experienced negative treatment in at least one of the locations, including being denied equal treatment or service, verbally harassed, or physically attacked (Table 16.1).

Table 16.1: Overall experiences in any place of public accommodation in the past year because of being transgender

Experience at a place of public accommodation	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	14%
Verbally harassed	24%
Physically attacked	2%
One or more experiences listed	31%

Respondents' experiences in each type of public accommodation visited or used in the past year are described in detail throughout the chapter (Table 16.2). Those who had not visited a specific type of public accommodation were asked whether they did not visit or use services at that place because they were afraid of being mistreated as a transgender person. Overall, one in five (20%) reported that they did not visit or use services at one or more of these locations because they thought they would be mistreated as a transgender person.

Table 16.2: Negative experiences in places of public accommodation in the past year because of being transgender

Location visited	% of those who believe staff knew or thought they were transgender
Public transportation	34%
Retail store, restaurant, hotel, or theater	31%
Drug or alcohol treatment program	22%
Domestic violence shelter or program or rape crisis center	22%
Gym or health club	18%
Public assistance or government benefit office	17%
DMV (Department of Motor Vehicles)	14%
Nursing home or extended care facility	14%
Court or courthouse	13%
Social Security office	11%
Legal services from an attorney, clinic, or legal professional	6%

II. Public Transportation

Two-thirds (66%) of the sample used public transportation services in the past year, such as a bus, train, subway, or taxi. Two percent (2%) of respondents did not use public transportation in the past year for fear of mistreatment as a transgender person. Twenty-four percent (24%) of those who used public transportation believed that the employees knew or thought they were transgender. Of those, 34% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender while using public transportation (Table 16.3).

Table 16.3: Experiences on public transportation in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	4%
Verbally harassed	32%
Physically attacked	3%
One or more experiences listed	34%

Non-binary people (39%) were more likely to have experienced negative treatment than transgender men and women (32%) when using public transportation (Figure 16.1). These experiences also varied by race and ethnicity, with American Indian (48%), multiracial (45%), and Asian (39%) respondents being more likely to have a negative experience (Figure 16.2). Those who were currently working in the underground economy (such as sex work, drug sales, or other work that is currently criminalized) (49%) and those who were living in poverty (39%) were also more likely to report such an experience.

Figure 16.1: Negative experiences on public transportation in the past year
GENDER IDENTITY (%)

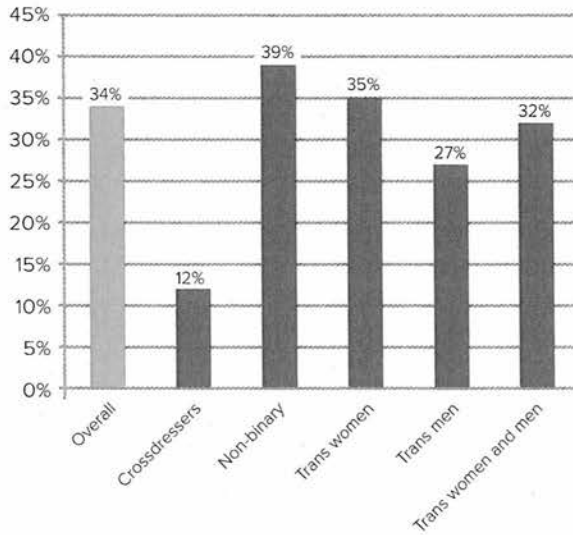
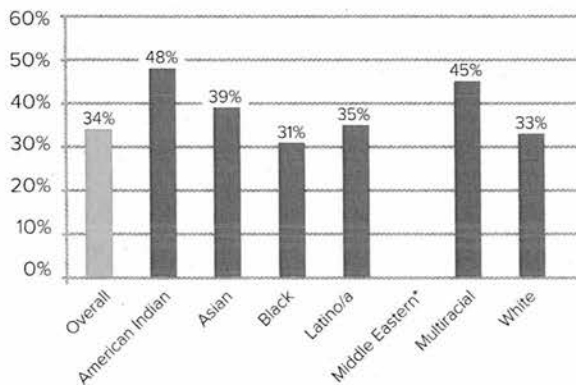


Figure 16.2: Negative experience on public transportation in the past year
RACE/ETHNICITY (%)



*Sample size too low to report

Nearly one-third (31%) of respondents who visited a store, restaurant, hotel, or theater where the staff knew or thought they were transgender were mistreated because of their gender identity or expression.

III. Retail Store, Restaurant, Hotel, or Theater

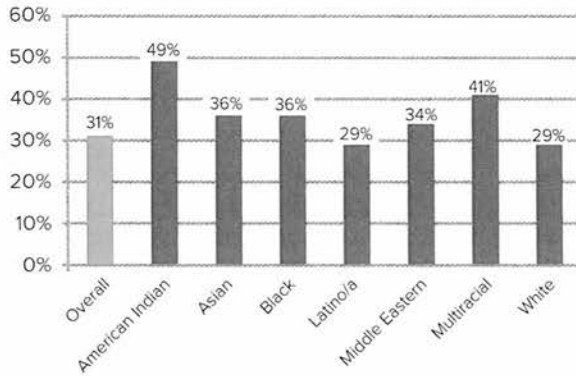
Ninety-one percent (91%) of respondents visited or used services in a retail store, restaurant, hotel, or theater in the past year. One percent (1%) of respondents reported not visiting a retail store, restaurant, hotel, or theater in the past year because they were afraid of mistreatment as a transgender person. Approximately one-third (34%) of those who visited or used services at these locations believed that the staff or employees knew or thought they were transgender. Of those, 31% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.4).

Table 16.4: Experiences in a retail store, restaurant, hotel, or theater in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	11%
Verbally harassed	24%
Physically attacked	1%
One or more experiences listed	31%

American Indian (49%), multiracial (41%), Black (36%), and Asian (36%) respondents were more likely to have a negative experience (Figure 16.3). Those who were currently working in the underground economy (52%), those who were living in poverty level (37%), and people with disabilities⁵ (39%) were also more likely to have such experiences in these locations.

Figure 16.3: Experiences in a retail store, restaurant, hotel, or theater in the past year because of being transgender
RACE/ETHNICITY (%)



IV. Drug or Alcohol Treatment Program

Two percent (2%) of the sample visited or used services at a drug or alcohol treatment program in the past year. One percent (1%) of respondents did not go to a treatment center in the past year because of fear of mistreatment as a transgender person. Of those who visited or used services at a treatment program, 58% believed that the staff or employees knew or thought they were transgender. Of those, 22% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.5).

Table 16.5: Experiences in a drug or alcohol treatment program in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	11%
Verbally harassed	13%
Physically attacked	1%
One or more experiences listed	22%

In Our Own Voices

“When I attempted to change my gender marker on my state ID, I was denied three times. All three times I was harassed. In one incident, the manager of the DMV location made fun of me and started laughing and talked so loud that other patrons at the DMV also began to laugh.”

“A year ago I had my Social Security updated to reflect my new name and gender. I was treated with respect at all times. The woman working in the Social Security office wrote ‘congratulations’ and drew a heart on my copy of the documentation.”

“A TSA officer referred to me as ‘it’ when I couldn’t walk through their security screen following top surgery. I had to argue with TSA that a male employee needed to do the pat down and I was informed that a woman would be more appropriate. I stood my ground after repeatedly being told that I was not a man.”

“I was subjected to a longer TSA screening while they searched my bag, pulled out my intimate items, and called over friends to look and laugh. I had to remove my wig to prove I was the same person. I was humiliated.”

Those who were currently working in the underground economy (34%) and those who were living in poverty (27%) were more likely to report having a negative experience in a drug or alcohol treatment program.

V. Domestic Violence Shelter, Domestic Violence Program, or Rape Crisis Center

One percent (1%) of the sample visited or used services at a domestic violence (DV) shelter, DV program, or rape crisis center in the past year. Two percent (2%) of respondents did not go to a DV shelter or program or rape crisis center in the past year because they were afraid they would be mistreated as a transgender person. Of those who went to one of these locations, more than half (59%) believed that the staff or employees knew or thought they were transgender. Of those, nearly one-quarter (22%) reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.6).

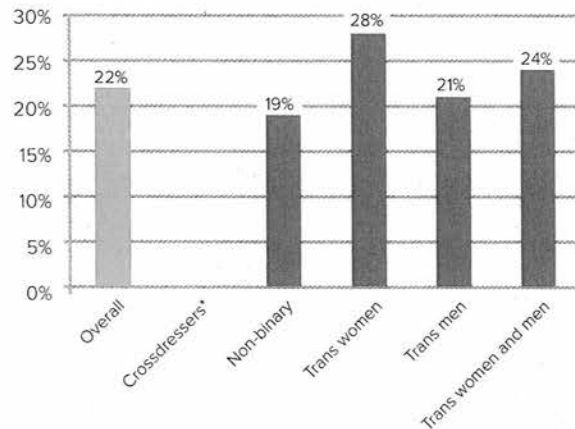
Table 16.6: Experiences in a DV shelter, DV program, or rape crisis center in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	16%
Verbally harassed	11%
Physically attacked	2%
One or more experiences listed	22%

Transgender women (28%) were more likely to report having a negative experience at a DV shelter, DV program, or rape crisis center (Figure 16.4).

Nearly one in four (22%) respondents who went to a domestic violence shelter or program or rape crisis center where staff knew or thought they were transgender experienced mistreatment of some kind.

Figure 16.4: Negative experiences in domestic violence shelter in the past year
GENDER IDENTITY (%)



*Sample size too low to report

VI. Gym or Health Club

More than one-third (35%) of the sample had visited or used services at a gym or health club in the past year. Fourteen percent (14%) of respondents did not go to a gym or health club in the past year because they were afraid of mistreatment as a transgender person. Of those respondents who had visited a gym or health club, 28% believed that the staff or employees knew or thought they were transgender. Of those, 18% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.7).

Table 16.7: Experiences in a gym or health club in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	7%
Verbally harassed	13%
Physically attacked	1%
One or more experiences listed	18%

Respondents who were currently working in the underground economy were nearly twice as likely to report having a negative experience in a gym or health club (35%).

VII. Public Assistance or Government Benefits Office

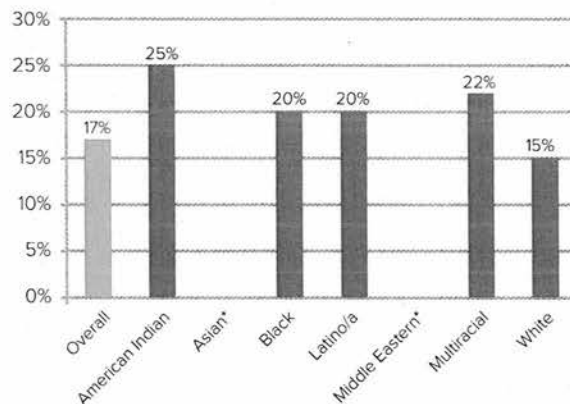
Twelve percent (12%) of the sample had visited or used services at a public assistance or government benefits office in the past year, such as for receiving Supplemental Nutrition Assistance Program (SNAP or food stamps) or Women, Infants, and Children (WIC) benefits. Two percent (2%) of respondents did not go to such an agency in the past year because they feared mistreatment as a transgender person. Over one-third (36%) of those who visited or used services at these locations believed that the staff or employees knew or thought they were transgender. Of those, 17% reported being denied equal treatment or service or being verbally harassed because of being transgender (Table 16.8).

Table 16.8: Experiences in a public assistance or government benefits office in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	11%
Verbally harassed	9%
One or more experiences listed	17%

American Indian (25%), multiracial (22%), Black (20%), and Latino/a (20%) respondents reported higher rates of mistreatment, in contrast to 15% of white respondents (Figure 16.5). People with disabilities (21%) and those who were currently working in the underground economy (24%) were also more likely to report having a negative experience in a public assistance or government benefits office.

Figure 16.5: Negative experiences in a public assistance or government benefits office in the past year RACE/ETHNICITY (%)



*Sample size too low to report

VIII. DMV

Nearly half (44%) of the sample visited or used services at a DMV (Department of Motor Vehicles) in the past year. Three percent (3%) of respondents did not go to a DMV in the past year because of fear of mistreatment as a transgender person. More than one-third (36%) of those who visited this location believed that the staff or employees knew or thought they were transgender. Of those, 14% reported being denied equal treatment or service or being verbally harassed because of being transgender (Table 16.9).

Table 16.9: Experiences in a DMV in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	9%
Verbally harassed	7%
One or more experiences listed	14%

IX. Nursing Home or Extended Care Facility

Four percent (4%) of the sample visited or used services at a nursing home or extended care facility in the past year. One percent (1%) of respondents did not go to a nursing home or extended care facility in the past year because they were afraid of mistreatment as a transgender person. Twenty-two percent (22%) of those who visited or used services in this location believed that the staff or employees knew or thought they were transgender. Of those, 14% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.10).

Nearly one in five (18%) respondents who went to a gym or health club where staff knew or thought they were transgender experienced mistreatment of some kind.

Table 16.10: Experiences in a nursing home or extended care facility in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	6%
Verbally harassed	11%
Physically attacked	1%
One or more experiences listed	14%

X. Court or Courthouse

Approximately one in four (22%) respondents in the sample visited or used services at a court or courthouse in the past year. Two percent (2%) of respondents did not go to a court or courthouse in the past year because they were afraid of mistreatment as a transgender person. One-half (50%) of those who visited or used services there believed that court staff or employees knew or thought they were transgender. Of those, 13% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.11).

Table 16.11: Experiences in court or a courthouse in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	8%
Verbally harassed	8%
Physically attacked	<1%
One or more experiences listed	13%

Those who were currently working in the underground economy (37%) were substantially more likely to report having a negative experience in court or a courthouse, and the rate was also higher among people with disabilities (19%).

XI. Social Security Office

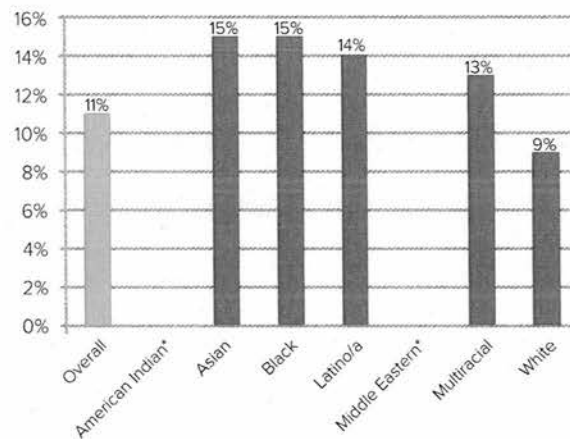
Nearly one in four respondents (19%) visited or used services at a Social Security office in the past year, such as for updating the name or gender on their records, receiving or changing a Social Security card, or accessing public benefits. Four percent (4%) of respondents did not go to a Social Security office in the past year for fear of mistreatment as a transgender person. Fifty-seven percent (57%) of those who went to a Social Security office believed that the staff or employees knew or thought they were transgender. Of those, 11% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.12).

Table 16.12: Experiences in a Social Security office in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	8%
Verbally harassed	5%
Physically attacked	<1%
One or more experiences listed	11%

Asian (15%), Black (15%), and Latino/a (14%) respondents were more likely to report having a negative experience in a Social Security office (Figure 16.6). Respondents who were currently working in the underground economy (36%) and people with disabilities (16%) were also more likely to have such an experience.

Figure 16.6: Negative experience in a Social Security office in the past year
RACE/ETHNICITY (%)



*Sample size too low to report

XII. Legal Services from an Attorney, Clinic, or Legal Professional

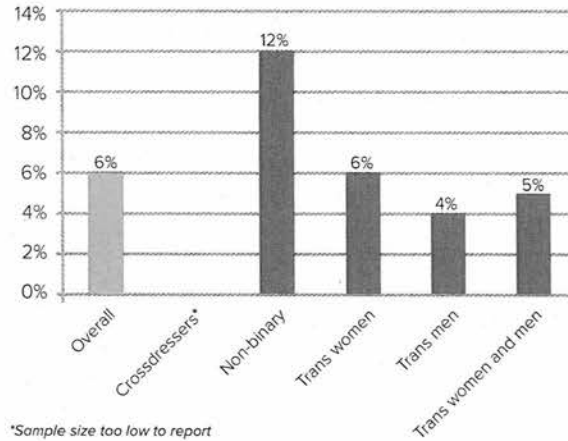
Twelve percent (12%) of the sample visited or used legal services from an attorney, clinic, or legal professional in the past year. Two percent (2%) of respondents did not visit or use such services in the past year due to fear of mistreatment as a transgender person. Fifty-seven percent (57%) of those who sought services from an attorney, legal clinic, or legal professional believed that the staff or employees knew or thought they were transgender. Of those respondents, 6% reported being denied equal treatment or service, verbally harassed, or physically attacked because of being transgender (Table 16.13).

Table 16.13: Experiences with legal services from an attorney, clinic, or legal professional in the past year because of being transgender

Experience in location	% of those who believe staff knew or thought they were transgender
Denied equal treatment or service	4%
Verbally harassed	3%
One or more experiences listed	6%

Non-binary respondents (12%) were more than twice as likely to report having a negative experience when seeking legal services, in contrast to transgender men and women (5%) (Figure 16.7). Those who were currently working in the underground economy (23%) were almost four times as likely to report a negative experience as the overall sample.

Figure 16.7: Negative experiences with legal services from an attorney, clinic, or legal professional in the past year
GENDER IDENTITY (%)



*Sample size too low to report

XIV. Experiences with Airport Security

In addition to the questions regarding mistreatment in and avoidance of public accommodations, respondents were asked about their experiences traveling through airport security in the United States in the past year. More than half (53%) of respondents reported having gone through airport security during that time period. These respondents were asked about specific experiences and interactions with Transportation Security Administration (TSA) officers during the security screening process.

Forty-three percent (43%) of those who went through airport security in the past year experienced at least one problem related to their gender identity or expression.

Forty-three percent (43%) of those who went through airport security in the past year experienced at least one issue related to their gender identity or expression, such as TSA officers using the wrong pronoun or title to refer to them, searching their bodies or belongings because of a gender-related item, or detaining them (Table 16.14).

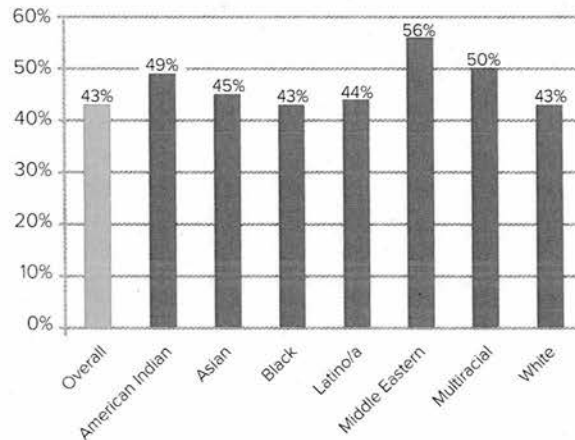
Table 16.14: Issues when going through airport security in the past year

Airport security issue	% of those who had gone through airport security
TSA officers used the wrong pronouns (such as he, she, or they) or title (such as Mr. or Ms.)	29%
They were patted down due to gender-related clothing/items (such as a binder or packer)	17%
They were patted down by TSA officers of the wrong gender	14%
TSA officers questioned the name or gender on ID	11%
TSA officers loudly announced or questioned their gender, body parts, or sensitive items (e.g., binder, packer)	6%
Their bag was searched due to a gender-related item (such as a binder or packer)	5%
They were asked to remove or lift clothing to show binder, undergarment, or other sensitive area	4%
They were taken to a separate room for questioning or examination	4%
They were verbally harassed by TSA officers	2%
They experienced unwanted sexual contact (beyond typical pat down by TSA officers)	1%
They were detained for over an hour	1%
They missed their flight due to screening	1%
TSA officers called the police about them	<1%
They were physically attacked/attacked by TSA officers	<1%
They were not allowed to fly	<1%
One or more experiences listed	43%

More than half (56%) of Middle Eastern and 50% of multiracial respondents who went through airport security in the past year reported one or more of

these experiences (Figure 16.8). Respondents who said that others can always or usually (61%) or sometimes (53%) tell that they are transgender were more likely to report one or more of these experiences, in comparison to those who said that others can rarely or never tell that they are transgender without being told (35%). Experiences also differed by gender, with transgender men (52%) being more likely to report one or more of these experiences than transgender women (31%). Respondents who said that none of their IDs reflect the name and/or gender they prefer (51%) were also more likely to report negative experiences in airport security related to their gender identity.

Figure 16.8: Negative experience in airport security in the past year RACE/ETHNICITY (%)



Conclusion

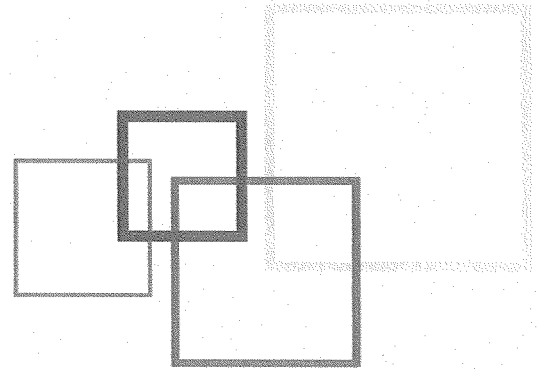
Responses indicated that many respondents faced mistreatment in places of public accommodations, including being denied equal treatment or service, verbally harassed, and/or physically attacked in one or more of the locations. People of color and respondents currently working in the underground economy were more likely to report mistreatment. A substantial number of respondents also did

not visit or use services in places of public accommodation altogether because of fear of being mistreated as a transgender person. Additionally, findings demonstrated that many transgender people experienced mistreatment

related to their gender identity when passing through airport security and, as a result, were at risk of potential harm while traveling through airports.

ENDNOTES | CHAPTER 16: PLACES OF PUBLIC ACCOMMODATION AND AIRPORT SECURITY

- 1 The legal definitions of public accommodations vary according to local, state, and federal laws, but frequently include places open to the public, such as restaurants, stores, hotels, places of public transportation, and government agencies.
- 2 See e.g., Equal Rights Center. (2016). *Room for Change*. DC: Equal Rights Center. Available at: <http://www.equalrightscenter.org/site/DocServer/Contents.pdf?docID=2681>.
- 3 See e.g., Charles, C. (2015, October 1). Dear TSA, my body is not an anomaly. *The Advocate*. Available at: <http://www.advocate.com/commentary/2015/10/01/dear-tsa-my-body-not-anomaly>; Ennis, D. (2015, October 21). Traveling while trans: Women share their stories. *The Advocate*. Available at: <http://www.advocate.com/transgender/2015/10/21/traveling-while-trans-women-share-their-stories>; Rogers, K. (2015, September 22). T.S.A. defends treatment of transgender air traveler. *New York Times*. Available at: <http://www.nytimes.com/2015/09/23/us/shadi-petosky-tsa-transgender.html>.
- 4 TSA body scanners examine each passenger's body based on the gender the officer perceives the passenger to be. As a result, transgender people's body parts, or items such as chest binders (compression garments) and prosthetics (such as packers and breast forms), may get flagged. This often causes transgender passengers to be outed or to face additional searches and scrutiny. See note 3.
- 5 "People with disabilities" here refers to respondents who identified as a person with a disability in Q. 2.20.



CHAPTER 17

Experiences in Restrooms

Safe access to public restrooms is a basic necessity and essential for most people's participation in civic life, the workplace, and school.¹ Many transgender people, however, face harassment and violence when seeking to use public restrooms, or they are excluded from restrooms by policies or staff.² Lack of safe restroom access has been linked to medical problems such as kidney infections, urinary tract infections, and stress-related conditions.³ Transgender people who are denied equal access to restrooms consistent with their gender identity are vulnerable to harassment, violence, and poor mental health, including higher levels of suicidal thoughts and behaviors.⁴

This chapter explores respondents' experiences in restrooms in public places, at work, and at school, including experiences with denial of access, harassment, and violence, as well as avoidance of public restrooms. Notable differences in respondents' experiences based on demographic and other characteristics are reported throughout the chapter.

It is important to note that the survey was conducted between August and September 2015, more than six months before the state of North Carolina passed a law in March 2016 restricting transgender people's restroom access, and before similar legislation was introduced in at least 23 other states in 2016.⁵ This legislation prompted substantial media coverage and public scrutiny of transgender people's restroom access. Widespread anecdotal evidence suggests that this climate had an adverse effect on the experiences of transgender people in restrooms and their perceptions of safety when accessing and using public restrooms. As a result, data collected after March 2016 would likely differ from USTS survey results, with potentially higher numbers of respondents reporting negative experiences in public restrooms.

KEY FINDINGS

- ▶ Nearly one-quarter (24%) of respondents said that someone had questioned or challenged their presence in a restroom in the past year.

- ▶ Nearly one in ten (9%) respondents reported that someone denied them access to a restroom in the past year.

- ▶ One in eight (12%) respondents were verbally harassed, physically attacked, or sexually assaulted when accessing or using a restroom in the past year.

- ▶ More than half (59%) avoided using a public restroom in the past year because they were afraid of having problems.

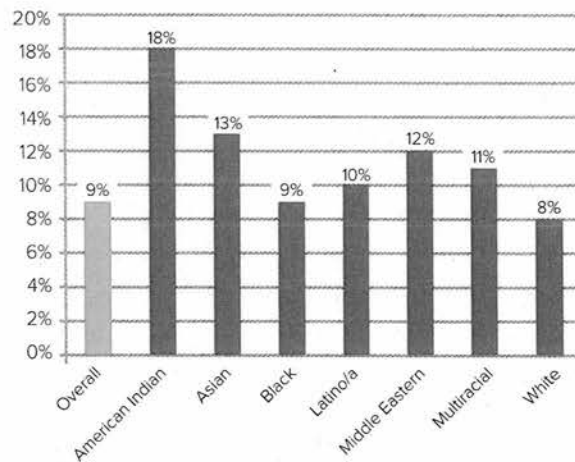
- ▶ Nearly one-third (32%) limited the amount they ate or drank to avoid using the restroom in the past year.

- ▶ Eight percent (8%) reported having a urinary tract infection, kidney infection, or another kidney-related problem in the past year as a result of avoiding restrooms.

I. Access to Restrooms

Nearly one-quarter (24%) of respondents said that someone told them or asked them if they were using the wrong restroom in the past year, and nearly one in ten (9%) said that someone stopped them from entering or denied them access to a restroom in the past year. American Indian (18%), Asian (13%), and Middle Eastern (12%) respondents were more likely to report that someone stopped them from entering or denied them access to a restroom in the past year (Figure 17.1). Undocumented residents (23%) and respondents currently working in the underground economy, such as sex work, drug sales, and other work that is currently criminalized (20%), were more than twice as likely to be denied access to restrooms than those in the overall sample.

Figure 17.1: Denied access to a restroom in the past year
RACE/ETHNICITY (%)

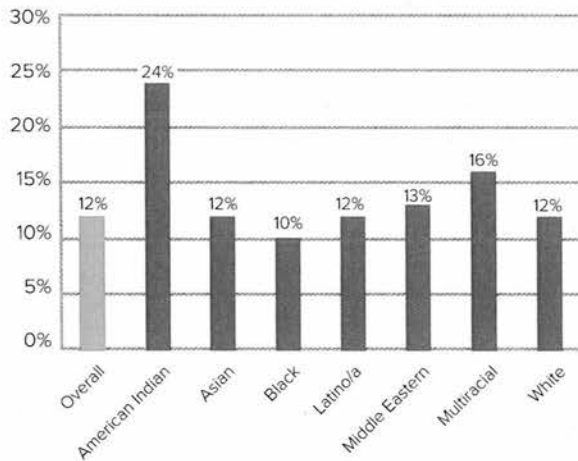


Nearly one in ten (9%) respondents said that someone stopped them from entering or denied them access to a restroom in the past year.

II. Verbal Harassment, Physical Attack, and Sexual Assault

Twelve percent (12%) of respondents reported being verbally harassed, physically attacked, and/or sexually assaulted⁶ when accessing or while using a restroom in the past year. These experiences were more frequently reported by undocumented residents (34%), respondents currently working in the underground economy (25%), and American Indian (24%) and multiracial (16%) respondents (Figure 17.2).

Figure 17.2: Verbal harassment, physical attack, and/or sexual assault in a restroom in the past year
RACE/ETHNICITY (%)



a. Verbal Harassment

One out of eight (12%) respondents were verbally harassed in a restroom in the past year.

Respondents who were verbally harassed in restrooms were asked for the places where the harassment had occurred. Eighty-nine percent (89%) were verbally harassed in a restroom at a public place, such as a restaurant, shopping mall, or movie theater, and 20% were verbally harassed in a school restroom (Table 17.1).

Table 17.1: Location of verbal harassment in restroom in past year

Restroom location	% of respondents who were verbally harassed
Public place (such as a restaurant, shopping mall, or movie theater)	89%
School	20%
Workplace	14%
Another location	5%

b. Physical Attack

One percent (1%) of the sample (228 respondents, unweighted) was physically attacked in a restroom in the past year. Undocumented residents (4%) and American Indian respondents (3%) were more likely to be physically attacked in a restroom.

Respondents who were physically attacked were asked where they had experienced the physical attack. Eighty-six percent (86%) were physically attacked in a restroom at a public place, such as a restaurant, shopping mall, or movie theater, and over one-quarter (27%) said they were physically attacked in a restroom at school (Table 17.2).

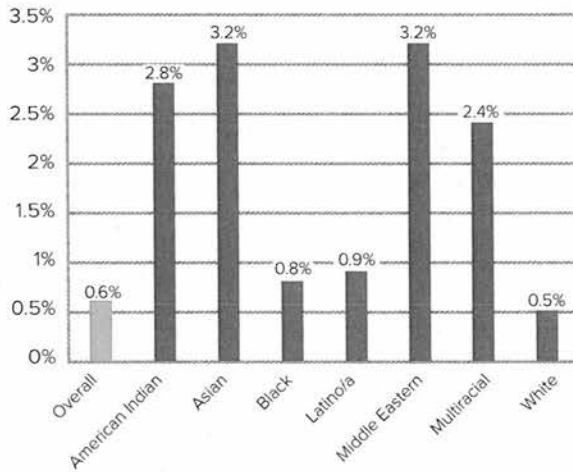
Table 17.2: Location of physical attack in restroom in past year

Restroom location	% of respondents who were physically attacked
Public place (such as a restaurant, shopping mall, or movie theater)	86%
School	27%
Workplace	14%
Another location	9%

c. Sexual Assault

Approximately one percent (0.6%) of the sample (139 respondents, unweighted) reported being sexually assaulted in a restroom in the past year. Those currently working in the underground economy were more likely to have had this experience (4%). Additionally, transgender women of color, including Asian (3.2%), Middle Eastern (3.2%), American Indian (2.8%), and multiracial (2.4%) women were more likely to have been sexually assaulted in a restroom in the past year (Figure 17.3).

Figure 17.3: Sexual assault in a restroom in the past year among transgender women
RACE/ETHNICITY (%)



More than three-quarters (78%) of respondents who were sexually assaulted reported that the sexual assault occurred in a restroom at a public place, and 19% were sexually assaulted at a school restroom (Table 17.3).

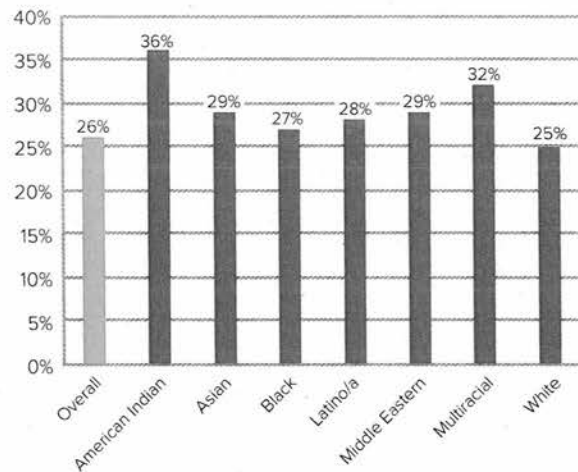
Table 17.3: Location of sexual assault in restroom in past year

Restroom location	% of respondents who were sexually assaulted
Public place (such as a restaurant, shopping mall, or movie theater)	78%
School	19%
Workplace	14%
Another location	18%

III. Overall Access to and Treatment in Restrooms

Overall, in the year prior to taking the survey, 26% of all respondents were denied access to restrooms, had their presence in a restroom questioned, and/or were verbal harassed, physically attacked, or sexually assaulted in a restroom. This was nearly twice as high for undocumented residents (50%) and was also higher for respondents currently working in the underground economy (39%). It was also higher among American Indian (36%) and multiracial (32%) respondents (Figure 17.4). Respondents who said that others could always or usually tell they were transgender without being told (45%) or sometimes tell they were transgender (38%) were more likely to report one or more of these experiences, in contrast to those who said that others could rarely or never tell that they were transgender (16%).

Figure 17.4: Any reported problem in a restroom in the past year
RACE/ETHNICITY (%)

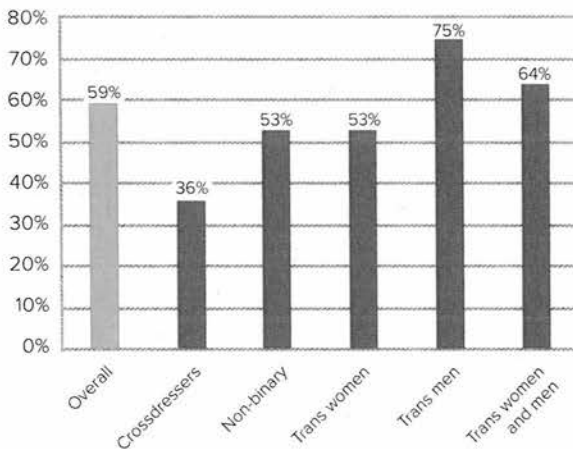


IV. Avoidance of Public Restrooms

Even prior to the increased public scrutiny and conversations in North Carolina and across the country about anti-transgender bathroom legislation in 2016, 59% of respondents reported that in the past year they had either sometimes (48%) or always (11%) avoided using a restroom, such as in public, at work, or at school, because they were afraid of confrontations or other problems.

Transgender men (75%) were far more likely to report sometimes or always avoiding using a public restroom, in contrast to transgender women (53%) and non-binary respondents (53%) (Figure 17.5). Undocumented residents were also more likely to report sometimes or always avoiding using a public restroom in the past year (72%). Eighty percent (80%) of respondents who said that others could always or usually tell that they were transgender and 72% of those who said that others can sometimes tell they are transgender reported avoiding using public restroom, in contrast to 48% of those who said that others can rarely or never tell that they are transgender.

Figure 17.5: Sometimes or always avoided bathrooms in the past year
GENDER IDENTITY (%)



In Our Own Voices

"I either have to 'hold it' or break down and use a male restroom in a public place. I'm not allowed to use the female restroom and have been confronted multiple times when attempting to."

"I went into the men's bathroom, being a man and all. I was using a stall, and I came out only to find one person who apparently thought it was okay to go after me. I was just washing my hands when he first punched me in the back and then went for my vagina. I nearly passed out due to the blow."

"I walked into a stall to do my business like I had done so many times before. This time, though, someone recognized me. He and his buddies circled around me as I tried to exit the restroom and pushed me around between them. A police officer walked into the restroom and tried to protest their harassment. The men responded by ripping my pants down. The officer shot me a disgusted look and left the room."

"I spent high school having to use the nurse's bathroom, because if I used the boys' bathroom, I would get reprimanded, and the same would happen if I went into the girls' bathroom since I was living as a boy. Going to the nurse's office always felt like a walk of shame, like there was no dignified place for me simply because I'm transgender."

Nearly one-third (32%) of the sample avoided drinking or eating so that they would not need to use the restroom, and 8% reported having a urinary tract infection or kidney-related medical problem as a result of avoiding restrooms in the past.

Respondents were also asked if they had experienced any physical problems as a result of avoiding restrooms in public places, at work, or at school. Nearly one-third (32%) of the sample avoided drinking or eating so that they would not need to use the restroom, and 8% reported having a urinary tract infection or kidney-related medical problem as a result of avoiding restrooms in the past year (Table 17.4).

Table 17.4: Physical problems due to avoiding public restrooms in the past year

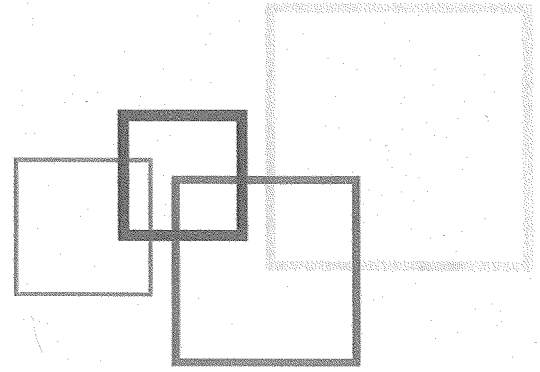
Physical problem	% of respondents who avoided using restrooms	% of all respondents
Did not use the restroom when needed to ("held it")	89%	55%
Avoided drinking or eating	52%	32%
Urinary tract infection	12%	8%
Kidney infection	2%	1%
Other kidney-related problems	2%	1%
Kidney-related problem and/or a urinary tract infection	13%	8%
A problem not listed	2%	1%

Conclusion

Responses suggest that using restrooms in public places, at work, or at school presents serious challenges for transgender people. Respondents faced numerous barriers and problems when attempting to use a public restroom, including being verbally harassed, physically attacked, sexually assaulted, or denied access to the restroom altogether. In many instances, these experiences were more frequently reported by people of color. A majority of people had avoided using public restrooms in the past year due to fear of encountering confrontations and other problems, which led to a range of health issues, including urinary tract infections and kidney-related problems.

ENDNOTES | CHAPTER 17: EXPERIENCES IN RESTROOMS

- 1 Department of Labor & Occupational Safety and Health Administration. (2015). *Best Practices: A Guide to Restroom Access for Transgender Workers*. Available at: <https://www.osha.gov/Publications/OSHA3795.pdf>.
- 2 Herman, J. L. (2013). Gendered restrooms and minority stress: The public regulation of gender and its impact on transgender people's lives. *Journal of Public Management & Social Policy*, 19(1), 65–85.
- 3 Herman, J. L. See note 2.
- 4 Seelman, K. L. (2016). Transgender adults' access to college bathrooms and housing and the relationship to suicidality. *Journal of Homosexuality*, 63(10), 1378–1399.
- 5 Movement Advancement Project, Equality Federation Institute, Freedom for All Americans, & National Center for Transgender Equality. (2016). *The Facts: Bathroom Safety, Nondiscrimination Laws, and Bathroom Ban Laws*. Available at: <http://www.lgbtmap.org/file/bathroom-ban-laws.pdf>.
- 6 Respondents were asked if they had experienced "unwanted sexual contact" when accessing or while using a bathroom in Q. 20.3 and Q. 20.6.
- 7 Movement Advancement Project et al. See note 5.



CHAPTER 18

Civic Participation and Policy Priorities

Voting and other forms of participation in the political process are important methods by which people involve themselves in their communities and can have a voice in governance at the local, state, and federal levels. They are also significant avenues by which individuals and groups can affect change and influence the policies and procedures that impact their lives.

Respondents received questions about voting in the previous national election (November 2014)¹ to assess levels of voting and determine reasons for not participating, including potential barriers to voting such as voter identification laws. Relevant questions were patterned on the November 2014 Voting and Registration Supplement of the Current Population Survey (CPS). Additionally, respondents were asked questions about their political engagement, political party affiliation, and policy priorities as they relate to issues that impact transgender people, some of which were patterned on the Gallup U.S. Daily Tracking Poll. Notable differences in respondents' experiences based on demographic and other characteristics are reported throughout the chapter.

KEY FINDINGS

- ▶ More than three-quarters (76%) of U.S. citizens of voting age in the sample reported that they were registered to vote in the November 2014 midterm election, compared to 65% of individuals in the U.S. population who reported that they were registered.

- ▶ More than half (54%) of U.S. citizens of voting age in the sample reported that they had voted in the election, compared to 42% of those who reported they had voted in the U.S. population.

- ▶ Over one-quarter (27%) of those who said they had not been registered to vote said that the main reason was that they were not interested in the election or not involved in politics.

- ▶ Three percent (3%) of those who said they were *not registered to vote* reported that the main reason was that they wanted to avoid harassment by election officials because they were transgender.

- ▶ Nineteen percent (19%) of those who reported they were registered but did not vote said that they thought their vote would not make a difference or they were not interested in the election, compared to 16% of those in the U.S. population.

- ▶ Three percent (3%) of those who reported *being registered to vote but not voting* said that the main reason was that they wanted to avoid harassment by election officials because they were transgender.

- ▶ When asked about what they believed the most important policy priorities were for transgender people, respondents most often identified addressing violence against transgender people (25%), health insurance coverage (15%), and racism (11%) as their top priorities.

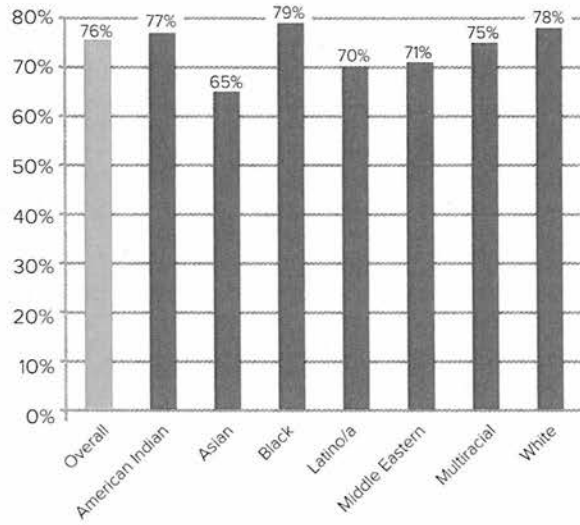
I. Voter Registration and Voting

a. Voter Registration

Survey respondents were asked about voting in relation to the November 4, 2014 midterm election, which was the national election held in closest proximity to the survey. More than three-quarters (76%) of U.S. citizens in the survey sample who

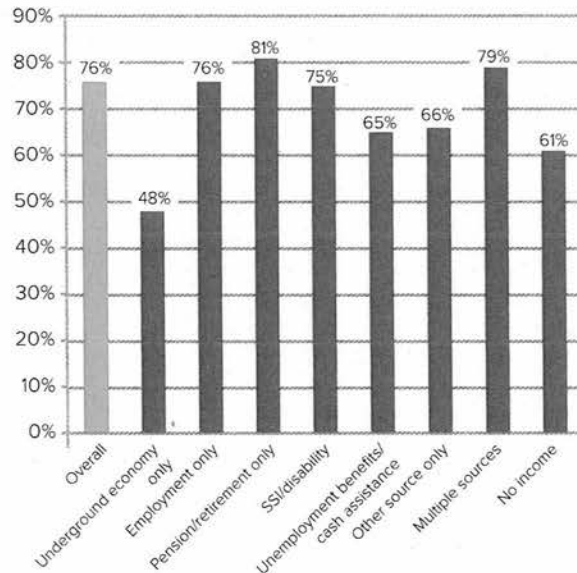
were of voting age at the time of the election² reported that they were registered to vote, compared to 65% of those individuals in the U.S. population.³ The number of reported registered voters differed by race or ethnicity, with Middle Eastern (71%), Latino/a (70%), and Asian (65%) respondents being less likely to be registered than American Indian (77%), white (78%), and Black (79%) respondents (Figure 18.1).

Figure 18.1: Registered to vote RACE/ETHNICITY (%)



Naturalized citizens (69%) were less likely to report being registered than citizens who were born in the United States (76%). There were also differences in voting registration based on respondents' sources of income, with only 48% of those whose sole source of income was from the underground economy—including sex work, drug sales, and other work that is currently criminalized—reporting being registered. Respondents whose only source of income was from unemployment benefits or other cash assistance programs such as TANF⁴ (65%) also being less likely to be registered (Figure 18.2).

Figure 18.2: Registered to vote SOURCES OF INCOME (%)



b. Reasons for Not Registering to Vote

Respondents who said they were not registered to vote in the November 4, 2014 election were asked to identify the main reason why they were not registered based on categories outlined in the Current Population Survey (CPS) and additional experiences they might have had as a transgender person. More than one-quarter (27%) of those in the sample who reported that they were not registered to vote said that they were not interested in the election or not involved in politics, which was the most frequently selected reason for not being registered. Sixteen percent (16%) did not know where or how to register, and 15% indicated that they did not meet registration deadlines. One in eight (12%) felt that their vote would not make a difference and therefore did not register (Table 18.1).⁵

Additionally, respondents reported not being registered to vote because they wanted to avoid anti-transgender harassment by election officials (3%), because they did not have their current name updated on their Social Security card (2%), and because they thought their state's voter identification law would stop them from voting (1%). Avoiding anti-transgender harassment by election officials was a more common reason for transgender men and women (5%) than for crossdressers (2%) and non-binary respondents

Three percent (3%) of respondents who were citizens and of voting age at the time of the 2014 midterm election were not registered to vote because they wanted to avoid anti-transgender harassment by election officials.

(1%) (Figure 18.3). Those who reported that people could always or usually tell they were transgender even without being told were more than twice as likely to report this reason (8%), in contrast to those who said people could rarely or never tell they were transgender without being told (3%). Black respondents (7%) were also more likely to report that they did not register to vote in order to avoid harassment by election officials (Figure 18.4).

Table 18.1: Main reason for not being registered to vote on November 4, 2014

Reasons for not being registered to vote	% of USTS citizens not registered to vote
They were not interested in the election or not involved in politics	27%
They did not know where or how to register	16%
They did not meet registration deadlines	15%
They felt their vote would not make a difference	12%
They did not live in place long enough or meet residency requirements	5%
They were not eligible to vote (due to criminal/felony conviction or other reason)	3%
Permanent illness or disability	2%
Difficulty with English	<1%
Other reasons (including):	19%
They wanted to avoid harassment by election officials because they were transgender	3%
They did not have an identity document (ID) and thought they needed one to register	2%
Their current name did not match the name on their Social Security card	2%
They thought their state's voter ID law would stop them from voting	1%
Protest or philosophical reasons (write-in response)	1%

Figure 18.3: Not registered due to avoiding anti-transgender harassment
GENDER IDENTITY (%)

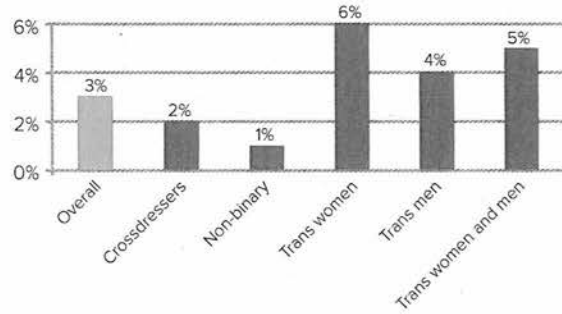
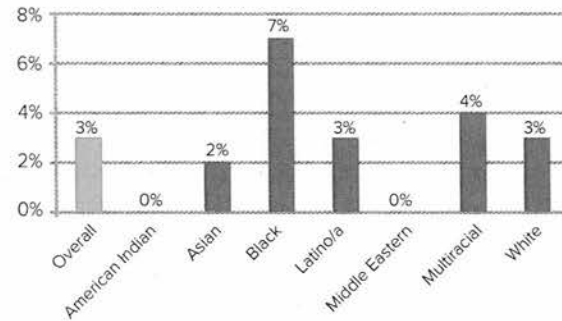


Figure 18.4: Not registered due to avoiding anti-transgender harassment
RACE/ETHNICITY (%)

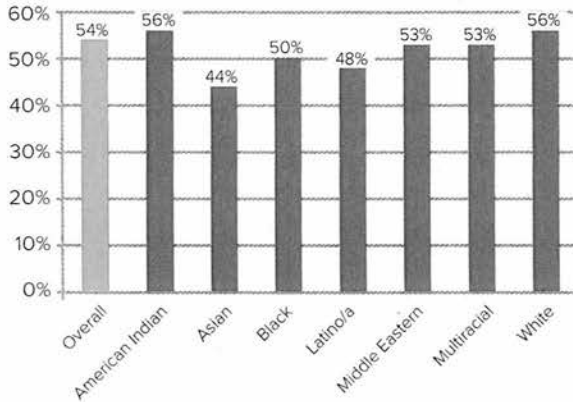


c. Voting in the 2014 Election

More than half (54%) of U.S. citizens in the sample who were of voting age at the time of the election reported that they voted in the election, compared to 42% of those in the U.S. population.⁶ Among people of color, Asian respondents (44%) were least likely to report having voted, and Latino/a (48%) and Black (50%) respondents were also less likely to report voting (Figure 18.5).

More than half (54%) of respondents who were citizens and of voting age at the time of the 2014 midterm election reported that they voted in the election, compared to 42% in the U.S. population.

Figure 18.5: Voted in election
RACE/ETHNICITY (%)



Respondents who were living in poverty⁷ (41%) were also less likely to say they had voted, as were those who were currently working in the underground economy (40%), unemployed (42%), or out of the labor force (50%).

d. Reasons for Not Voting

Respondents who reported being registered but did not vote in the November 4, 2014 election were asked to identify the main reason why they did not vote, based on categories outlined in the CPS and additional experiences they might have had as a transgender person. Nearly one in five (19%) respondents who reported they were registered but did not vote reported that they were not interested or felt their vote would not make a difference, compared to 16% of such voters in the U.S. population.⁸ Respondents were also more than twice as likely to report not voting due to registration problems, such as not receiving an absentee ballot or not being registered in the current location (5%), than registered voters in the U.S. general population (2%) (Table 18.2).

Among those who provided additional reasons for not voting that were not included in the CPS, 3% of respondents reported that they wanted to avoid harassment by election officials because they were transgender. Transgender men and women

In Our Own Voices

“Lawmakers pushed through voter ID reforms in my state, requiring every voter to present a photo ID with a gender marker. Since I was unable to do so, I was a victim of ‘de facto’ disenfranchisement and voter intimidation tactics that are now, unfortunately, all too common.”

“When changing my name on my voter registration, the DMV put in the wrong name. I don’t know how to fix it and I’m scared that if I try to vote (something I really want to do!) I won’t be able to because the voter registration has the wrong name.”

“I had to try twice to get my county to change my name in the voter registration, which is extremely embarrassing as people are essentially shouting that you’re trans in a public place. Some accused me of attempting voter fraud when all I wanted to do was try to make sure I had the best candidates who would protect my rights.”

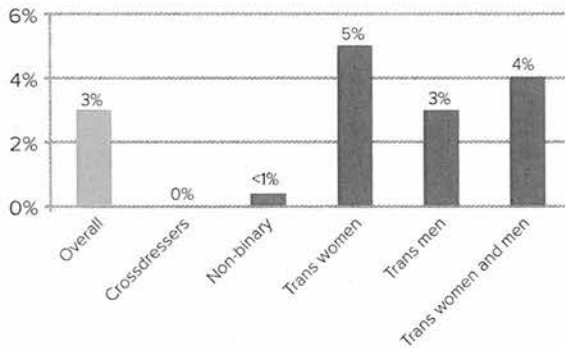
(4%) were more likely to report that they did not vote because they wanted to avoid harassment by an election official than non-binary respondents (<1%) (Figure 18.6). Two percent (2%) of those who did not vote said that the main reason was that

their ID did not match their current name or gender or that their photo did not match their appearance, and 1% said that the main reason was that their current name or gender that did not match their voter registration.

Table 18.2: Main reason for not voting on November 4, 2014

Reasons included in the Current Population Survey (CPS):	% of USTS respondents who were registered but did not vote	% in U.S. population who were registered but did not vote (CPS)
They were not interested or felt their vote would not make a difference	19%	16%
They forgot to vote or send in an absentee ballot	19%	8%
They were too busy or had a conflicting work or school schedule	16%	28%
They were out of town or away from home	12%	10%
They did not like the candidates or campaign issues	8%	8%
Registration problems (e.g., they did not receive an absentee ballot or they were not registered in their current location)	5%	2%
Illness or disability (own or family's)	5%	11%
Inconvenient hours, polling place, or hours or lines too long	3%	2%
Transportation problems	3%	2%
Bad weather conditions	<1%	<1%
Other reasons	10%	9%
Additional reasons not included in the CPS:		
They wanted to avoid harassment by election officials because they were transgender	3%	---
Their ID did not match their current name or gender, or they had an old photo	2%	---
Name or gender on ID did not match voter registration	1%	---
They did not have the ID they needed to vote	1%	---
They did not know the process for voting or did not know about the candidates (write-in response)	1%	---
Protest or philosophical reasons (write-in response)	1%	---
They were not allowed by a poll worker or election official because they were transgender	<1%	---

Figure 18.6: Did not vote due to avoiding anti-transgender harassment
GENDER IDENTITY (%)



II. Political Engagement and Party Affiliation

Respondents received a question about political affairs to examine how much of an influence they believed they could have on government decisions. Specifically, they were asked to rate on five-point scale from “strongly agree” to “strong disagree” what they thought about the following statement: “Someone like me can’t really influence government decisions.” Nearly half (44%) of respondents disagreed or strongly disagreed with the statement, and approximately one-third (32%) agreed or strongly agreed with the statement (Figure 18.7). This means that there were more respondents who thought that they could

Half (50%) of respondents identified as Democrats, 48% identified as Independents, and 2% identified as Republicans, compared to 27%, 43%, and 27% in the U.S. general population, respectively.

have some influence on government decisions than those who believed they could not influence government decisions.

Figure 18.7: Perception of ability to influence government decisions



Respondents were also asked about their political party affiliation with questions that were patterned on the Gallup U.S. Daily Tracking Poll, including whether they consider themselves a Republican, Democrat, or Independent. Half (50%) of respondents identified as Democrats, 48% identified as Independents, and 2% identified as Republicans, compared to 27%, 43%, and 27% in the U.S. general population, respectively (Figure 18.8).⁹ Respondents who did not identify as Democrats or Republicans wrote in several political parties and political movements, including socialist or democratic socialist (4%), Green Party (2%), Libertarian (1%), and anarchist (1%). For comparison with the Gallup Daily Tracking Poll, these respondents are included as Independents in Figure 18.8.

Those who identified as Independents were also asked whether they lean more to the Democratic Party or the Republican Party. Overall, 79% in the sample reported that they were Democrats or lean towards the Democratic Party, 4% were Republicans or lean towards the Republican Party,

and 17% were Independents who do not lean towards the Democratic or Republican parties. This compares to 44% in the U.S. population who are Democrats or lean towards the Democratic Party, 45% who are Republicans or lean towards the Republican Party, and 11% who are Independents and do not lean towards either party (Figure 18.9).¹⁰

When asked about their political views, more than half (55%) of the sample described themselves as “very liberal,” 27% selected “liberal,” 15% selected “moderate,” 2% selected “conservative,” and only 1% described themselves as “very conservative.”

Figure 18.8: Consider themselves a Republican, Democrat, or Independent

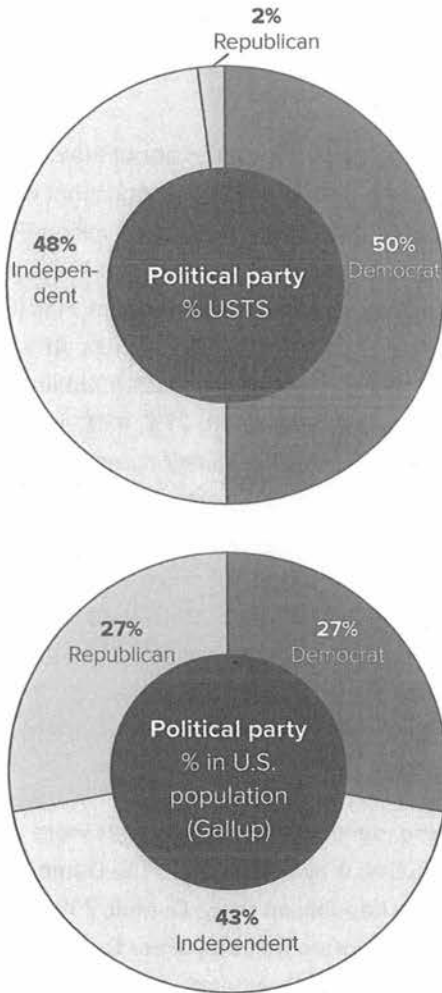
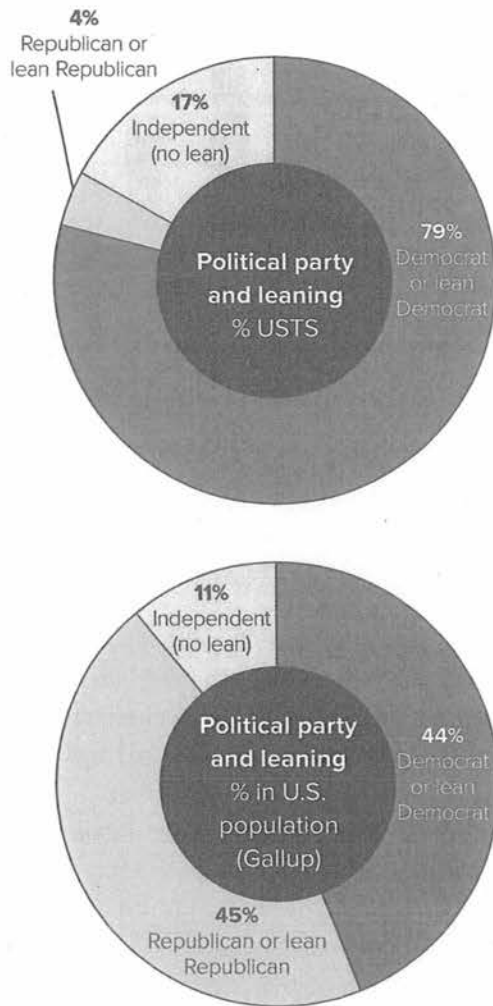


Figure 18.9: Democratic or Republican party affiliation and leaning



III. Policy Priorities

The survey explored respondents' opinions on the most important policy priorities for transgender people in the U.S. and asked for those issues to be ranked from “very important” to “not very important.” Violence against transgender people was most widely selected as being a very important issue (94%). Insurance coverage for transgender-related health care (90%), police mistreatment of transgender people (88%), and

employment (87%) were also commonly selected as very important priorities (Table 18.3).

Table 18.3: Respondents' policy priorities

Issue	Very important	Important	Not very important
Violence against transgender people	94%	5%	1%
Insurance coverage for transgender-related health care	90%	9%	1%
Police mistreatment of transgender people	88%	11%	1%
Employment	87%	13%	1%
Training health care providers about transgender health	86%	13%	1%
Housing and homelessness	85%	14%	1%
Poverty	84%	15%	1%
Bullying and discrimination in schools	84%	15%	1%
Racism	83%	15%	3%
Mistreatment in prisons or jails	82%	16%	2%
Identity documents	79%	20%	1%
HIV/AIDS	68%	29%	3%
Parenting and adoption rights	68%	28%	4%
Conversion therapy	68%	22%	10%
Immigration reform	60%	30%	10%
Marriage recognition	55%	32%	13%
Military (open service for transgender people)	49%	33%	18%

Respondents were also asked for their top three policy priorities. One-quarter (25%) reported that violence against transgender people was the top policy priority for them, and more than half (54%) reported that it was one of their top three priorities. Fifteen percent (15%) reported that health insurance coverage was the most important priority for them, and 11% reported that racism was the most important policy priority for them (Table 18.4).

Table 18.4: Top policy priorities

Respondents' most important priority	% of respondents
Violence against transgender people	25%
Insurance coverage for transgender-related health care	15%
Racism	11%
Employment	7%
Identity documents	7%
Poverty	6%
Bullying and discrimination in schools	5%
Training health care providers about transgender health	5%
Police mistreatment of transgender people	5%
Housing and homelessness	4%
Mistreatment in prisons or jails	2%
HIV/AIDS	1%
Conversion therapy	1%
Military (open service for transgender people)	1%
Immigration reform	1%
Parenting and adoption rights	1%
Marriage recognition	1%

Conclusion

Participation in the political process through activities such as voting is a vital component of influencing policies that impact lives and communities at the local, state, and national levels throughout the U.S. However, the process may be inaccessible at times or may otherwise present a difficult avenue through which policy priorities and day-to-day needs can be expressed. The results indicate that while a majority of eligible respondents had registered to vote in the most recent national election, only half had engaged in the process by voting, providing reasons such as not believing their vote would make a difference or

wanting to avoid potential harassment by election officials as a transgender person. Respondents were substantially more likely to identify with the Democratic Party or lean towards the Democratic Party than other political parties. Policy priorities that respondents identified as most important are

those directly related to the safety and wellbeing of transgender people, including violence against transgender people, health insurance and health care, police treatment of transgender people, racism, employment, and housing.

ENDNOTES | CHAPTER 18: CIVIC PARTICIPATION AND POLICY PRIORITIES

- 1 Questions referred to the midterm elections held on Tuesday, November 4, 2014, and respondents received the explanation that “[t]his was the election in November 2014 to elect members of the U.S. Congress and state-level offices.” See Q. 29.1 and 29.2.
- 2 Voter registration and voting results reported in this chapter are based on the responses of U.S. citizens in the sample who were aged 18 or older at the time of the election to provide the most appropriate comparison to Current Population Survey data on registration and voting in the U.S. population.
- 3 Reported voter registration in the U.S. is among U.S. citizens aged 18 and over. U.S. Census Bureau, (2014, November). *Current Population Survey: Reported Voting and Registration, by Sex and Single Years of Age: November 2014*. Available at: <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-577.html>.
- 4 TANF (the Temporary Assistance for Needy Families program) is a federal cash assistance program.
- 5 Although the Current Population Survey asked about the main reason for not registering to vote on November 4, 2014, U.S. population data for that question was not available at the time of this report.
- 6 The number of USTS respondents who voted represents 70% of those in the sample who were registered to vote in the election. According to the CPS, 42% of citizen voters aged 18 and older voted in the 2014 election, which represents 65% of registered voters. U.S. Census Bureau. (2014, November). *Current Population Survey. Reported Voting and Registration, by Sex and Single Years of Age: November 2014*. Available at: <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-577.html>. See also File, T. (2015). *Who Votes? Congressional Elections and the American Electorate: 1978-2014*. (p. 2). DC: U.S. Census Bureau. Available at: <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p20-577.pdf>.
- 7 Respondents who are “living in poverty” represent those who are living at or near the poverty line. See the *Income and Employment Status* chapter for more information about the poverty line calculation.
- 8 U.S. Census Bureau. (2014, November). *Current Population Survey. Voting and Registration in the Election of November 2014*. Available at: <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-577.html>.
- 9 This data is based on Gallup Poll results from September 9–13, 2015, the poll in closest proximity to when the survey was in the field. Gallup Poll. (2015, September 9–13). *Party Affiliation*. Available at: <http://www.gallup.com/poll/15370/party-affiliation.aspx>.
- 10 Gallup Poll. (2015, September 9–13). *Party Affiliation*. Available at: <http://www.gallup.com/poll/15370/party-affiliation.aspx>.

About the Authors

Sandy E. James

As Survey Project Manager at the National Center for Transgender Equality, Sandy led the research team in developing, fielding, analyzing, and presenting the 2015 U.S. Transgender Survey. After a decade-long career as a forensic toxicologist, Sandy launched a new career as a civil rights advocate focused on law, research, and policy to advance transgender rights. He has worked on numerous projects involving trans-related legislation, policy, and research, including extensive work with data from the 2008–09 National Transgender Discrimination Survey. Sandy has been published in *The Georgetown Journal of Gender and the Law* and the *LGBTQ Policy Journal at the Harvard Kennedy School*. Sandy received a J.D and M.A in American Government from Georgetown University, where he is also currently pursuing his Ph.D.

Jody L. Herman

Jody L. Herman is a Scholar of Public Policy at the Williams Institute at the UCLA School of Law. She holds a Ph.D. in Public Policy and Public Administration in the field of Gender and Social Policy from the George Washington University, where she also earned her M.A. in Public Policy with a concentration in Women's Studies. Her doctoral dissertation focused on the problems transgender and gender non-conforming people face when using public restrooms and the development of anti-discrimination protections in public accommodations based on gender identity and expression. She has worked on issues of poverty, women's rights, voting rights, and anti-discrimination policy development with non-profit research, advocacy, and direct-service organizations in the United States and Mexico. She served as a co-author on the groundbreaking report *Injustice at Every Turn*, based on the National Transgender Discrimination Survey conducted by the National Gay and Lesbian Task Force and the National Center for Transgender Equality. Her research at the Williams Institute focuses on the prevalence and impact of interpersonal and structural discrimination based on gender identity or expression.

Sue Rankin

Sue Rankin is the principal of Rankin & Associates Consulting. She retired from the Pennsylvania State University in 2013 after 36 years, where she most recently served as an Associate Professor of Education, and Associate in the Center for the Study of Higher Education. Sue earned her B.S. from Montclair State University in 1978, and an M.S. and Ph.D. from the Pennsylvania State University. She has presented and published widely on the impact of sexism, racism, and heterosexism in the academy and in intercollegiate athletics. Her current research focuses on the assessment of institutional climate and providing program planners and policymakers with recommended strategies to improve the campus climate for under-served communities. Her recent publications include *The State of Higher Education for LGBT People* and *The Lives of Transgender People* in 2010 and an *NCAA Student-Athlete Climate Study* in 2011. In addition to serving as a consultant for the National Transgender Discrimination Survey in 2011, she has collaborated with over 170 institutions in implementing assessments and developing strategic plans regarding social justice issues.

Mara Keisling

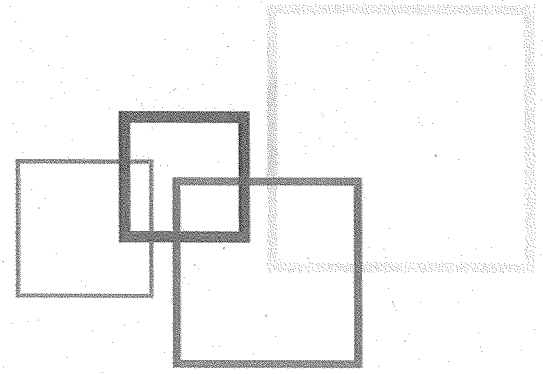
Mara Keisling is the founding Executive Director of the National Center for Transgender Equality, one of the nation's leading social justice organizations winning life-saving change for transgender people. After a 25-year career in survey research, Mara helped found NCTE and quickly became one of the nation's foremost authorities on transgender issues. Mara has led organizational and coalition efforts that have won significant advances in transgender equality throughout the country, especially in federal law and policy. Under her leadership, NCTE has won well over 100 federal policy changes that have improved the lives of transgender people. Mara was a co-author of *Injustice at Every Turn: The Report of the National Transgender Discrimination Survey*. A native of Pennsylvania and a transgender woman, Mara holds a B.A. from Pennsylvania State University and conducted her graduate studies in American Government at Harvard University.

Lisa Mottet

Lisa Mottet joined the National Center for Transgender Equality as the Deputy Executive Director in 2013, helping to grow NCTE from 5 staff to now 15 staff. She helps guide the organization's local, state, and federal policy advocacy, while also helping to oversee communications and development. In her previous position as Director of the Transgender Civil Rights Project at the National LGBTQ Task Force (formerly the National Gay and Lesbian Task Force), where she served for 12 years, she was a member of the research team for the National Transgender Discrimination Survey, and co-authored the report of its findings, *Injustice at Every Turn* (2011). As a long-time ally to the transgender community, Lisa was a major figure in promoting trans-inclusion in the LGBT movement and, while at the Task Force, she helped engineer the addition of "gender identity" to the Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act, which became law in 2009, and to the Employment Non-Discrimination Act. Her thoughts and guidance on trans-inclusion were recorded in the 2008 publication, *Opening the Door to Transgender Inclusion: The Nine Keys to Making LGBT Organizations Fully Transgender-Inclusive*. Also while at the Task Force, Lisa co-authored *Transitioning Our Shelters: A Guide to Making Homeless Shelters Safe for Transgender People*. Lisa graduated from the University of Washington in 1998 and received her J.D. from the Georgetown University Law Center in 2001.

Ma'ayan Anafi

Ma'ayan Anafi is a Policy Counsel at the National Center for Transgender Equality. As part of the NCTE team, Ma'ayan has worked to strengthen and preserve nondiscrimination protections for transgender communities, with a focus on efforts to defeat anti-transgender state legislation and the implementation of federal nondiscrimination laws in health care, employment, education, and housing. Ma'ayan obtained a J.D. from Harvard Law School and a B.A. from the University of Toronto. An Autistic and non-binary transgender person, Ma'ayan is the co-leader of the DC chapter of the Autistic Self-Advocacy Network.



Appendix A

Demographic Description and Other Characteristics of the Sample

Throughout the report, findings were presented with the standard or supplemental survey weight applied. These weights adjusted the sample to reflect the U.S. population in regard to age, race, and educational attainment and also adjusted for disproportionate representation of 18-year-olds in the sample. In this appendix, unweighted tabulations of selected demographic and other variables are presented to provide a description of the sample before weights were applied. This includes recoded variables, which are indicated as such. See the *Methodology* chapter and *Appendix C: Detailed Methodology* for a description of the weights used in this report.

Q1.4. What U.S. state or territory do you currently live in?	Unweighted frequency	Unweighted %
U.S. military base outside of the U.S.	32	0.1%
Alabama	228	0.8%
Alaska	84	0.3%
American Samoa	2	0.0%
Arizona	537	1.9%
Arkansas	222	0.8%
California	3453	12.5%
Colorado	669	2.4%
Connecticut	319	1.2%
Delaware	84	0.3%
District of Columbia	214	0.8%
Florida	1099	4.0%
Georgia	614	2.2%
Guam	2	0.0%
Hawai'i	69	0.3%
Idaho	155	0.6%
Illinois	1082	3.9%
Indiana	452	1.6%
Iowa	219	0.8%
Kansas	197	0.7%
Kentucky	274	1.0%
Louisiana	274	1.0%
Maine	182	0.7%
Maryland	662	2.4%
Massachusetts	1195	4.3%
Michigan	894	3.2%
Minnesota	670	2.4%
Mississippi	82	0.3%
Missouri	509	1.8%
Montana	72	0.3%
Nebraska	165	0.6%
Nevada	206	0.7%
New Hampshire	225	0.8%
New Jersey	550	2.0%
New Mexico	213	0.8%
New York	1779	6.4%
North Carolina	686	2.5%
North Dakota	46	0.2%
Ohio	941	3.4%
Oklahoma	215	0.8%

Q1.4. What U.S. state or territory do you currently live in? (continued)	Unweighted frequency	Unweighted %
Oregon	1152	4.2%
Pennsylvania	1171	4.2%
Puerto Rico	27	0.1%
Rhode Island	119	0.4%
South Carolina	233	0.8%
South Dakota	43	0.2%
Tennessee	416	1.5%
Texas	1490	5.4%
Utah	270	1.0%
Vermont	163	0.6%
Virginia	723	2.6%
Washington	1667	6.0%
West Virginia	83	0.3%
Wisconsin	541	2.0%
Wyoming	44	0.2%
Total	27715	100%

Q1.4. U.S. region of current residence (recode based on Census regions)	Unweighted frequency	Unweighted %
Northeast	5703	21%
Midwest	5759	21%
South	7599	27%
West	8591	31%
Total	27652	100%

Q1.10. Do you think of yourself as transgender?	Unweighted frequency	Unweighted %
No	3270	12%
Yes	24445	88%
Total	27715	100%

Q1.11. Do you identify as more than one gender or as no gender?	Unweighted frequency	Unweighted %
No	14362	52%
Yes	13353	48%
Total	27715	100%

Q1.12. Do you currently live full-time in a gender that is different from the one assigned to you at birth?	Unweighted frequency	Unweighted %
No	11135	40%
Yes	16580	60%
Total	27715	100%

Q1.14. Someday do you want to live full time in a gender that is different from the one assigned to you at birth?*	Unweighted frequency	Unweighted %
No	770	7%
Yes	6497	58%
Not sure	3862	35%
Total	11129	100%

*Asked of those who responded "No" to Q1.12.

Q1.16. Have you seriously thought about living in a gender that is different from the one assigned to you at birth (transitioning gender)?*	Unweighted frequency	Unweighted %
No	251	33%
Yes	519	67%
Total	770	100%

*Asked of those who responded "No" to Q1.12 and Q1.14.

Q1.17. Do you consider yourself to be a cross-dresser?	Unweighted frequency	Unweighted %
No	25225	91%
Yes	2490	9%
Total	27715	100%

Q1.18. Do you live part of the time in one gender and part of the time in another gender?	Unweighted frequency	Unweighted %
No	19063	69%
Yes	8652	31%
Total	27715	100%

Q2.1. What sex were you assigned at birth, on your original birth certificate?	Unweighted frequency	Unweighted %
Female	15858	57%
Male	11857	43%
Total	27715	100%

Q2.1 & Q2.3. Gender categories used for analysis (recode)	Unweighted frequency	Unweighted %
Crossdressers	758	3%
Transgender women	9238	33%
Transgender men	7950	29%
Non-binary people, assigned female at birth	7844	28%
Non-binary people, assigned male at birth	1925	7%
Total	27715	100%

Q2.1 & Q2.3. Gender categories (collapsed recode)	Unweighted frequency	Unweighted %
Transgender men and women	17188	64%
Non-binary people	9769	36%
Total	26957	100%

Q2.4. How comfortable are you with the word "transgender" being used to describe you?	Unweighted frequency	Unweighted %
Very comfortable	12189	44%
Somewhat comfortable	7413	27%
Neutral	4129	15%
Somewhat uncomfortable	3116	11%
Very uncomfortable	830	3%
Total	27677	100%

Q2.5. What gender pronouns do you ask people to use to refer to you?	Unweighted frequency	Unweighted %*
He, his	9981	36%
She, hers	10138	37%
They, their	8026	29%
Ze, hir	466	2%
No pronouns. I ask people only to use my name.	1095	4%
I don't ask people to use specific pronouns.	5619	20%
Pronouns not listed above	1162	4%

*Multiple choices were allowed, so percentages do not add to 100%.

Q2.6. What gender do you currently live in on a day-to-day basis?	Unweighted frequency	Unweighted %
Man	9418	34%
Woman	8271	30%
Neither man nor woman/ Genderqueer/Non-binary	5721	21%
Part time one gender/part time another gender	4305	16%
Total	27715	100%

Q2.7. People can tell I am trans even if I don't tell them.	Unweighted frequency	Unweighted %
Always	549	2%
Most of the time	2629	10%
Sometimes	9139	33%
Rarely	8986	33%
Never	6346	23%
Total	27649	100%

Q2.8. What best describes your current sexual orientation?	Unweighted frequency	Unweighted %
Asexual	2984	11%
Bisexual	4129	15%
Gay	1316	5%
Heterosexual/Straight	3363	12%
Lesbian	3037	11%
Same-gender loving	264	1%
Pansexual	5056	18%
Queer	5706	21%
Demisexual*	287	1%
A sexual orientation not listed above	1573	6%
Total	27715	100%

*Added to the response list from write-in responses.

Q2.9-Q2.11. Race/ethnicity (recode)	Unweighted frequency	Unweighted %
Alaska Native alone	17	0.1%
American Indian alone	302	1.1%
Asian/Asian American alone	721	2.6%
Biracial/Multiracial	1513	5.5%
Black/African American alone	796	2.9%
Latino/a/Hispanic alone	1473	5.3%
Middle Eastern/North African alone	132	0.5%
Native Hawaiian/Pacific Islander alone	62	0.2%
White/European American alone	22658	81.8%
A racial/ethnic identity not listed above	41	0.2%
Total	27715	100%

Q2.12. Religious/spiritual identity (recode)	Unweighted frequency	Unweighted %
Not religious/spiritual	10460	38%
Religious/spiritual	17195	62%
Total	27655	100%

Q2.13. Age ranges (recode)	Unweighted frequency	Unweighted %
18 to 24	11840	43%
25 to 44	10987	40%
45 to 64	4085	15%
65 and over	803	3%
Total	27715	100%

Q2.15. What is your current relationship status?	Unweighted frequency	Unweighted %
Partnered, living together	8762	31.6%
Partnered, not living together	4630	16.7%
Single	13219	47.7%
Not listed above	404	1.5%
Aromantic/not active/platonic*	67	0.2%
Open relationship*	53	0.2%
Poly*	535	1.9%
Single, divorced*	11	0.0%
Single, widowed*	28	0.1%
Total	27709	100%

*Added to the response list from write-in responses.

Q2.16. What is your current legal marital status?	Unweighted frequency	Unweighted %
Married	4671	16.9%
Legally recognized civil union	67	0.2%
Registered domestic partnership	238	0.9%
Widowed	216	0.8%
Divorced	2538	9.2%
Separated	456	1.7%
Single, never married	19463	70.4%
Total	27649	100%

Q2.17. Have you ever served on active duty in the U.S. Armed Forces, Reserves, or National Guard?	Unweighted frequency	Unweighted %
Never served in the military	25263	91.3%
Only active duty for training in the Reserves or National Guard	298	1.1%
Now on active duty	129	0.5%
On active duty in the past, but not now	1976	7.1%
Total	27666	100%

Q2.18. What is your citizenship or immigration status in the U.S.?	Unweighted frequency	Unweighted %
U.S. citizen, birth	26684	96.3%
U.S. citizen, naturalized	555	2.0%
Permanent Resident	249	0.9%
A visa holder (such as F-1, J-1, H1-B, and U)	115	0.4%
DACA (Deferred Action for Childhood Arrival)	16	0.1%
DAPA (Deferred Action for Parental Accountability)	1	0.0%
Refugee status	6	0.0%
Other documented status not mentioned above	40	0.1%
Currently under a withholding of removal status	3	0.0%
Undocumented resident	46	0.2%
Total	27715	100%

Q2.20. Disability (questions based on American Community Survey, with the exception of the last question)	Unweighted frequency	Unweighted %*
Are you deaf or have serious difficulty hearing?	1072	4%
Are you blind or have serious difficulty seeing even when wearing glasses?	679	2%
Because of a physical mental or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?	8471	31%
Do you have serious difficulty walking or climbing stairs?	1729	6%
Do you have difficulty dressing or bathing?	924	3%
Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone, such as visiting a doctor's office or shopping?	6200	23%
Do YOU identify as a person with a disability?	7764	28%

*Multiple choices were allowed, so percentages do not add to 100%.

Q2.20. Any disability (recode) (based on American Community Survey questions only, not including self-identification)	Unweighted frequency	Unweighted %
No	16305	60%
Yes	10913	40%
Total	27218	100

Q2.21. What is the main language that people speak in your home?	Unweighted frequency	Unweighted %
English only	24958	90.1%
Language(s) other than English	285	1.0%
English and other language(s)	2461	8.9%
Total	27704	100%

Q2.22. What is the highest level of school or degree you have completed?	Unweighted frequency	Unweighted %
Less than 8th grade	48	0.2%
8th grade	54	0.2%
Some high school, no diploma or GED	804	2.9%
GED	661	2.4%
High school graduate	2806	10.1%
Some college, no degree (including currently in college)	10486	37.8%
Associate degree in college—Occupational/vocational program	858	3.1%
Associate degree in college—Academic program	1475	5.3%
Bachelor's degree	5291	19.1%
Some graduate work, no graduate degree	1652	6.0%
Master's degree (M.A, M.S., MBA)	2562	9.2%
Doctoral degree (e.g., Ph.D., Ed.D.)	504	1.8%
Professional degree (e.g., MD, JD)	514	1.9%
Total	27715	100%

Q2.23. What are your current living arrangements?	Unweighted frequency	Unweighted %
Living in house/apartment/condo I OWN alone or with others (with a mortgage or that you own free and clear)	4697	17.0%
Living in house/apartment/condo I RENT alone or with others	11507	41.5%
Living with a partner, spouse, or other person who pays for the housing	1443	5.2%
Living temporarily with friends or family because I can't afford my own housing	2229	8.0%
Living with parents or family I grew up with because I have not yet left home	5149	18.6%
Living in a foster group home or other foster care	10	0.0%
Living in campus/university housing	1821	6.65%
Living in a nursing home or other adult care facility	9	0.0%
Living in a hospital	2	0.0%
Living in military barracks	31	0.1%
Living in a hotel or motel that I pay for myself	37	0.1%
Living in a hotel or motel with an emergency shelter voucher	6	0.0%

Q2.23. What are your current living arrangements? (continued)	Unweighted frequency	Unweighted %
Living in transitional housing/halfway house	48	0.2%
Living on the street, in a car, in an abandoned building, in a park, or a place that is NOT a house, apartment, shelter, or other housing	91	0.3%
Living in a homeless shelter	36	0.1%
Living in a domestic violence shelter	6	0.0%
Living in a shelter that is not a homeless shelter or domestic violence shelter	3	0.0%
A living arrangement not listed above	126	0.5%
Mobile housing (RV, camper, etc.)*	40	0.1%
A place owned/rented by someone else*	176	0.6%
A group home or treatment facility*	13	0.1%
At home/with family for other reasons*	186	0.7%
Nomadic*	16	0.1%
Commune/co-op/collective*	28	0.1%
Total	27710	100%

*Added to the response list from write-in responses.

Q2.24. Is there at least one telephone INSIDE your home that is currently working and is not a cell phone?	Unweighted frequency	Unweighted %
No	18255	66%
Yes	9313	34%
Total	27568	100%

Q2.24. Do you have a cell phone?	Unweighted frequency	Unweighted %
No	882	3%
Yes	26744	97%
Total	27626	100%

Q14.1 & Q14.2 HIV status (recode)	Unweighted frequency	Unweighted %
HIV positive	179	0.7%
HIV negative	13869	50.2%
Don't know/not tested	13606	49.2%
Total	27654	100%

Q7.7 Employment status	Unweighted frequency	Unweighted %*
Work for pay from sex work, selling drugs, or other work that is currently considered illegal	516	1.9%
Work full-time for an employer	9560	34.5%
Work part-time for an employer	6735	24.3%
Self-employed in your own business, profession or trade, or operate a farm (not including sex work, selling drugs, or other work that is currently considered illegal)	3868	14.0%
Unemployed but looking for work	3991	14.4%
Unemployed and have stopped looking for work	1247	4.5%
Not employed due to disability	2255	8.1%
Student	8639	31.2%
Retired	1107	4.0%
Homemaker or full-time parent	549	2.0%
Not listed above	1240	4.5%
Seasonal work/odd jobs/other part-time work*	136	0.5%
Volunteer*	76	0.3%
Internship*	66	0.2%

*Multiple choices were allowed, so percentages do not add to 100%.

Q7.8. Respondent is member of a union (recode)	Unweighted frequency	Unweighted %
No	25997	94%
Yes	1691	6%
Total	27688	100%

Q7.8 & Q7.9. Respondent is a union member or under a union contract (recode)	Unweighted frequency	Unweighted %
No	25623	92%
Yes	2082	8%
Total	27705	100%

Q7.10. Do you currently receive assistance from food stamps (SNAP) or WIC?	Unweighted frequency	Unweighted %
No	25060	91%
Yes	2606	9%
Total	27666	100%

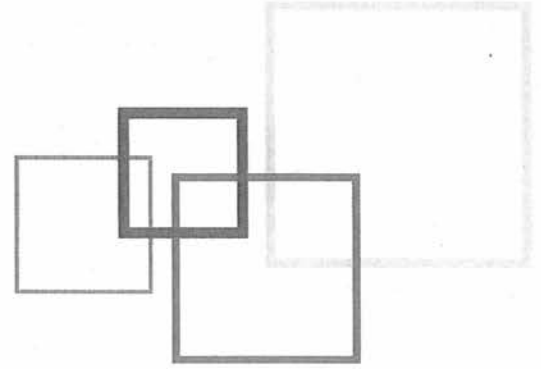
Q711. Current sources of income (recode)	Unweighted frequency	Unweighted %
Pay from sex work, selling drugs, or other work that is currently considered illegal only	143	0.6%
Pay from employment only	10519	40.4%
Pay from pension or retirement only	227	0.9%
SSI or disability income only	903	3.5%
Unemployment benefits or cash assistance only	207	0.8%
Other income source only	1165	4.5%
Multiple income sources	12183	46.8%
No income	664	2.6%
Total	26011	100%

Q712. Individual income in 2014 (includes all income sources except food stamps (SNAP) or WIC)	Unweighted frequency	Unweighted %
No income	3913	14.4%
\$1 to \$5,000	4647	17.1%
\$5,000 to \$7,499	1665	6.1%
\$7,500 to \$9,999	1444	5.3%
\$10,000 to \$12,499	1743	6.4%
\$12,500 to \$14,999	1184	4.4%
\$15,000 to \$17,499	843	3.1%
\$17,500 to \$19,999	772	2.9%
\$20,000 to \$24,999	1568	5.8%
\$25,000 to \$29,999	1071	4.0%
\$30,000 to \$34,999	1163	4.3%
\$35,000 to \$39,999	888	3.3%
\$40,000 to \$49,999	1355	5.0%
\$50,000 to \$59,999	1049	3.9%
\$60,000 to \$74,999	1070	3.9%
\$75,000 to \$99,999	1118	4.1%
\$100,000 to \$149,999	998	3.7%
\$150,000 or more	636	2.3%
Total	27127	100%

Q712 - Q714 Household income in 2014 (recode)	Unweighted frequency	Unweighted %
No income	996	3.9%
\$1 to \$5,000	1433	5.7%
\$5,000 to \$7,499	811	3.2%
\$7,500 to \$9,999	869	3.4%
\$10,000 to \$12,499	1109	4.4%
\$12,500 to \$14,999	897	3.6%
\$15,000 to \$17,499	725	2.9%
\$17,500 to \$19,999	725	2.9%
\$20,000 to \$24,999	1571	6.2%
\$25,000 to \$29,999	1220	4.8%
\$30,000 to \$34,999	1367	5.4%
\$35,000 to \$39,999	1224	4.8%
\$40,000 to \$49,999	1872	7.4%
\$50,000 to \$59,999	1806	7.1%
\$60,000 to \$74,999	2096	8.3%
\$75,000 to \$99,999	2360	9.3%
\$100,000 to \$149,999	2418	9.6%
\$150,000 or more	1797	7.1%
Total	25296	100%

Q29.1 & Q29.2 Registered to vote on November 4, 2014 (recode)	Unweighted frequency	Unweighted %
No	8468	31%
Yes	19215	69%
Total	27683	100%

Q29.1. Did you vote in the election held on Tuesday, November 4, 2014?	Unweighted frequency	Unweighted %
No	13846	50%
Yes	13805	50%
Total	27651	100%



Appendix B

Survey Instrument (Questionnaire)

The survey was offered online only. The questionnaire has been reproduced here to best reflect what respondents saw when completing the survey. Programming notes are indicated in italics.

QUESTIONNAIRE:

The National Center for Transgender Equality welcomes you to the 2015 U.S. Trans Survey, the follow up to the National Transgender Discrimination Survey: Injustice At Every Turn. We thank you for participating in this survey. Every voice counts in documenting and better understanding the lives and experiences of trans people in the United States, and we appreciate yours.

Sincerely,

The National Center for Transgender Equality Survey Team



UNIVERSITY OF CALIFORNIA LOS ANGELES

Study information sheet

2015 U.S. Trans Survey

This study has been commissioned by the National Center for Transgender Equality (NCTE). A research team made up of Jody L. Herman, Ph.D. and Susan Rankin, Ph.D. are conducting this study. Your participation in this study is voluntary.

WHY IS THIS STUDY BEING DONE?

This study is being conducted to better understand the demographics, health, and experiences of trans people in the United States. The findings of this study will be used for the benefit of the trans community and the research community.

WHAT WILL HAPPEN IF I TAKE PART IN THIS RESEARCH STUDY?

If you volunteer to participate in this study, the researchers ask that you participate in an online survey. The purpose of the survey is to gather information about you and your experiences as a trans person in the United States. You will be one of over 700,000 possible participants who may take part in this survey, which is the current best estimate of the total number of trans-identified adults in the United States.

HOW LONG WILL I BE IN THE RESEARCH STUDY?

Participation in the study will take between 30 and 60 minutes.

ARE THERE ANY RISKS OR DISCOMFORTS THAT I CAN EXPECT FROM THIS STUDY?

Participating in this study poses no risks that are not ordinarily encountered in daily life. Any information you provide in the survey will be confidential. Some of the questions asked of you as part of this survey may make you feel uncomfortable. You may refuse to answer questions posed to you by skipping the question. You may stop your participation in this study at any time by exiting the survey. Should you need them, there will be a list of resources, including hotlines, provided at the end of the survey.

ARE THERE ANY BENEFITS IF I PARTICIPATE?

The results of the research will be used for the benefit of the trans community in the United States and the research community. You will not directly benefit from your participation in the research.

WILL I BE PAID FOR MY PARTICIPATION?

You will receive no payment for your participation. You will have the option to voluntarily enter a drawing to win one of three cash prizes: one prize of \$500 and two prizes of \$250.

HOW WILL INFORMATION ABOUT ME AND MY PARTICIPATION BE KEPT CONFIDENTIAL?

Your survey response will be anonymous, so no information that can be used to identify you will be collected unless you voluntarily provide it. Any information that is obtained in connection with this study and that can identify you will remain confidential. If you do voluntarily provide any information that could be used to identify you, the research team will maintain your confidentiality by taking precautions to minimize any risk to your privacy from participating in this survey.

You will be given the option at the end of the survey to be directed to a separate page on a secure website if you wish to provide your contact information to receive survey results from NCTE, be entered into the drawing for one of three cash prizes, or share your personal story with NCTE. NCTE will NOT be provided with any responses from your survey in connection with your contact information. NCTE will only know that you have participated in the survey. NCTE will not provide to the research team any information that could be used to identify you, such as your name. Therefore, you will remain anonymous to the research team.

Results of this research study that are reported in published form will not name you or identify you as a participant. If you choose to self-identify anywhere on the survey and provide a written response, a different name will be created and used instead of your name if quoting you directly in any publication and any content of quotes that could be used to identify you will be removed.

CAN THE RESEARCHERS REMOVE ME FROM THIS STUDY?

The researchers will not remove you from the study. You may remove yourself from the study by exiting the survey. If you exit the survey, your responses will not be recorded or used in the study.

WHAT ARE MY RIGHTS IF I TAKE PART IN THIS STUDY?

Taking part in this study is your choice. You can choose whether or not you want to participate. Whatever decision you make, there will be no penalty to you.

- You have a right to have all of your questions answered before deciding whether to take part in the study.
- If you decide to take part in the study, you have the right to exit the study at anytime by exiting the survey.
- If you decide at any point to stop participating in this study, you have the right to exit the study at any time by exiting the survey.

WHO CAN I CONTACT IF I HAVE QUESTIONS ABOUT THIS STUDY?

The Research Team:

You may contact Jody L. Herman at (310) 267-4382 or Susan Rankin at (814) 625-2780 with any questions or concerns about the research or your participation in this study.

UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, you may contact the UCLA OHRPP by phone: (310) 825-7122 or U.S. mail: UCLA OHRPP, 11000 Kinross Ave., Suite 102, Box 951694, Los Angeles, CA 90095-1694.

If you agree to take part in this study, as described in detail above, please click on the **"I AGREE"** button below. By clicking on the **"I AGREE"** button, you will indicate your consent to participate in this study.

If you do not agree to take part in this study, as described above, please click on the **"I DO NOT AGREE"** button below.

I AGREE

I agree and give my consent to participate in this study.

I DO NOT AGREE

I do not agree to participate in this study.

Respondents who selected "do not agree" were sent a disqualification page #2.¹

Survey Instructions

Please read and answer each question carefully. For each answer, click on the appropriate oval and/or fill in the appropriate blank. If you want to change an answer, click on the oval of your new answer and/or edit the appropriate blank, and your previous response will be erased.

You may decline to answer specific questions. The survey will take between 30-60 minutes to complete.

There will be several places in the survey where you will see a word or phrase that is underlined and bolded. You can click on those words or phrases and a definition or additional information will be offered.

In order to clear a response choice, please use the back button on your browser.

WARNING: If you use the back button on your browser to return to a previous question, the responses you have entered for each page you clicked back on will be erased. For instance, if you click back three pages in the survey, your answers on those three pages will be erased. Responses before those three pages would stay the same.

In the survey, please do not provide any information that could be used to identify you, such as your name or contact information. All of your answers are confidential and cannot be used against you.

You must hit the "submit" button on the last page of the survey for your responses to be included in the final analyses.

Section 1

1.1 Please make an ID in question 1.1. The research team will use the ID for their analysis. It will not be used to identify you.

Enter the first and last letter of your preferred first name. For example, if your first name is "Robert", enter "RT".

[Text box]

Enter the first letter of your preferred last name. For example, if your last name is "Smith", enter "S".

[Text box]

1.2 It is important that people only complete this survey one time so that we can gather accurate information. You will only be entered into the prize drawing once, even if you complete this survey more than once. Have you already completed this survey before? *[Must answer to continue.]*

No

Yes *[Sent to disqualification page #1]²*

1.3 Are you 18 years of age or older? *[Must answer to continue.]*

No *[Sent to disqualification page #2]³*

Yes

1.4 What U.S. state or territory do you currently live in? *[Must answer to continue.]*

[Drop-down list of all U.S. states and territories.]

I do not live in a U.S. state or territory. *[Sent to disqualification page #1]*⁴

1.5 How did you hear about this survey? **(Mark all that apply.)**

Email from an organization (listserv, e-newsletter)

Social networking site (such as Facebook)

Organization website (such as NCTE)

I was told about it in person (at an organization, event, or support group)

Flier or print advertisement

Word of mouth (e-mail from a friend, a friend told you about it)

Not listed above (please specify) _____

1.6 Are you taking this survey at a survey event or meeting, such as one hosted by an LGBTQ or Trans organization or meeting?

No

Yes

1.7 How are you taking this survey?

On my home computer/laptop

On my work computer

On a public computer (such as in a computer lab or library)

On my mobile phone or tablet

On a friend's or family member's mobile phone, tablet, or computer

Not listed above (please specify) _____

1.8 Not including for this survey, do you use the internet or email, at least occasionally? **(Mark all that apply.)**

No *[Respondents could not select "No" in combination with any other option.]*

Yes, the internet

Yes, email

1.9 If a national survey company, like Gallup, asked you the following question: "We are asking only for statistical purposes: Do you, personally, identify as lesbian, gay, bisexual, or transgender?" How would you answer?

I would answer No

I would answer Yes

I would not answer the question

PLEASE READ AND RESPOND CAREFULLY TO THE FOLLOWING QUESTIONS.

This is a survey for people who are transgender, trans, or non-binary. It doesn't matter if you have transitioned gender or if you plan to. To see if this survey is for you, please answer the following questions.

1.10 Do you think of yourself as transgender? *[Must answer to continue.]*

No

Yes

1.11 Do you identify as more than one gender or as no gender (such as genderqueer or non-binary)? *[Must answer to continue.]*

No

Yes

1.12 Do you currently live full-time in a gender that is different from the one assigned to you at birth? *[Must answer to continue.]*

No *[Skip to 1.14]*

Yes

1.13 How old were you when you started to live full-time in a gender that is different from the one assigned to you at birth? *[Only respondents who selected "Yes" in response to 1.12 received this question.]*

[Drop-down list of all ages from "1" through "99," and "100 and above" as final response choice]

1.14 Someday do you want to live full-time in a gender that is different from the one assigned to you at birth? *[Respondents who selected "No" in response to 1.12 must answer to continue.]*

No *[Skip to 1.16]*

Yes

Not sure

1.15 What are the main reasons that you don't live full-time in a gender that is different from the one assigned to you at birth? **(Mark all that apply.)** *[Only respondents who selected "Yes" or "Not sure" in response to 1.14 received this question.]*

My spouse and/or kids might reject me.

My parents might reject me.

I might lose my job or not be able to get a job.

I might face mistreatment at school.

My friends might reject me.

I might not get the medical care I need.

I might be hurt financially.

I might become homeless.

My church or faith community might reject me.

- I might face violence.
- I am not ready to transition.
- A reason not listed above
(please specify) _____

1.16 Have you seriously thought about living in a gender that is different from the one assigned to you at birth (transitioning gender)? *[Respondents who selected "No" in response to 1.13 must answer to continue.]*

- No
- Yes

1.17 Do you consider yourself to be a cross-dresser? *[Must answer to continue.]*

- No
- Yes

1.18 Do you live part of the time in one gender and part of the time in another gender? *[Must answer to continue.]*

- No
- Yes

[Respondents who answered "No" to 1.10, 1.11, 1.12, 1.14, 1.16, 1.17, and 1.18 were sent to disqualification page #1.]⁵

Section 2

2.1 What sex were you assigned at birth, on your original birth certificate? *[Must answer to continue.]*

- Female
- Male

2.2 Which of these terms do you identify with? **(Mark all that apply.)**

- A.G. or aggressive
- Agender
- Androgynous
- Bi-gender
- Butch
- Bulldagger
- Cross dresser
- Drag performer (king/queen)
- Fa'afafine
- Gender non-conforming or gender variant
- Genderqueer
- Gender fluid/fluid
- Intersex
- Mahu
- Multi-gender
- Non-binary

- Third gender
- Stud
- Transgender
- Trans
- Trans man (FTM, female to male)
- Transsexual
- Trans woman (MTF, male to female)
- Travesti
- Two-spirit
- A gender not listed above
(please specify) _____

2.3 If you had to choose only one of the following terms, which best describes your current gender identity? **(Please choose only one answer.)**

- Cross-dresser
- Woman
- Man
- Trans woman (MTF)
- Trans man (FTM)
- Non-binary/Genderqueer *[Respondents who selected this answer received questions 2.3_1, 2.3_2, and 2.3_3.]*

2.3_1 For people in your life who don't know that you're non-binary/genderqueer, what gender do they usually think you are? *[Only respondents who selected "Non-binary/Genderqueer" in response to 2.3 received this question.]*

- Man
- Woman
- Trans Man
- Trans Woman
- Non-Binary/Genderqueer
- They can't tell
- It varies

2.3_2 When people in your life assume you are something other than non-binary/genderqueer (such as a man or a woman), how do you respond? *[Only respondents who selected "Non-binary/Genderqueer" in response to 2.3 received this question.]*

- I **usually** let them assume I am a man or a woman
- I **sometimes** tell them I identify as non-binary/genderqueer (or whatever words I use)
- I **always** tell them I identify as non-binary/genderqueer (or whatever words I use) *[Skip to 2.4.]*

2.3_3 What are the main reasons that you don't tell people you identify as non-binary/genderqueer? **(Mark all that apply).** [Only respondents who selected "Non-binary/Genderqueer" in response to 2.3 and either selected "I usually let them assume I am a man or a woman" or "I sometimes tell them I identify as non-binary/genderqueer" in response to 2.3_2 received this question.]

- Most people don't understand so I don't try to explain it.
- Most people dismiss it as not being a real identity or a "phase."
- It is just easier not to say anything.
- I am not ready to tell people I identify as non-binary/genderqueer.
- I might lose my job or not be able to get a job.
- I might face mistreatment at school.
- My friends might reject me.
- I might not get the medical care I need.
- I might be hurt financially.
- I might become homeless.
- My church or faith community might reject me.
- I might face violence.
- A reason not listed above (please specify) _____

2.4 How comfortable are you with the word "transgender" being used to describe you?

- Very comfortable
- Somewhat comfortable
- Neutral
- Somewhat uncomfortable
- Very uncomfortable

[All respondents received the following message.] **We know that not everyone is comfortable with the word "transgender," but for this survey, we must use one word to refer to all trans and non-binary identities. Because of this we will use the word "trans" in this survey to refer to all trans and non-binary identities.**

2.5 What gender pronouns do you ask people to use to refer to you? [Respondents could mark all answers that applied.]

- He, his
- She, hers
- They, their
- Ze, hir
- No pronouns. I ask people only to use my name.
- I don't ask people to use specific pronouns.
- Pronouns not listed above (please specify) _____

2.6 What gender do you currently live in on a day-to-day basis?

- Man
- Woman
- Neither man nor woman/Genderqueer/Non-binary
- Part time one gender/part time another gender

2.7 People can tell I am trans even if I don't tell them.

- Always
- Most of the time
- Sometimes
- Rarely
- Never

2.8 What best describes your current sexual orientation?

- Asexual
- Bisexual
- Gay
- Heterosexual/Straight
- Lesbian
- Same-gender loving
- Pansexual
- Queer
- A sexual orientation not listed above (please specify) _____

2.9 Although the choices listed below may not represent your full identity or use the language you prefer, for this survey please select the choice that most accurately describes your racial/ethnic identity. **(Please choose only one answer.)**

- Alaska Native
 - Enter your enrolled or principal corporation: _____ [required]
- American Indian
 - Enter your enrolled or principal tribe: _____ [required]
- Asian/Asian American
- Biracial/Multiracial [respondents received follow-up question 2.10]
- Black/African American
- Latino/a/Hispanic
- Middle Eastern/North African
- Native Hawaiian/Pacific Islander
- White/European American
- A racial/ethnic identity not listed above (please specify) _____ [respondents received follow-up question 2.11]

2.10 You said that you are biracial or multiracial. Please choose the racial/ethnic identities that best describe you. **(Mark all that apply.)**

[Only respondents who selected "Biracial/Multiracial" in 2.9 received this question.]

Alaska Native

Enter your enrolled or principal corporation:
_____ *[required]*

American Indian

Enter your enrolled or principal tribe:
_____ *[required]*

Asian/Asian American

Black/African American

Latino/a/Hispanic

Middle Eastern/North African

Native Hawaiian/ Pacific Islander

White/European American

A racial/ethnic identity not listed above
(please specify) _____

2.11 You said that you had a racial/ethnic identity that was not listed above. Please choose the racial/ethnic identities that best describe you. **(Mark all that apply.)**

[Only respondents who selected "A racial/ethnic identity not listed above" in 2.9 received this question.]

Alaska Native

Enter your enrolled or principal corporation:
_____ *[required]*

American Indian

Enter your enrolled or principal tribe:
_____ *[required]*

Asian/Asian American

Black/African American

Latino/a/Hispanic

Middle Eastern/North African

Native Hawaiian/ Pacific Islander

White/European American

2.12 What is your current religious or spiritual identity? **(Mark all that apply.)**

Agnostic

Atheist

Baha'i

Buddhist

Christian (Please click here to specify) *[Respondents received the following drop-down list.]*

African Methodist Episcopal

African Methodist Episcopal Zion

Assembly of God

Baptist

Catholic/Roman Catholic

Church of Christ

Church of God in Christ

Christian Orthodox

Christian Methodist Episcopal

Christian Reformed Church (CRC)

Episcopalian

Evangelical

Greek Orthodox

Lutheran

Mennonite

Moravian

Nondenominational Christian

Pentecostal

Presbyterian

Protestant

Protestant Reformed Church (PR)

Quaker

Reformed Church of America (RCA)

Russian Orthodox

Seventh Day Adventist

The Church of Jesus Christ of Latter-day Saints

United Methodist

Unitarian Universalist

United Church of Christ

A Christian affiliation not listed above
(please specify) _____

Confucianist

Druid

Hindu

Jain

Jehovah's Witness

Jewish (Please click here to specify) *[Respondents received the following drop-down list.]*

Conservative

Orthodox

Reform

Muslim (Please click here to specify) *[Respondents received the following drop-down list.]*

Ahmadi

Shi'ite

Sufi

Sunni

Native American Traditional Practitioner or Ceremonial

Pagan

- Rastafarian
- Scientologist
- Secular Humanist
- Shinto
- Sikh
- Taoist
- Tenrikyo
- Wiccan
- Spiritual, but no religious affiliation
- No affiliation
- A religious affiliation or spiritual identity not listed above (please specify) _____

2.13 What is your current age?

[Drop-down list of all ages from "18" through "99," and "100 and above" as final response choice]

2.14 What month and year were you born?

Month [Drop-down list of all months]

Year [Drop-down list with years 1997–1915, and earlier as final response choice]

2.15 What is your current relationship status?

- Partnered, living together
- Partnered, not living together
- Single
- Not listed above (please specify) _____

2.16 What is your current legal marital status?

- Married
- Legally recognized civil union
- Registered domestic partnership
- Widowed
- Divorced
- Separated
- Single, never married

2.17 Have you ever served on active duty in the U.S. Armed Forces, Reserves, or National Guard? **As a reminder, your answers are confidential and cannot be used against you.**

- Never served in the military
- Only on active duty for training in the Reserves or National Guard
- Now on active duty⁵
- On active duty in the past, but not now

2.18 What is your citizenship or immigration status in the U.S.? **As a reminder, your answers are confidential and cannot be used against you.**

- U.S. citizen, birth [Respondents directed to 2.19]
- U.S. citizen, naturalized
- Permanent Resident
- A visa holder (such as F-1, J-1, H1-B, and U)
- DACA (Deferred Action for Childhood Arrival)
- DAPA (Deferred Action for Parental Accountability)
- Refugee status
- Other documented status not mentioned above
- Currently under a withholding of removal status
- Undocumented resident

2.19 In what U.S. state or territory were you born? [Only respondents who selected "U.S. citizen, birth" in 2.18 received this question.]

I was not born in a U.S. state or territory.

[Drop-down list for all U.S. states and territories for other response choices. Respondents who selected "New York" received an additional drop-down choice for "New York City."]

2.20 Please answer each question below. (Please provide an answer in each row.)

	No	Yes
Are you deaf or have serious difficulty hearing?	<input type="radio"/>	<input type="radio"/>
Are you blind or have serious difficulty seeing even when wearing glasses?	<input type="radio"/>	<input type="radio"/>
Because of a physical mental or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?	<input type="radio"/>	<input type="radio"/>
Do you have serious difficulty walking or climbing stairs?	<input type="radio"/>	<input type="radio"/>
Do you have difficulty dressing or bathing?	<input type="radio"/>	<input type="radio"/>
Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone, such as visiting a doctor's office or shopping?	<input type="radio"/>	<input type="radio"/>
Do YOU identify as a person with a disability?	<input type="radio"/>	<input type="radio"/>

2.21 What is the main language that people speak in your home?

- English only
- Language(s) other than English
 - Armenian
 - Chinese
 - French
 - German
 - Greek

- Italian
- Japanese
- Korean
- Persian
- Polish
- Portuguese or Portuguese Creole
- Russian
- Serbo-Croatian
- Spanish or Spanish Creole
- Tagalog
- Vietnamese
- Yiddish
- A language not listed above
(_____)

English and other language(s)

- Armenian
- Chinese
- French
- German
- Greek
- Italian
- Japanese
- Korean
- Persian
- Polish
- Portuguese or Portuguese Creole
- Russian
- Serbo-Croatian
- Spanish or Spanish Creole
- Tagalog
- Vietnamese
- Yiddish
- A language not listed above
(_____)

2.22 What is the highest level of school or degree you have completed?

- Less than 8th grade
- 8th grade
- Some high school, no diploma or GED
- GED
- High school graduate
- Some college, no degree (including currently in college)
- Associate degree in college – Occupational/vocational program
- Associate degree in college – Academic program
- Bachelor's degree

- Some graduate work, no graduate degree
- Master's degree (M.A, M.S., MBA)
- Doctoral degree (e.g., Ph.D., Ed.D.)
- Professional degree (e.g., MD, JD)

2.23 What are your current living arrangements?

- Living in house/apartment/condo I OWN alone or with others (with a mortgage or that you own free and clear)
- Living in house/apartment/condo I RENT alone or with others
- Living with a partner, spouse, or other person who pays for the housing
- Living temporarily with friends or family because I can't afford my own housing
- Living with parents or family I grew up with because I have not yet left home
- Living in a foster group home or other foster care
- Living in campus/university housing
- Living in a nursing home or other adult care facility
- Living in a hospital
- Living in military barracks
- Living in a hotel or motel that I pay for myself
- Living in a hotel or motel with an emergency shelter voucher
- Living in transitional housing/halfway house
- Living on the street, in a car, in an abandoned building, in a park, or a place that is NOT a house, apartment, shelter, or other housing [Skip to 2.25]
- Living in a homeless shelter [Skip to 2.25]
- Living in a domestic violence shelter [Skip to 2.25]
- Living in a shelter that is not a homeless shelter or domestic violence shelter [Skip to 2.25]
- A living arrangement not listed above (please specify) _____

2.24 Is there at least one telephone INSIDE your home that is currently working and is not a cell phone?

- No
- Yes

2.25 Do you have a cell phone?

- No
- Yes

2.26 What is the zip code where you currently live? _____

Section 3

3.1 At about what age did you begin to feel that your gender was "different" from your assigned birth sex?

[Drop-down list of ages]

3.2 At about what age did you start to think you were trans (even if you did not know the word for it)?

[Drop-down list of ages]

3.3 At about what age did you first start to tell others that you were trans (even if you did not use that word)?

I have not told others that I am trans.

[Drop-down list of ages for other responses]

3.4 How do you socialize with other trans people? **(Mark all that apply.)**

- In political activism
- Socializing in person
- Socializing on-line (such as Facebook or Twitter)
- In support groups
- I don't socialize with other trans people *[Respondents could not select this answer in combination with any other option.]*
- Not listed above (please specify) _____

Section 4

These are questions about the people in your life and whether they know you are trans.

4.1 Have any of your spouses/partners known that you are trans during your relationship with them? **(Mark all that apply).**

I have never had a spouse/partner *[Respondents could not select this answer in combination with any other option. Skip to 4.3 if selected.]*

No *[Respondents could not select this answer in combination with any other option. Skip to 4.3 if selected.]*

Yes, my current spouse/partner knows I am trans

Yes, at least one of my former spouses or partners knew I was trans

4.2 Have any of your spouses/partners ended your relationship because you are trans? *[Only respondents who indicated that at least one of their past or current spouses knew they were trans in 4.1 received this question.]*

No

Yes, only because I was trans.

Yes, because I was trans and other reasons.

4.3 Do any of your children know you are trans?

I do not have any children *[Skip to 4.5]*

No *[Skip to 4.5]*

Yes

4.4 Have any of your children ever stopped speaking to you or spending time with you because you are trans?

No

Yes

4.5 How many people in each group below currently know you are trans? **(Please provide an answer in each row.)**

	I currently have no people like this in my life	All know that I am trans	Most know that I am trans	Some know that I am trans	None know that I am trans
Immediate family you grew up with (mother, father, sisters, brothers, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extended family (aunts, uncles, cousins, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lesbian, gay, bisexual, or trans (LGBT) friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Straight, non-trans (non-LGBT) friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current boss/manager/supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current coworkers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current classmates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current health care providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.6 You said some or all of your immediate family you grew up with (mother, father, sisters, brothers, etc.) know that you are trans. On average, how supportive are they of you being trans? *[Only respondents who said in response to 4.5 that some, most, or all of their immediate family members knew they were trans received this question.]*

Very supportive

Supportive

Neither supportive nor unsupportive

Unsupportive

Very unsupportive

4.7 Did any of your immediate family members you grew up with (mother, father, sisters, brothers, etc.) do any of these things to you because you are trans? **(Mark all that apply.)** *[Only respondents who said in response to 4.5 that some, most, or all of their immediate family members knew they were trans received this question.]*

Stopped speaking to you for a long time or ended your relationship

Were violent towards you

Kicked you out of the house

Did not allow you to wear the clothes that matched your gender

Sent you to a therapist, counselor, or religious advisor to stop you from being trans

None of the above *[Respondents could not select this answer in combination with any other option.]*

4.8 Did any of your immediate family members you grew up with (mother, father, sisters, brothers, etc.) do any of these things to **support** you? **(Mark all that apply.)** *[Only respondents who said in response to 4.5 that some, most, or all of their immediate family members knew they were trans received this question.]*

Told you that they respect and/or support you

Used your preferred name

Used your correct pronouns (such as he/she/they)

Gave you money to help with any part of your gender transition

Helped you change your name and/or gender on your identity documents (ID), like your driver's license (such as doing things like filling out papers or going with you to court)

Did research to learn how to best support you (such as reading books, using online information, or attending a conference)

Stood up for me with family, friends, or others

Supported you in another way not listed above (please specify) _____

None of the above *[Respondents could not select this answer in combination with any other option.]*

4.9 Did you ever run away from home because you are trans? *[Only respondents who said in response to 4.5 that some, most, or all of their immediate family members knew they were trans received this question.]*

No *[Skip to 4.11]*

Yes

4.10 At what age did you run away from home because you are trans? *[Only respondents who selected "Yes" in 4.9 received this question.]*

[Drop-down list of ages]

4.11 On average, how supportive are your co-workers with you being trans? *[Only respondents who said in response to 4.5 that some, most, or all of their coworkers knew they were trans received this question.]*

Very supportive

Supportive

Neither supportive nor unsupportive

Unsupportive

Very unsupportive

4.12 On average, how supportive are your classmates with you being trans? *[Only respondents who said in response to 4.5 that some, most, or all of their classmates knew they were trans received this question.]*

Very supportive

Supportive

Neither supportive nor unsupportive

Unsupportive

Very unsupportive

Section 5

These questions are about your experiences with your church, synagogue, mosque, or other faith community.

5.1 Have you ever been part of a spiritual/religious community (such as a church, synagogue, mosque, or other faith community)?

No *[Skip to 6.1]*

Yes

5.2 Have you ever left your spiritual/religious community because you **were afraid** they might reject you because you are a trans person?

No

Yes

5.3 Have you ever left your spiritual/religious community because they **did reject** you because you are a trans person?

No *[Skip to 5.5]*

Yes

5.4 After you stopped attending, did you find a spiritual/religious community that welcomed you as a trans person? *[Only respondents who selected "Yes" in 5.4 received this question.]*

No

Yes

5.5 **Now just thinking about the past year**, have you been part of a spiritual/religious community?

No *[Skip to 6.1]*

Yes

5.6 **In the past year**, did any leaders or other members of your spiritual/religious community think or know you were trans?

No *[Skip to 6.1]*

Yes

5.7 In the past year, how often did leaders or other members of your spiritual/religious community... (Please provide an answer in each row.)

In the past year...	Never	Once or twice	A few times	Many times
Make you feel welcome as a trans person attending services/faith community functions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accept you for who you are as a trans person?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tell you that your religion/faith accepts you as a trans person?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tell you that your being trans is a sin or that your religion does not approve of your being trans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ask you to meet with spiritual/religious leaders to stop you from being trans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ask you to seek medical/psychological help to stop you from being trans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ask you to stop coming to services or faith community functions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 6

These are questions about work for pay in the sex industry and sex work. As a reminder, your answers are confidential and cannot be used against you.

6.1 Have you ever engaged in sex or sexual activity for money (sex work) or worked in the sex industry (such as erotic dancing, webcam work, or porn films)?

- No [Skip to 6.4]
- Yes

6.2 Now just thinking about the past year, have you engaged in sex or sexual activity for money (sex work) or worked in the sex industry (such as erotic dancing, webcam work, or porn films) in the past year? [Only respondents who selected "Yes" in 6.1 received this question.]

- No
- Yes

6.3 What type of sex work or work in the sex industry have you ever done? (Mark all that apply). [Only respondents who selected "Yes" in 6.1 received this question.]

- Street-based sex work
- Sex work advertised online
- Sex work advertised in magazines or newspapers
- Informal sex work through word of mouth, occasional hook ups with dates in my networks, or things like that
- Escort/call girl/rent boy with an agency
- Pornography/picture or video
- Phone sex
- Webcam work

- Erotic dancer/stripper
- Fetish work (Domme, sub, switch)
- Not listed above (please specify) _____

6.4 Have you engaged in sex or sexual activity for any of the following? (Please mark all that apply in each row.) [Respondents could not select "No" in combination with any other option.]

	No	Yes, within the past year	Yes, but more than a year ago
I engaged in sex or sexual activity for food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I engaged in sex or sexual activity for a place to sleep in someone's bed, at their home, or in their hotel room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I engaged in sex or sexual activity for drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For something not listed above (please specify)			
[Response recorded as "No" if text left blank.]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6.5 Did you ever interact with the police while doing sex work or when police thought you were doing sex work? [Respondents could select multiple answer choices, but could not select "No" in combination with any other option.]

- No [Skip to 6.11]
- Yes, while I was doing sex work.
- Yes, when police thought I was doing sex work.

6.6 When you interacted with police while doing sex work or when police thought you were doing sex work, did you experience any of the following? (Please provide an answer in each row.)

	No	Yes
Officers kept calling me by the wrong gender pronouns (such as he/him or she/her) or the wrong title (such as Mr. or Ms.).	<input type="radio"/>	<input type="radio"/>
Officers asked me questions about my gender transition (such as hormones and surgical status).	<input type="radio"/>	<input type="radio"/>
Officers verbally harassed me.	<input type="radio"/>	<input type="radio"/>
Officers physically attacked me.	<input type="radio"/>	<input type="radio"/>
Officers forced me to have sex or sexual activity to avoid arrest.	<input type="radio"/>	<input type="radio"/>
I experienced unwanted sexual contact from an officer (such as fondling, sexual assault, or rape).	<input type="radio"/>	<input type="radio"/>
I was arrested for drugs in my possession when police stopped me for doing sex work.	<input type="radio"/>	<input type="radio"/>

6.7 Have you ever been arrested for doing sex work or when police thought you were doing sex work? [Only respondents who selected "Yes, while I was doing sex work" and/or "Yes, when police thought I was doing sex work" in 6.5 received this

question. Respondents could select multiple answer choices but could not select "No" in combination with any other option.]

No [Skip to 6.11]

Yes, while I was doing sex work

Yes, when the police thought I was doing sex work

6.8 How many times have you been arrested for doing sex work or when police thought you were doing sex work?

[Drop-down list of 1–10 and "11 or more"]

6.9 When police arrested you, did they consider things in your possession such as condoms or sex toys as "evidence of prostitution"? [Respondents could select multiple answer choices.]

No

Yes, condoms

Yes, sex toys

Yes, items not listed above (please specify) _____

I don't know

6.10 Did any of these things happen when you were arrested? (Mark all that apply.)

The charges were dropped.

I pled guilty.

I went to trial and was found not guilty.

I went to trial and was found guilty.

Something not listed above (please specify) _____

6.11 Have you ever been paid for selling drugs or other work that is currently considered illegal? (Mark all that apply.) [Respondents could not select "No" in combination with any other option.]

No [Skip to 7.1]

Yes, selling drugs

Yes, other work (please specify) _____

6.12 Now just thinking about the past year, were you paid for selling drugs or other work that is currently considered illegal in the past year? (Mark all that apply.) [Only respondents who selected an answer choice other than "No" received this question. Respondents could not select "No" in combination with any other option.]

No

Yes, selling drugs

Yes, other work (please specify) _____

Section 7

These questions are about your household, your income, and your current job. As a reminder, your answers are confidential and cannot be used against you. These questions are based on national surveys that we will use to compare with the U.S. population.

7.1 How many adults (age 18 or older) live in your household,⁷ including yourself? (Do not include neighbors or others who do not live with you in your house, apartment, or single housing unit.) For more information, click on **household** above.

1 [Skip to 7.5]

2

3

4

5

6

7

8

9 or more

7.2 How are the other adults (age 18 or older) who live in your household related to you? (Mark all that apply).

Spouse (legally married)

Partner (not legally married)

Child or children

Grandchild or grandchildren

Parent(s) (Mother/Father/Step-Parent(s))

Brother(s)/Sister(s)/Step-Brother(s)/Step-Sister(s)

Other relative(s) (Aunt, Cousin, Nephew, Mother-in-law, etc.)

Foster child or foster children

Housemate(s)/Roommate(s)

Roomer(s)/Boarder(s)

Other non-relative(s)

Not listed above (please specify) _____

7.3 How many adults in your household are related to you⁸ by birth (blood relatives), adoption, or legal marriage? Don't include partners who aren't legally married to you or adults who aren't related to you. We will ask about them later.

0 [Skip to 7.5]

1

2

3

4

5

6

7

8

9 or more

7.4 Is any person aged 65 or older named on the lease, mortgage, or deed⁹ for your household?

- No
- Yes

7.5 How many babies and other children under age 18 live in your household?

- 0 [Skip to 7.7]
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9 or more

7.6 How many of the children under age 18 who live in your household are related to you¹⁰ by birth (blood relatives) or adoption? Don't include children who aren't related to you by birth or legal adoption. We will ask about them later.

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9 or more

7.7 What is your current employment status? (Mark all that apply.)

Work for pay from sex work, selling drugs, or other work that is currently considered illegal

[Respondents who selected this answer choice received the following question.] Are you actively looking for legal work outside sex work, selling drugs, or other work that is currently considered illegal

- No
- Yes

Work full-time for an employer

[Respondents who selected this answer choice received the following question.] Do you have more than one full-time job?

- No
- Yes

Work part-time for an employer

[Respondents who selected this answer choice received the following question.] Do you have more than one part-time job?

- No
- Yes

Self-employed in your own business, profession or trade, or operate a farm (not including sex work, selling drugs, or other work that is currently considered illegal)

- Unemployed but looking for work
- Unemployed and have stopped looking for work
- Not employed due to disability
- Student
- Retired
- Homemaker or full-time parent
- Not listed above (please specify) _____

7.8 On any of your full-time or part-time jobs, are you a member of a labor union or of an employee association similar to a union? [Only respondents who selected "Work full-time for an employer" and/or "Work part-time for an employer" in 7.7 received this question. Respondents could select multiple answer choices but could not select "No" in combination with any other option.]

- No
- Yes in a part-time job [Skip to 7.10]
- Yes in a full-time job [Skip to 7.10]

7.9 On any of your full-time or part-time jobs, are you covered by a union or employee association contract? [Only respondents who selected "Work full-time for an employer" and/or "Work part-time for an employer" in 7.7 AND selected "No" in 7.8 received this question. Respondents could select multiple answer choices but could not select "No" in combination with any other option.]

- No
- Yes in a part-time job
- Yes in a full-time job

7.10 Do you currently receive assistance from FOOD STAMPS (SNAP)¹¹ or WIC¹²? (Mark all that apply.) [Respondents could not select "No" in combination with any other option.]

- No
- Yes, assistance from food stamps (SNAP)¹³
- Yes, assistance from WIC^{14,15}

7.11 What are your current sources of income? (Mark all that apply.)

- Pay from sex work, selling drugs, or other work that is currently considered illegal
- Pay from your full-time or part-time job
- Pay from your partner's/spouse's full-time or part-time job

Self-employment income from your own business, profession or trade, or farm (not including underground economy)

Income from dividends, estates or trusts, royalties, or rental income

Interest income (on savings or bonds)

Cash assistance from welfare (such as TANF) or other public cash assistance program (DO NOT include food stamps (SNAP) or WIC)

Unemployment benefits

Child support or alimony

Social security retirement or railroad retirement income

Private pension or government employee pension

Other retirement income

Social security disability benefits (SSDI)

Supplemental security income (SSI)

Workers' comp or other disability

Veteran's disability benefits and other Veteran's benefits

Regular contributions from people who don't live in the household

Income not listed above, (please specify) _____

7.12 What was your total combined **Individual Income**¹⁶ (before taxes) in 2014? This includes all income sources **except** food stamps (SNAP) or WIC.

- No income
- 1 to 5,000
- 5,000 to 7,499
- 7,500 to 9,999
- 10,000 to 12,499
- 12,500 to 14,999
- 15,000 to 17,499
- 17,500 to 19,999
- 20,000 to 24,999
- 25,000 to 29,999
- 30,000 to 34,999
- 35,000 to 39,999
- 40,000 to 49,999
- 50,000 to 59,999
- 60,000 to 74,999
- 75,000 to 99,999
- 100,000 to 149,999
- 150,000 or more

7.13 What was your total combined **Family Income**¹⁷ (before taxes) in 2014? This includes all income from all family members who are related to you by legal marriage, birth, or adoption and who have lived with you during the last 12

months. **Don't include** food stamps (SNAP) or WIC. *[Only respondents who selected an answer choice other than "0" in 7.3 (related adults in household) and/or selected an answer choice other than "0" in 7.6 (related children in household) received this question.]*

- No income
- 1 to 5,000
- 5,000 to 7,499
- 7,500 to 9,999
- 10,000 to 12,499
- 12,500 to 14,999
- 15,000 to 17,499
- 17,500 to 19,999
- 20,000 to 24,999
- 25,000 to 29,999
- 30,000 to 34,999
- 35,000 to 39,999
- 40,000 to 49,999
- 50,000 to 59,999
- 60,000 to 74,999
- 75,000 to 99,999
- 100,000 to 149,999
- 150,000 or more

7.14 How much was your total combined **HOUSEHOLD INCOME**¹⁸ (before taxes) in 2014? This includes income from all members of your household from all sources **except** food stamps (SNAP) or WIC. *[Only respondents with non-related adults and/or non-related children in their household received this question. Respondents received this question if they indicated that they had non-related adults in their household (they selected "2" or more in 7.1 and selected a higher number in response to 7.3 than in response to 7.1) and/or they indicated that they had non-related children in the household (they selected "1" or more in 7.5 and selected a higher number in response to 7.6 than in response to 7.5).]*

- No income
- 1 to 5,000
- 5,000 to 7,499
- 7,500 to 9,999
- 10,000 to 12,499
- 12,500 to 14,999
- 15,000 to 17,499
- 17,500 to 19,999
- 20,000 to 24,999
- 25,000 to 29,999
- 30,000 to 34,999
- 35,000 to 39,999
- 40,000 to 49,999
- 50,000 to 59,999

- 60,000 to 74,999
- 75,000 to 99,999
- 100,000 to 149,999
- 150,000 or more

Section 8

[Only respondents who selected an answer choice other than "never served in the military" in 2.17 received question in this section.]

You said earlier that you currently serve or have served on active duty in U.S. Armed Forces, Reserves, or National Guard. These are questions about your military service. As a reminder, your answers are confidential and cannot be used against you.

8.1 What is your current or most recent branch of service?

- Air Force
- Air Force Reserve
- Air National Guard
- Army
- Army Reserve
- Army National Guard
- Coast Guard
- Coast Guard Reserve
- Marine Corps
- Marine Corps Reserve
- Navy
- Navy Reserve

8.2 Are you still serving in the military? *[Only respondents who selected "on active duty in the past, but not now" in 2.17 received this question.]*

- No
- Yes *[Skip to 8.4]*

8.3 Did you separate from military service within the last 10 years? *[Only respondents who selected "on active duty in the past, but not now" in 2.17 received this question.]*

- Yes
- No *[Skip to 8.12]*

8.4 While serving in the military, have you ever received **mental health** treatment related to a gender transition from a military provider (do not include VA)? *[Only respondents who selected "Yes" in 8.2 or selected "Yes" in 8.3 received this question.]*

- No
- Yes

8.5 While serving in the military, have you ever received **medical** treatment related to a gender transition from a military provider (do not include VA)? *[Only respondents who selected "Yes" in 8.2 or selected "Yes" in 8.3 received this question.]*

- No
- Yes

8.6 Has any military medical or mental health provider reported to your commanding officer that you are trans or recommended you for discharge? **(Mark all that apply.)** *[Only respondents who selected "Yes" in 8.2 received this question. Respondents could not select "No" in combination with any other option.]*

- No
- Yes, reported that I was trans
- Yes, recommended me for discharge
- Does not apply to me, none of these providers knew that I was trans

8.7 If trans people were allowed to serve openly, which of these would apply to you? *[Only respondents who selected "Yes" in 8.2 received this question.]*

- I would start to transition while still serving
- I would finish the transition that I have already started while still serving
- I would not finish the transition that I have already started while still serving
- I would leave military service so that I could transition, and not return.
- I would leave military service so that I could transition, then return to service after transition
- I do not want to transition
- I have already transitioned
- None of the options listed above

8.8 If trans people were allowed to serve openly, I would return to service: *[Only respondents who selected "Yes" in 8.3 received this question.]*

- Yes
- No
- Maybe

8.9 How many people in the military (who aren't trans) believe you are trans? *[Only respondents would selected "Yes" in 8.2 received this question.]*

- None *[Skip to 9.1]*
- A few
- Some
- Most
- All

8.10 Does your leadership or commanding officer (or both) think or know you are trans? *[Only respondents who selected "Yes" in 8.2 and an answer choice other than "None" in 8.9 received this question.]*

- No *[Skip to 9.1]*
- Yes

8.11 How has your leadership or commanding officer (or both) reacted to you being trans? **(Mark all that apply.)** *[Only respondents who selected "Yes" in 8.10 received this question.]*

- Supported my name change
- Supported my medical treatment
- Ignored it or looked the other way
- Took actions to discharge me
- Not listed above (please specify) _____

[Only respondents who selected "No" in 8.2 and "No" in 8.3 received questions 8.12–8.21]

8.12 What was your character of discharge?

- Entry Level Separation
- Honorable
- General
- Medical
- Other-than-honorable
- Bad Conduct
- Dishonorable
- None of the options listed above (please specify) _____

8.13 Do you believe your discharge was related to being trans?

- No
- Yes, partially
- Yes, completely

8.14 Did you leave the service in order to transition?

- No
- Yes

8.15 Did you leave the service to avoid mistreatment/harassment?

- No
- Yes

8.16 Did any military medical or mental health provider tell your commander that you are trans or recommend you for discharge? **(Mark all that apply.)** *[Respondents could not select "No" in combination with any other option.]*

- No
- Yes, reported that I was trans.

Yes, recommended me for discharge.

Does not apply to me, none of these providers knew that I was trans.

8.17 Did you ever get any type of health care through the VA?

- No *[Skip to 8.21]*
- Yes

8.18 Did you ever get health care related to a gender transition through the VA?

- No
- Yes

8.19 Do you currently get any type of health care through the VA?

- No
- Yes

8.20 As a trans person, have you received respectful care at the VA?

- Never
- Sometimes
- Mostly
- Always
- Does not apply to me, the VA staff do not know I'm trans

8.21 Have you changed your name on your DD214 military discharge papers?

- Yes, I received an updated DD214 with new name.
- Yes, I received a DD215 (amended) with new name.
- No, I was denied.
- No, I never tried.

Section 9

[Only respondents who selected any answer choice other than "U.S. citizen, birth" in 2.18 received questions in this section.]

You said earlier that you are not a U.S. citizen by birth. These are questions about immigration experiences you may have had. As a reminder, your answers are confidential and cannot be used against you.

9.1 Have you ever been held in immigration detention (such as being held in an Immigration and Customs Enforcement (ICE) detention center or local jail just for immigration court proceedings)?

- No *[Skip to 9.6]*
- Yes

9.2 While you were in immigration detention, do you believe staff, guards, or others thought or knew you were trans or lesbian, gay, or bisexual (LGB)?

- No
- Yes

9.3 When you were in immigration detention, separated from others who were also in detention? (Mark all that apply.) [Respondents could not choose "No" in combination with any other option.]

- No [Skip to 9.5]
- Yes, in solitary confinement
- Yes, in a separate area for trans or LGB people (such as a pod, unit, tank, or other housing area) [Skip to 9.5]
- Not listed above (please specify) _____ [Skip to 9.5]

9.4 In total, how long were you held in solitary confinement? [Only respondents who selected "Yes, in solitary confinement" received this question.]

- Up to 14 days (up to two weeks)
- 15 days to 30 days (three or four weeks)
- 31 days to 90 days (1-3 months)
- 91 days to 180 days (3-6 months)
- 181 days to one year (more than 6 months up to a year)
- More than 1 year

9.5 When you were in immigration detention, did any of these things happen to you? (Mark all that apply.) [Respondents could not select "None of these things happened to me" in combination with any other option.]

I was physically assaulted.
[Respondents who selected this answer choice received the following question.] Were you physically assaulted by:

- Staff or detention officers
- Other detainees or inmates

I was sexually assaulted.
[Respondents who selected this answer choice received the following question.] Were you sexually assaulted by:

- Staff or detention officers
- Other detainees or inmates

I was threatened with sexual assault
[Respondents who selected this answer choice received the following question.] Were you threatened with sexual assault by:

- Staff or detention officers
- Other detainees or inmates

I was denied access to hormones that I use.

I was denied gender-appropriate clothing.

None of these things happened to me.

9.6 Have you ever applied for asylum in the United States? [Respondents could select multiple answer choices but could not select "No" in combination with any other answer choice.]

- No [Skip to 9.8]
- Yes, because I am trans or LGB
- Yes, for another reason

9.7 Did you receive asylum in the United States? [Only respondents who selected "Yes, because I am trans or LGB" or "Yes, for another reason" received this question.]

- Yes [Skip to 10.1]
- No [Skip to 9.9]
- No, but I received a "withholding of removal" status. [Skip to 10.1]

9.8 Why didn't you apply for asylum? [Only respondents who selected "No" in 9.6 received this question.]

- I didn't know how to apply.
- I have access to other legal statuses.
- I didn't want to apply.
- I was afraid to apply.
- I believed I was past the 1 year deadline.
- A reason not listed above (please specify) _____

9.9 Why didn't you receive asylum? [Only respondents who selected "No" in 9.7 received this question.]

- I was past the 1 year deadline.
- The immigration official decided that I didn't face danger in my country.
- A reason not listed above (please specify) _____

Section 10

These are questions about legal name change and your current identification documents, such as your birth certificate or driver's license.

10.1 Did you ever try OR complete the process to get a legal name change to match your gender identity?

- No [Skip to 10.12]
- Yes

10.2 How did you try to change your name?

- With a court order
- During the immigration/naturalization process [Skip to 10.13]
- By another method (Please tell us what method) _____ [Skip to 10.13]

10.3 For your legal name change, did you interact with judges or court staff? *[Only respondents who selected "With a court order" in 10.2 received this question.]*

No *[Skip to 10.7]*

Yes

10.4 Do you believe the judges or court staff you interacted with thought or knew you were trans? *[Only respondents who selected "Yes" in 10.3 received this question.]*

No *[Skip to 10.7]*

Yes

10.5 When you interacted with judges or court staff, were you treated with respect? *[Only respondents who selected "Yes" in 10.4 received this question.]*

I was never treated with respect

I was sometimes treated with respect

I was always treated with respect

10.6 When you interacted with judges or court staff, did you experience any of the following? **(Please provide an answer in each row.)** *[Only respondents who selected "Yes" in 10.4 received this question.]*

	No	Yes
I was verbally harassed.	<input type="radio"/>	<input type="radio"/>
I received unequal treatment/service.	<input type="radio"/>	<input type="radio"/>
They kept calling me by the wrong gender pronouns (such as he/him or she/her) or a wrong title (Mr. or Ms.).	<input type="radio"/>	<input type="radio"/>
I was asked questions about my gender transition (such as hormones and surgical status).	<input type="radio"/>	<input type="radio"/>

10.7 Did the court grant your name change? *[Only respondents who selected "With a court order" in 10.2 received this question.]*

Yes, the court granted my name change. *[Skip to 10.9]*

No, the court denied my name change.

No, I ran out of money to complete the process. *[Skip to 10.9]*

No, I gave up. *[Skip to 10.9]*

Not sure yet. I am still in the process of getting my court ordered name change. *[Skip to 10.9]*

Not listed above (please specify) _____ *[Skip to 10.9]*

10.8 Why did the court deny your name change? *[Only respondents who selected "No, the court denied my name change" in 10.7 received this question.]*

[Text box]

10.9 How old were you when you went to court to get your legal name change? *[Only respondents who selected "With a court order" in 10.2 received this question.]*

[Drop-down list of ages]

10.10 Did you get legal help to change your name? *[Only respondents who selected "With a court order" in 10.2 received this question.]*

No

Yes, I got legal help from a paid attorney.

Yes, I got help for free from a legal clinic or non-profit organization.

Yes, I got help from a friend.

Yes, I got help from some other source.

10.11 How much did your legal name change cost? Please include the cost of legal help, court fees, newspaper publication, etc. *[Only respondents who selected "Yes, the court granted my name change" in 10.7 received this question.]*

\$0

\$1 - \$99

\$100 - \$249

\$250 - \$499

\$500 - \$749

\$750 - \$999

\$1,000 - \$2,000

More than \$2,000

I do not remember the cost of my legal name change.

10.12 Why you have not tried to legally change your name? **(Mark all that apply.)** *[Only those who selected "No" in 10.1 received this question.]*

I feel like my name doesn't conflict with my gender identity or expression.

I am not ready.

I cannot afford it.

I don't know how.

I believe I am not allowed (for example, because of my criminal record, immigration status, or residency).

I am worried that changing my name would out me.

A reason not listed above (please specify) _____

10.13 Thinking about how your **NAME** is listed on all of your IDs and records that list your name, such as your birth certificate, driver's license, passport, etc. Which of the statements below is most true? *[All respondents received this question.]*

All of my IDs and records list the name I prefer.

Some of my IDs and records list the name I prefer.

None of my IDs and records list the name I prefer. *[Skip to 10.15]*

10.14 Which of these IDs/records have you changed to list your preferred **NAME**? **(Please provide an answer in each row.)** *[Only respondents who selected "All of my IDs and records list the name I prefer" or "Some of my IDs and records list the name I prefer" in 10.13 received this question.]*

	I do not have this ID/record	I changed my NAME on this ID/record	I was denied a NAME change on this ID/record	I am in the process of changing my NAME on this ID/record	I have not tried to change my NAME on this ID/record but I want to	I do not want to change my NAME on this ID/record
Birth certificate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Driver's license and/or state issued non-driver ID	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Security records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student records (current or last school attended)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work ID	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10.15 Thinking about how your **GENDER** is listed on all of your IDs and records that list your gender, such as your birth certificate, driver's license, passport, etc. Which of the statements below is most true? *[All respondents received this question.]*

- All of my IDs and records list the gender I prefer.
- Some of my IDs and records list the gender I prefer.
- None of my IDs and records list the gender I prefer. *[Skip to 10.17]*

10.16 Which of these IDs/records have you changed to list your preferred **GENDER**? **(Please provide an answer in each row.)** *[Only respondents who selected "All of my IDs and records list the gender I prefer" or "Some of my IDs and records list the gender I prefer" in 10.15 received this question.]*

	I do not have this ID/record	I changed my GENDER on this ID/record	I was denied a GENDER change on this ID/record	I am in the process of changing my GENDER on this ID/record	I have not tried to change my GENDER on this ID/record but I want to	I do not want to change my GENDER on this ID/record
Birth certificate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Driver's license and/or state issued non-driver ID	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Security records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student records (current or last school attended)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10.17 You said that none of your IDs or records list the gender you prefer. Why haven't you changed your gender on your IDs or records? **(Mark all that apply.)** *[Only respondents who selected "None of my IDs and records list the gender I prefer" in 10.15 received this question.]*

- The gender options that are available (male or female) do not fit my gender identity.
- I have not tried yet.
- My request was denied.
- I am not ready.
- I cannot afford it.
- I do not know how.
- I believe I am not allowed. (For example, I have not had the medical treatment needed to change my gender on ID. Or I can't get a doctor's letter or other letter that is needed to update the gender.)
- I am worried that if I change my gender, I might not be able to get some benefits or services. These might include medical, insurance, employment, etc.
- I am worried that changing my gender would out me.
- A reason not listed above (please specify) _____

10.18 When I have shown IDs with my name or gender that do not match the gender I present as... **(Mark all that apply.)** *[All respondents received this question. Respondents could not select "I have had none of the above problems" or "This does not apply to me. I have only shown IDs that match" in combination with any other option.]*

- I have been verbally harassed.
- I have been assaulted/attacked.
- I have been asked to leave.
- I have been denied services or benefits.
- I have had none of the above problems.
- This does not apply to me. I have only shown IDs that match.

Section 11

These are questions about your current health insurance coverage, your health care providers, and the health insurance marketplace (such as healthcare.gov).

11.1 Are you currently covered by any health insurance or health coverage plan?

- No *[Skip to 11.4]*
- Yes

11.2 What type of health insurance or health coverage plan do you have? **(Mark all that apply.)**

- Insurance through my current or former employer or union
- Insurance through someone else's current or former employer or union
- Insurance I or someone else purchased through

HealthCare.Gov or a Health Insurance Marketplace (sometimes called "Obamacare")

Insurance I or someone else purchased directly from an insurance company

Medicare (for people 65 and older, or people with certain disabilities)

Medicaid (government-assistance plan for those with low incomes or a disability)

TRICARE or other military health care

VA (including those who have ever used or enrolled for VA health care)

Indian Health Service

Any other type of health insurance or health coverage plan (please specify) _____

11.3 In the past year, did any of these things happen with your health insurance company? (Please provide an answer in each row. If you didn't try to get the kind of care listed or if you never tried to change your records, choose "I have not asked for this.")

In the past year...	Yes	No	I have not asked for this
My health insurance company wouldn't change my records to list my current name or gender.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company denied me hormone therapy for transition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company denied me surgery for transition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company covers only some of the surgical care I need for my transition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company covers surgery for transition, but has no surgery providers in their network.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company denied me gender-specific health care (such as Pap smears, prostate exams, mammogram, etc.) because I am trans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance company denied me other routine health care because I am trans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11.4 Thinking about the doctor or provider you go to for your trans-related health care (such as hormone treatment), how much do they know about providing health care for trans people?

I don't have a trans-related doctor or health care provider right now *[Skip to 11.7]*

They know almost everything about trans healthcare

They know most things about trans healthcare

They know some things about trans healthcare

They know almost nothing about trans healthcare

I am not sure

11.5 How far do you travel to see your trans-related health care provider?

Less than 10 miles

10-25 miles

25-50 miles

50-75 miles

75-100 miles

Over 100 miles

11.6 Do you also go to your trans-related health care provider for your routine health care, like physicals, flu, diabetes, etc.?

Yes, I see my trans health care provider for my routine health care *[Skip to 11.9]*

No, I see a different doctor or health care provider for my routine healthcare

No, I do not get any routine health care *[Skip to 11.9]*

11.7 How much does your routine health care provider (who you see for physicals, flu, diabetes, etc.) know about health care for trans people? *[Only respondents who selected "No, I see a different doctor or health care provider for my routine healthcare" received this question.]*

I don't have a routine health care provider *[Skip to 11.9]*

They know almost everything about trans health care

They know most things

They know some things

They know almost nothing

I am not sure

11.8 How far do you travel to see your routine health care provider? *[Only respondents who selected "No, I see a different doctor or health care provider for my routine healthcare" received this question.]*

Less than 10 miles

10-25 miles

25-50 miles

50-75 miles

75-100 miles

Over 100 miles

11.9 In the past year, did you look for health insurance from a state or federal health insurance marketplace? (Health insurance marketplaces are part of the new health care law, sometimes called "Obamacare" or the "Affordable Care Act," where people can get insurance online, such as through healthcare.gov, over the phone, or in person.)

No *[Skip to 12.1]*

Yes

11.10 Did you buy insurance or enroll in a state Medicaid program through a health insurance marketplace? *[Only respondents who selected "Yes" in 11.9 received this question.]*

No *[Skip to 12.1]*

Yes

11.11 What type of insurance coverage did you buy? *[Only respondents who selected "Yes" in 11.10 received this question.]*

- Coverage through a state Medicaid program
- Coverage through a private plan with a subsidy, so I pay a lower price because of my income
- Coverage through a private plan without a subsidy
- Not listed above (please specify) _____

Section 12

These are questions about your health, experiences with doctors or health care providers, and health care.

12.1 Would you say that in general your health is...

- Excellent
- Very good
- Good
- Fair
- Poor

12.2 The following questions ask about how you have been feeling **during the past 30 days**. For each row, please select the column that best describes how often you had this feeling. **(Please provide an answer in each row.)**

During the past 30 days, how often did you feel...	All of the time	Most of the time	Some of the time	A little of the time	None of the time
...so sad that nothing could cheer you up?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...nervous?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...restless or fidgety?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...hopeless?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...that everything was an effort?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...worthless?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12.3 We just asked about a number of feelings you had **during the past 30 days**. Altogether, how MUCH did these feelings interfere with your life or activities? *[Only respondents who selected an answer choice other than "None of the time" in 12.2 received this question.]*

- A lot
- Some
- A little
- Not at all

12.4 Was there a time **in the past 12 months** when you needed to see a doctor but could not because of cost?

- No
- Yes

12.5 Was there a time in the **past 12 months** when you needed to see a doctor but did not because you thought you would be disrespected or mistreated as a trans person?

- No
- Yes

12.6 **In the past year**, have you seen a doctor or health care provider?

- No *[Skip to 12.8]*
- Yes

12.7 **In the past year**, did you have any of these things happen to you, as a trans person, when you went to see a doctor or health care provider? **(Please provide an answer in each row.)** *[Only respondents who selected "Yes" in 12.6 received this question.]*

In the past year...	No	Yes
My doctor knew I was trans and treated me with respect.	<input type="radio"/>	<input type="radio"/>
I had to teach my doctor or other health care provider about trans people so that I could get appropriate care.	<input type="radio"/>	<input type="radio"/>
A doctor or other health care provider refused to give me trans-related care.	<input type="radio"/>	<input type="radio"/>
A doctor or other health care provider refused to give me other health care (such as for like physicals, flu, diabetes).	<input type="radio"/>	<input type="radio"/>
My doctor asked me unnecessary/invasive questions about my trans status that were not related to the reason for my visit.	<input type="radio"/>	<input type="radio"/>
A doctor or other health care provider used harsh or abusive language when treating me.	<input type="radio"/>	<input type="radio"/>
A doctor or other health care provider was physically rough or abusive when treating me.	<input type="radio"/>	<input type="radio"/>
I was verbally harassed in a health care setting (such as a hospital, office, clinic).	<input type="radio"/>	<input type="radio"/>
I was physically attacked by someone during my visit in a health care setting (such as a hospital, office, clinic).	<input type="radio"/>	<input type="radio"/>
I experienced unwanted sexual contact (such as fondling, sexual assault, or rape) in a health care setting (such as a hospital, office, clinic).	<input type="radio"/>	<input type="radio"/>

12.8 Have you **ever wanted** any of the health care listed below for your gender identity or gender transition? **(Mark all that apply.)** *[Respondents could not select "None of the above" in combination with any other option.]*

- Counseling/Therapy
- Hormone Treatment/HRT
- Puberty Blocking Hormones (usually used by youth ages 9-16)
- None of the above

12.9 Have you **ever had** any of the health care listed below for your gender identity or gender transition? **(Mark all that apply.)** *[Respondents could not select "None of the above" in combination with any other option.]*

- Counseling/Therapy
- Hormone Treatment/HRT
- Puberty Blocking Hormones (usually used by youth ages 9-16)
- None of the above

12.10 At what age did you begin hormone treatment/HRT treatment? *[Only respondents who selected "Hormone Therapy/HRT" in 12.9 received this question.]*

[Drop-down list of ages]

12.11 At what age did you begin taking Puberty Blocking Hormones? *[Only respondents who selected "Puberty Blocking Hormones" in 12.9 received this question.]*

[Drop-down list of ages]

12.12 Are you currently taking hormones for your gender identity or gender transition?

No *[Skip to 12.15]*

Yes

12.13 Where do you currently get your hormones? *[Only respondents who selected "Yes" in 12.12 and did not select "Now on active duty" in 2.17 received this question.]*

I only go to licensed professionals (like a doctor) for hormones

In addition to licensed professionals, I also get hormones from friends, online, or other non-licensed sources

I ONLY get hormones from friends, online, or other non-licensed sources

12.14 Where do you currently get your hormones? **(Mark all that apply.)** *[Only respondents who selected "Yes" in 12.12 and selected "Now on active duty" in 2.17 received this question.]*

On-post medical doctor

Off-post medical doctor

On-post pharmacy

Off-post pharmacy

Through friends, online, or other non-licensed sources (not through a doctor or medical provider)

Another source not listed above (please specify) _____

12.15 Have you had or do you want any of the health care listed below for gender transition? **(Please give an answer in each row.)** *[Only respondents who selected "Female" in 2.1 received this question.]*

	Have had it	Want it some day	Not sure if I want this	Do not want this
Top/chest surgery reduction or reconstruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hysterectomy/"hysto" (removal of the uterus, ovaries, fallopian tubes, and/or cervix)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clitoral release/metoidioplasty/centurion procedure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phalloplasty (creation of a penis)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other procedure not listed: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12.16 You said that you had at least one procedure for your gender transition. At what age did you have your first procedure (other than hormones)? *[Only respondents who selected "Have had it" at least once in 12.15 received this question.]*

[Drop-down list of ages]

12.17 Have you had a Pap smear or Pap test in the past year? *[Only respondents who selected "Female" in 2.1 received this question.]*

No

Yes

12.18 Have you had or do you want any of the health care listed below for gender transition? **(Please provide an answer in each row.)** *[Only respondents who selected "Male" in 2.1 received this question.]*

	Have had it	Want it some day	Not sure if I want this	Do not want this
Hair removal/electrolysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Breast augmentation / top surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Silicone injections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Orchidectomy / "orchy" / removal of testes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vaginoplasty/labiaplasty/SRS/GRS/GCS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trachea shave (Adam's apple or thyroid cartilage reduction)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facial feminization surgery (such as nose, brow, chin, cheek)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice therapy (non-surgical)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other procedure not listed: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12.19 You said that you had at least one procedure for your gender transition. At what age did you have your first procedure (other than hormones)? *[Only respondents who selected "Have had it" at least once for a procedure other than "voice therapy (non-surgical)" in 12.15 received this question.]*

[Drop-down list of ages]

12.20 Have you ever de-transitioned? In other words, have you ever gone back to living as your sex assigned at birth, at least for a while?

I have never transitioned. *[Skip to 13.1]*

No *[Skip to 13.1]*

Yes

12.21 Why did you de-transition? In other words, why did you go back to living as your sex assigned at birth? **(Mark all that apply.)**

Pressure from spouse or partner

Pressure from a parent

- Pressure from other family members
- Pressure from friends
- Pressure from my employer
- Pressure from a religious counselor
- Pressure from a mental health professional
- I had trouble getting a job.
- I realized that gender transition was not for me.
- I faced too much harassment/discrimination.
- It was just too hard for me.
- Not listed above (please specify) _____

Section 13

These are questions about experiences you may have had with some professionals, such as psychologists, counselors, religious advisors.

13.1 Did you ever discuss your gender identity or trans identity with a professional (such as a psychologist, counselor, religious advisor)?

- No [Skip to 13.5]
- Yes

13.2 Did any professional (such as a psychologist, counselor, religious advisor) try to make you identify only with your sex assigned at birth (in other words, try to stop you being trans)?

- No [Skip to 13.5]
- Yes

13.3 How old were you the first time a professional tried to make you identify only with your sex assigned at birth (in other words, try to stop you being trans)? [Only respondents who selected "Yes" in 13.2 received this question.]

[Drop-down list of ages]

13.4 Was this person a religious or spiritual counselor/advisor? [Only respondents who selected "Yes" in 13.2 received this question.]

- No
- Yes

13.5 Did you ever discuss your **sexual orientation** with any professional (such as a psychologist, counselor, religious advisor)?

- No [Skip to 14.1]
- Yes

13.6 Did any professional (such as a psychologist, counselor, religious advisor) ever try to change your **sexual orientation**

or who you are attracted to (such as try to make you straight/heterosexual)? [Only respondents who selected "Yes" in 13.5 received this question.]

- No
- Yes

Section 14

These are questions about HIV testing and care.

14.1 This question is about the test for HIV, the virus that causes AIDS. Except for tests you may have had as part of blood donations, have you ever been tested for HIV?

- No [Skip to 14.3]
- Yes

14.2 What was the result of your most recent HIV test? [Only those who selected "Yes" in 14.1 received this question.]

- HIV positive or reactive, meaning I have HIV. [Skip to 14.4]
- HIV negative, meaning I do not have HIV. [Skip to 14.4]
- HIV test results were unclear, meaning the test could not determine if I have HIV. [Skip to 14.4]
- I don't know. I never received the results. [Skip to 14.4]

14.3 Here is a list of reasons why some people have not been tested for HIV (the virus that causes AIDS). Which one of these would you say is the **MAIN** reason why you have not been tested? [Only respondents who selected "No" in 14.1 received this question.]

- It's unlikely I've been exposed to HIV.
- I was afraid to find out if I was HIV positive (that you had HIV).
- I didn't want to think about HIV or about being HIV positive.
- I was worried my name would be sent to the government if I tested positive.
- I didn't know where to get tested.
- I don't like needles.
- I was afraid of losing my job, insurance, home, friends, or family if people knew I was tested for AIDS infection.
- My doctor/health care provider never mentioned getting an HIV test.
- Some other reason
- No particular reason

14.4_1 Where were you last tested? [Only respondents who selected "Yes" in 14.1 received this question.]

- Private doctor or HMO office
- Counseling and testing site
- Emergency room
- Hospital inpatient

- Clinic
- Jail or prison (or other correctional facility)
- Drug treatment facility
- At home
- Somewhere else
- A place not listed above
(please specify) _____

14.4_2 Not including blood donations, in what month and year was your last HIV test? *[Only respondents who selected "Yes" in 14.1 received this question.]*

- Month *[Drop-down list of all months]*
- Year *[Drop-down list with years 2015–1984 and "before 1984" as a final option]*

[Only respondents who selected "HIV positive or reactive, meaning I have HIV" in 14.2 received questions 14.5–14.13.]

14.5 In the past 12 MONTHS, have you seen a doctor or health care provider for HIV care? Don't include care you received during emergency room visits or while staying in the hospital.

- No
- Yes *[Skip to 14.7]*

14.6 What is the main reason you haven't seen a doctor or health care provider for HIV care in the past 12 months? *[Only respondents who selected "No" in 14.5 received this question.]*

- I couldn't afford it.
- I have no health insurance.
- I only recently found out I have HIV.
- I have needed other types of medical or mental health care.
- I didn't know where to go for HIV care.
- I wasn't ready to look for health care for HIV.
- I didn't feel sick enough to look for health care.
- My family or partner would find out I have HIV.
- I believed that I would be mistreated because I am trans.
- I rely on a higher power/God to help my HIV.
- A reason not listed above
(please specify) _____

14.7 In the past 6 MONTHS, have you seen a doctor or health care provider for HIV care? Don't include care you received during emergency room visits or while staying in the hospital. *[Only respondents who selected "Yes" in 14.5 received this question.]*

- No
- Yes *[Skip to 14.9]*

14.8 What is the main reason that you haven't seen a doctor or health care provider for HIV care in the past 6 months? *[Only*

respondents who selected "No" in 14.7 received this question.]

- I couldn't afford it.
- I have no health insurance.
- I have needed other types of medical or mental health care.
- I didn't know where to go for HIV care.
- I wasn't ready to look for health care for HIV.
- I didn't feel sick enough to look for health care.
- My family or partner would find out I have HIV.
- I believed that I would be mistreated because I am trans.
- I rely on a higher power/God to help my HIV.
- A reason not listed above
(please specify) _____

14.9 When was your last blood test to determine your viral load and CD4 counts?

- Within the past 6 months
- Within the past year
- More than a year ago
- I have never had a blood test for my viral load and CD4 count.

14.10 Have you ever been prescribed anti-retroviral therapy, which are the pills that reduce the amount of HIV in your body (often called ART)?

- No
- Yes

14.11 Are you currently taking anti-retroviral therapy (ART)?

- No *[Skip to 14.13]*
- Yes

14.12 Do you take your anti-retroviral therapy (ART) like you're supposed to (regularly and as prescribed)?

- Never
- Rarely
- Most of the time
- All of the time *[Skip to 15.1]*

14.13 What is the main reason that are you not taking or not regularly taking anti-retroviral therapy (ART) all of the time? *[Only respondents who selected "No" in 14.11 or "Never," "Rarely," or "Most of the time" in 14.12 received this question.]*

- I can't afford it.
- I have no health insurance.
- I only recently found out I have HIV.
- My doctor or health care provider said I didn't need it.
- I am afraid it would conflict with my hormones.
- I am afraid it would conflict with my other medications.
- I would gain weight.

- I don't know where to get it.
- I don't want to take anti-retroviral therapy (ART).
- I don't feel sick enough to take anti-retroviral therapy (ART).
- My family, partner, or friends would find out I have HIV.
- I rely on a higher power/God to help my HIV.
- A reason not listed above
(please specify) _____

Section 15

These are questions about your use of alcohol, tobacco, marijuana, or other drugs.

15.1 Have you ever had a drink¹⁹ of any type of alcoholic beverage, smoked part or all of a cigarette, or used any of the other following substances? (Please provide an answer in each row.)

	No	Yes
Alcohol ²⁰ (such as beer, wine, or hard liquor)	<input type="radio"/>	<input type="radio"/>
Cigarettes ²¹ (tobacco only)	<input type="radio"/>	<input type="radio"/>
E-Cigarettes or vaping products ²²	<input type="radio"/>	<input type="radio"/>
Marijuana or hashish ²³ (such as weed, joints, hash, hash oil)	<input type="radio"/>	<input type="radio"/>
Illegal or illicit drugs ²⁴ (such as cocaine, crack, heroin, LSD, meth, inhalants like poppers or whippits)	<input type="radio"/>	<input type="radio"/>
Prescription drugs ²⁵ (such as Oxycontin, Xanax, Adderall, Ambien) that weren't prescribed to you, or that you didn't take as prescribed.	<input type="radio"/>	<input type="radio"/>

[Only respondents who selected "Yes" under "Alcohol (such as beer, wine, or hard liquor)" in 15.1 received questions 15.2–15.4]

15.2 How long has it been since you last drank an alcoholic beverage²⁶?

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

15.3 During the past 30 days, on how many days did you drink one or more drinks²⁷ of an alcoholic beverage? *[Only respondents who selected "Within the past 30 days" in 15.2 received this question.]*

[Drop-down list of numbers 1–30]

15.4 During the past 30 days, on how many days did you have 5 or more drinks²⁸ on the same occasion? By "occasion," we mean at the same time or within a couple of hours of each other. *[Only respondents who selected "Within the past 30 days" in 15.2 received this question.]*

[Drop-down list of numbers 1–30]

[Only respondents who selected "Yes" under "Cigarettes (tobacco only)" in 15.1 received questions 15.5–15.7]

15.5 How long has it been since you last smoked part or all of a cigarette?

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

15.6 During the past 30 days, on how many days did you smoke part or all of a cigarette? *[Only respondents who selected "Within the past 30 days" in 15.5 received this question.]*

[Drop-down list of numbers 1–30]

15.7 On the days you smoked cigarettes during the past 30 days, how many cigarettes did you smoke per day, on average? *[Only respondents who selected "Within the past 30 days" in 15.5 received this question.]*

- Less than one cigarette per day
- 1 cigarette per day
- 2 to 5 cigarettes per day
- 6 to 15 cigarettes per day (about ½ pack)
- 16 to 25 cigarettes per day (about 1 pack)
- 26 to 35 cigarettes per day (about 1 ½ packs)
- More than 35 cigarettes per day (about 2 packs or more)

15.8 How long has it been since you last used E-Cigarettes or vaping products? *[Only respondents who selected "Yes" under "E-cigarettes or vaping products" in 15.1 received this question.]*

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

15.9 How long has it been since you last used marijuana or hashish? *[Only respondents who selected "Yes" under "Marijuana or hashish (such as weed, joints, hash, hash oil)" in 15.1 received this question.]*

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

15.10 During the past 30 days, on how many days did you use marijuana or hashish? *[Only respondents who selected "Within the past 30 days" in 15.9 received this question.]*

[Drop-down list of numbers 1–30]

15.11 How long has it been since you last used any illegal/illicit drug (such as cocaine, crack, heroin, LSD, meth, inhalants like poppers or whippits)? *[Only respondents who selected "Yes" under "Illegal or illicit drugs (such as cocaine, crack, heroin, LSD, meth, inhalants like poppers or whippits)" in 15.1 received this question.]*

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

15.12 How long has it been since you last used any prescription drugs not as prescribed or not prescribed to you? *[Only respondents who selected "Yes" under "Prescription drugs (such as Oxycontin, Xanax, Adderall, Ambien) that weren't prescribed to you, or that you didn't take as prescribed" in 15.1 received this question.]*

- Within the past 30 days
- More than 30 days ago but within the past 12 months
- More than 12 months ago

Section 16

These are questions about suicidal thoughts and behaviors. Talking about suicidal thoughts or behaviors sometimes brings up difficult emotions. If you experience any difficult emotions because of these questions we encourage you to get help from someone you trust or call one of the anonymous helplines listed at the end of the section.

16.1 The next few questions are about thoughts of suicide. **At any time in the past 12 months** did you **seriously think about trying to kill yourself?**

- No *[Skip to 16.6]*
- Yes

16.2 During the past 12 months, did you **make any plans** to kill yourself? *[Only respondents who selected "Yes" in 16.1 received this question.]*

- No
- Yes

16.3 During the past 12 months, did you **try** to kill yourself? *[Only respondents who selected "Yes" in 16.1 received this question.]*

- No *[Skip to 16.8]*
- Yes

16.4 During the past 12 months, did you get medical attention from a doctor or other health professional as a result of an attempt to kill yourself? *[Only respondents who selected "Yes" in 16.3 received this question.]*

- No *[Skip to 16.9]*
- Yes

16.5 Did you stay in a hospital overnight or longer because you tried to kill yourself? *[Only respondents who selected "Yes" in 16.4 received this question.]*

- No *[Skip to 16.9]*
- Yes *[Skip to 16.9]*

16.6 **At any time in your life**, have you **seriously thought** about trying to kill yourself? *[Only respondents who selected "No" in 16.1 received this question.]*

- No *[Skip to 17.1]*
- Yes

16.7 At any time in your life, did you **make any plans** to kill yourself? *[Only respondents who selected "Yes" in 16.6 received this question.]*

- No
- Yes

16.8 At any time in your life, did you **try** to kill yourself? *[Only respondents who said "Yes" in 16.6 received this question.]*

- No *[Skip to 17.1]*
- Yes

16.9 How many times have you tried to kill yourself in your lifetime? *[Only respondents who selected "Yes" in 16.3 "or" "Yes" to 16.8 received this question.]*

[Drop-down list of numbers 1–25 and "more than 25" as last option]

16.10 How old were you when you tried to kill yourself? *[Only respondents who selected "1" in 16.9 received this question.]*

[Drop-down list of ages]

16.11 How old were you the **first time** you tried to kill yourself? *[Only respondents who selected a value other than "1" in 16.9 received this question.]*

[Drop-down list of ages]

16.12 How old were you the **last time** you tried to kill yourself?

[Drop-down list of ages]

If you are experiencing any difficult emotions after answering these questions and would like to talk to someone, please contact one of the anonymous resources below:

National Suicide Prevention Helpline
1-800-273-8255
<http://www.suicidepreventionlifeline.org/>

Veterans Crisis Line (for veterans, military personnel, and their families)
1-800-273-8255 and Press 1
<http://veteranscrisisline.net/>

The Trevor Project
The Trevor Project is a phone and internet chat hotline for LGBTQ people. For those participating in this survey, The Trevor Project will speak or chat with people of all ages.
1-866-488-7386
<http://www.thetrevorproject.org/section/get-help>

Section 17

These are questions about being treated unequally, harassed, or physically attacked.

17.1 In the past year, have you been denied equal treatment or service, such as at a place of business, government agency, or public place for any reason?

- No
- Yes

17.2 In the past year, did anyone verbally harass you for any reason?

- No
- Yes

17.3 In the past year, did anyone physically attack you (such as grab you, throw something at you, punch you, use a weapon) for any reason?

- No
- Yes

17.4 You said that you were denied equal treatment or service **in the past year**. Do you believe any of those experiences were because of your... **(Mark all that apply.)** *[Only respondents who selected "Yes" in 17.1 received this question. Respondents could not select "None of the above" in combination with any other option.]*

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

17.5 You said that you have been verbally harassed **in the past year**. Do you believe any of those experiences were because of your... **(Mark all that apply.)** *[Only respondents who selected "Yes" in 17.2 received this question. Respondents could not select "None of the above" in combination with any other option.]*

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality

- Sexual orientation
- None of the above

17.6 In the past year, did strangers verbally harass you in public because of your trans status, gender identity, or gender expression? *[Only respondents who selected "Trans status/gender identity" or "Gender expression/appearance" in 17.5 received this question.]*

- No
- Yes

[Only respondents who selected "Yes" in 17.3 received questions 17.7–17.10.]

17.7 In the past year, how many times were you physically attacked? _____

[Drop-down list of numbers]

17.8 How were you physically attacked? **(Mark all that apply.)**

- With a gun
- With a knife
- With another weapon (like a baseball bat, frying pan, scissors, or stick)
- By something thrown (such as a rock or bottle)
- By someone grabbing, punching, or choking you
- Unwanted sexual contact (such as rape, attempted rape, being forced to penetrate)
- Not listed above

17.9 When you were physically attacked **in the past year**, do you believe any of those experiences were because of your... **(Mark all that apply.)** *[Respondents could not select "None of the above" in combination with any other option.]*

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

17.10 In the past year, did strangers physically attack you in public because of your trans status, gender identity, or gender expression? *[Only respondents who selected "Trans status/gender identity" or "Gender expression/appearance" in 17.9 received this question.]*

- No
- Yes

Section 18

These are questions about unwanted sexual contact. Some people get sexual attention that they don't want and don't ask for. It could come from someone they know well - a romantic or sexual partner, a friend, a teacher, a coworker, a supervisor, or a family member. These questions are based on national surveys that we will use to compare with the U.S. population. If you experience any difficult emotions because of these questions we encourage you to get help from someone you trust or call one of the anonymous helplines listed at the end of the section.

18.1 Have you ever experienced unwanted sexual contact (such as oral, genital, or anal contact or penetration, forced fondling, rape)?

No [Skip to 19.1]

Yes

18.2 Who did this to you? (Mark all that apply.)

- A partner/ex-partner
- A relative
- A friend/acquaintance
- A law enforcement officer
- A health care provider/doctor
- A stranger
- A boss or supervisor
- A co-worker
- A teacher or school staff member
- A person not listed above

18.3 Now just thinking about the past year, have you experienced unwanted sexual contact (such as oral, genital, or anal contact or penetration, forced fondling, rape)?

No

Yes

If you are experiencing any difficult emotions after answering these questions and would like to talk to someone, please contact one of the anonymous resources below:

Veterans Crisis Line (for veterans, military personnel, and their families)

1-800-273-8255 and Press 1
<http://veteranscrisisline.net/>

FORGE Transgender Sexual Violence Project

414-559-2123
<http://forge-forward.org/anti-violence/for-survivors/> to list of resources

National Sexual Assault Hotline

800-656-HOPE (4673)
<https://ohl.rainn.org/online/>

Section 19

These are questions about any harm caused by a current or former romantic or sexual partner. This could include physical, emotional, or financial harm.

19.1 Have you ever had a romantic or sexual partner?

No [Skip to 20.1]

Yes

19.2 Have any of your romantic or sexual partners ever...? (Please provide an answer in each row.)

	No	Yes
Tried to keep you from seeing or talking to your family or friends	<input type="radio"/>	<input type="radio"/>
Kept you from having money for your own use	<input type="radio"/>	<input type="radio"/>
Kept you from leaving the house when you wanted to go	<input type="radio"/>	<input type="radio"/>
Hurt someone you love	<input type="radio"/>	<input type="radio"/>
Threatened to hurt a pet or threatened to take a pet away from you	<input type="radio"/>	<input type="radio"/>
Wouldn't let you have your hormones	<input type="radio"/>	<input type="radio"/>
Wouldn't let you have other medications	<input type="radio"/>	<input type="radio"/>
Threatened to call the police on you	<input type="radio"/>	<input type="radio"/>
Threatened to "out" you	<input type="radio"/>	<input type="radio"/>
Told you that you weren't a "real" woman or man	<input type="radio"/>	<input type="radio"/>
Stalked you	<input type="radio"/>	<input type="radio"/>
Threatened to use your immigration status against you	<input type="radio"/>	<input type="radio"/>

19.3 Have any of your romantic or sexual partners ever...? (Please provide an answer in each row.)

	No	Yes
Made threats to physically harm you	<input type="radio"/>	<input type="radio"/>
Slapped you	<input type="radio"/>	<input type="radio"/>
Pushed or shoved you	<input type="radio"/>	<input type="radio"/>
Hit you with a fist or something hard	<input type="radio"/>	<input type="radio"/>
Kicked you	<input type="radio"/>	<input type="radio"/>
Hurt you by pulling your hair	<input type="radio"/>	<input type="radio"/>
Slammed you against something	<input type="radio"/>	<input type="radio"/>
Forced you to engage in sexual activity	<input type="radio"/>	<input type="radio"/>
Tried to hurt you by choking or suffocating you	<input type="radio"/>	<input type="radio"/>
Beaten you	<input type="radio"/>	<input type="radio"/>
Burned you on purpose	<input type="radio"/>	<input type="radio"/>
Used a knife or gun on you	<input type="radio"/>	<input type="radio"/>

Section 20

These are questions about your experiences with bathrooms while in public places, at work, or at school.

20.1 In the past year, did anyone tell or ask you if you were using the wrong bathroom?

- No
- Yes

20.2 In the past year, did anyone stop you from entering or deny you access to a bathroom?

- No
- Yes

20.3 In the past year, were you verbally harassed, physically attacked, or experience unwanted sexual contact when accessing or while using a bathroom? **(Mark all that apply.)** [Respondents could not select "No" in combination with any other option.]

- No [Skip to 20.7]
- Yes, verbally harassed
- Yes, physically attacked
- Yes, experienced unwanted sexual contact

20.4 You said that you were **verbally harassed** in a bathroom in the past year. Where did this happen? **(Mark all that apply.)** [Only respondents who selected "Yes, verbally harassed" in 20.3 received this question.]

- A bathroom in a public place (such as a restaurant, shopping mall, movie theater, etc.)
- A bathroom at my workplace
- A bathroom at my school
- A bathroom at another location (please specify) _____

20.5 You said that you were **physically attacked** in a bathroom in the past year. Where did this happen? **(Mark all that apply.)** [Only respondents who selected "Yes, physically attacked" in 20.3 received this question.]

- A bathroom in a public place (such as a restaurant, shopping mall, movie theater, etc.)
- A bathroom at my workplace
- A bathroom at my school
- A bathroom at another location (please specify) _____

20.6 You said that you **experienced unwanted sexual contact** in a bathroom in the past year. Where did this happen? **(Mark all that apply.)** [Only respondents who selected "Yes, experienced unwanted sexual contact" in 20.3 received this question.]

A bathroom in a public place (such as a restaurant, shopping mall, movie theater, etc.)

A bathroom at my workplace

A bathroom at my school

A bathroom at another location (please specify) _____

20.7 In the past year, did you avoid going to the bathroom because you were afraid of having problems using them? This would include bathrooms in public, at work, or at school.

- I have never avoided them [Skip to 21.1]
- I have sometimes avoided them
- I have always avoided them
- Not listed above (please specify) _____

20.8 Did you experience any of the following because you avoided using bathrooms in public places, at work, or at school? **(Mark all that apply.)** [Only respondents who selected an answer choice other than "I have never avoided them" in 20.8 received this question.]

- Not going when needed ("holding it")
- I avoided drinking or eating
- Urinary tract infection
- Kidney infection
- Other kidney-related problems
- I have never had physical problems from avoiding bathrooms
- Not listed above (please specify) _____

Section 21

These are questions about things that might have happened to you at your job or business, or while you were looking for work.

21.1 Have you ever worked at a job or business? Do not include sex work, selling drugs, or other work that is currently considered illegal.

- No [Skip to 21.6]
- Yes

21.2 Have you ever lost a job or been laid off?

- No [Skip to 21.4]
- Yes

21.3 Do you believe that you were ever laid off or lost a job because of your... **(Mark all that apply.)** [Only respondents who selected "Yes" in 21.2 received this question. Respondents could not select "None of the above" in combination with any other option.]

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

21.4 Have you ever been fired or forced to resign from a job?

No [Skip to 21.6]

Yes

21.5 Do you believe that you were ever fired or forced to resign because of your... **(Mark all that apply.)** [Only respondents who selected "Yes" in 21.4 received this question. Respondents could not select "None of the above" in combination with any other option.]

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

21.6 Now just thinking about the past year, did you apply for a job and/or work at a job or business? Do not include sex work, selling drugs, or other work that is currently considered illegal. **(Mark all that apply.)** [Respondents could not select "No" in combination with any other option.]

No [Skip to 22.1]

Yes, I applied for a job

Yes, I worked at job or business

21.7 In the past year, how many times have you been... **(Please provide an answer in each row.)**

In the past year...	0 times	1 time	2 times	3 times	4 times	5 or more times
Denied a promotion at a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not hired for a job you applied for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fired or forced to resign from a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21.8_1 Do you believe that any of the times that you were denied a promotion at a job in the past year were because of your... **(Mark all that apply.)** [Only respondents who selected a value other than "0" under "Denied a promotion at a job" in 21.7 received this question. Respondents could not select "None of the above" in combination with any other option.]

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

21.8_2 Do you believe that any of the times that you were not hired for a job you applied for in the past year were because of your... **(Mark all that apply.)** [Only respondents who selected a value other than "0" under "Not hired for a job you applied for" in 21.7 received this question. Respondents could not select "None of the above" in combination with any other option.]

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

21.8_3 Do you believe that any of the times that you were fired or forced to resign from a job in the past year were because of your... **(Mark all that apply.)** [Only respondents who selected a value other than "0" under "Fired or forced to resign from a job" in 21.7 received this question. Respondents could not select "None of the above" in combination with any other option.]

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

[Only respondents who selected "Trans status/gender identity" or "gender expression/appearance" in 21.8_3 received questions 21.9–21.11.]

21.9 Now just thinking about when you were **fired or forced to resign from a job** because of your gender identity, trans status, and/or gender expression in the past year, please describe your response. **(Mark all that apply.)**

- I did nothing [Skip to 22.1]
- I contacted a lawyer.
- I contacted a trans, LGBT, or other non-profit group. [Skip to 22.1]
- I contacted my union representative. [Skip to 22.1]
- I made an official complaint.
- Not listed above (please specify) _____ [Skip to 22.1]

21.10 You said that you contacted a lawyer in response to being **fired or forced to resign from a job** in the past year. What did the lawyer do to help you? [Only respondents who selected "I contacted a lawyer" in 21.9 received this question.]

- I was not able to hire the lawyer.
- The lawyer called or wrote a letter to my employer.
- The lawyer helped me file an official complaint.
- The lawyer filed a lawsuit for me.
- Not listed above (please specify) _____

21.11 You said that you made an official complaint in response to being **fired or forced to resign from a job** in the past year. Where did you make the official complaint? **(Mark all that apply.)** [Only respondents who selected "I made an official complaint" in 21.9 received this question.]

- EEOC (Equal Employment Opportunity Commission)
- Local/State Human Rights Commission
- The Human Resources or Personnel department of the employer
- Equal Employment Opportunity (EEO) office of the employer
- Not listed above (please specify) _____

Section 22

[Only respondents who selected "Yes, I worked at a job or business" in 21.6 received questions 22.1–22.3.]

22.1 In the past year, to **avoid** trans discrimination at work... **(Please provide an answer in each row.)**

	No	Yes
I asked for a transfer to a different position/department at my job in the past year	<input type="radio"/>	<input type="radio"/>
I stayed in a job I'd prefer to leave in the past year	<input type="radio"/>	<input type="radio"/>
I didn't seek a promotion or a raise in the past year	<input type="radio"/>	<input type="radio"/>
I quit my job in the past year	<input type="radio"/>	<input type="radio"/>
I had/have a job for which I am over-qualified (in the past year)	<input type="radio"/>	<input type="radio"/>
I had to be in the closet about my gender identity in the past year	<input type="radio"/>	<input type="radio"/>
I delayed my gender transition in the past year	<input type="radio"/>	<input type="radio"/>
I did not ask my employer to use the pronouns I prefer in the past year (such as he, she, or they)	<input type="radio"/>	<input type="radio"/>
I hid the fact that I have transitioned gender already in the past year	<input type="radio"/>	<input type="radio"/>

22.2 In the past year, did any of these things happen to you because of trans discrimination at work? **(Please provide an answer in each row.)**

	No	Yes
My employer/boss forced me to resign in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss forced me to transfer to a different position/department at my job in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss removed me from direct contact with clients, customers, or patients in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss told me to present in the wrong gender in order to keep my job in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss gave me a negative job review in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss and I could not work out an acceptable bathroom situation in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss did not let me use the bathroom I should be using based on my gender identity in the past year.	<input type="radio"/>	<input type="radio"/>
My employer/boss or coworkers shared information about me that they should not have in the past year.	<input type="radio"/>	<input type="radio"/>

22.3 In the past year, did any of these things happen to you at work because you are trans? **(Mark all that apply.)** [Respondents could not select "None of the above" in combination with any other option.]

- I was verbally harassed
- I was physically attacked
- I experienced unwanted sexual contact (such as fondling, sexual assault, or rape)
- None of the above

Section 23

These are questions about experiences you may have had with housing.

23.1 Have you ever experienced homelessness? Experiencing homelessness includes such things as staying in a shelter, living on the street, living out of a car, or staying temporarily with family or friends because you can't afford housing.

- No
- Yes

23.2 Now just thinking about the past year, have you had any of these housing situations because you are trans? (Please provide an answer in each row.)

Please choose "Does not apply to me" if you could not have had that housing situation in the past year. For example, if you didn't rent a home in the past year, you would answer "Does not apply to me" to the first question because you could not have been evicted.

In the past year...	Yes	No	Does not apply to me
I was evicted from my home/apartment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was denied a home/apartment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I experienced homelessness. ²⁹	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to move back in with family members or friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to move into a less expensive home/apartment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I slept in different places for short periods of time, such as on a friend's couch.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 24

[Only respondents who selected "I experienced homelessness" in 23.2 received questions 24.1–24.4.]

24.1 When you experienced homelessness this past year, did you seek shelter in a homeless shelter? (Mark all that apply.) *[Respondents could not select a "No" answer in combination with a "Yes" answer.]*

- Yes, and I stayed at one or more shelters. *[Skip to 24.3]*
- Yes, but I was denied access to one or more shelters.
- No, because I feared I would be mistreated as a trans person *[Skip to 25.1]*
- No, for other reasons *[Skip to 25.2]*

24.2 Do you believe that you were denied access to a homeless shelter in the past year because of your ... (Mark all that apply.) *[Only respondents who selected "Yes, but I was denied access to one or more shelters" in 24.1 received this question. Respondents could not select "None of the above" in combination with any other option.]*

- Age
- Disability
- Income level or education
- Trans status/gender identity
- Gender expression/appearance
- Race/ethnicity
- Religion/spirituality
- Sexual orientation
- None of the above

24.3 In the past year, did any of these things happen to you in the homeless shelter? (Please provide an answer in each row.) *[Only respondents who selected "Yes, and I stayed at one or more shelters" in 24.1 received this question.]*

	No	Yes
I was thrown out after they learned I was trans.	<input type="radio"/>	<input type="radio"/>
I decided to dress/present as the wrong gender to feel safe in a shelter.	<input type="radio"/>	<input type="radio"/>
They required me to dress/present as the wrong gender in the shelter.	<input type="radio"/>	<input type="radio"/>
I decided to leave a shelter because of poor treatment or unsafe conditions, even though I had no place to go.	<input type="radio"/>	<input type="radio"/>

24.4 In the past year, did any of these things happen to you in a homeless shelter because you are trans? (Mark all that apply.) *[Only respondents who selected "Yes, and I stayed at one or more shelters" in 24.1 received this question. Respondents could not select "None of the above" in combination with any other option.]*

- I was verbally harassed
- I was physically attacked
- I experienced unwanted sexual contact (such as fondling, sexual assault, or rape)
- None of the above

Section 25

These are questions about your experiences in places of public accommodations, such as hotels, restaurants, or government agencies.

25.1 In the past year, have you visited or used services in any of these places? (Mark all that apply.) *[Respondents could not select "I have not visited or used services in any of these places" in combination with any other option.]*

- Domestic violence shelter/DV program/Rape crisis center
- Drug/alcohol treatment program
- DMV or RMV (Department or Registry of Motor Vehicles)
- Social Security office (such as for name or gender change, Social Security card, public benefits)

- Public assistance/government benefits office (such as SNAP, WIC)
- Gym/health club
- Legal services from an attorney, clinic, or legal professional
- Court/court house
- Nursing home/extended care facility
- Public transportation (such as bus, train, subway, taxi)
- Retail store, restaurant, hotel, theater
- I have not visited or used services in any of these places.

25.2 In the past year, did you **NOT** visit or use services at these places because you thought you would be mistreated as a trans person? **(Please give an answer for each place.)** [Respondents received this question for each of the locations that they did not select in 25.1.]

	No	Yes (I did NOT visit because I thought I would be mistreated)
[Location not selected in 25.1]	<input type="radio"/>	<input type="radio"/>

25.3 In the past year, when you visited or used services at these places, do you think the staff or employees knew or thought you were trans? **(Please give an answer for each place.)** [Respondents received this question for each of the locations that they selected in 25.1.]

	No	Yes
[Location selected in 25.1]	<input type="radio"/>	<input type="radio"/>

25.4 In the past year, when you visited or used services at these places, did any of these things happen to you because you are trans? **(Please provide an answer for each location.)** [Respondents received this question for each of the locations that they selected in 25.1.]

	Denied equal treatment or service	Verbally harassed	Physically attacked	None of these things happened to me at this place
[Location selected in 25.1]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 26

These are questions about experiences you may have had in school.

26.1 Were you out as trans in school at any time between Kindergarten and 12th grade?

- No
- Yes [Skip to 26.3]

26.2 Do you believe that any of your classmates, teachers, or school staff in Kindergarten through 12th grade (K-12) thought you were trans? [Only respondents who selected "No" in 26.1 received this question.]

- No
- Yes

26.3 Do you believe that any of your classmates, teachers or school staff in K-12 thought or knew you were lesbian, gay, bisexual, or queer (LGBQ)?

- No
- Yes

26.4 Did any of these happen to you while in K-12? (If any of these things were done to you in K-12 by classmates, teachers, or school staff, please answer "yes.") **(Please provide an answer in each row.)** [Only respondents who selected "Yes" in 26.1 or "Yes" in 26.2 received this question.]

	NO	YES
I was verbally harassed because people thought I was trans.	<input type="radio"/>	<input type="radio"/>
I was physically attacked because people thought I was trans.	<input type="radio"/>	<input type="radio"/>
I experienced unwanted sexual contact because people thought I was trans	<input type="radio"/>	<input type="radio"/>
I wasn't allowed to dress in the way that fit my gender identity/expression.	<input type="radio"/>	<input type="radio"/>
I was disciplined for fighting back against bullies.	<input type="radio"/>	<input type="radio"/>
I believe I was disciplined more harshly because teachers/staff thought I was trans.	<input type="radio"/>	<input type="radio"/>
I left a school because the mistreatment was so bad.	<input type="radio"/>	<input type="radio"/>
I was expelled from school.	<input type="radio"/>	<input type="radio"/>

26.5 Did any of these happen to you while in K-12? (If any of these things were done to you in K-12 by classmates, teachers, or school staff, please answer "yes.") **(Please provide an answer in each row.)** [Only respondents who selected "No" in 26.1, AND "No" in 26.2, AND "Yes" in 26.3 received this question.]

	YES	NO
I was verbally harassed because people thought I was LGBQ.	<input type="radio"/>	<input type="radio"/>
I was physically attacked because people thought I was LGBQ.	<input type="radio"/>	<input type="radio"/>
I experienced unwanted sexual contact because people thought I was LGBQ.	<input type="radio"/>	<input type="radio"/>
I wasn't allowed to dress in a way that fit my gender identity/expression.	<input type="radio"/>	<input type="radio"/>
I was disciplined for fighting back against bullies.	<input type="radio"/>	<input type="radio"/>
I left a school because the mistreatment was so bad.	<input type="radio"/>	<input type="radio"/>
I was expelled from school.	<input type="radio"/>	<input type="radio"/>

[Only respondents who selected a level of educational attainment higher than "high school graduate" in 2.22 received questions 26.6–26.9.]

26.6 Now just thinking about classmates, professors, or staff at your college or vocational school, did they think or know you were trans?

No [Skip to 26.9]

Yes

26.7 Were you harassed (verbally, physically, or sexually) at college or vocational school because people thought or knew you were trans? [Only respondents who selected "Yes" in 26.6 received this question.]

No [Skip to 26.9]

Yes

26.8 Did you have to leave your college or vocational school because the harassment was so bad? [Only respondents who selected "Yes" in 26.7 received this question.]

No

Yes

26.9 Did you leave or were you forced to leave a college or vocational school because you are trans? (Mark all that apply.) [Respondents could not select "No" in combination with any other option.]

No

Yes, I left school because the mistreatment was so bad.

Yes, I was expelled or forced out.

Yes, I left for other trans-related reasons.

Section 27

These are questions about things that may have happened to you when going through airport security.

27.1 In the past year, have you gone through airport security in the United States?

No [Skip to 28.1]

Yes

27.2 When you went through airport security in the past year, did a TSA officer do any of these things to you? (Mark all that apply.) [List was randomized for each respondent. Respondents could not select "None of the above" in combination with any other option.]

They questioned the name or gender on my ID.

They used the wrong pronouns with me (he/him or she/her) or wrong title (Mr. or Ms.)

They patted me down due to gender-related clothing or items (such as a binder, packer).

I was patted down by a TSA officer of the wrong gender.

They searched my bag due to a gender-related item (such as binder, packer).

They asked me to remove or lift clothing to show a binder, undergarment, or other sensitive area.

They took me to a separate room for questioning/examination.

They announced or questioned loudly my gender, body parts, or sensitive items (such as a binder, packer).

They called the police about me.

I missed my flight due to screening.

I was not allowed to fly.

They detained me for over an hour.

They verbally harassed me.

They physically attacked me.

I experienced unwanted sexual contact (beyond a typical pat down by a TSA officer)

None of the above

Section 28

These are questions about things that happened to you with police, in jail, in prison, or in a juvenile detention center.

28.1 If you needed help from the police, how comfortable would you feel asking them for help?

Very comfortable

Somewhat comfortable

Neutral

Somewhat uncomfortable

Very uncomfortable

28.2 In the past year, did you interact with the police or other law enforcement officers?

No [Skip to 28.8]

Yes

28.3 In the past year, do you believe the police or other law enforcement officers you interacted with thought or knew you were trans?

None of the officers thought or knew I was trans. [Skip to 28.6]

Some officers thought or knew I was trans, some did not.

All officers thought or knew I was trans.

28.4 In the past year, when you interacted with police or other law enforcement officers, were you treated with respect?

I was never treated with respect.

I was sometimes treated with respect.

I was always treated with respect.

28.5 In the past year, when you interacted with police or other law enforcement officers, did any of these things happen to you? **(Please give an answer in each row.)**

In the past year...	No	Yes
Officers kept called me by the wrong gender pronouns (such as he/him or she/her) or wrong title (Mr. or Ms.)	<input type="radio"/>	<input type="radio"/>
Officers asked me questions about my gender transition (such as hormones and surgical status).	<input type="radio"/>	<input type="radio"/>
Officers assumed I was a sex worker.	<input type="radio"/>	<input type="radio"/>
Officers verbally harassed me.	<input type="radio"/>	<input type="radio"/>
Officers physically attacked me.	<input type="radio"/>	<input type="radio"/>
Officers forced me to engage in sexual activity to avoid arrest	<input type="radio"/>	<input type="radio"/>
I experienced unwanted sexual contact from an officer (such as fondling, sexual assault, or rape)	<input type="radio"/>	<input type="radio"/>

28.6 In the past year, were you arrested for any reason?

No *[Skip to 28.8]*

Yes

28.7 In the past year, do you believe that you were arrested because you were trans?

No

Yes

28.8 In the past year, at any time were you held in jail, prison, or juvenile detention?

No *[Skip to 29.1]*

Yes

[Only respondents who selected "Yes" in 28.8 received questions 28.9–28.20.]

28.9 In the past year, what types of jail, prison or juvenile detention facility were you in? **(Mark all that apply.)**

Federal prison

State prison

Local jail

Holding cell

State juvenile system

Locally or privately-operated juvenile facilities

Other correctional facility

(please specify) _____

28.10 In the past year, during your time in jail, prison or juvenile detention facility were you physically forced, pressured, or made to feel that you had to have sex or sexual contact with any **facility staff**?

No *[Skip to 28.12]*

Yes

28.11 In the past year, how many times did this happen to you? *[Only respondents who selected "Yes" in 28.10 received this question.]*

[Drop-down list of numbers 1–10 and "11 or more"]

28.12 In the past year, during your time in jail, prison or juvenile detention facility, were you physically forced, pressured, or made to feel that you had to have sex or sexual contact with **another inmate**?

No *[Skip to 28.14]*

Yes

28.13 In the past year, how many times did this happen to you? *[Only respondents who selected "Yes" in 28.12 received this question.]*

[Drop-down list of numbers 1–10 and "11 or more"]

28.14 In the past year, during your time in jail, prison or juvenile detention facility were you **physically** assaulted or attacked by **facility staff**?

No *[Skip to 28.16]*

Yes

28.15 In the past year, how many times did this happen to you? *[Only respondents who selected "Yes" in 28.14 received this question.]*

[Drop-down list of numbers 1–10 and "11 or more"]

28.16 In the past year, during your time in jail, prison or juvenile detention facility were you **physically** assaulted or attacked by **another inmate**?

No *[Skip to 28.18]*

Yes

28.17 In the past year, how many times did this happen to you? *[Only respondents who selected "Yes" in 28.16 received this question.]*

[Drop-down list of numbers 1–10 and "11 or more"]

28.18 Before your time in jail, prison, or juvenile detention, were you taking hormones?

No *[Skip to 29.1]*

Yes

28.19 Did you have a prescription for the hormones you were taking?

No

Yes

28.20 In the past year, during your time in jail, prison, or juvenile detention, were you not allowed to take your hormones?

- No
- Yes

Section 29

Now we have some questions about voting and registration.

29.1 In any election, some people are not able to vote because they are sick or busy or have some other reason, and others do not want to vote. Did you vote in the election held on Tuesday, November 4, 2014^{30?}

- No
- Yes [Skip to 30.1]

29.2 Were you registered to vote in the November 4, 2014 election^{31?} [Only respondents who selected "No" in 29.1 received this question.]

- No
- Yes [Skip to 29.4]

29.3 Which of the following was the MAIN reason you were not registered to vote? (Please choose only one response.) [Only respondents who selected "No" in 29.2 received this question.]

- Not eligible to vote because I am not a U.S. citizen.
- I wanted to avoid being harassed by election officials because I am trans.
- My current name does not match social security card.
- I thought my state's voter ID law could stop me from voting.
- I don't have ID and thought I would need one to register.
- Did not meet registration deadlines.
- Did not know where or how to register
- Did not live here long enough/did not meet residency requirements.
- Permanent illness or disability
- Difficulty with English
- Not interested in the election or not involved in politics.
- My vote would not make a difference.
- Not eligible to vote because of a criminal/felony conviction.
- Not eligible to vote for a reason other than a criminal/felony conviction.
- A reason not listed above (please specify) _____

29.4 What was the MAIN reason you did not vote? (Please choose only one response.) [Only respondents who selected "Yes" in 29.2 received this question.]

I wanted to avoid being harassed by election officials because I am trans.

- Illness or disability (own or family's)
- Out of town or away from home
- Forgot to vote (or send in absentee ballot)
- Not interested, felt my vote wouldn't make a difference
- Too busy, conflicting work or school schedule
- Transportation problems
- Didn't like candidates or campaign issues.
- Registration problems (for example, I didn't receive an absentee ballot or wasn't registered in current location)
- Bad weather conditions
- Inconvenient hours, polling place, or hours or lines too long
- I didn't have the identification documents (ID) I needed to vote.
- My identification documents (ID) do not match my current name, gender, or have an old photo.
- My gender/name on my identification document (ID) does not match my voter registration.
- I was not allowed to vote by a poll worker or election official because I am trans.
- A reason not listed above (please specify) _____

Section 30

These are questions about civic and political activities.

30.1 Do you agree or disagree with the following statement about political affairs in this country?

Someone like me can't really influence government decisions.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

30.2 People may be involved in civic and political activities. In the last Presidential election in 2012³² did you... (Please provide an answer in each row.) [Response choices were randomized, keeping the first two and last two grouped together in the following order.]

In the last Presidential election in 2012 did you ...	No	Yes
Volunteer or work for a Presidential campaign		
Volunteer or work for another political candidate, issue, or cause		
Give money to a Presidential campaign		
Give money to another political candidate, issue, or cause		

30.3 In the past 12 months have you... (Please provide an answer in each row.) [Response choices were randomized.]

In the past 12 months, have you...	No	Yes
Attended a political protest or rally		
Contacted a government official		
Worked with others in your community to solve a problem		
Served on a community board		
Written a "letter to the editor"		
Commented about politics on a message board or Internet site		
Held a publicly elected office		

30.4 In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?

- Republican [Skip to 30.6]
- Democrat [Skip to 30.6]
- Independent
- Other party (please specify) _____

30.5 As of today, do you lean more to the Democratic Party or the Republican Party? [Only respondents who selected "Independent" or "Other party" in 30.4 received this question.]

- Democratic
- Republican
- Neither/Other

30.6 How would you describe your political views?

- Very conservative
- Conservative
- Moderate
- Liberal
- Very liberal

Section 31

This question asks for your opinion on the most important policy priorities for trans people in the United States.

This is a two-part question:

31.1 For each issue below that affects trans people in the U.S., please mark how important it is. (Please provide an answer in each row.) [Response choices were randomized. Respondents could select up to 3 response choices in the last column.]

	Very important	Important	Not very important
HIV/AIDS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identity documents (ID) (updating name and gender)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullying/discrimination in schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Police mistreatment of trans people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mistreatment in prisons/jails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Immigration reform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military (ability to be openly trans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training health care providers about trans health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insurance coverage for trans-related health care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing and homelessness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Violence against trans people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parenting and adoption rights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marriage recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conversion Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Racism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poverty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31.2 Of these issues, please select your top 3 most important issues.

- Issue#1 [Drop-down list of issues listed in 31.1]
- Issue#2 [Drop-down list of issues listed in 31.1]
- Issue#3 [Drop-down list of issues listed in 31.1]

Section 32

32.1 Is there anything else that you would like to tell us about your experiences of acceptance or discrimination so we can better understand your experiences?

No [Responses were submitted and respondents were directed to the Thank You Page hosted by NCTE.]

Yes

32.2 Please tell us anything else that you would like to tell us about your experiences of acceptance or discrimination so we can better understand your experiences. Please do not provide any information that could be used to identify you, such as your name or contact information. Your response will be anonymous. [Only respondents who selected "Yes" in 32.1 received this question.]

[Text box]

Please enter your survey responses by clicking on the submit button below:

SUBMIT

[Once completed, responses were submitted and respondents were directed to the Thank You Page hosted by NCTE.]

Thank You Page

THANK YOU FOR MAKING YOUR VOICE HEARD

YOUR SURVEY HAS BEEN SUBMITTED

Want to be one of the first to get the survey results?

Want to win one of the cash prizes?

Give us your info here.

This information will not be connected to your survey responses.

Preferred name

Email address

Zip Code (required)

Phone (optional)

Send me the results of the survey when you release them!

Enter me in the drawing for one of three cash prizes: one prize of \$500 and two prizes of \$250!

SUBMIT

RESOURCES

We recognize that answering some of the questions on this survey may have been hard. If you are experiencing any difficult emotions after answering the questions and would like to talk to someone, please contact one of the anonymous resources below:

National Suicide Prevention Helpline

1-800-273-8255

<http://www.suicidepreventionlifeline.org/>

FORGE Transgender Sexual Violence Project

414-559-2123

<http://forge-forward.org/anti-violence/for-survivors/> to list of resources

Veterans Crisis Line (for veterans, military personnel, and their families)

1-800-273-8255 and Press 1

<http://veteranscrisisline.net/>

The Trevor Project

The Trevor Project is a phone and internet chat hotline for LGBTQ people. For those participating in this survey, The Trevor Project will speak or chat with people of all ages.

1-866-488-7386

<http://www.thetrevorproject.org/section/get-help>

National Sexual Assault Hotline

800-656-HOPE (4673)

<https://ohl.rainn.org/online/>

ENDNOTES | APPENDIX B

- 1 Respondents who were sent to disqualification page #2 received the following message: "Based on your answers, you are not eligible to complete this survey. Thank you for your interest in participating in this study. For more information about this project please visit the NCTE website: <http://www.ustranssrvey.org/>"
- 2 Respondents who were sent to disqualification page #1 received the following message: "Thank you for your survey responses. We're interested to learn more about your identity and experiences. If you would like to tell us more, please respond to the following questions. Please **do not** provide any information that could be used to identify you, such as your name or contact information.

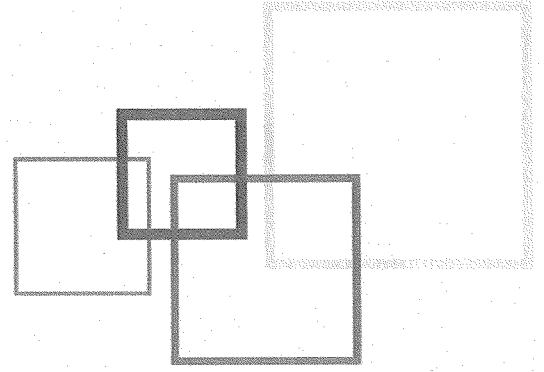
Tell us about your gender identity or expression. [Text box.]

Tell us about your experiences related to your gender identity or expression. [Text box.]

- 3 See note 1.
- 4 See note 2.
- 5 See note 2.
- 6 Respondents received the following hyperlinked definition for "active duty": "Active duty means full-time service, other than active duty for training as a member of the Army, Navy, Air Force, Marine Corps, Coast Guard, or as a commissioned officer of the Public Health Service or the National Oceanic and Atmospheric Administration, or its predecessors, the Coast and Geodetic Survey or Environmental Science Service Administration. Active duty also applies to a person who is a cadet attending one of the five United States Military Service Academies. For a person with service in the military Reserves or National Guard, mark the "Only on active duty for training in the Reserves or National Guard" box if the person has never been called up for active duty, mobilized, or deployed. For

- a person whose only service was as a civilian employee or civilian volunteer for the Red Cross, USO, Public Health Service, or War or Defense Department, mark the 'Never served in the military' box. For Merchant Marine service, count only the service during World War II as active duty and no other period of service."
- 7 Respondents received the following hyperlinked definition for "household": "A household includes all the adults who live with you in the same house, apartment, group of rooms, or room that is used as one home. If you live in group housing, such as a dormitory, only include yourself and your adult family members who live with you."
 - 8 Respondents received the following hyperlinked note regarding the term "related to you": "Include only adults you're related to by blood, legal adoption, or legal marriage that is recognized by the U.S. government. Do not include your unmarried partner or unrelated adults. Later we will ask about the people not included here."
 - 9 Respondents received the following hyperlinked note regarding the term "named on the lease, mortgage, or deed": "This includes people who are listed on the lease, mortgage, or deed for your home. If your home is not owned or rented by anyone who lives with you, include any adult in the home except roomers, boarders, or paid employees."
 - 10 Respondents received the following hyperlinked note regarding the term "related to you": "Do not include children that are not related to you by birth or by legal adoption. For instance, your unmarried partner's children would not be included here unless you have legally adopted them. We ask about these members of your household elsewhere in the survey."
 - 11 Respondents received the following hyperlinked definition for "SNAP": "The Supplemental Nutrition Assistance Program (SNAP) is sometimes called the Food Stamp program. It helps people who have low or no income to buy food, usually with an EBT card."
 - 12 Respondents received the following hyperlinked definition for "WIC": "'WIC' stands for 'Women, Infants, and Children.' It's the short name for the Special Supplemental Nutrition Program for Women, Infants, and Children. WIC is a federal program to help women who are pregnant or breastfeeding and children less than five years old get health care and healthy food."
 - 13 Respondents who selected this answer choice received the message and clicked "OK" to proceed: "Please note that for upcoming questions about income, don't include food stamps (SNAP) as income."
 - 14 Respondents who selected this answer choice received the message and clicked "OK" to proceed: "For upcoming questions about income, don't include assistance from WIC as income."
 - 15 Respondents who selected multiple answer choices in this question received the following message and clicked "OK" to proceed: "Please note that for upcoming questions about income, don't include assistance from food stamps (SNAP) or WIC as income."
 - 16 Respondents received the following hyperlinked definition for "Individual Income": "Individual income" includes money from jobs, employment, net income from business, income from farms or rentals, income from self-employment, pensions, dividends, interest, social security payments, and other money income that you personally received in 2014. Do not include assistance from food stamps (SNAP) or WIC as income."
 - 17 Respondents received the following hyperlinked definition for "Family Income": "'Family income' includes you and members of your family related by legally-recognized marriage, by birth, or by adoption who have lived with you during the last 12 months and includes money from jobs, employment, net income from business, income from farms or rentals, income from self-employment, pensions, dividends, interest, social security payments, and any other money income received by you and family members in your household who are 15 years of age or older in 2014. Do not include assistance from food stamps (SNAP) or WIC as income."
 - 18 Respondents received the following hyperlinked definition for "Household Income": "'Household income' includes you and all members of your household who have lived with you during the past 12 months and includes money from jobs, employment, net income from business, income from farms or rentals, income from self-employment, pensions, dividends, interest, social security payments, and any other money income received by you and members of your household who are 15 years of age or older in 2014. Do not include assistance from food stamps (SNAP) or WIC as income."
 - 19 Respondents received the following hyperlinked note regarding the term "had a drink": "Please do not include any time when you only had a sip or two from a drink."
 - 20 Respondents received the following hyperlinked definition for "alcohol": "Alcoholic beverages, such as beer, wine, brandy, and mixed drinks."
 - 21 Respondents received the following hyperlinked definition for "cigarettes": "Cigarettes made of tobacco. Do not include electronic cigarettes (E-cigs)."
 - 22 Respondents received the following hyperlinked definition for "e-cigarettes or vaping products": "This includes electronic cigarettes (e-cigs or e-cigarettes), personal vaporizer (PV), or electronic nicotine delivery system (ENDS), all of which are battery-powered vaporizers that feel similar to tobacco smoking."
 - 23 Respondents received the following hyperlinked definition for "marijuana or hashish": "Marijuana is also called pot or grass. Marijuana is usually smoked, either in cigarettes, called joints, or in a pipe. It is sometimes cooked in food. Hashish is a form of marijuana that is also called 'hash.' It is usually smoked in a pipe. Another form of hashish is hash oil."

- 24 Respondents received the following hyperlinked definition for "illegal or illicit drugs": "Drugs like cocaine, crack, heroin, LSD, and meth that are considered to be illegal. Inhalants are liquids, sprays, and gases that people sniff or inhale to get high or to make them feel good, like poppers or whippets. We are not interested in times when you inhaled a substance accidentally— such as when painting, cleaning an oven, or filling a car with gasoline."
- 25 Respondents received the following hyperlinked definition for "prescription drugs": "Use of prescription drugs in any way a doctor did not direct you to use them. When you answer this question, please think only about your use of the prescription drug in any way a doctor did not direct you to use it, including:
- Using it without a prescription of your own
 - Using it in greater amounts, more often, or longer than you were told to take it
 - Using it in any other way a doctor did not direct you to use it"
- 29 Respondents received the following hyperlinked definition for "homelessness": "Experiencing homelessness includes such things as staying in a shelter, living on the street, living out of a car, or staying temporarily with family or friends because you can't afford housing."
- 26 Respondents received the following note regarding the term "drank an alcoholic beverage": "A can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. We are not asking about times when you only had a sip or two from a drink."
- 27 Respondents received the following note regarding the term "drink one or more drinks": "A can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. We are not asking about times when you only had a sip or two from a drink."
- 28 Respondents received the following note regarding the term "drinks": "A can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. We are not asking about times when you only had a sip or two from a drink."
- 30 Respondents received the following hyperlinked note: "This was the election in November 2014 to elect members of the U.S. Congress and state-level offices."
- 31 Respondents received the following hyperlinked note: "This was the election in November 2014 to elect members of the U.S. Congress and state-level offices."
- 32 Respondents received the following hyperlinked note regarding this term: "This was the presidential election in 2012 between Mitt Romney and Barack Obama."



Appendix C

Detailed Methodology

Survey Sources

When developing the survey instrument, the research team focused on creating a questionnaire that could provide data to address both current and emerging needs of transgender people while gathering information about disparities that often exist between transgender people and non-transgender people throughout the United States. To achieve this, questions were included that would allow comparisons between the U.S. Transgender Survey (USTS) sample and known benchmarks for the U.S. population as a whole or populations within the U.S. Consequently, questions were selected to best match those previously asked in federal government or other national surveys on a number of measures, such as measures related to income and health. Questions in the USTS survey instrument were drawn from federally administered national population-based surveys, either exactly as they appeared in the source survey or with modifications, as follows:

USTS Questions	Source Survey
2.16–2.22; 11.1 & 11.2	American Community Survey (ACS)
2.24 & 2.25; 15.1–15.12; 16.1–16.5	National Survey on Drug Use and Health (NSDUH)
7.1–7.14	Current Population Survey (CPS)
12.1; 12.4; 12.6; 12.17; 14.4	CDC's Behavioral Risk Factor Surveillance System (BRFSS)
12.2 & 12.3; 14.1; 14.3	National Health Interview Survey (NHIS)
16.6–16.12	National Comorbidity Survey Replication (NCS-R)
17.7 & 17.8	National Crime Victimization Survey (NCVS)
18.1–18.3; 19.2 & 19.3	National Intimate Partner and Sexual Violence Survey (NISVS)
28.10–28.17	National Inmate Survey (NIS)
29.1–29.4	Current Population Survey (CPS) 2014 November Supplement
30.4–30.6	Gallup Daily Tracking Poll (U.S. Political and Economic Daily Tracking)

Data Cleaning

Data cleaning is the process of detecting and removing some survey responses (e.g., duplicate responses, incomplete responses, illogical responses) in order to improve the quality of the sample. Cleaning of the USTS data proceeded in the following steps: (1) flagging and removal of respondents not eligible to take the survey, (2) flagging and removal of incomplete responses, (3) flagging and removal of duplicate responses, and (4) flagging and removal of illogical responses.

The first step was to remove survey responses from individuals who did not meet basic eligibility criteria for the survey. Respondents had to consent to take the survey, be at least 18 years of age, and reside in the U.S., a U.S. territory, or on a U.S. military base. Additionally, respondents needed to identify as transgender—including non-binary identities—or meet other criteria related to their

gender identity or expression. Additionally, respondents were asked if they had already completed this survey before. Respondents who indicated that they had completed the survey before were also ineligible to take the survey. Skip logic was added to the survey to send respondents who did not meet these basic eligibility criteria to a disqualification page, but their responses were included in the initial dataset and had to be removed. Additional analyses of the dataset were completed to remove ineligible respondents. Respondents who provided a month and year of birth that indicated they were under 18 at the time they took the survey were flagged and removed from the dataset. Additional analyses of responses related to gender identity and transition status in Sections 1 and 2 of the survey were completed to flag additional ineligible respondents, which included those who did not identify as transgender or with a range of other gender-related experiences associated with transgender communities. Please see the “Variable Recoding Process” section below for a more detailed description of this process. In all, 10,304 responses were removed from the initial dataset due to being ineligible to take the survey.

Incomplete responses were then removed from the sample based on a requirement that respondents minimally complete Section 1 and specific demographic questions in Section 2 of the questionnaire. Missing data was otherwise allowed provided respondents completed these questions. The required Section 2 questions were as follows: 2.1, 2.3, 2.6, 2.8, 2.9, either 2.13 or 2.14, 2.15, 2.18, 2.19, 2.22, 2.23, and 2.26. It was determined that these questions would provide key information about respondents, including questions used to determine eligibility, and these questions were used to set a minimal level of survey “completeness” the research team was willing to accept for a respondent to remain in the dataset. In all 515 respondents were removed for incomplete survey responses.

Duplicate survey responses were then flagged and removed. Duplicates were determined based on all quantitative responses in the survey. Qualitative (“write-in”) responses were not considered when determining whether a response was a duplicate. In all, 329 responses were considered duplicates and were removed from the final dataset.

Finally, respondents who provided more than one illogical response were flagged and removed from the final dataset. An illogical response is one that provides information that contradicts other information provided by a respondent. For instance, the USTS survey included 16 questions related to respondents’ age, including current age, age they first disclosed to others they are transgender, age of suicide attempts, and ages of other milestones or experiences. An example of an illogical response would be a respondent who reported they attempted suicide at an age older than their current age. An illogical response could be due to an accidental miscode on the part of the respondent, meaning they accidentally filled out a question incorrectly, or could be evidence that a respondent is not taking the survey in earnest. The research team considered a respondent having more than one illogical response as evidence that the respondent may not have been taking the survey in earnest. In all, 53 respondents had more than one illogical response and were removed from the final dataset.¹

Total initial sample:	38,916
Total cases removed:	11,201
Did not consent to take survey	223
Not eligible: under 18 years of age	6,168
Not eligible: had already taken survey	1,072
Not eligible: did not live in U.S., territory, or military base	1,052
Not eligible: gender identity or expression did not meet minimum criteria	1,789
Duplicate responses	329
Incomplete responses	515
Illogical responses	53
Final sample:	27,715

Missing Data and Imputation

When a dataset has substantial amounts of missing data, such as over 5% missing data, researchers should consider techniques to impute the missing data.² The research team conducted an analysis to determine whether missing data should be imputed in the USTS dataset. The percentage of missing data due to item non-response (not including intentionally missing data due to skip logic) on any original quantitative variable (not including recoded variables or “write-in” variables) was less than 5%, with the exception of two variables. Question 14.4 regarding the month of respondents’ last HIV test had 5.9% missing data (Q. 14.4: “Not including blood donations, in what month was your last HIV test?”). This item may have had relatively higher item non-response because respondents may have been more likely to recall the year of their last HIV test, which was also requested in Q. 14.4, than the month. Question 7.11 regarding respondents’ sources of income had 6.2% missing data (Q. 7.11: “What are your current sources of income?”). This may reflect a general reluctance to provide financial information that is routinely found in item non-response to income-related questions in population-based surveys. The research team determined that due to the low amount of missing data, including minimal missing data on questions that routinely have high item non-response in population-based surveys (e.g., individual and household income), missing data imputation was not necessary for this report. Future researchers are encouraged to investigate the impact of data imputation when using this dataset.

Variable Recoding Process

The initial final dataset contained 1,140 unique variables based on 324 items respondents could have received in the survey. Most of these variables required quantitative or qualitative recoding for use in the study. Quantitative recodes, such as for creating variables to reflect how “out” a respondent was about their transgender identity, were completed by one primary researcher and the syntax for that recode was reviewed by another researcher. Any errors in the syntax that were found in the review were submitted to the primary researcher in order to make corrections. The primary researcher completed any corrections and the variable was then considered a final recode. In all, the research team produced over 2,000 recodes used to generate the findings presented in this report.

Respondents to the survey had many opportunities to write in responses to questions by selecting an answer such as “none of the above” and writing in a unique response or responding to an open-ended question. The research team reviewed approximately 80,000 write-in responses for recoding. The recoding process included two coding teams that conducted initial coding, which was reviewed by another coding team and areas of disagreement were flagged. A simple percent agreement score was calculated to assess inter-rater reliability. For nearly all variables that were recoded, the coding team and the review team had 90% or higher agreement, two variables had agreement between 80% and 90%, and three fell below 80% agreement (Q. 1.7 (79%), Q. 9.3 (67%), and Q. 21.11 (70%)).

In the case of a question with write-in responses where only one answer option was allowed, write-in responses were reviewed to see if they could be recoded into existing answer options. If

substantial numbers of respondents wrote in the same response, a new answer option could be added to the question to reflect those responses. If it was not feasible for a response to be recoded into an existing answer option or to be combined with others to create a new answer option, the response remained in the “none of the above” category as a unique response. In the case of a question that allowed multiple choices, a similar process took place. However, if a substantial number of responses could be grouped into a new answer option and a new variable was created to describe those responses, those respondents also remained in the “none of the above” category. Therefore, new answer options based on write-in questions that allowed multiple answer choices should be viewed as a subset of the “none of the above” category.

A different recoding process was established in order to recode respondents into four gender identity categories: transgender women, transgender men, non-binary people, and crossdressers. To categorize respondents based on gender identity, the research team relied on respondents' self-selected gender category in Q. 2.3, which was cross-tabulated with Q. 2.1 to identify transgender men and transgender women. For instance, the researchers would categorize someone assigned female at birth in Q. 2.1 who identifies as a man in Q. 2.3 as a transgender man and would categorize someone assigned male at birth in Q. 2.1 who identifies as a woman in Q. 2.3 as a transgender woman. In a few cases (n=439), a respondent selected female in Q. 2.1 and woman in Q. 2.3 or selected male in Q. 2.1 and man in Q. 2.3. These respondents required additional analysis of their survey responses in order to determine if they met the eligibility criteria for the survey, and if so, to categorize them as transgender men, transgender women, non-binary people, or crossdressers. The research team relied on questions in Sections 1, 2, and 12 to help make these determinations. Members

of the research team completed initial recoding of these respondents to indicate whether they were eligible for the survey, and if so, in which of these categories they should be included. These initial recodes were reviewed by other members of the research team. When initial recoders and reviewers were not in agreement on a recode, the team met to discuss the disagreements and made a final decision on the recode as a group. In all, 250 respondents were determined to be ineligible for the survey based on this recoding and review process and were removed from the final dataset.

Weights

The USTS sample was a purposive sample that was created using direct outreach, modified venue-based sampling, and “snowball” sampling. As a non-probability sample, generalizability is limited, meaning it is unclear whether the findings presented in this report would hold true for the transgender population of the U.S. as a whole. In addition, prior research has found that online surveys have a known bias, particularly in regard to demographic representation. Online samples tend to over-represent those who are white, young, more highly educated, and with higher incomes.³ In order to address these biases, at least in part, the research team created and utilized weights to adjust the USTS sample in certain ways in order to better represent what is believed to be the actual population characteristics of transgender people in the U.S. and in order to make more accurate comparisons with population-based samples of the U.S. population.

Prior research using probability samples of transgender adults have found that transgender adults differ from the general population in regard to race and ethnicity and age, with those that identify as transgender being more likely to be people of color and younger than the general

population.⁴ Studies have found no difference in educational attainment or lower educational attainment and have found lower incomes among transgender people as compared to non-transgender people.⁵ The USTS sample has a higher percentage of white, young, and more highly educated respondents than the U.S. general population, which may be due, at least in part, to internet survey bias. However, the younger age is also likely due to the transgender population being younger overall. The USTS sample also has higher incidence of low incomes as compared to the U.S. population, which goes against the typical internet survey bias. Based on the existing research about the transgender population, there is not adequate information available to attempt to correct for bias in the sample based on age, educational attainment, or income. However, there is sufficient evidence to indicate that the race and ethnicity of the USTS sample does not reflect the racial and ethnic makeup of the U.S. transgender population as a whole.

“Weighting” is a common statistical technique used to adjust data drawn from a sample of a population to be more representative of the population from which the sample was drawn. For example, in a survey sample of the U.S. population, the proportion of respondents aged 18–24 may differ from the proportion of that age group in the U.S. population as a whole, in which case weights are commonly applied to adjust the sample to be more representative of the U.S. population. To help correct for sampling bias in the USTS sample in regard to race and ethnicity, U.S. population weights based on the American Community Survey for race and ethnicity were created as part of the standard weight applied to all findings in this report. While this may still over-represent white respondents relative to the makeup of the transgender adult population, this weighting procedure brings the sample closer to what is believed to be the true population distribution for race and ethnicity for

transgender people in the U.S. The standard weight also includes an adjustment to the 18-year-old category, described in more detail below. Additional survey weights were created for the purposes of comparability with federal government and national data sources, including weights for age and educational attainment.⁶ These weights were applied in addition to the standard weight when comparing the USTS sample to the U.S. population for items that are sensitive to age and educational attainment, such as individual and household income, and are noted accordingly as the “supplemental weight.” Weighted percentages for these and other variables can be found in the *Portrait of USTS Respondents* chapter. Unweighted frequencies and percentages for these and other variables can be found in *Appendix A (Characteristics of the Sample)*.

In addition to the potential biases described above, the USTS had a high volume of respondents who indicated that their age was 18 years old, and respondents who, based on their birth date, were 17 years old.⁷ It was suspected that the increased binning of 18-year-olds may be attributable to multiple factors, including a higher prevalence of respondents who were younger than 18 at the time of the survey. This resulted in 18-year-olds comprising 9% of the sample, compared to 19-year-olds comprising 6% of the sample. It is impossible to determine the source of this binning entirely, but in order to correct for it, the research team created a weight to adjust the 18-year-olds in the sample so that respondents reporting that age appeared more like the 19-year-old respondents in both sample size and other demographics. The rationale behind this adjustment is that a person’s year of birth is likely randomly distributed around the date in which they took the survey. This would imply that the composition of 18-year-olds should strongly match the composition of 19-year-olds.

A sample matching and weighting procedure was used to balance the composition of 18-year-old respondents to 19-year-old respondents. This process is done by using the Covariate Balance Propensity Score (CBPS), which treats the 18-year-olds as a “treatment group” and 19-year-olds as a baseline “control group.”⁸ The estimation procedure then tries to achieve balance on covariates used in the model while simultaneously accounting for the conditional probability of being in one group over the other. The former process reduces observable differences among 18-year-olds to make their demographic composition reflect 19-year-olds.⁹ The latter process weights the data such that the two groups are of equivalent size. After weighting, the size of the 18-year-old sample comprises 6%, which is the same as the 19-year-old sample. Any observed demographic differences between 18- and 19-year-olds were minimized, and many failed to reach statistical significance.

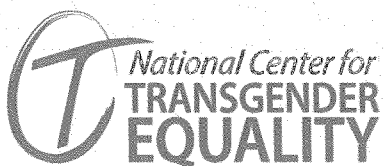
The goal of this weighting process is to up-weight respondents who are most likely 18 years old by making them observationally equivalent to the age cohort closest to them (i.e., 19-year-olds) and to down-weight respondents who are less likely to actually be 18 years old. This way, if respondents who were binned at 18 years of age are really younger than 18 years of age, it would be expected that their responses would diverge from 19-year-olds as that age gap increases.¹⁰ The weighting process down-weights 18-year-old respondents as they diverge from 19-year-olds, minimizing the influence of that group on findings. This adjustment for 18-year-olds was included in the standard survey weight applied to all findings in this report.

ENDNOTES | APPENDIX C

- 1 Respondents sometimes provided responses that seemed unlikely, for instance running away from home at a very young age, such as two years old. These types of responses were only considered to be illogical responses if they contradicted other responses. In the case of responses that were considered unlikely, they were allowed to remain in the dataset. These outliers were negligible in the overall findings in that only a handful of outliers are found in any given variable and, therefore, they do not skew the findings. Findings based on age and other variables are often presented in ranges, which also helps to mitigate any influence of outliers.
- 2 Dong, Y. & Pang, C. Y. J. (2013). Principled missing data methods for researchers. *SpringerPlus*, 2, 222.
- 3 Online survey bias is related to demographic differences in internet access. See e.g., Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (4th ed.). Hoboken, NJ: John Wiley & Sons; Smith, A. (2014). *African Americans and Technology Use: A Demographic Portrait*. DC: The Pew Research Center; Herman, J. L. & Hess, D. R. (2009). *Internet Access and Voter Registration*. DC: Project Vote.
- 4 See e.g., Flores, A. R., Brown, T. N. T., & Herman, J. L. (2016). *Race and Ethnicity of Adults who Identify as Transgender in the United States*. Los Angeles, CA: Williams Institute; Conron, K. J., Scott, G., Stowell, G. S., & Landers, S. J. (2012). Transgender health in Massachusetts: Results from a household probability sample of adults. *American Journal of Public Health*, 102(1), 118–122; Meyer, I. H., Brown, T. N. T., Herman, J. L., Reisner, S. L., & Bockting, W. O. (in press). Demographic characteristics and health outcomes among transgender adults in select regions in the Behavioral Risk Factor Surveillance System. *American Journal of Public Health*. (accepted); Harris, B.C. (2015). *Likely Transgender Individuals in U.S. Federal Administrative Records and the 2010 Census*, Working Paper #2015-03. DC: Center for Administrative Records Research and Applications Working Papers. Available at: https://www.census.gov/srd/carra/15_03_Likely_Transgender_Individuals_in_ARs_and_2010Census.pdf.
- 5 See note 4.
- 6 The weights for race, age, and educational attainment were created based on the Census Bureau's 2014 American Community Survey (ACS).
- 7 Respondents who are younger than 18 were removed from the final dataset and, therefore, are excluded from all reporting because they were not eligible to participate in the study.
- 8 Imai, K. & Ratkovic, M. (2014). Covariate balancing propensity score. *Journal of the Royal Statistical Society, Series B*, 76(1), 243–263.
- 9 Variables used for covariate balance were based on the following questions: Q. 1.4; Q. 1.10; Q. 1.11; Q. 1.12; Q. 1.14; Q. 1.16; Q. 1.17; Q. 1.18; Q. 2.1; Q. 2.3; Q. 2.4; Q. 2.5; Q. 2.6; Q. 2.7; Q. 2.9; Q. 2.16; Q. 2.17; Q. 2.18; Q. 2.19; Q. 2.22; Q. 2.23; Q. 3.1; Q. 3.2; Q. 3.3; Q. 4.1; Q. 4.3; Q. 4.5; Q. 6.1; Q. 7.7; Q. 7.12; Q. 7.13; Q. 7.14; Q. 10.1; Q. 11.1; Q. 11.2; Q. 12.1; Q. 12.8; Q. 12.12; Q. 12.20; Q. 13.1; Q. 14.1; Q. 15.2; Q. 15.9; Q. 16.3; Q. 16.8; Q. 17.1; Q. 17.2; Q. 17.4; Q. 17.5; Q. 17.6; Q. 17.3; Q. 17.9; Q. 18.1; Q. 18.3; Q. 19.1; Q. 20.1; Q. 20.2; Q. 20.7; Q. 21.1; Q. 21.2; Q. 21.7; Q. 23.1; Q. 23.2; Q. 26.1; Q. 26.6; Q. 27.1; Q. 28.1; Q. 28.2; Q. 29.1; Q. 29.2; Q. 30.4; and Q. 30.6.
- 10 Prior to weighing, the demographic characteristics of 18-year-olds were more similar to respondents who were identified as being 17 years of age and had less similarity to 19-year-olds. After weighting, there are many more similarities between 18- and 19-year-olds and far less commonality with 17-year-olds.

THE REPORT OF THE

2015 U.S.
TRANSGENDER
SURVEY



1400 16th St. N.W., Suite 510, Washington, D.C. 20036
202-642-4542 | ncte@transequality.org
ustranssurvey.org | transequality.org

Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N)

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Decision Summary

Currently, the local Medicare Administrative Contractors (MACs) determine coverage of gender reassignment surgery on a case-by-case basis. We received a complete, formal request to make a national coverage determination on surgical remedies for gender identity disorder (GID), now known as gender dysphoria. The Centers for Medicare & Medicaid Services (CMS) is not issuing a National Coverage Determination (NCD) at this time on gender reassignment surgery for Medicare beneficiaries with gender dysphoria because the clinical evidence is inconclusive for the Medicare population.

In the absence of a NCD, coverage determinations for gender reassignment surgery, under section 1862(a)(1)(A) of the Social Security Act (the Act) and any other relevant statutory requirements, will continue to be made by the local MACs on a case-by-case basis. To clarify further, the result of this decision is not national non-coverage rather it is that no national policy will be put in place for the Medicare program. In the absence of a national policy, MACs will make the determination of whether or not to cover gender reassignment surgery based on whether gender reassignment surgery is reasonable and necessary for the individual beneficiary after considering the individual's specific circumstances. For Medicare beneficiaries enrolled in Medicare Advantage (MA) plans, the initial determination of whether or not surgery is reasonable and necessary will be made by the MA plans.

Consistent with the request CMS received, the focus of this National Coverage Analysis (NCA) was gender reassignment surgery. Specific types of surgeries were not individually assessed. We did not analyze the clinical evidence for counseling or hormone therapy treatments for gender dysphoria. As requested by several public commenters, we have modified our final decision memorandum to remove language that was beyond the scope of the specific request. We are not making a national coverage determination related to counseling, hormone therapy treatments, or any other potential treatment for gender dysphoria.

While we are not issuing a NCD, CMS encourages robust clinical studies that will fill the evidence gaps and help inform which patients are most likely to achieve improved health outcomes with gender reassignment surgery, which types of surgery are most appropriate, and what types of physician criteria and care setting(s) are needed to ensure that patients achieve improved health outcomes.

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Decision Memo

To: Administrative File: CAG #00446N

From: Tamara Syrek Jensen, JD
Director, Coverage and Analysis Group

Joseph Chin, MD, MS
Deputy Director, Coverage and Analysis Group

James Rollins, MD, PhD
Director, Division of Items and Devices

Elizabeth Koller, MD
Lead Medical Officer

Linda Gousis, JD
Lead Analyst

Katherine Szarama, PhD
Analyst

Subject: Final Decision Memorandum on Gender Reassignment Surgery for Medicare Beneficiaries with Gender Dysphoria

Date: August 30, 2016

I. Decision

Currently, the local Medicare Administrative Contractors (MACs) determine coverage of gender reassignment surgery on a case-by-case basis. We received a complete, formal request to make a national coverage determination on surgical remedies for gender identity disorder (GID), now known as gender dysphoria. The Centers for Medicare & Medicaid Services (CMS) is not issuing a National Coverage Determination (NCD) at this time on gender reassignment surgery for Medicare beneficiaries with gender dysphoria because the clinical evidence is inconclusive for the Medicare population.

In the absence of a NCD, coverage determinations for gender reassignment surgery, under section 1862(a)(1)(A) of the Social Security Act (the Act) and any other relevant statutory requirements, will continue to be made by the local MACs on a case-by-case basis. To clarify further, the result of this decision is not national non-coverage rather it is that no national policy will be put in place for the Medicare program. In the absence of a national policy, MACs will make the determination of whether or not to cover gender reassignment surgery based on whether gender reassignment surgery is reasonable and necessary for the individual beneficiary after considering the individual's specific circumstances. For Medicare beneficiaries enrolled in Medicare Advantage (MA) plans, the initial determination of whether or not surgery is reasonable and necessary will be made by the MA plans.

Consistent with the request CMS received, the focus of this National Coverage Analysis (NCA) was gender reassignment surgery. Specific types of surgeries were not individually assessed. We did not analyze the clinical evidence for counseling or hormone therapy treatments for gender dysphoria. As requested by several public commenters, we have modified our final decision memorandum to remove language that was beyond the scope of the specific request. We are not making a national coverage determination related to counseling, hormone therapy treatments, or any other potential treatment for gender dysphoria.

While we are not issuing a NCD, CMS encourages robust clinical studies that will fill the evidence gaps and help inform which patients are most likely to achieve improved health outcomes with gender reassignment surgery, which types of surgery are most appropriate, and what types of physician criteria and care setting(s) are needed to ensure that patients achieve improved health outcomes.

II. Background

Below is a list of acronyms used throughout this document.

AHRQ - Agency for Healthcare Research and Quality
AIDS - Acquired Immune Deficiency Syndrome
ANOVA - Analysis of Variance
APA - American Psychiatric Association
APGAR - Adaptability, Partnership Growth, Affection, and Resolve test
BIQ - Body Image Questionnaire
BSRI - Bem Sex Role Inventory
CCEI - Crown Crisps Experimental Index
CDC - Centers for Disease Control
CHIS - California Health Interview Survey
CI - Confidence Interval
CMS - Centers for Medicare & Medicaid Services
DAB - Departmental Appeals Board
DSM - Diagnostic and Statistical Manual of Mental Disorders
EMBASE - Excerpta Medica dataBASE
FBek - Fragebogen zur Beurteilung des eigenen Körpers
FDA - Food and Drug Administration
FPI-R - Freiburg Personality Inventory
FSFI - Female Sexual Function Index
GAF - Global Assessment of Functioning
GID - Gender Identity Disorder
GIS - Gender Identity Trait Scale
GRS - Gender Reassignment Surgery
GSI - Global Severity Indices
HADS - Hospital Anxiety Depression Scale
HHS - U.S. Department of Health and Human Services
HIV - Human Immunodeficiency Virus
IIP - Inventory of Interpersonal Problems
IOM - Institute of Medicine
KHQ - King's Health Questionnaire
LGB - Lesbian, Gay, and Bisexual
LGBT - Lesbian, Gay, Bisexual, and Transgender
MAC - Medicare Administrative Contractor
MMPI - Minnesota Multiphasic Personality Inventory
NCA - National Coverage Analysis
NCD - National Coverage Determination
NICE - National Institute for Health Care Excellence
NIH - National Institutes of Health
NZHTA - New Zealand Health Technology Assessment
PIT - Psychological Integration of Trans-sexuals
QOL - Quality of Life
S.D. - Standard Deviation
SADS - Social Anxiety Depression Scale
SCL-90R - Symptom Check List 90-Revised
SDPE - Scale for Depersonalization Experiences
SES - Self Esteem Scale

SF - Short Form

SMR - Standardized Mortality Ratio SOC – Standards of Care

STAI-X1 - Spielberger State and Trait Anxiety Questionnaire

STAI-X2 - Spielberger State and Trait Anxiety Questionnaire

TSCS - Tennessee Self-Concept Scale

U.S. - United States

VAS - Visual Analog Scale

WHOQOL-BREF - World Health Organization Quality of Life - Abbreviated version of the WHOQOL-100

WPATH - World Professional Association for Transgender Health

A. Diagnostic Criteria

The criteria for gender dysphoria or spectrum of related conditions as defined by the American Psychiatric Association (APA) in the Diagnostic and Statistical Manual of Mental Disorders (DSM) has changed over time (See Appendix A).

Gender dysphoria (previously known as gender identity disorder) is a classification used to describe persons who experience significant discontent with their biological sex and/or gender assigned at birth. Although there are other therapeutic options for gender dysphoria, consistent with the NCA request, this decision only focuses on gender reassignment surgery.

B. Prevalence of Transgender Individuals

For estimates of transgender individuals in the U.S., we looked at several studies.

The Massachusetts Behavior Risk Factor Surveillance Survey (via telephone) (2007 and 2009) identified 0.5% individuals as transgender (Conron et al., 2012).

Derivative data obtained from the 2004 California Lesbian Gay Bisexual and Transgender (LGBT) Tobacco Survey (via telephone) and the 2009 California Health Interview Survey (CHIS) (via telephone) suggested the LGB population constitutes 3.2% of the California population and that transgender subjects constitute approximately 2% of the California LGBT population and 0.06% of the overall California population (Bye et al., 2005; CHIS 2009; Gates, 2011).

Most recently, the Williams Institute published a report that utilized data from the Centers for Disease Control's (CDC) Behavioral Risk Factor Surveillance System (BRFSS). Overall, they found that 0.6% or 1.4 million U.S. adults identify as transgender. The report further estimated 0.7% of adults between the ages of 18-25 identify as transgender, 0.6% of adults between the ages of 25-65 identify as transgender, and 0.5% of adults age 65 or older identify as transgender (Flores et al., 2016).

In a recent review of Medicare claims data, CMS estimated that in calendar year 2013 there were at least 4,098 transgender beneficiaries (less than 1% of the Medicare population) who utilized services paid for by Medicare, of which 90% had confirmatory diagnosis, billing codes, or evidence of a hormone therapy prescription. The Medicare transgender population is racially and ethnically diverse (e.g., 74% White, 15% African American) and spans the entire country. Nearly 80% of transgender beneficiaries are under age 65, including approximately 23% ages 45-54. (CMS Office of Minority Health 2015).

For international comparison purposes, recent estimates of transgender populations in other countries are similar to those in the United States. New Zealand researchers, using passport data, reported a prevalence of 0.0275% for male-to-female adults and 0.0044% female-to-male adults (6:1 ratio) (Veale, 2008). Researchers from a centers of transgender treatment and reassignment surgery in Belgium conducted a survey of regional plastic surgeons and reported a prevalence of 0.008% male-to-female and 0.003% female-to-male (ratio 2.7:1) surgically reassigned transsexuals in Belgium (De Cuyper et al., 2007). Swedish researchers, using national mandatory reporting data on those requesting reassignment surgery, reported secular changes over time in that the number of completed reassignment surgeries per application increased markedly in the 1990s; the male-to-female/female-to-male sex ratio changed from 1:1 to 2:1; the age of male-to-female and female-to-male applicants was initially similar, but increased by eight years for male-to-female applicants; and the proportion of foreign born applicants increased (Olsson and Moller 2003).

III. History of Medicare Coverage

Date	Action
August 1, 1989	CMS published the initial NCD, titled "140.3, Transsexual Surgery" in the Federal Register. (54 Fed. Reg. 34,555, 34,572)
May 30, 2014	The HHS Departmental Appeals Board (DAB) determined that the NCD denying coverage for all transsexual surgery was not valid. As a result, MACs determined coverage on a case-by-case basis.

CMS does not currently have a NCD on gender reassignment surgery.

A. Current Request

On December 3, 2015, CMS accepted a formal complete request from a beneficiary to initiate a NCA for gender reassignment surgery.

CMS opened this National Coverage Analysis (NCA) to thoroughly review the evidence to determine whether or not gender reassignment surgery may be covered nationally under the Medicare program.

B. Benefit Category

Medicare is a defined benefit program. For an item or service to be covered by the Medicare program, it must fall within one of the statutorily defined benefit categories as outlined in the Act. For gender reassignment surgery, the following are statutes are applicable to coverage:

Under §1812 (Scope of Part A) Under §1832 (Scope of Part B)
Under §1861(s) (Definition of Medical and Other Health Services)
Under §1861(s)(1) (Physicians' Services)

This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

IV. Timeline of Recent Activities

Timeline of Medicare Coverage Policy Actions for Gender Reassignment Surgery

Date	Action
December 3, 2015	CMS accepts an external request to open a NCD. A tracking sheet was posted on the web site and the initial 30 day public comment period commenced.
January 2, 2016	Initial comment period closed. CMS received 103 comments.
June 2, 2016	Proposed Decision Memorandum posted on the web site and the final 30 day public comment period commenced.
July 2, 2016	Final comment period closed. CMS received 45 comments.

V. FDA Status

Surgical procedures per se are not subject to the Food and Drug Administration's (FDA) approval.

Inflatable penile prosthetic devices, rigid penile implants, testicular prosthetic implants, and breast implants have been approved and/or cleared by the FDA.

VI. General Methodological Principles

In general, when making national coverage determinations, CMS evaluates relevant clinical evidence to determine whether or not the evidence is of sufficient quality to support a finding that an item or service is reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member. (§ 1862 (a)(1)(A)). The evidence may consist of external technology assessments, internal review of published and unpublished studies, recommendations from the Medicare Evidence Development & Coverage Advisory Committee (MEDCAC), evidence-based guidelines, professional society position statements, expert opinion, and public comments.

The overall objective for the critical appraisal of the evidence is to determine to what degree we are confident that: 1) specific clinical question relevant to the coverage request can be answered conclusively; and 2) the extent to which we are confident that the intervention will improve health outcomes for patients.

A detailed account of the methodological principles of study design the agency staff utilizes to assess the relevant literature on a therapeutic or diagnostic item or service for specific conditions can be found in Appendix B. In general, features of clinical studies that improve quality and decrease bias include the selection of a clinically relevant cohort, the consistent use of a single good reference standard, blinding of readers of the index test, and reference test results.

VII. Evidence

A. Introduction

Below is a summary of the evidence we considered during our review, primarily articles about clinical trials published in peer-reviewed medical journals. We also considered articles cited by the requestor, articles identified in public comments, as well as those found by a CMS literature review. Citations are detailed below.

B. Literature Search Methods

CMS staff extensively searched for primary studies for gender dysphoria. The emphasis focused less on specific surgical techniques and more on functional outcomes unless specific techniques altered those types of outcomes.

The reviewed evidence included articles obtained by searching literature databases and technology review databases from PubMed (1965 to current date), EMBASE, the Agency for Healthcare Research and Quality (AHRQ), the Blue Cross/Blue Shield Technology Evaluation Center, the Cochrane Collection, the Institute of Medicine, and the National Institute for Health and Care Excellence (NICE) as well as the source material for commentary, guidelines, and formal evidence-based documents published by professional societies. Systematic reviews were used to help locate some of the more obscure publications and abstracts.

Keywords used in the search included: Trans-sexual, transgender, gender identity disorder (syndrome), gender dysphoria and/or hormone therapy, gender surgery, genital surgery, gender reassignment (surgery), sex reassignment (surgery) and/or quality of life, satisfaction-regret, psychological function (diagnosis of mood disorders, psychopathology, personality disorders), suicide (attempts), mortality, and adverse events-reoperations. After the identification of germane publications, CMS also conducted searches on the specific psychometric instruments used by investigators.

Psychometric instruments are scientific tools used to measure individuals' mental capabilities and behavioral style. They are usually in the form of questionnaires that numerically capture responses. These tools are used to create a psychological profile that can address questions about a person's knowledge, abilities, attitudes and personality traits. In the evaluation of patients with gender dysphoria, it is important that both validity and reliability be assured in the construction of the tool (validity refers to how well the tool actually measures what it was designed to measure, or how well it reflects the reality it claims to represent, while reliability refers to how accurately results of the tool would be replicated in a second identical piece of research). Reliability and validity are important because when evaluating patients with gender dysphoria most of the variables of interest (e.g., satisfaction, anxiety, depression) are latent in nature (not directly observed but are rather inferred) and difficult to quantify objectively.

Studies with robust study designs and larger, defined patient populations assessed with objective endpoints or validated test instruments were given greater weight than small, pilot studies. Reduced consideration was given to studies that were underpowered for the assessment of differences or changes known to be clinically important. Studies with fewer than 30 patients were reviewed and delineated, but excluded from the major analytic framework. Oral presentations, unpublished white papers, and case reports were excluded. Publications in languages other than English were excluded. The CMS initial internal search for the proposed decision memorandum was limited to articles published prior to March 21, 2016. The CMS internal search for the final decision memorandum continued through articles published prior to July 22, 2016.

Included studies were limited to those with adult subjects. Review and discussion of the management of children and adolescents with the additional considerations of induced pubertal delay are outside the scope of this NCD. In cases where the same population was studied for multiple reasons or where the patient population was expanded over time, the latest and/or most germane sections of the publications were analyzed. The excluded duplicative publications are delineated.

CMS also searched Clinicaltrials.gov to identify relevant clinical trials. CMS looked at trial status including early

termination, completed, ongoing with sponsor update, and ongoing with estimated date of completion. Publications on completed trials were sought. For this final decision, CMS also reviewed all evidence submitted via public comment.

C. Discussion of Evidence

The development of an assessment in support of Medicare coverage determinations is based on the same general question for almost all national coverage analyses (NCAs): "Is the evidence sufficient to conclude that the application of the item or service under study will improve health outcomes for Medicare patients?" For this specific NCA, CMS is interested in answering the following question:

Is there sufficient evidence to conclude that gender reassignment surgery improves health outcomes for Medicare beneficiaries with gender dysphoria?

The evidence reviewed is directed towards answering this question.

1. Internal Technology Assessment

CMS conducted an extensive literature search on gender reassignment related surgical procedures and on facets of gender dysphoria that provide context for this analysis. The latter includes medical and environmental conditions.

CMS identified numerous publications related to gender reassignment surgery. A large number of these were case reports, case series with or without descriptive statistics, or studies with population sizes too small to conduct standard parametric statistical analyses. Others addressed issues of surgical technique.

CMS identified and described 36 publications on gender reassignment surgery that included health outcomes. Because the various investigators at a site sometimes conducted serial studies on ever-enlarging cohort populations, studied sub-populations, studied different outcomes, or used different tools to study the same outcomes, not all study populations were unique. To reduce bias from over-lapping populations, only the latest or most germane publication(s) were described. Subsumed publications were delineated.

Of these 36 publications, two publications used different assessment tools on the same population, and, so for the purposes of evaluation, were classified as one study (Udeze et al., 2008; Megeri and Khoosal, 2007). A total of 33 studies were reviewed (See Figure 1). Appendices C, D, and F include more detail of each study. The publications covered a time span from 1979 to 2015. Over half of the studies were published after 2005.

Figure 1. Studies of Gender Reassignment Surgery (GRS)

✕

ANOVA=Analysis of Variance Normative=Psychometric Tests with known normative for large populations

Figure 1 Legend: The studies in Figure 1 are categorized into three groups. The first group, depicted by the colored boxes (red, blue, and green), had explicit controls. There was a single randomized study. The remainder in the first group were observational studies. These were subdivided into longitudinal studies and cross-sectional studies. The second group, depicted by black boxes (starting with the surgery only population box) consisted of surgical series. The third group, depicted by black boxes (starting with mixed population), was composed of patients whose treatment could involve a variety of therapeutic interventions, but who were not stratified by that treatment.

When looking at the totality of studies, the 33 studies could be characterized by the following research design groups:

a. Observational, mixed population of surgical and non-surgical patients without stratification

Asscheman H, Giltay EJ, Megens JA, de Ronde WP, van Trotsenburg MA, Gooren LJ. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. Eur J Endocrinol. 2011 Apr;164(4):635-42. Epub 2011 Jan 25.

Asscheman et al. conducted a retrospective, non-blinded, observational study of mortality using a longitudinal design to assess a mixed population treated with hormones, as well as, reassignment surgery in comparison to a population-based cohort. The study was not designed to assess the specific impact of gender reassignment surgery on clinical outcomes:

The investigators assessed mortality in patients who (a) were from a single-center, unspecified, Dutch university specialty clinic, (b) had initiated cross-sex hormone treatment prior to July 1, 1997, and (c) had been followed (with or without continued hormone treatment) by the clinic for at least one year or had expired during the first year of treatment. The National Civil Record Registry (Gemeentelijke Basis Administratie) was used to identify/confirm deaths of clinic patients. Information on the types or hormones used was extracted from clinic records, and information on the causation of death was extracted from medical records or obtained from family physicians. Mortality data for the general population were obtained through the Central Bureau of Statistics of the Netherlands (Centraal Bureau voor Statistiek). Mortality data from Acquired Immune Deficiency Syndrome (AIDS) and substance abuse were extracted from selected Statistics Netherlands reports. The gender of the general Dutch population comparator group was the natal sex of the respective gender dysphoric patient groups.

A total of 1,331 patients who met the hormone treatment requirements were identified (365 female-to-male [27.4%]; 966 male-to-female [72.6%]; ratio 1:2.6). Of these, 1,177 (88.4%) underwent reassignment surgery (343 [94.0% of female-to-male entrants]; 834 [86.3% of male-to-female entrants]; ratio difference 1:2.4 with a p-value $p < 0.0001$). Later calculations did not distinguish between those with hormone therapy alone versus those with hormone therapy plus reassignment surgery. The mean age at the time of hormone initiation in female-to-male and male-to-female patients was 26.1 ± 7.6 (range 16–56) years and 31.4 ± 11.4 (range 16–76) years respectively, although the male-to-female subjects were relatively older ($p < 0.001$). The mean duration of hormone therapy in female-to-male and male-to-female patients was 18.8 ± 6.3 and 19.4 ± 7.7 years respectively.

There were a total of 134 deaths in the clinic population using hormone therapy with or without surgical reassignment. Of these patients, 12 (3.3%) of the 365 female-to-male patients and 122 (12.6%) of the 966 male-to-female patients died. All-cause mortality for this mixed population was 51% higher and statistically significant (Standardized Mortality Ratio [SMR] 95% confidence interval [CI] 1.47–1.55) for males-to-females when compared to males in the general Dutch population. The increase in all-cause mortality (12%) for females-to-males when compared to females in the general Dutch population was not statistically significant (95% CI 0.87–1.42).

Ischemic heart disease was a major disparate contributor to excess mortality in male-to-female patients but only in older patients ($n=18$, SMR 1.64 [95% CI 1.43–1.87]), mean age [range]: 59.7 [42–79] years. Current use of a particular type of estrogen, ethinyl estradiol, was found to contribute to death from myocardial infarction or stroke (Adjusted Hazard Ratio 3.12 [95% CI 1.28–7.63], $p=0.01$). There was a small, but statistically significant increase in lung cancer that was thought to possibly be related to higher rates of smoking in this cohort.

Other contributors to the mortality difference between male-to-female patients and the Dutch population at large were completed suicide ($n=17$, SMR 5.70 [95% CI 4.93–6.54]), AIDS ($n=16$, SMR 30.20 [95% CI 26.0–34.7]), and illicit drug use ($n=5$, SMR 13.20 [95% CI 9.70–17.6]). An additional major contributor was "unknown cause" ($n=21$, SMR 4.00 [95% CI 3.52–4.51]). Of the 17 male-to-female hormone treated patients who committed suicide, 13 (76.5%) had received prior psychiatric treatment and six (35.3%) had not undergone reassignment surgery because of concerns about mental health stability.

Overall mortality, and specifically breast cancer and cardiovascular disease, were not increased in the hormone-treated female-to-male patients. Asscheman et al. reported an elevated SMR for illicit drug use ($n=1$, SMR 25

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This study subsumes earlier publications on mortality (Asscheman et al. 1989 [n=425]; Van Kesteren et al. 1997 [n=816]).

Gómez-Gil E, Zubiaurre-Elorza L, Esteva I, Guillamon A, Godás T, Cruz Almaraz M, Halperin I, Salamero M. Hormone- treated transsexuals report less social distress, anxiety and depression. Psychoneuroendocrinology. 2012 May;37(5):662-70. Epub 2011 Sep 19.

Gómez-Gil et al. conducted a prospective, non-blinded observational study using a cross-sectional design and non-specific psychiatric distress tools in Spain. The investigators assessed anxiety and depression in patients with gender dysphoria who attended a single-center specialty clinic with comprehensive endocrine, psychological, psychiatric, and surgical care. The clinic employed World Professional Association for Transgender Health (WPATH) guidelines. Patients were required to have met diagnostic criteria during evaluations by 2 experts. Investigators used the Hospital Anxiety and Depression Scale (HADS) and the Social Anxiety and Distress Scale (SADS) instruments. The SADS total score ranges from 0 to 28, with higher scores indicative of more anxiety. English language normative values are 9.1 ± 8.0 . HAD-anxiety and HAD-depression total score ranges from 0 to 21, with higher scores indicative of more pathology. Scores less than 8 are normal. ANOVA was used to explore effects of hormone and surgical treatment.

Of the 200 consecutively selected patients recruited, 187 (93.5% of recruited) were included in the final study population. Of the final study population, 74 (39.6%) were female-to-male patients; 113 (60.4%) were male-to-female patients (ratio 1:1.5); and 120 (64.2%) were using hormones. Of those using hormones, 36 (30.0%) were female-to-male; 84 (70.0%) were male-to-female (ratio 1:2.3). The mean age was 29.87 ± 9.15 years (range 15-61). The current age of patients using hormones was 33.6 ± 9.1 years (n=120) and older than the age of patients without hormone treatment (25.9 ± 7.5) ($p=0.001$). The age at hormone initiation, however, was 24.6 ± 8.1 years.

Of those who had undergone reassignment surgery, 29 (36.7%) were female-to-male; 50 (63.3%) were male-to-female (ratio 1:1.7). The number of patients not on hormones and who had undergone at least one gender-related surgical procedure (genital or non-genital) was small (n=2). The number of female-to-male patients on hormones who had undergone such surgery (mastectomy, hysterectomy, and/or phalloplasty) was 28 (77.8%). The number of male-to-female patients on hormones who had undergone such surgery (mammoplasty, facial feminization, buttock feminization, vaginoplasty, orchiectomy, and/or vocal feminization (thyroid chondroplasty) was 49 (58.3%).

Analysis of the data revealed that although the mean scores HAD-Anxiety, HAD-Depression, and SADS were statistically lower (better) in those on hormone therapy than in those not on hormone therapy, the mean scores for HAD-Depression and SADS were in the normal range for gender dysphoric patients not using hormones. The HAD-Anxiety score was 9 in transsexuals without hormone treatment and 6.4 in transsexuals with hormone

treatment. The mean scores for HAD-Anxiety, HAD- Depression, and SADS were in the normal range for gender dysphoric patients using hormones. ANOVA revealed that results did not differ by whether the patient had undergone a gender related surgical procedure or not.

Gómez-Gil E, Zubiaurre-Elorza L, de Antonio I, Guillamon A, Salamero M. Determinants of quality of life in Spanish transsexuals attending a gender unit before genital sex reassignment surgery. Qual Life Res. 2014 Mar;23(2):669-76. Epub 2013 Aug 13.

Gómez-Gil et al. conducted a prospective, non-blinded observational study using a non-specific quality of life tool. There were no formal controls for this mixed population ± non-genital reassignment surgery undergoing various stages of treatment.

The investigators assessed quality of life in the context of culture in patients with gender dysphoria who were from a single-center (Barcelona, Spain), specialty and gender identity clinic. The clinic used WPATH guidelines. Patients were required to have met diagnostic criteria during evaluations by both a psychologist and psychiatrist. Patients could have undergone non-genital surgeries, but not genital reassignment surgeries (e.g., orchiectomy, vaginoplasty, or phalloplasty). The Spanish version of the World Health Organization Quality of Life-Abbreviated version of the WHOQOL-100 (WHOQOL- BREF) was used to evaluate quality of life, which has 4 domains (environmental, physical, psychological, and social) and 2 general questions. Family dynamics were assessed with the Spanish version of the Family Adaptability, Partnership Growth, Affection, and Resolve (APGAR) test. Regression analysis was used to explore effects of surgical treatment.

All consecutive patients presenting at the clinic (277) were recruited and, 260 (93.9%) agreed to participate. Of this number, 59 of these were excluded for incomplete questionnaires, 8 were excluded for prior genital reassignment surgery, and 193 were included in the study (the mean age of this group was 31.2±9.9 years (range 16-67). Of these, 74 (38.3%) were female-to-male patients; 119 (61.7%) were male-to-female patients (ratio1:1.6). Of these, 120 (62.2%) were on hormone therapy; 29 (39.2%) of female-to-male patients had undergone at least 1 non-genital, surgical procedure (hysterectomy n=19 (25.7%); mastectomy n=29 (39.2%)); 51 (42.9%) of male-to-female patients had undergone at least one non-genital surgical procedure with mammoplasty augmentation being the most common procedure, n=47 (39.5%), followed by facial feminization, n=11 (9.2%), buttocks feminization, n=9 (7.6%), and vocal feminization (thyroid chondroplasty), n=2 (1.7%).

WHOQOL-BREF domain scores for gender dysphoric patients with and without non-genital surgery were: "Environmental" 58.81±14.89 (range 12.50-96.88), "Physical" 63.51±17.79 (range 14.29-100), "Psychological" 56.09±16.27 (range 16.67- 56.09), "Social" 60.35±21.88 (range 8.33-100), and "Global QOL and Health" 55.44±27.18 (range 0-100 with higher score representing better QOL). The mean APGAR family score was 7.23±2.86 (range 0-10 with a score of 7 or greater indicative of family functionality).

Regression analysis, which was used to assess the relative importance of various factors to WHOQOL-BREF domains and general questions, revealed that family support was an important element for all four domains and

the general health and quality-of-life questions. Hormone therapy was an important element for the general questions and for all of the domains except "Environmental." Having undergone non-genital reassignment surgery, age, educational levels, and partnership status, did not impact domain and general question results related to quality of life.

Hepp U, Kraemer B, Schnyder U, Miller N, Delsignore A. Psychiatric comorbidity in gender identity disorder. J Psychosom Res. 2005 Mar;58(3):259-61.

Hepp et al. conducted a single-site (Zurich, Switzerland) prospective, non-blinded, observational study using a cross-sectional design. There was some acquisition of retrospective data. The investigators assessed current and lifetime psychiatry co-morbidity using structured interviews for diagnosis of Axis 1 disorders (clinical syndromes) and Axis 2 disorders (developmental or personality disorders) and HADS for dimensional evaluation of anxiety and depression. Statistical description of the cohort and intra-group comparisons was performed. Continuous variables were compared using t-tests and ANOVA.

A total of 31 patients with gender dysphoria participated in the study: 11 (35.5%) female-to-male; 20 (64.5%) male-to-female (ratio 1:1.8). The overall mean age was 32.2 ± 10.3 years. Of the participants, seven had undergone reassignment surgery, 10 pre-surgical patients had been prescribed hormone therapy, and 14 pre-surgical patients had not been prescribed hormone therapy. Forty five and one half percent of female-to-male and 20% of male-to-female patients did not carry a lifetime diagnosis of an Axis 1 condition. Sixty three and six tenths percent of female-to-male and 60% of male-to-female patients did not carry a current diagnosis of an Axis 1 condition. Lifetime diagnosis of substance abuse and mood disorder were more common in male-to-female patients (50% and 55% respectively) than female-to-male patients (36.4% and 27.3% respectively). Current diagnosis of substance abuse and mood disorder were present in male-to-female patients (15% and 20% respectively) and absent in female-to-male patients. One or more personality disorders were identified 41.9%, but whether this was a current or lifetime condition was not specified. Of the patients, five (16.1%) had a Cluster A personality disorder (paranoid-schizoid), seven (22.6%) had a Cluster B personality disorder (borderline, anti-social, histrionic, narcissistic), six (19.4%) had a Cluster C personality disorder (avoidant, dependent, obsessive-compulsive), and two (6.5%) were not otherwise classified.

HADS scores were missing for at least one person. The HADS test revealed non-pathologic results for depression (female-to-male: 6.64 ± 5.03 ; male-to-female: 6.58 ± 4.21) and borderline results for anxiety (female-to-male: 7.09 ± 5.11 ; male-to-female: 7.74 ± 6.13 , where a result of 7-10 = possible disorder). There were no differences by natal gender. The investigators reported a trend for less anxiety and depression as measured by HADS in the patients who had undergone surgery.

Johansson A, Sundbom E, Höjerback T, Bodlund O. A five-year follow-up study of Swedish adults with gender identity disorder. Arch Sex Behav. 2010 Dec;39(6):1429-37. Epub 2009 Oct 9.

Johansson et al. conducted a two center (Lund and Umeå, Sweden) non-blinded, observational study using a

semi-cross-sectional design (albeit over an extended time interval) using a self-designed tool and Axis V assessment. The study was prospective except for the acquisition of baseline Axis V data. There were no formal controls in this mixed population with and without surgery.

The investigators assessed satisfaction with the reassignment process, employment, partnership, sexual function, mental health, and global satisfaction in gender-reassigned persons from two disparate geographic regions. Surgical candidates were required to have met National Board of Health and Welfare criteria including initial and periodic psychiatric assessment, ≥ 1 year of real-life experience in preferred gender, and ≥ 1 year of subsequent hormone treatment. In addition, participants were required to have been approved for reassignment five or more years prior and/or to have completed surgical reassignment (e.g., sterilization, genital surgery) two or more years prior. The investigators employed semi-structured interviews covering a self-designed list of 55 pre-formulated questions with a three or five point ordinal scale. Clinician assessment of Global Assessment of Functioning (GAF; Axis V) was also conducted and compared to initial finding during the study. Changes or differences considered to be biologically significant were not pre-specified except for GAF, which pre-specified a difference to mean change ≥ 5 points. Statistical corrections for multiple comparisons were not included. There was no stratification by treatment.

Of the pool of 60 eligible patients, 42 (70.0% of eligible) (17 [40.5 %] female-to-male; 25 [59.5%] male-to-female; ratio 1:1.5) were available for follow-up. Of these, 32 (53.3% of eligible) (14 [43.8%] female-to-male; 18 [56.2%] male-to-female [ratio 1:1.3]) had completed genital gender reassignment surgery (not including one post mastectomy), five were still in the process of completing surgery, and five (one female-to-male; four male-to-female; ratio 1:4) had discontinued the surgical process prior to castration and genital surgery.

The age (ranges) of the patients at entry into the program, reassignment surgery, and follow-up were 27.8 (18-46), 31.4 (22- 49), and 38.9 (28-53) years in the female-to-male group respectively and 37.3 (21-60), 38.2 (22-57), and 46.0 (25.0-69.0) years in the male- to-female group respectively. The differences in age by cohort group were statistically significant. Of participants, 88.2% of all enrolled female-to-male versus 44.0% of all enrolled female-to-male patients had cross-gender identification in childhood (versus during or after puberty) ($p < 0.01$).

Although 95.2% of all enrolled patients self-reported improvement in GAF, in contrast, clinicians determined GAF improved in 61.9% of patients. Clinicians observed improvement in 47% of female-to-male patients and 72% of male-to- female patients. A ≥ 5 point improvement in the GAF score was present in 18 (42.9%). Of note, three of the five patients who were in the process of reassignment and five of the five who had discontinued the process were rated by clinicians as having improved.

Of all enrolled 95.2% (with and without surgery) reported satisfaction with the reassignment process. Of these 42 patients, 33 (79%) identified themselves by their preferred gender and nine (21%) identified themselves as transgender. None of these nine (eight male-to-female) had completed reassignment surgery because of ambivalence secondary to lack of acceptance by others and dissatisfaction with their appearance. Of the patients who underwent genital surgery ($n=32$) and mastectomy only ($n=one$), 22 (66.7%) were satisfied while four (three female-to-male) were dissatisfied with the surgical treatment.

Regarding relationships after surgery, 16 (38.1%) (41.2% of female- to-male; 36.0% of male-to-female patients) were reported to have a partner. Yet more than that number commented on partner relationships: (a) 62.2 % of the 37 who answered (50.0% of female- to- male; 69.6% of male-to-female patients) reported improved partner relationships (five [11.9%] declined to answer.); (b) 70.0% of the 40 who answered (75.0% of female-to-male; 66.7% of male-to-female patients) reported an improved sex life. Investigators observed that reported post-operative satisfaction with sex life was statistically more likely in those with early rather than late cross-gender identification. In addition 55.4% self-reported improved general health; 16.1% reported impaired general health; 11.9% were currently being treated with anti-depressants or tranquilizers.

This study subsumes earlier work by Bodlund et al. (1994, 1996). The nationwide mortality studies by Dhejne et al. (2011) may include all or part of this patient population.

Leinung M, Urizar M, Patel N, Sood S. Endocrine treatment of transsexual persons: extensive personal experience. Endocr Pract. 2013 Jul-Aug;19(4):644-50. (United States study)

Leinung et al. conducted a single-center (Albany, New York) a partially prospective, non-blinded, observational study using a cross-sectional design and descriptive statistics. There were no formal controls. The investigators assessed employment, substance abuse, psychiatric disease, mood disorders, Human Immunodeficiency Virus (HIV) status in patients who had met WPATH guidelines for therapy, and who had initiated cross-sex hormone treatment.

A total of 242 patients treated for gender identity disorder in the clinic from 1992 through 2009 inclusive were identified. The number of those presenting for therapy almost tripled over time. Of these patients, 50 (20.7%) were female-to-male; 192 (79.3%) male-to-female (ratio 1:3.8).

The age of female-to-male and male-to-female patients with gender dysphoria at the time of clinic presentation was 29.0 and 38.0 years respectively.

The female-to-male and male-to-female patients with gender dysphoria at the time of hormone initiation were young: 27.5 and 35.5 years old respectively ($p < 0.5$). Of the male-to-female cohort, 19 (7.8%) had received hormone therapy in the absence of physician supervision; Of the patient population, 91 (37.6%) had undergone gender-reassignment surgery (32 female-to-male [64.0% of all female-to- male; 35.2% of all surgical patients]; 59 male-to-female [30.7% of all male-to-female; 64.8% of all surgical patients]; ratio 1:1.8).

Psychiatric disease was more common in those who initiated hormone therapy at an older age (>32 years) 63.9% versus 48.9% at a younger age and by natal gender (48.0% of female-to-male; 58.3% male-to-female). Mood disorders were more common in those who initiated hormone therapy at an older age (>32 years) 52.1% versus 36.0% at a younger age and this finding did not differ by natal gender (40.0% of female-to-male; 44.8% male-to-female). The presence of mood disorders increased the time to reassignment surgery in male-to-female patients.

Motmans J, Meier P, Ponnet K, T'Sjoen G. Female and male transgender quality of life: socioeconomic and medical differences. J Sex Med. 2012 Mar;9(3):743-50. Epub 2011 Dec 21.

Motmans et al., conducted a prospective, non-blinded, observational study using a cross-sectional design and a non-specific quality of life tool. No concurrent controls were used in this study. Quality of life in this Dutch-speaking population was assessed using the Dutch version of a SF-36 (normative data was used). Participants included subjects who were living in accordance with the preferred gender and who were from a single Belgian university specialty clinic at Ghent. The Dutch version of the SF-36 questionnaire along with its normative data were used. Variables explored included employment, pension status, ability to work, being involved in a relationship. Also explored, was surgical reassignment surgery and the types of surgical interventions. Intragroup comparisons by transgender category were conducted, and the relationships between variables were assessed by analysis of variance (ANOVA) and correlations.

The age of the entire cohort (n=140) was 39.89±10.21 years (female-to-male: 37.03±8.51; male-to-female: 42.26±10.39). Results of the analysis revealed that not all female-to-male patients underwent surgical reassignment surgery and, of those who did, not all underwent complete surgical reassignment. The numbers of female-to-male surgical interventions were: mastectomy 55, hysterectomy 55, metaoidplasty eight (with five of these later having phalloplasty), phalloplasty 40, and implantation of a prosthetic erectile device 20. The frequencies of various male-to-female surgical interventions were: vaginoplasty 48, breast augmentation 39, thyroid cartilage reduction 17, facial feminization 14, and hair transplantation three.

The final number of subjects with SF-36 scores was 103 (49 [47.6%] female-to-male; 54 [52.4%] male-to-female; ratio 1:1.1). For this measure, the scores for the vitality and mental health domains for the final female-to-male cohort (n= 49 and not limited to those having undergone some element of reassignment surgery) were statistically lower: 60.61±18.16 versus 71.9±18.31 and 71.51±16.40 versus 79.3±16.4 respectively. Scores were not different from the normative data for Dutch women: vitality: 64.3±19.7 or mental health 73.7±18.2. None of the domains of the SF-36 for the final male-to-female cohort (n=54 and not limited to those having undergone some element of reassignment surgery) were statistically different from the normative data for Dutch women.

Analysis of variance indicated that quality of life as measured by the SF-36 did not differ by whether female-to-male patients had undergone genital surgery (metaoidoplasty or phalloplasty) or not. Also, ANOVA indicated that quality of life as measured by the SF-36 did not differ by whether male-to-female patients had undergone either breast augmentation or genital surgery (vaginoplasty) or not.

Newfield E, Hart S, Dibble S, Kohler L. Female-to-male transgender quality of life. Qual Life Res. 2006 Nov;15(9):1447-57. Epub 2006 Jun 7. (United States study)

Newfield et al. conducted a prospective, observational internet self-report survey of unknown blinding status using a cross-sectional design and a non-specific quality of life tool in a mixed population with and without hormone therapy and/or reassignment surgery. There were no formal controls.

The investigators recruited natal female participants identifying as male using email, internet bulletin boards, and flyers/postcards distributed in the San Francisco Bay Area. Reduction of duplicate entries by the same participant was limited to the use of a unique user name and password.

The investigators employed the Short-Form 36 (SF-36) Version 2 using U.S. normative data. They reported using both male and female normative data for the comparator SF-36 cohort. Data for the eight domains were expressed as normative scoring. The Bonferroni correction was used to adjust for the risk of a Type 1 error with analyses using multiple comparisons.

A total of 379 U.S. respondents classified themselves as males-or-females to males with or without therapeutic intervention. The mean age of the respondents who classified themselves as male or female-to-male was 32.6 ± 10.8 years. Of these 89% were Caucasian, 3.6% Latino, 1.8% African American, 1.8% Asian, and 3.8% other. Of these, 254 (67.0%) reported prior or current testosterone use while 242 (63.8%) reported current testosterone use. In addition, 136 (36.7%) reported having had "top" surgery and 11 (2.9%) reported having "bottom" surgery.

Complete SF-36 data were available for 376 U.S. respondents. For the complete, non-stratified U.S. cohort the Physical Summary Score (53.45 ± 9.42) was statistically higher (better) than the natal gender unspecified SF-36 normative score (50 ± 10) ($p < 0.001$), but was within one standard deviation of the normative mean. The Mental Summary Score (39.63 ± 12.2) was statistically lower (worse) than the natal gender unspecified SF-36 normative score (50 ± 10) ($p < 0.001$), but was well within two standard deviations of the normative mean. Subcomponents of this score: Mental Health (42.12 ± 10.2), Role Emotional (42.42 ± 11.6), Social Functioning (43.14 ± 10.9), and Vitality (46.22 ± 9.9) were statistically lower (worse) than the SF-36 normative sub-scores, but well within one standard deviation of the normative sub-score means. Interpretive information for these small biologic differences in a proprietary assessment tool was not provided.

Additional intragroup analyses were conducted, although the data were not stratified by type of therapeutic intervention (hormonal, as well as, surgical). Outcomes of hormone therapy were considered separately and dichotomously from reassignment surgery. The Mental Summary Score was statistically higher (better) in those who had "Ever Received Testosterone" (41.22 ± 11.9) than those with "No Testosterone Usage" (36.08 ± 12.6) ($p=0.001$). The Mental Summary Scores showed a trend towards statistical difference between those who "Ever Received Top Surgery" (41.21 ± 11.6) and those without "Top Surgery" (38.01 ± 12.5) ($p=0.067$). These differences were well within one standard deviation of the normative mean. Interpretive information for these small biologic differences in a proprietary assessment tool was not provided.

b. Observational, surgical series, without concurrent controls

Blanchard R, Steiner BW, Clemmensen LH. Gender dysphoria, gender reorientation, and the clinical management of transsexualism. J Consult Clin Psychol. 1985 Jun; 53(3):295-304.

Blanchard et al. conducted a single-center (Ontario, Canada), prospective, non-blinded, cross-sectional study using a self-designed questionnaire and a non-specific psychological symptom assessment with normative data. The investigators assessed social adjustment and psychopathology in patients with gender dysphoria and who were at least one year post gender reassignment surgery. Reassignment surgery was defined as either vaginoplasty or mastectomy/construction of male chest contour with or without nipple transplants, but did not preclude additional procedures. Partner preference was determined using Blanchard's Modified Androphilia-Gynephilia Index, and the nature and extent of any psychopathology was determined with the Symptom Check List 90-Revised (SCL-90R). Differences in test scores considered to be biologically significant were not pre-specified in the methods.

Of the 294 patients (111 natal females and 183 natal males, ratio: 1:1.65) initially evaluated, 263 were diagnosed with gender dysphoria. Of these 79 patients participated in the study (38 female-to-male; 32 male-to-female with male partner preference; 9 male-to-female with female partner preference). The respective mean ages for these 3 groups were 32.6, 33.2, and 47.7 years with the last group being older statistically ($p=0.01$).

Additional surgical procedures in female-to-male patients included: oophorectomy/hysterectomy (92.1%) and phalloplasty (7.9%). Additional surgical procedures in male-to-female patients with male partner preference included facial hair electrolysis 62.5% and breast implantation (53.1%). Additional procedures in male-to-female patients with female partner preference included facial hair electrolysis (100%) and breast implantation (33.3%). The time between reassignment surgery and questionnaire completion did not differ by group.

Psychopathology as measured by the Global Severity Index of the SCL-90R was absent in all three patient groups. Interpretation did not differ by the sex of the normative cohort.

Of participants, 63.2% of female-to-male patients cohabitated with partners of their natal gender; 46.9% of male-to-female patients with male partner preference cohabitated with partners of their natal gender; and no male-to-female patients with female partner preference cohabitated with partners of their natal gender.

Of participants, 93.7% reported that they would definitely undergo reassignment surgery again. The remaining 6.3% (one female-to-male; one male-to-female with male partner preference; three male-to-female with female partner preference) indicated that they probably would undertake the surgery again. Post hoc analysis suggested that the more ambivalent responders had more recently undergone surgery. Of responders, 98.7% indicated that they preferred life in the reassigned gender. The one ambivalent subject was a skilled and well compensated tradesperson who was unable to return to work in her male dominated occupation.

Eldh J, Berg A, Gustafsson M. Long-term follow up after sex reassignment surgery. Scand J Plast Reconstr Surg Hand Surg. 1997 Mar;31(1):39-45.

Eldh et al. conducted a non-blinded, observational study using a prospective cross-sectional design with an investigator designed questionnaire and retrospective acquisition of pre-operative data. The investigators assessed economic circumstances, family status, satisfaction with surgical results, and sexual function in patients who had undergone gender reassignment surgery.

Of the 175 patients who underwent reassignment surgery in Sweden, 90 responded. Of this number, 50 were female-to-male and 40 were male-to-female (ratio: 1:0.8). Patients reportedly were generally satisfied with the appearance of the reconstructed genitalia (no numbers provided). Of the patients who had undergone surgery prior to 1986, seven (14%) were dissatisfied with shape or size of the neo-phallus; eight (16%) declined comment. There were 14 (35%), with 12 having surgery prior to 1986 and two between 1986 and 1995 inclusive, were moderately satisfied because of insufficient vaginal volume; 8 (20%) declined comment. A neo-clitoris was not constructed until the later surgical cohort. Three of 33 reported no sensation or no sexual sensation. Eight had difficulties comprehending the question and did not respond.

A total of nine (18%) patients had doubts about their sexual orientation; 13 (26%) declined to answer the question. The study found that two female-to-male patients and two male-to-female patients regretted their reassignment surgery and continued to live as the natal gender, and two patients attempted suicide.

Hess J, Rossi Neto R, Panic L, Rübber H, Senf W. Satisfaction with male-to-female gender reassignment surgery. Dtsch Arztebl Int. 2014 Nov 21;111(47):795-801.

Hess et al. conducted a prospective, blinded, observational study using a cross-sectional design and a self-designed anonymous questionnaire. The investigators assessed post-operative satisfaction in male-to-female patients with gender dysphoria who were followed in a urology specialty clinic (Essen, Germany). Patients had met the ICD-10 diagnostic criteria, undergone gender reassignment surgeries including penile inversion vaginoplasty, and a Likert-style questionnaire with 11 elements. Descriptive statistics were provided.

There were 254 consecutive eligible patients who had undergone surgery between 2004 and 2010 identified and sent surveys, of whom 119 (46.9%) responded anonymously. Of the participants, 13 (10.9%) reported dissatisfaction with outward appearance and 16 (13.4%) did not respond; three (2.5%) reported dissatisfaction with surgical aesthetics and 25 (21.0%) did not respond; eight (6.7%) reported dissatisfaction with functional outcomes of the surgery and 26 (21.8%) did not respond; 16 (13.4%) reported they could not achieve orgasm and 28 (23.5%) did not respond; four (3.4%) reported feeling completely male/more male than female and 28 (23.5%) did not respond; six (5.0%) reported not feeling accepted as a woman, two (1.7%) did not understand the question, and 17 (14.3%) did not respond; and 16 (13.4%) reported that life was harder and 24 (20.2%) did not respond.

Lawrence A. Patient-reported complications and functional outcomes of male-to-female sex reassignment surgery. Arch Sex Behav. 2006 Dec;35(6):717-27. Epub 2006 Nov 16. (United States study)

Lawrence conducted a prospective, blinded observational study using a cross-sectional design and a partially self-designed quality of life tool using yes/no questions or Likert scales. The investigator assessed sexual function, urinary function, and other pre/post-operative complications in patients who underwent male-to-female gender reassignment surgery. Questions addressed core reassignment surgery (neo-vagina and sensate neo-clitoris) and related reassignment surgery (labiaplasty, urethral meatus revision, vaginal deepening/widening, and other procedures), use of electrolysis, and use of hormones.

Questionnaires were designed to be completed anonymously and mailed to 727 eligible patients. Of those eligible, 232 (32%) returned valid questionnaires. The age at the time reassignment surgery was 44 ± 9 (range 18-70) years and mean duration after surgery was 3 ± 1 (range 1-7) years.

Happiness with sexual function and the reassignment surgery was reported to be lower when permanent vaginal stenosis, clitoral necrosis, pain in the vagina or genitals, or other complications such as infection, bleeding, poor healing, other tissue loss, other tissue necrosis, urinary incontinence, and genital numbness were present. Quality of life was impaired when pain in the vagina or genitals was present.

Satisfaction with sexual function, gender reassignment surgery, and overall QOL was lower when genital sensation was impaired and when vaginal architecture and lubrication were perceived to be unsatisfactory. Intermittent regret regarding reassignment surgery was associated with vaginal hair and clitoral pain. Vaginal stenosis was associated with surgeries performed in the more distant past; whereas, more satisfaction with vaginal depth and width was present in more recent surgical treatment.

Salvador J, Massuda R, Andrezza T, Koff WJ, Silveira E, Kreische F, de Souza L, de Oliveira MH, Rosito T, Fernandes BS, Lobato MI. Minimum 2-year follow up of sex reassignment surgery in Brazilian male-to-female transsexuals. Psychiatry Clin Neurosci. 2012 Jun; 66(4):371-2. PMID: 22624747.

Salvador et al. conducted a single center (Port Alegre, Brazil) prospective, non-blinded, observational study using a cross-sectional design (albeit over an extended time interval) and a self-designed quality of life tool. The investigators assessed regret, sexual function, partnerships, and family relationships in patients who had undergone gender reassignment surgery at least 24 months prior.

Out of the 243 enrolled in the clinic over a 10 year interval, 82 underwent sex reassignment surgery. There were 69 participants with a minimum 2-year follow up, of whom 52 patients agreed to participate in the study. The age at follow-up was 36.3 ± 8.9 (range 15-58) years with the time to follow-up being 3.8 ± 1.7 (2-7) years. A total of 46 participants reported pleasurable neo-vaginal sex and post-surgical improvement in the quality of their sexual experience. The quality of sexual intercourse was rated as satisfactory to excellent, average, unsatisfactory, or not applicable in the absence of sexual contact by 84.6%, 9.6%, 1.9%, and 3.8% respectively. Of the participants, 78.8% reported greater ease in initiating and maintaining relationships; 65.4% reported having a partner; 67.3% reported increased frequency of intercourse; 36.8% reported improved familial relationships. No patient reported regret over reassignment surgery. The authors did not provide information about incomplete questionnaires.

Tsoi WF. Follow-up study of transsexuals after sex-reassignment surgery. Singapore Med J. 1993 Dec; 34(6):515-7.

Tsoi conducted a single-center (Singapore) prospective, non-blinded, observational study using a cross-sectional design and a self-designed quality of life tool. The investigator assessed overall life satisfaction, employment, partner status, and sexual function in gender-reassigned persons who had undergone gender reassignment surgery between 1972 and 1988 inclusive and who were approximately 2 to 5 years post-surgery. Acceptance criteria for surgery included good physical health, good mental health, absence of heterosexual tendencies, willingness to undergo hormonal therapy for ≥ 6 months, and willingness to function in the life of the desired gender for ≥ 6 months. Tsoi also undertook retrospective identification of variables that could predict outcomes.

The size of the pool of available patients was not identified. Of the 81 participants, 36 (44.4%) were female-to-male and 45 (55.6%) were male-to-female (ratio 1:1.25).

The mean ages at the time of the initial visit and operation were: female-to-male 25.4 ± 4.4 (range 14-36) and 27.4 ± 4.0 ; (range 14-36); male-to-female 22.9 ± 4.6 (range 14-36) and 24.7 ± 4.3 (14-36) years respectively. Of all participants, 14.8% were under age 20 at the time of the initial visit. All were at least 20 at the time of gender

reassignment surgery. The reported age of onset was 8.6 years for female-to-male patients and 8.7 years for male-to-female patients.

All participants reported dressing without difficulty in the reassigned gender; 95% of patients reported good or satisfactory adjustment in employment and income status; 72% reported good or satisfactory adjustment in relationships with partners. Although the quality of life tool was self-designed, 81% reported good or satisfactory adjustment to their new gender, and 63% reported good or acceptable satisfaction with sexual activity. Of the female-to-male patients, 39% reported good or acceptable satisfaction with sex organ function in comparison to 91% of male-to-female patients ($p < 0.001$). (The author reported that a fully functioning neo-phallus could not be constructed at the time.) The age of non-intercourse sexual activity was the only predictor of an improved outcome.

Weyers S, Elaut E, De Sutter P, Gerris J, T'Sjoen G, Heylens G, De Cuypere G, Verstraelen H. Long-term assessment of the physical, mental, and sexual health among transsexual women. J Sex Med. 2009 Mar;6(3):752-60. Epub 2008 Nov 17.

Weyers et al. (2009) conducted a prospective, non-blinded, observational study using a cross-sectional design and several measurement instruments including a non-specific quality of life tool and a semi-specific quality of life tool (using normative data) along with two self-designed tools.

The investigators assessed general quality of life, sexual function, and body image from the prior four weeks in Dutch-speaking male-to-female patients with gender dysphoria who attended a single-center (Ghent, Belgium), specialized, comprehensive care university clinic. Investigators used the Dutch version of the SF-36 and results were compared to normative data from Dutch women and U.S. women. The 19 items of the Dutch version of the Female Sexual Function Index (FSFI) were used to measure sexual desire, function, and satisfaction. A self-designed seven question visual analog scale (VAS) was used to measure satisfaction with gender related body traits and appearance perception by self and others. A self-designed survey measured a broad variety of questions regarding personal medical history, familial medical history, relationships, importance of sex, sexual orientation, gynecologic care, level of regret, and other health concerns. For this study, hormone levels were also obtained.

The study consisted of 50 (71.5% of the eligible recruits) participants. Analysis of the data revealed that the patient's average age was 43.1 ± 10.4 years, and all of the patients had vaginoplasty. This same population also had undergone additional feminization surgical procedures (breast augmentation 96.0%, facial feminization 36.0%, vocal cord surgery 40.0%, and cricoid cartilage reduction 30.0%). A total of two (4.0%) participants reported "sometimes" regretting reassignment surgery and 23 (46.0%) were not in a relationship. For the cohort, estradiol, testosterone, and sex hormone binding globulin levels were in the expected range for the reassigned gender. The SF-36 survey revealed that the subscale scores of the participants did not differ substantively from those of Dutch and U.S. women. VAS scores of body image were highest for self-image, appearance to others, breasts, and vulva/vagina (approximately 7 to 8 of 10). Scores were lowest for body hair, facial hair, and voice characteristics (approximately 6 to 7 of 10).

The total FSFI score was 16.95 ± 10.04 out of a maximal 36. The FSFI scores averaged 2.8 (6 point maximum): satisfaction 3.46 ± 1.57 , desire 3.12 ± 1.47 , arousal 2.95 ± 2.17 , lubrication 2.39 ± 2.29 , orgasm 2.82 ± 2.29 , and pain 2.21 ± 2.46 . Though these numbers were reported in the study, data on test population controls were not provided.

A post hoc exploration of the data suggested the following: perceived improvement in general health status was greater in the subset that had undergone reassignment surgery within the last year; sexual orientation impacted the likelihood of being in a relationship; SF-36 scores for vitality, social functioning, and mental health were nominally better for those in relationships, but that overall SF-36 scores did not differ by relationship status; sexual orientation and being in a relationship impacted FSFI scores; and reported sexual function was higher in those with higher satisfaction with regards to their appearance.

Wierckx K, Van Caenegem E, Elaut E, Dedecker D, Van de Peer F, Toye K, Weyers S, Hoebeke P, Monstrey S, De Cuypere G, T'Sjoen G. Quality of life and sexual health after sex reassignment surgery in transsexual men. J Sex Med. 2011 Dec;8 (12):3379-88. Epub 2011 Jun 23.

Wierckx et al. conducted a prospective, non-blinded, observational study using a cross-sectional design and several measurement instruments (a non-specific quality of life tool with reported normative data along with three self-designed tools). The investigators assessed general quality of life, sexual relationships, and surgical complications in Dutch-speaking female-to-male patients with gender dysphoria who attended a single-center, specialized, comprehensive care, university clinic (Ghent, Belgium). Investigators used the Dutch version of the SF-36 with 36 questions, eight subscales, and two domains evaluating physical and mental health. Results were compared to normative data from Dutch women and Dutch men. Self-designed questionnaires to evaluate aspects of medical history, sexual functioning (there were separate versions for those with and without partners), and surgical results were also used. The Likert-style format was used for many of the questions.

A total of 79 female-to-male patients with gender dysphoria had undergone reassignment surgery were recruited; ultimately, 47 (59.5%) chose to participate. Three additional patients were recruited by other patients. One of the 50 participants was later excluded for undergoing reassignment surgery within the one year window. The age of patients was: 30 ± 8.2 years (range 16 to 49) at the time of reassignment surgery and 37.1 ± 8.2 years (range 22 to 54) at the time of follow-up. The time since hysterectomy, oophorectomy, and mastectomy was 8 years (range 2 to 22). The patient population had undergone additional surgical procedures: metoidioplasty (n=9; 18.4%), phalloplasty (n=8 after metoidioplasty, 38 directly; 93.9% total), and implantation of erectile prosthetic device (n=32; 65.3%). All had started hormonal therapy at least two years prior to surgery and continued to use androgens.

The SF-36 survey was completed by 47 (95.9%) participants. The "Vitality" and the "Mental Health" scales were lower than the Dutch male population: 62.1 ± 20.7 versus 71.9 ± 18.3 and 72.6 ± 19.2 versus 79.3 ± 16.4 respectively. These subscale scores were equivalent to the mean scores of the Dutch women.

None of the participants were dissatisfied with their hysterectomy-oophorectomy procedures; 4.1% were dissatisfied with their mastectomies because of extensive scarring; and 2.2% were dissatisfied with their phalloplasties. Of the participants, 17.9% were dissatisfied with the implantation of an erectile prosthetic device; 25 (51.0%) reported at least one post-operative complication associated with phalloplasty (e.g., infection, urethrostenosis, or fistula formation); 16 (50.0% of the 32 with an erectile prosthetic device) reported at least one post-operative complication associated with implantation of an erectile prosthetic (e.g., infection, leakage, incorrect positioning, or lack of function).

A total of 18 (36.7%) participants were not in a relationship; 12.2% reported the inability to achieve orgasm with self-stimulation less than half the time; 12.2% did not respond to the question. Of those participants with partners, 28.5% reported the inability to achieve orgasm with intercourse less than half the time and 9.7% did not respond to this question. Also, 61.3% of those with partners reported (a) no sexual activities (19.4%) or (b) activities once or twice monthly (41.9%), and there were 12.9% who declined to answer.

c. Observational, surgical patients, cross-sectional, with controls

Ainsworth TA, Spiegel JH: Quality of life of individuals with and without facial feminization surgery or gender reassignment surgery. Qual Life Res. 2010 Sep;19(7):1019-24.

Ainsworth and Spiegel conducted a prospective, observational study using a cross-sectional design and a partially self-designed survey tool. The blind status is unknown. Treatment types served as the basis for controls.

The investigators, head and neck surgeons who provided facial feminization services, assessed perception of appearance and quality of life in male-to-female subjects with self-reported gender dysphoria. Patients could have received no therapeutic intervention, hormone therapy, reassignment surgery, and/or facial feminization surgery and an unrestricted length of transition. (Transition refers to the time when a transgender person begins to live as the gender with which they identify rather than the gender assigned at birth.) Criteria for the various types of interventions were not available because of the survey design of the study. Patients were recruited via website or at a 2007 health conference. Pre-specified controls to eliminate duplicate responders were not provided. The investigators employed a self-designed Likert-style facial feminization outcomes evaluation questionnaire and a "San Francisco 36" health questionnaire. No citations were provided for the latter. It appears to be the Short-form (SF) 36-version 2. Changes or differences considered to be biologically significant were not pre-specified. Power corrections for multiple comparisons were not provided.

The investigators reported that there were 247 participants. (The numbers of incomplete questionnaires was not reported.) Of the 247 participants, 25 (10.1%) received only primary sex trait reassignment surgery, 28 (11.3%) received facial surgery without primary sex trait reassignment surgery, 47 (19.0%) received both facial and primary sex trait reassignment surgery, and 147 (59.5%) received neither facial nor reassignment surgery.

The mean age for each of these cohorts was: 50 years (no standard deviation [S.D.]) only reassignment surgery, 51 years (no S.D.) only facial surgery, 49 years (no S.D.) both types of surgery, and 46 years (no S.D.) (neither surgery). Of the surgical cohorts: 100% of those who had undergone primary sex trait reassignment surgery alone used hormone therapy, 86% of those who had undergone facial feminization used hormone therapy, and 98% of those who had undergone both primary sex trait reassignment surgery and facial feminization used hormone therapy. In contrast to the surgical cohorts, 66% of the "no surgery" cohort used hormonal therapy, and a large proportion (27%) had been in transition for less than one year.

The investigators reported higher scores on the facial outcomes evaluation in those who had undergone facial feminization. Scores of the surgical cohorts for the presumptive SF-36 comprehensive mental health domain did not differ from the general U.S. female population. Scores of the "no surgery" cohort for the comprehensive mental health domain were statistically lower than those of the general U.S. female population, but within one standard deviation of the normative mean. Mean scores of all the gender dysphoric cohorts for the comprehensive physical domain were statistically higher than those of the general female U.S. population, but were well within one standard deviation of the normative mean. Analyses of inter-cohort differences for the SF-36 results were not conducted. Although the investigators commented on the potential disproportionate impact of hormone therapy on outcomes and differences in the time in "transition", they did not conduct any statistical analyses to correct for putative confounding variables.

Kraemer B, Delsignore A, Schnyder U, Hepp U. Body image and transsexualism. Psychopathology. 2008;41(2):96-100. Epub 2007 Nov 23.

Kraemer et al. conducted a single center (Zurich, Switzerland) prospective, non-blinded, observational study using a cross-sectional design comparing pre-and post- surgical cohorts. Patients were required to meet DSM III or DSM IV criteria as applicable to the time of entry into the clinic. Post-surgical patients were from a long-term study group (Hepp et al., 2002). Pre-surgical patients were recent consecutive referrals. The assessment tool was the Fragebogen zur Beurteilung des eigenen Körpers (FBek) which contained three domains.

There were 23 pre-operative patients: 7 (30.4%) female-to-male and 16 (69.6%) male-to-female (ratio 1:2.3). There were 22 post-operative patients: 8 (36.4 %) female-to-male and 14 (63.6%) male-to-female (ratio 1:1.8). The mean ages of the cohorts were as follows: pre-operative 33.0±11.3 years; post-operative 38.2±9.0 years. The mean duration after reassignment surgery was 51±25 months (range 5-96).

The pre-operative groups had statistically higher insecurity scores compared to normative data for the natal sex: female-to-male 9.0±3.8 versus 5.1±3.7; male-to-female 8.1±4.5 versus 4.7±3.1 as well as statistically lower self-confidence in one's attractiveness: female-to-male 3.1±2.9 versus 8.9±3.1; male-to-female 7.0±2.9 vs 9.5±2.6.

Mate-Kole C, Freschi M, Robin A. Aspects of psychiatric symptoms at different stages in the treatment of

Mate-Kole et al. conducted a single site (London, United Kingdom) prospective non-blinded, observational study using a cross-sectional design and two psychological tests (one with some normative data). Concurrent controls were used in this study design. The investigators assessed neuroticism and sex role in natal males with gender dysphoria. Patients at various stages of management, (i.e., under evaluation, using cross-sex hormones, or post reassignment surgery [6 months to 2 years]) were matched by age of cross-dressing onset, childhood neuroticism, personal psychiatric history, and family psychiatric history. Both a psychologist and psychiatrist conducted assessments. The instruments used were the Crown Crisp Experiential Index (CCEI) for psychoneurotic symptoms and the Bem Sex Role Inventory. ANOVA was used to identify differences between the three treatment cohorts.

For each cohort, investigators recruited 50 male-to-female patients from Charing Cross Hospital. The mean ages of the three cohorts were as follows: 34 years for patients undergoing evaluation; 35 years for wait-listed patients; and 37 years for post-operative patients. For the cohorts, 22% of those under evaluation, 24% of those on hormone treatment only, and 30% of those post-surgery had prior psychiatric histories, and 24%, 24%, while 14% in each cohort, respectively, had a history of attempted suicide. More than 30% of patients in each cohort had a first degree relative with a history of psychiatric disease.

The scores for the individual CCEI domains for depression and somatic anxiety were statistically higher (worse) for patients under evaluation than those on hormone treatment alone. The scores for all of the individual CCEI domains (free floating anxiety, phobic anxiety, somatic anxiety, depression, hysteria, and obsessiveness) were statistically lower in the post-operative cohort than in the other two cohorts.

The Bem Sex Role Inventory masculinity score for the combined cohorts was lower than for North American norms for either men or women. The Bem Sex Role Inventory femininity score for the combined cohorts was higher than for North American norms for either men or women. Those who were undergoing evaluation had the most divergent scores from North American norms and from the other treatment cohorts. Absolute differences were small. All scores of gender dysphoric patients averaged between 3.95 and 5.33 on a 7 point scale while the normative scores averaged between 4.59 and 5.12.

Wolfradt U, Neumann K. Depersonalization, self-esteem and body image in male-to-female transsexuals compared to male and female controls. Arch Sex Behav. 2001 Jun;30(3):301-10.

Wolfradt and Neumann conducted a controlled, prospective, non-blinded, observational study using a cross-sectional design. The investigators assessed aspects of personality in male-to-female patients who had undergone vocal cord surgery for voice feminization and in healthy non-transgender volunteers from the region. The patients had undergone gender reassignment surgery 1 to 5 years prior to voice surgery. The volunteers were matched by age and occupation.

The primary hypothesis was that depersonalization, with the sense of being detached from one's body or mental processes, would be more common in male-to-female patients with gender dysphoria. German versions of the Scale for Depersonalization Experiences (SDPE), the Body Image Questionnaire (BIQ), a Gender Identity Trait Scale (GIS), and the Self-Esteem Scale (SES) were used in addition to a question regarding global satisfaction. Three of the assessments used a 5 point scale (BIQ, GIS, and SDPE) for questions. One used a 4 point scale (SES). Another used a 7 point scale (global satisfaction). The study consisted of 30 male-to-female patients, 30 healthy female volunteers, and 30 healthy male volunteers. The mean age of study participants was 43 years (range 29- 67).

Results of the study revealed that there were no differences between the three groups for the mean scores of measures assessing depersonalization, global satisfaction, the integration of masculine traits, and body-image-rejected (subset). Also, the sense of femininity was equivalent for male-to-female patients and female controls and higher than that in male controls. The levels of self-esteem and body image-dynamic (subset) were equivalent for male-to-female patients and male controls and higher than that in female controls, and none of the numeric differences between means exceeded 0.61 units.

Kuhn A, Bodmer C, Stadlmayr W, Kuhn P, Mueller M, Birkhäuser M. Quality of life 15 years after sex reassignment surgery for transsexualism. Fertil Steril. 2009 Nov;92(5):1685-1689.e3. Epub 2008 Nov 6.

Kuhn et al. conducted a prospective, non-blinded, observational study using a cross-sectional design and semi-matched control cohort. The investigators assessed global satisfaction in patients who were from gynecology and endocrinology clinic (Bern, Switzerland), and who had undergone some aspect of gender reassignment surgery in the distant past, but were still receiving cross-sex hormones from the clinic. The quality of life assessment tools included a VAS and the King's Health Questionnaire (KHQ), which consists of eight domains with scores between zero and five or one and five, with lower scores indicating higher preference. The KHQ and the numerical change/difference required for clinical significance (≥ 5 points in a given domain, with higher scores being more pathologic) were included in the publication. Twenty healthy female controls from the medical staff who had previously undergone an abdominal or pelvic surgery were partially matched by age and body mass index (BMI), but not sex. No corroborative gynecologic or urologic evaluations were undertaken.

Of the 55 participants, three (5.4%) were female-to-male and 52 (94.5%) were male-to-female (ratio 1:17.3). Reassignment surgery had been conducted 8 to 23 years earlier (median 15 years). The median age of the patients at the time of this study was 51 years (range 39-62 years). The patients had undergone a median of nine surgical procedures in comparison to the two undergone by controls. Reassignment patients were less likely to be married (23.6% versus 65%; $p=0.002$); partnership status was unknown in five patients. The scores of VAS global satisfaction (maximal score eight) were lower for surgically reassigned patients (4.49 ± 0.1 SEM) than controls (7.35 ± 0.26 SEM) ($p<0.0001$).

The abstract stated that quality of life was lower in reassignment patients 15 years after surgery relative to controls. One table in the study, Table 2, delineated statistically and biologically significant differences for four of the eight KHQ domains between the patients and controls: physical limitation: 37.6 ± 2.3 versus 20.9 ± 1.9 ($p<0.0001$), personal limitation: 20.9 ± 1.9 versus 11.6 ± 0.4 ($p<0.001$), role limitation: 27.8 ± 2.4 versus 34.6 ± 1.7 ($p=0.046$), and general health: 31.7 ± 2.2 versus 41.0 ± 2.3 ($p<0.02$). There is a related paper by Kuhn
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et al. 2006.

Haraldsen IR, Dahl AA. Symptom profiles of gender dysphoric patients of transsexual type compared to patients with personality disorders and healthy adults. Acta Psychiatr Scand. 2000 Oct;102(4):276-81.

Haraldsen and Dahl conducted a single-center (Oslo, Norway) partially prospective, non-blinded, observational study using a cross-sectional design and a non-specific psychometric test. There was a control group, but it was not concurrent.

In the germane sub-study, the investigator assessed psychopathology in patients with gender dysphoria. Patients, who were independently evaluated by two senior psychiatrists, were required to meet DSM III-R or DSM IV diagnostic criteria and the Swedish criteria for reassignment surgery. The Norwegian version of the SCL-90 was used. The testing was conducted from 1987 to 1989 for those who had undergone reassignment surgery between 1963 and 1987 and from 1996 to 1998 for pre- surgical patients who had applied for reassignment surgery between 1996 and 1998. In addition, Axis I, Axis II, and Axis V (Global Functioning) was assessed.

Of 65 post-surgical and 34 pre-surgical patients, 59 post-surgical and 27 pre-surgical patients ultimately entered the study. The combined cohorts consisted of 35 (40.7%) female-to-male patients and 51 (59.3%) male-to-female patients (ratio 1:1.5). The ages were female-to-male 34 ± 9.5 years and female-to-male 33.3 ± 10.0 years. The other control group consisted of patients with personality disorder. Of these, 101 (27 men (33.9 ± 7.3 years) and 74 women (31.6 ± 8.2)) were tested during a treatment program. One year later, 98% were evaluated. A total of 28 (32.5%) of the pre- and post- reassignment surgery patients had an Axis I diagnosis compared to 100 (99.0%) of those with personality disorders. Depression and anxiety were the most common diagnoses in both groups, but were approximately three to four times more common in the personality disorder cohort. Seventeen (19.8%) of the pre- and post-reassignment surgery patients had an Axis II diagnosis whereas the mean number of personality disorders in the personality disorder cohort was 1.7 ± 1 . The Global Assessment of Function was higher (better) in the gender dysphoric groups (78.0 ± 8.9) than in the personality disorder cohort (53.0 ± 9.0).

Global Severity Indices (GSI) were highest for those with personality disorder regardless of gender and exceeded the cut-point score of 1.0. The GSI scores for females-to-males and males-to-females were 0.67 ± 0.57 and 0.56 ± 0.45 . Although they were nominally higher than the healthy normative controls (males: 0.32 ± 0.36 and females 0.41 ± 0.43), they were well within the non- pathologic range. The same was true for the subscales.

SCL-90 GSI scores did not differ substantively between pre- and post-surgical patients, nor did the SCI subscale scores differ substantively between pre- and post-surgical patients. Any small non-significant differences tracked with the age and sex differences.

Beatrice conducted a prospective, non-blinded, observational study using a cross-sectional design and control cohorts in the U.S. The investigator assessed psychological adjustment and functioning (self-acceptance) in male-to-female patients with gender dysphoria (with and without GRS), transvestites from two university specialty clinics, and self-identified heterosexual males recruited from the same two universities. The criteria to qualify for the study included being known to the clinic for at least one year, cross-dressing for at least one year without arrest, attendance at 10 or more therapy sessions, emotionally self-supporting, and financially capable of payment for reassignment surgery, and all of these criteria were met by the pre-operative cohort as well as the post-operative cohort. The cohorts were matched to the post-operative cohort (age, educational level, income, ethnicity, and prior heterosexual object choice). The post-operative cohort was selected not on the basis of population representation, but on the basis of demographic feasibility for a small study. The instruments used were the Minnesota Multiphasic Personality Inventory (MMPI) and the Tennessee Self-Concept Scale (TSCS). Changes or differences considered to be biologically significant were not pre-specified.

Of the initial 54 recruits, ten subjects were left in each of the cohorts because of exclusions identified due to demographic factors. The mean age of each cohort were as follows: pre-operative gender dysphoric patients 32.5 (range 27-42) years, postoperative patients 35.1 (30-43) years old, transvestite 32.5 (29-37) years old, and heterosexual male 32.9 (28-38) years old. All were Caucasian. The mean age for cross-dressing in pre-operative patients (6.4 years) and post-operative patients (5.8 years) was significantly lower than for transvestites (11.8 years).

The scores for self-acceptance did not differ by diagnostic category or surgical status as measured by the TSCS instrument. As measured by the T-scored MMPI instrument (50 ± 10), levels of paranoia and schizophrenia were higher for post-operative (GRS) patients (63.0 and 68.8) than transvestites (55.6 and 59.6) and heterosexual males (56.2 and 51.6). Levels of schizophrenia were higher for pre-operative patients (65.1) than heterosexual males (51.6). There were no differences between patients with gender dysphoria. Scores for the Masculine-Feminine domain were equivalent in those with transvestitism and gender dysphoria with or without surgery, but higher than in heterosexual males. The analysis revealed that despite the high level of socio-economic functioning in these highly selected subjects, the MMPI profiles based on the categories with the highest scores were notable for antisocial personality, emotionally unstable personality, and possible manic psychosis in the pre-operative GRS patients and for paranoid personality, paranoid schizophrenia, and schizoid personality in the post-operative GRS patients. By contrast, the same MMPI profiling in heterosexual males and transvestites was notable for the absence of psychological dysfunction.

d. Observational, surgical patients, longitudinal, with controls

Dhejne C, Lichtenstein P, Boman M, Johansson A, Långström N, Landén M. Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PLoS One*. 2011;6(2):e16885. Epub 2011 Feb 22.

Dhejne et al. conducted a retrospective, non-blinded, observational study of nation-wide mortality using a longitudinal and a population-based matched cohort. The investigators assessed conditions such as, but not limited to, mortality, suicide attempts, psychiatric hospitalization, and substance abuse in gender-reassigned persons and randomly selected unexposed controls matched by birth year and natal sex (1:10) as well as by birth year and the reassigned gender (1:10). Data were extracted from national databases including the Total Population Register (Statistics Sweden), the Medical Birth Register, the Cause of Death Register (Statistics Sweden), the Hospital Discharge Register (National Board of Health and Welfare), the Crime Register (National Council of Crime), and those from the Register of Education for highest educational level. The criteria required to obtain the initial certificate for reassignment surgery and change in legal status from the National Board of Health and Welfare were the 2002 WPATH criteria and included evaluation and treatment by one of six specialized teams, name change, a new national identity number indicative of gender, continued use of hormones, and sterilization/castration. Descriptive statistics with hazard ratios were provided.

Investigators identified 804 patients with gender identity disorder (or some other disorder) in Sweden during the period from 1973 to 2003 inclusive. Of these patients, 324 (40.3%) underwent gender-reassignment surgery (133 female-to-male [41.0%]; 191 male-to-female [59.0%]; ratio 1:1.4). The average follow-up time for all-cause mortality was 11.4 years (median 9.1). The average follow-up time for psychiatric hospitalization was 10.4 years (median 8.1).

The mean ages in female-to-male and male-to-female reassigned patients were: 33.3 ± 8.7 (range 20–62) and 36.3 ± 10.1 (range 21–69) years, respectively. Immigrant status was two times higher in reassigned patients ($n=70$, 21.6%) than in either type of control (birth [natal] sex matched $n=294$ [9.1%] or reassigned gender matched $n=264$ [8.1%]). Educational attainment (10 or more years) was somewhat lower for reassigned patients ($n=151$ [57.8%]) than in either type of control (birth sex matched $n=1,725$ [61.5%] or reassigned gender matched $n=1804$ [64.3%]) (cohort data were incomplete). The biggest discordance in educational attainment was for female-to-male reassigned patients regardless of the control used. Prior psychiatric morbidity (which did not include hospitalization for gender dysphoria) was more than four times higher in reassigned patients ($n=58$, 17.9%) than in either type of control (birth sex matched $n=123$ [3.8%] or reassigned gender matched $n=114$ [3.5%]).

All-cause mortality was higher for patients who underwent gender reassignment surgery ($n=27$ [8.3%]) than in controls (hazard ratio 2.8 [CI 1.8–4.3]) even after adjustment for covariants (prior psychiatric morbidity and immigration status). Divergence in the survival curves began at 10 years. Survival rates at 20 year follow-up (as derived from figure 1) were: female control 97%, male controls 94%, female-to-male patients 88%, and male-to-female patients 82%. The major contributor to this mortality difference was completed suicide ($n=10$ [3.1%]; adjusted hazard ratio 19.1 [CI 5.8–62.9]). Mortality due to cardiovascular disease was modestly higher for reassigned patients ($n=9$ [2.8%]) than in controls (hazard ratio 2.5 [CI 1.2–5.3]).

Suicide attempts were more common in patients who underwent gender reassignment surgery ($n=29$ [9.0%]) than in controls (adjusted hazard ratio 4.9 [CI 2.9–8.5]). Male-to-female patients were at higher adjusted risk for attempted suicide than either control whereas female-to-male patients were at higher adjusted risk compared to only male controls and maintained the female pattern of higher attempted suicide risk. Hospitalizations for psychiatric conditions (not related to gender dysphoria) were more common in reassigned persons $n=64$ [20.0%] than in controls (hazard ratio 2.8 [CI 2.0–3.9]) even after adjusting for prior psychiatric morbidity. Hospitalization for substance abuse was not greater than either type of control.

The nationwide mortality studies by Dhejne et al. (2011) includes much, if not all, of the Landén (1998) patient population and much of the Dhejne et al. (2014) population.

Dhejne C, Öberg K, Arver S, Landén M. An analysis of all applications for sex reassignment surgery in Sweden, 1960-2010: prevalence, incidence, and regrets. Arch Sex Behav. 2014 Nov;43(8):1535-45. Epub 2014 May 29 and Landén M, Wålinder J, Lambert G, Lundström B. Factors predictive of regret in sex reassignment. Acta Psychiatr Scand. 1998 Apr;97(4):284 (Dhejne et al., 2014; Landén et al., 1998) Sweden-All

Dhejne et al. conducted a non-blinded, observational study that was longitudinal for the capture of patients with "regret" in a national database. This same group (Landén et al., 1998) conducted a similar study along with retrospective acquisition of clinical data to explore the differences between the cohorts with and without regret. There were no external controls; only intra- group comparisons for this surgical series.

The investigators assessed the frequency of regret for gender reassignment surgery. Data were extracted from registries at the National Board of Health and Welfare to which patients seeking reassignment surgery or reversal of reassignment surgery make a formal application and which has maintained such records since a 1972 law regulating surgical and legal sex reassignment. The investigators reviewed application files from 1960 through 2010. The specific criteria to qualify for gender surgery were not delineated. Patients typically underwent diagnostic evaluation for at least one year. Diagnostic evaluation was typically followed by the initiation of gender confirmation treatment including hormonal therapy and real-life experience. After two years of evaluation and treatment, patients could make applications to the national board. Until recently sterilization or castration were the required minimal surgical procedures (Dhejne et al., 2011). Secular changes in this program included consolidation of care to limited sites, changes in accepted diagnostic criteria, and provision of non-genital surgery, e.g., mastectomy during the real- life experience phase, and family support.

There were 767 applicants for legal and surgical reassignment (289 [37.7%] female-to-male and 478 [62.3%] male-to-female; ratio 1:1.6). The number of applicants doubled each ten year interval starting in 1981.

Of the applicants, 88.8% or 681 (252 [37.0%] female-to-male and 429 [63.0%] male-to-female; ratio 1:1.7) had undergone surgery and changed legal status by June 30, 2011. This number included eight (four [50.0%] female-to-male and four [50.0%] male to female; ratio 1:1) people who underwent surgery prior to the 1972 law. This number appears to include 41 (two [4.9%] female-to-male and 39 [95.1%] male-to-female; ratio 1:19.5) people who underwent surgery abroad at their own expense (usually in Thailand or the U.S.). This cohort (6% of 681) includes one person who was denied reassignment surgery by Sweden.

Twenty-five (3.3%) of the applications were denied with the two most common reasons being an incomplete application or not meeting the diagnostic criteria. An additional 61(8.0%) withdrew their application, were wait-listed for surgery, postponed surgery (perhaps in hopes of the later revocation of the sterilization requirement), or were granted partial treatment.

The formal application for reversal of the legal gender status, the "regret rate", was 2.2%. No one who underwent sex- reassignment surgery outside of Sweden (36 of these 41 had surgery after 1991) has requested reversal. The authors noted, however, that this preliminary number may be low because the median time interval to reversal request was eight years-only three of which had elapsed by publication submission- and because it was the largest serial cohort. This number did not include other possible expressions of regret including suicide (Dhejne et al., 2011).

Dhejne et al. in 2014 reported that the female-to-male (n=5): male-to-female (n=10) ratio among those who made formal applications for reversal was 1:2. The investigators also reported that the female-to-male applicants for reversal were younger at the time of initial surgical application (median age 22 years) than the complete female-to-male cohort at the time of surgical application (median age 27 years). By contrast the male-to-female applicants for reversal were older at the time of initial surgical application (median age 35 years) than the complete male-to-female cohort at the time of initial surgical application (median age 32 years). Other clinical data to explore the differences between the cohorts with and without regret were not presented in this update publication.

In their earlier publication, in addition to determining a regret rate (3.8%), Landén et al. extracted data from medical records and government verdicts. Pearson Chi-square testing with Yates' correction for small sample sizes was used to identify candidate variables predictive of regret. They observed that: (a) 25.0% of the cohort with regrets and 11.4% of the cohort without regrets were unemployed, (b) 16.7% of the cohort with regrets and 15.4% of the cohort without regrets were on "sick benefit", (c) 15.4% of the cohort with regrets and 13.9% of the cohort without regrets had problems with substance abuse, (d) 69.2% of the cohort with regrets and 34.6% of the cohort without regrets had undergone psychiatric treatment, (e) 15.4% of the cohort with regrets and 8.8% of the cohort without regrets had a mood disorder, and (f) 15.4% of the cohort with regrets and 1.5% of the cohort without regrets had a psychotic disorder.

The putative prognostic factors that were statistically different between the cohorts with and without regret included prior psychiatric treatment, a history of psychotic disorder, atypical features of gender identity, and poor family support. Factors that trended towards statistical difference included having an unstable personality, sexual orientation and transvestitism. Univariate regression analyses further clarified the most important variables. These variables were tested with logistic regression. Initial modeling included the variable "history of psychotic disorder". Although this variable was predictive, it was excluded from future analyses because it was already a contraindication to reassignment surgery. Additional multivariate regression analyses identified poor family support as the most predictive variable and atypical features of gender identity as the second most important variable. Presence of both variables had a more than additive effect.

The nationwide mortality studies by Dhejne et al. (2011) includes much, if not all, of the Landén (1998) patient population and most of the Dhejne (2014) population. There is a related paper by Landén et al. 1998b that included the criteria to qualify for surgical intervention at that time.

Heylens G, Verroken C, De Cock S, T'Sjoen G, De Cuypere G. Effects of different steps in gender reassignment therapy on psychopathology: a prospective study of persons with a gender identity disorder. J Sex Med. 2014 Jan;11(1):119-26. Epub 2013 Oct 28.

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Heylens et al. conducted a prospective, non-blinded observational study using a longitudinal design in which patients served as their own controls. They used a non-specific psychiatric test with normative data along with two self-designed questionnaires. The investigators assessed psychosocial adjustment and psychopathology in patients with gender identity disorders. Patients were to be sequentially evaluated prior to institution of hormonal therapy, then 3 to 6 months after the start of cross-sex hormone treatment, and then again one to 12 months after reassignment surgery. The Dutch version of the SCL-90R with eight subscales (agoraphobia, anxiety, depression, hostility, interpersonal sensitivity, paranoid ideation/psychoticism, and sleeping problems) and a global score (psycho-neuroticism) was used serially. A seven parameter questionnaire was used serially to assess changes in social function. Another cross-sectional survey assessed emotional state. The cohorts at each time point consisted of patients who were in the treatment cohort at the time and who had submitted survey responses.

Ninety of the patients who applied for reassignment surgery between June 2005 and March 2009 were recruited. Fifty seven entered the study. Forty-six (51.1% of the recruited population) underwent reassignment surgery. Baseline questionnaire information was missing for 3 patients. Baseline SCL-90 scores were missing for 1 patient but included SCL-90 scores from some of the 11 recruits who had not yet undergone reassignment surgery. Time point 2 (after hormone therapy) SCL-90 information was missing for 10, but included SCL-90 scores from some of the 11 recruits who had not yet undergone reassignment surgery. At time point 3, 42 (91.3% of those who underwent reassignment surgery) patients completed some part of the SCL-90 survey and the psychosocial questionnaires. Some questionnaires were incomplete. The investigators reported response rates of 73.7% for the psychosocial questionnaires and 82.5% for the SCL-90.

Of those who responded at follow-up after surgery, 88.1% reported having good friends; 52.4% reported the absence of a relationship; 47.6% had no sexual contacts; 42.9% lived alone; 40.5% were unemployed, retired, students, or otherwise not working; 2.4% reported alcohol abuse; and 9.3% had attempted suicide. The frequency of these parameters reportedly did not change statistically during the study interval, but there was no adjustment for the inclusion of patients who did not undergo surgery.

In a cross-sectional, self-report mood survey, of the 42 study entrants who completed the entire treatment regimen including reassignment surgery and the final assessment (refers to the initial 57) reported improved body-related experience (97.6%), happiness (92.9%), mood (95.2%), and self-confidence (78.6%) and reduced anxiety (81.0%). Of participants, 16.7% reported thoughts of suicide. Patients also reported on the intervention phase that they believed was most helpful: hormone initiation (57.9%), reassignment surgery (31.6%), and diagnostic-psychotherapy phase (10.5%).

The global "psycho-neuroticism" SCL-90R score, along with scores of 7 of the 8 subscales, at baseline were statistically more pathologic than the general population. After hormone therapy, the score for global "psycho-neuroticism" normalized and remained normal after reassignment surgery. More specifically the range for the global score is 90 to 450 with higher scores being more pathologic. The score for the general population was 118.3 ± 32.4 . The respective scores for the various gender dysphoric cohorts were 157.7 ± 49.8 at initial presentation, 119.7 ± 32.1 after hormone therapy, and 127.9 ± 37.2 after surgery. The scores for the general population and the scores after either hormone treatment or surgical treatment did not differ.

Kockott and Fahrner conducted a single center (Munich, Germany) prospective, observational study using a longitudinal design. Treatment cohorts were used as controls, and patients served as their own controls. The investigators assessed psychosocial adjustment in patients with gender identity issues. Patients were to have met DSM III criteria. Trans-sexuality, transvestitism, and homosexuality were differentiated. The criteria required for patients to receive hormone therapy and/or reassignment surgery were not delineated. After receiving hormone therapy, patients were later classified by surgical reassignment status (pre-operative and post-operative) and desire for surgery (unchanged desire, hesitant, and no longer desired).

The first investigative tool was a semi-structured in-person interview consisting of 125 questions. The second investigative tool was a scale that organized the clinical material into nine domains which were then scored on a scale. The Psychological Integration of Trans-sexuals (PIT) instrument developed according to the scale used by Hunt and Hampson (1980) for assessment of 17 post-operative patients. There were 15 interviews and two separate interviewers. There were 80 patients identified, but 58 (72.5%) patients (26 pre-operative; 32 post-operative) were ultimately included in the analysis. The duration of follow-up was longer for post-operative patients (6.5 years) than for pre-operative patients (4.6 years) (including time for one patient subsequently excluded). The mean age of the post-operative patients was 35.5 ± 13.1 years, and the age of the patients who maintained a continued desire for surgery was 31.7 ± 10.2 years. The age of the patients who hesitated about surgery was somewhat older, 40.3 ± 9.4 years. The age of the patients who were no longer interested in surgery was 31.8 ± 6.5 years. All were employed or in school at baseline. Patients with hesitation were financially better-off, had longer-standing relationships even if unhappy, and had a statistical tendency to place less value on sex than those with an unchanged wish for surgery.

Post-operative patients more frequently reported contentment with the desired gender and the success of adaption to the gender role than the pre-operative patients with a persistent desire for surgery. Post-operative patients more frequently reported sexual satisfaction than pre-operative patients with a continuing desire for surgery. Post-operative patients also more frequently reported financial sufficiency and employment than pre-operative patients with a persistent desire for surgery. Suicide attempts were stated to be statistically less frequent in the post-surgical cohort.

Psychosocial adjustment scores were in the low end of the range with "distinct difficulties" (19-27) at the initial evaluation for the post-operative patients (19.7), the pre-operative patients with a persistent wish for surgery (20.2), and the hesitant patients (19.7). At initial evaluation, psychosocial adjustment scores for patients no longer wanting surgery were at the high end of the range with "few difficulties" (10-18). At the final evaluation, Psychosocial adjustment scores were at the high end of the range "few difficulties" (10-18) for the post-operative patients (13.2) and the patients no longer wanting surgery (16.5). Psychosocial adjustment scores at the final evaluation were in the borderline range between "few difficulties" (10-18) and "distinct difficulties" (19-27) for both the pre-operative patients with a persistent desire for surgery (18.7), and the hesitant patients (19.1).

The changes in the initial score and the final follow-up score within each group were tracked and reported to be statistically significant for the post-operative group, but not for the other groups. Statistical differences between groups were not presented. Moreover, the post-operative patients had an additional test immediately prior to surgery. The first baseline score (19.7) would have characterized the patients as having "distinct difficulties" in

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psychosocial adjustment while the second baseline score (16.7) would have categorized the patients as having "few difficulties" in psychosocial adjustment despite the absence of any intervention except the prospect of having imminent reassignment surgery. No statistics reporting on the change between scores of the initial test and the test immediately prior to surgery and the change between scores of the test immediately prior to surgery and the final follow-up were provided.

Meyer JK, Reter DJ. Sex reassignment. Follow-up. Arch Gen Psychiatry. 1979 Aug;36(9):1010-5. (United States study)

Meyer and Reter conducted a single-center (Baltimore, Maryland, U.S.) prospective, non-blinded, observational study using a longitudinal design and retrospective baseline data. Interview data were scored with a self-designed tool. There were treatment control cohorts, and patients served as their own controls. The investigators assessed patients with gender dysphoria. The 1971 criteria for surgery required documented cross-sex hormone use as well as living and working in the desired gender for at least one year in patients subsequently applying for surgery. Clinical data including initial interviews were used for baseline data. In follow-up, the investigators used extensive two to four hour interviews to collect information on (a) objective criteria of adaptation, (b) familial relationships and coping with life milestones, and (c) sexual activities and fantasies. The objective criteria, which were the subject of the publication, included employment status (Hollingshead job level), cohabitation patterns, and need for psychiatric intervention. The investigators designed a scoring mechanism for these criteria and used it to determine a global adjustment score. The score value or the change score that was considered to be biologically significant was not pre-specified in the methods.

The clinic opened with 100 patients, but when the follow-up was completed, 52 patients were interviewed and 50 gave consent for publication. Of these, 15 (four female-to-male, 11 male-to-female; ratio 1:2.8) were part of the initial operative cohort, 14 (one female-to-male; 13 male-to-female; ratio 1:13) later underwent reassignment surgery at the institution or elsewhere, and 21 (five female-to-male; 16 male-to-female; ratio 1:3.2) did not undergo surgery. The mean ages of these cohorts were 30.1, 30.9, and 26.7 years respectively. The mean follow-up time was 62 months (range 19-142) for those who underwent surgery and 25 months (range 15-48) for those who did not. Socioeconomic status was lowest in those who subsequently underwent reassignment surgery.

Of patients initially receiving surgery, 33% had some type of psychiatric contact prior to the initial clinic evaluation and 8% had psychiatric contact during the follow-up. Of the patients who had not undergone surgery or who had done so later, 72% had some type of psychiatric contact prior to the initial clinic evaluation and 28% had psychiatric contact during follow-up. There was a single female-to-male patient with multiple surgical complications who sought partial reassignment surgery reversal.

The adjustment scores improved over time with borderline statistical significance for the initial operative group and with statistical significance for the never operated group. The absolute score value at follow-up was the same for both groups (1.07+1.53 and 1.10+1.97 respectively). By contrast, the adjustment scores did not improve for those who were not in the cohort initially approved for surgery, but who subsequently underwent surgery later. This was particularly true if the surgery was performed elsewhere. The absolute score value at follow-up was 0.21+1.89.

Related papers include Meyer et al. (1971), Meyer et al. (1974a-d), and Derogatis et al. (1978) along with commentary response by Fleming et al. (1980).

Rakic Z, Starcevic V, Maric J, Kelin K. The outcome of sex reassignment surgery in Belgrade: 32 patients of both sexes. Arch Sex Behav. 1996 Oct;25(5):515-25.

Rakic et al. single-center (Belgrade, Yugoslavia) conducted a prospective, non-blinded, observational study using a cross-sectional design and an investigator-designed quality of life tool that asked longitudinal (pre- and post-treatment) questions. Patients served as their own controls. The authors state that the study was not designed to assess the predictors of poor outcomes.

The investigators assessed global satisfaction, body image, relationships, employment status, and sexual function in patients with gender dysphoria who underwent reassignment surgery between 1989 and 1993 and were at least six months post-operative. The criteria to qualify for gender surgery were delineated (1985 standards from the Harry Benjamin International Gender Dysphoria Association) and included cross-gender behavior for at least one year and sexual orientation to non-natal sex. The questionnaire consisted of 10 questions using yes/no answers or Likert-type scales. Findings were descriptive without statistical analysis. As such, changes or differences considered to be biologically significant were not pre-specified, and there were no adjustments for multiple comparisons.

Of the 38 patients who had undergone reassignment surgery, 34 were eligible for the study and 32 participated in the study (two were lost to follow-up and four were in the peri-operative period) - 10 (31.2%) female-to-male and 22 (68.8%) male-to-female (ratio 1:2.2). The duration of follow-up was 21.8 ± 13.4 months (range 6 months to 4 years). The age was female-to-male 27.8 ± 5.2 (range 23-37) and male-to-female 26.4 ± 7.8 (range 19-47).

Using an investigator-designed quality of life tool, all patients reported satisfaction with having undergone the surgery. Of the total participants, four (12.5%) (all male-to-female) and eight (25%) (87.5% male-to-female) reported complete dissatisfaction or partial satisfaction with their appearance. Regarding relationships, 80% of female-to-male and 100% of male-to-female patients were dissatisfied with their relationships with others prior to surgery; whereas, no female-to-male patients and 18.1% of male-to-female patients were dissatisfied with relationships after surgery. Regarding sexual partners, 60% of female-to-male and 72.7% of male-to-female patients reported not having a sexual partner prior to surgery; whereas, 20% of female-to-male patients and 27.3% of male-to-female patients did not have a sexual partner after surgery. Of those with partners at each time interval, 100% of female-to-male and 50% of male-to-female patients reported not experiencing orgasm prior to surgery; whereas, 75% of female-to-male and 37.5% of male-to-female patients reported not experiencing orgasm after surgery.

Ruppin U, Pfäfflin F. Long-term follow-up of adults with gender identity disorder. Arch Sex Behav. 2015 Jul;44(5):1321-9. Epub 2015 Feb 18.

Ruppin and Pfafflin conducted a single-center (Ulm, Germany) partially prospective, non-blinded, observational study using a longitudinal design and non-specific psychometric tests and a self-designed interview tool and questionnaire. Patients served as their own controls.

The investigators assessed psychological symptoms, interpersonal difficulties, gender role stereotypes, personality characteristics, societal function, sexual function, and satisfaction with new gender role in patients with gender dysphoria. Patients were required to have met the ICD-10 criteria for trans-sexualism, been seen by the clinic by prior to 2001, and completed an official change in gender including name change prior to 2001. Assessment tools included German versions of standardized surveys with normative data: the SCL 90R, the Inventory of Interpersonal Problems (IIP), Bem Sex Role Inventory (BSRI), and the Freiburg Personality Inventory (FPI-R), along with semi-structured interviews with self-designed questionnaires. The prospective survey results were compared to retrospective survey results. Changes or inter-group differences considered to be biologically significant were not pre-specified. Diagnostic cut points were not provided. Statistical corrections for multiple comparisons were not included.

Overall, 140 patients received recruitment letters and then 71 (50.7%) agreed to participate. Of these participants, 36 (50.7%) were female-to-male; 35 (49.3%) were male-to-female (ratio 1:0.97). The ages of the patients were: 41.2 ± 5.78 years (female-to-male) and 52.9 ± 10.82 years (male-to-female). The intervals for follow-up were 14.1 ± 1.97 years and 13.7 ± 2.17 years, respectively.

All female-to-male patients had undergone mastectomy; 91.7% had undergone oophorectomy and/or hysterectomy; 61.1% had undergone radial forearm flap phalloplasty or metaoidioplasty. Of male-to-female patients, 94.3% had undergone vaginoplasty and perhaps an additional procedure (breast augmentation, larynx surgery, or vocal cord surgery). Two male-to-female patients had not undergone any reassignment surgery, but were still included in the analyses.

A total of 68 patients ranked their well-being as 4.35 ± 0.86 out of five (three patients did not respond to this question). Of respondents, 40% reported not being in a steady relationship. Regular sexual relationships were reported by 57.1% of 35 female-to-male respondents and 39.4% of 33 male-to-female respondents (three patients did not respond to this question). A total of 11 patients reported receiving out-patient psychotherapy; 69 did not express a desire for gender role reversal (two did not respond to this question). The response rate was less than 100% for most of the self-designed survey questions.

Changes from the initial visit to the follow-up visit were assessed for the SCL-90R in 62 of 71 patients. The effect size was statistically significant and large only for the "Interpersonal Sensitivity" scale (one of 10 parameters). The absolute magnitude of mean change was small: from 0.70 ± 0.67 to 0.26 ± 0.34 (scale range 0-4). The duration of follow-up did not correlate with the magnitude of change on the various scales. Differences in baseline SCL-90R scores of 62 participants were compared with the score of 63 of the 69 eligible recruits who declined to enter the study and were notable for higher "Depression" scores for the latter.

Changes from the initial visit to the follow-up visit were assessed for the IIP in 55 of 71 patients. The effect size was statistically significant and large only for the "Overly Accommodating" scale (one of eight parameters). The absolute magnitude of mean change was small: from 11.64 ± 5.99 to 7.04 ± 4.73 (scale range 0-32). The duration of follow-up did not correlate with the magnitude of change on the various scales.

Changes from the initial visit to the follow-up visit were assessed for the FPI-R in 58 of 71 patients. The effect size was statistically significant and large only for the "Life Satisfaction" scale (one of 12 parameters). The absolute magnitude of mean change was substantive: from 4.43 ± 2.99 to 8.31 ± 2.63 (scale range 0-12). The duration of follow-up did not correlate with the magnitude of change on the various scales.

Changes from the initial visit to the follow-up visit were assessed for the BSRI in 16 of 36 female to male patients and 19 of 35 male to female patients. The "Social Desirability" score increased for the female-to-male respondents. At endpoint, both categories of respondents reported androgynous self-images.

This current report is an update of prior publications by Pfafflin including work with Junge which was published in a variety of formats and initially in German.

Smith YL, Van Goozen SH, Kuiper AJ, Cohen-Kettenis PT. Sex reassignment: outcomes and predictors of treatment for adolescent and adult transsexuals. Psychol Med. 2005 Jan;35(1):89-99.

Smith et al. conducted a single-center (Amsterdam, Netherlands) prospective, non-blinded, observational study using a longitudinal design and psychological function tools. Patients served as their own control prior to and after reassignment surgery. The investigators assessed gender dysphoria, body dissatisfaction, physical appearance, psychopathology, personality traits, and post-operative function in patients with gender dysphoria. Patients underwent some aspect of reassignment surgery. The test instruments included the Utrecht Gender Dysphoria Scale (12 items), the Body Image Scale adapted for a Dutch population (30 items), Appraisal of Appearance Inventory (3 observers, 14 items), the Dutch Short MMPI (83 items), the Dutch version of the Symptom Checklist (SCL)(90 items), and clinic-developed or modified questionnaires. Pre-treatment data was obtained shortly after the initial interview. Post- surgery data were acquired at least one year post reassignment surgery.

Three hundred twenty five consecutive adolescents and adults were screened for the study. One-hundred three (29 [28.2%] female-to-male patients and 74 [71.8%] male-to-female patients [ratio 1:2.6]) never started hormone therapy; 222 (76 [34.2%] female-to-male patients and 146 [65.8%] male-to-female patients [ratio 1:1.9]) initiated hormone therapy. Of the patients who started hormone therapy, 34 (5 [14.7%] female-to-male patients and 29 [85.3%] male-to-female patients [ratio 1:5.8]) discontinued hormone therapy.

Subsequently, the study analysis was limited to adults. One hundred sixty-two (58 [35.8%] female-to-male and 104 [64.2%] male-to-female [ratio 1:1.8]) were eligible and provided pre-surgical test data, and 126 (77.8% of eligible adults) (49 [38.9%] female-to-male and 77 [61.1%] male-to-female [ratio 1:1.6]) provided post-surgical data. For those patients who completed reassignment, the mean age at the time of surgical request was 30.9 years (range 17.7-68.1) and 35.2 years (range 21.3-71.9) years at the time of follow-up. The intervals between hormone treatment initiation and surgery and surgery and follow-up were 20.4 months (range 12 to 73) and 21.3 months (range 12 to 47) respectively.

Of the 126 adults who provided post-surgical data, 50 (40.0%) reported having a steady sexual partner, three (2.3%) were retired, and 58 (46.0%) were unemployed. Regarding regret, six patients expressed some regret regarding surgery, but did not want to resume their natal gender role, and one male-to-female had significant regret and would not make the same decision.

Post-surgery Utrecht dysphoria scores dropped substantially and approached reportedly normal values. The patients' appearance better matched their new gender. No one was dissatisfied with his/her overall appearance at follow-up. Satisfaction with primary sexual, secondary sexual, and non-sexual body traits improved over time. Male-to-female patients, however, were more dissatisfied with the appearance of primary sex traits than female-to-male patients. Regarding mastectomy, 27 of 38 (71.1%) female-to-male respondents (not including 11 non-respondents) reported incomplete satisfaction with their mastectomy procedure. For five of these patients, the incomplete satisfaction was because of scarring. Regarding vaginoplasty, 20 of 67 (29.8%) male-to-female respondents (not including 10 non-respondents) reported incomplete satisfaction with their vaginoplasty.

Most of the MMPI scales were already in the normal range at the time of initial testing and remained in the normal range after surgery. SCL global scores for psycho-neuroticism were minimally elevated before surgery 143.0 ± 40.7 (scoring range 90 to 450) and normalized after surgery 120.3 ± 31.4 . (An analysis using patient level data for only the completers was not conducted.)

Udeze B, Abdelmawla N, Khoosal D, Terry T. Psychological functions in male-to-female people before and after surgery. Sexual and Relationship Therapy. 2008 May; 23(2):141-5. (Not in PubMed) and Megeri D, Khoosal D. Anxiety and depression in males experiencing gender dysphoria. Sexual and Relationship Therapy. 2007 Feb; 22(1):77-81. (Not in PubMed)

Udeze et al. conducted a single-center (Leicester, United Kingdom) prospective, non-blinded, longitudinal study assessing a randomized subset of patients who had completed a non-specific psychological function tool prior to and after male-to-female reassignment surgery. Patients served as their own controls. The investigators used the WPATH criteria for patient selection. Psychiatric evaluations were routine. All patients selected for treatment were routinely asked to complete the self-administered SCL-90R voluntarily on admission to the program and post-operatively. A post-operative evaluations (psychiatric and SCL-90R assessment) were conducted within six months to minimize previously determined loss rates. The patient pool was domestic and international. There were 546 gender dysphoric patients from all over the United Kingdom and abroad, of whom 318 (58.2%) progressed to surgery. Of these, 127 were from the local Leicester area in the United Kingdom and 38 (29.9%) progressed to surgery. The mean age for the selected male-to-female patients at the time of study was 47.33 ± 13.26 years (range 25 to 80) and reflected an average wait time for surgery of 14 months (range 2 months to 6 years). For this investigation, 40 male-to-female subjects were prospectively selected.

The raw SCL-90 global scores for psycho-neuroticism were unchanged over time: 48.33 prior to surgery and 49.15 after surgery. If the scale was consistent with T-scoring, the results were non-pathologic. No psychiatric disorders were otherwise identified prior to or after surgery.

Investigators from the same clinical group (Megeri, Khoosal, 2007) conducted additional testing to specifically address anxiety and depression with the Beck Depression Inventory, General Health Questionnaire (with 4 subscales), HADS, and Spielberger State and Trait Anxiety Questionnaire (STAI-X1 and STA-X2). The test population and study design appear to be the same. No absolute data were presented. Only changes in scores were presented. There were no statistically significant changes.

e. Randomized, surgical patients, longitudinal, with controls

Mate-Kole C, Freschi M, Robin A. A controlled study of psychological and social change after surgical gender reassignment in selected male transsexuals. Br J Psychiatry. 1990 Aug;157:261-4.

Mate-Kole et al. conducted a prospective, non-blinded, controlled, randomized, longitudinal study using investigator-designed patient self-report questionnaires and non-specific psychological tests with some normative data. The investigators assessed neuroticism and sex role in natal males with gender dysphoria who had qualified for male-to-female reassignment surgery at a single-center specialty clinic (London, United Kingdom). Forty sequential patients were alternately assigned to early reassignment surgery or to standard wait times for reassignment surgery. Patients were evaluated after acceptance and 2 years later. The criteria used to qualify for gender surgery were the 1985 standards from the Harry Benjamin International Gender Dysphoria Association. These included a ≥ 2 year desire to change gender, a ≥ 1 year demonstrable ability to live and be self-supporting in the chosen gender, and psychiatric assessment for diagnosis and reassessment at six months for diagnostic confirmation and exclusion of psychosis.

Reassignment surgery was defined as orchidectomy, penectomy, and construction of a neo-vagina. The instruments used were the CCEI for psychoneurotic symptoms and the Bem Sex Role Inventory along with an incompletely described investigator-designed survey with questions about social life and sexual activity.

The mean age and range of the entire cohort was 32.5 years (21-53). Members of the early surgery cohort had a history of attempted suicide (one patient), psychiatric treatment for non-gender issues (six patients), and first degree relatives with psychiatric histories (four patients). Members of the standard surgery cohort were similar, with a history of attempted suicide (two patients), psychiatric treatment for non-gender issues (five patients), and first degree relatives with psychiatric histories (six patients). The early surgery group had surgery approximately 1.75 years prior to the follow-up evaluation. In both groups, cross-dressing began at about age 6.