

#### **Transgender Health in Primary Care**

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Current position: Clinician-educator, BWH

- Director of Education, Center for Transgender Health, BWH
- Endocrinology fellowship program director, BWH
- Education editor, NEJM Group



#### **Disclosures**

- No financial conflicts of interests
- None of the medications discussed have been FDAapproved for gender affirmation
- Images: The Gender Spectrum Collection (<a href="https://genderphotos.vice.com">https://genderphotos.vice.com</a>) unless otherwise specified

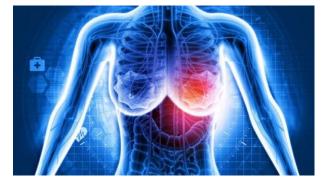
#### **Objectives**

- Describe the role of the primary care clinician in genderaffirming healthcare
- Apply screening recommendations to transgender and gender diverse people
- Review principles of patient-centered care as they apply to transgender and gender diverse people

## This session will review primary care needs of TGD people



Gender-affirming terminology and care



Screening in TGD people



Primary care and TGD health



ASCVD risk in TGD people



#### Gender-affirming terminology and care

## Using the correct terms help promote precise communication

- **Gender identity:** A person's inner sense of being a man, woman, something else, or no gender
- Sex assigned at birth: The sex recorded at birth, generally based on appearance of external genitalia (AFAB / AMAB; biological)
- Transgender and gender diverse (TGD): People whose gender identity differs from what is typically associated with their sex designated at birth (≠cisgender)
- **Gender incongruence:** ICD-11 (WHO) term (transsexualism, gender identity disorder, gender dysphoria)
- Trans woman (≈MtF = Male-to-female ≈ transfeminine): AMAB whose gender identity is female
- Trans man (≈FtM = Female-to-male ≈ transmasculine)
- Nonbinary: Gender identity falling outside of traditional binary man/woman

### Healthcare for TGD people

Peer support groups, voice therapy, prostheses, legal

Confirmation of gender identity and assessment for coexisting mental health conditions

Transgender hormone therapy

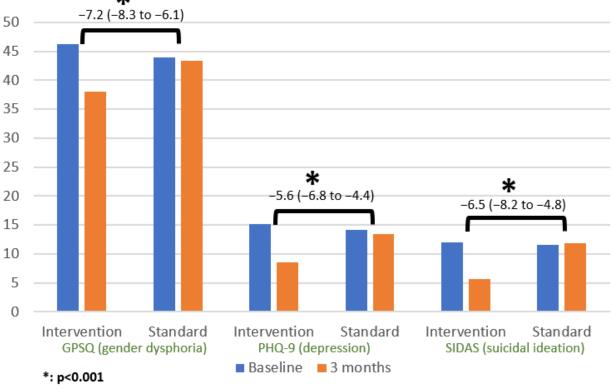
Transgender surgeries

Primary / specialty care and routine health maintenance

# Hormone therapy can promote body/identity congruence

- Adolescents: Pubertal blockade (GnRH analogs)
- Transmasculine:
  - ☐ Testosterone (gel, patch, IM, SC)
  - ☐ Adjuncts: Progestin, GnRH analogs
- **■** Transfeminine:
  - ☐ Estradiol (PO, patch, IM, SC)
  - ☐ Androgen blocker (spironolactone, GnRH analogs)
  - ☐ Adjuncts: ?progestin, ?finasteride, ?bicalutamide





# Embodiment goals may require transgender surgeries

Masculinizing
 Mastectomy
 Hysterectomy / oophorectomy
 Reconstructive: Metoidioplasty, phalloplasty
 Feminizing
 Facial feminizing surgery
 Breast augmentation
 Orchiectomy

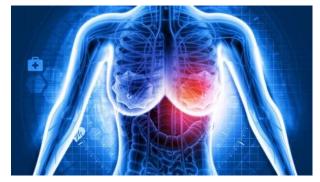
Reconstructive: Vaginoplasty, vulvoplasty

Other procedures as indicated

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**Primary care and TGD health** 

	Transgender women			Transgender men		
	Number who died (n)	SMR compared with general population men	SMR compared with general population women	Number who died (n)	SMR compared with general population women	SMR compared wit general population men
Overall*	241	1.6 (1.4–1.9)	2.4 (2.1–2.7)	34	1.6 (1.1–2.1)	1.1 (0.8–1.5)
Cardiovascular disease	50	1.4 (1.0–1.8)	2.6 (1.9-3.4)	<10	1.6 (0.5–3.2)	0.8 (0.3–1.6)
Myocardial infarction	17	1.1 (0.7–1.7)	3.0 (1.7-4.5)	<10	1.0 (0.0-3.7)	0-4 (0-0-1-4)
Thromboembolism	NA	NA	NA	NA	NA	NA
Other	33	1.5 (1.1-2.1)	2.5 (1.7-3.4)	<10	1.8 (0.5-4.0)	1.1 (0.3-2.3)
Cancer	76	1.3 (1.0-1.6)	1.6 (1.3-2.0)	<10	0.8 (0.4–1.4)	0.8 (0.4-1.4)
Lung cancer	34	2.0 (1.4–2.8)	3.1 (2.1-4.2)	<10	1.1 (0.2-2.7)	1.0 (0.2-2.3)
Cancer of digestive tract	17	1.0 (0.6–1.5)	1.5 (0.9-2.4)	<10	0.4 (0.0–1.6)	0-3 (0-0-1-0)
Other	25	1.1 (0.7–1.6)	1.0 (0.6–1.4)	<10	0.8 (0.3–1.6)	1.1 (0.4-2.2)
Infection	13	5.4 (2.9–8.7)	8-7 (4-7-14-1)	NA	NA	NA
HIV	<10	14.7 (1.8–40.9)	47.6 (5.8–132.6)	NA	NA	NA
Other	<10	4.8 (2.4-8.0)	7.6 (3.8–12.7)	NA	NA	NA
Non-natural cause	32	2.7 (1.8-3.7)	6-1 (4-2-8-4)	<10	3.3 (1.2-6.4)	1.3 (0.5-2.5)
Suicide	18	3.1 (1.8-4.7)	6.8 (4.1–10.3)	<10	2.8 (0.6–6.8)	1.2 (0.3–3.0)
Other	<14	2-3 (1-2-3-6)	5.2 (2.9–8.4)	<10	4.0 (0.8–9.7)	1-3 (0-3-3-2)
Other	70	1.9 (1.5-2.3)	2.7 (2.1-3.4)	14	2.8 (1.6-4.5)	1.9 (1.0-3.0)

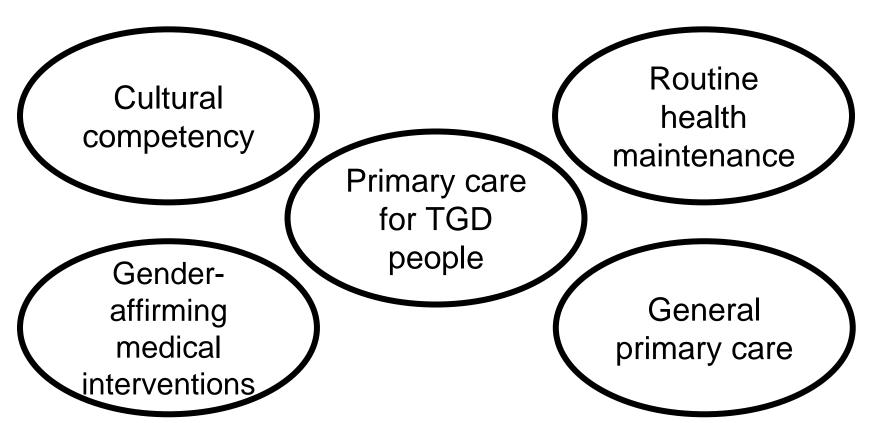
Data are absolute values or standardised mortality ratio (95% CI). N indicates the number of patients who started hormone therapy who died. Absolute numbers of people who died are only presented if the number exceeds ten cases to guarantee patient anonymity. SMR=standardised mortality ratio. NA=not applicable (no deaths in the population). HIV=human immunodeficiency virus. \*Overall mortality risk for the period that cause-specific death data were available (1996–2018).

Table 3: Cause-specific standardised mortality ratios in transgender women and transgender men compared with general population men and general population women

### Standards of Care for the Health of Transgender and Gender Diverse People, Version 8

S4 🕒 E. COLEMAN ET AL.

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Hi, I am Dr. Olsen, I use she/her pronouns. What name would you like for me to use for you? And what pronouns do you use?

I'd like to ask you some questions about your sexual orientation, gender identity and sexual history



### Figure 2. SOGI Questions Do you think of yourself as (Check one): Straight or heterosexual Lesblan, gay, or homosexual Bisexual Something else (e.g., queer, pansexual, Seaual) Please specify.\_\_\_\_\_\_\_\_



#### Do Ask, Do Tell







Let your provider know if you are LGBT.
Your provider will welcome the conversation.
Start today!

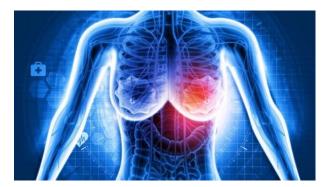
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## This session will review primary care needs of TGD people



Gender-affirming terminology and care



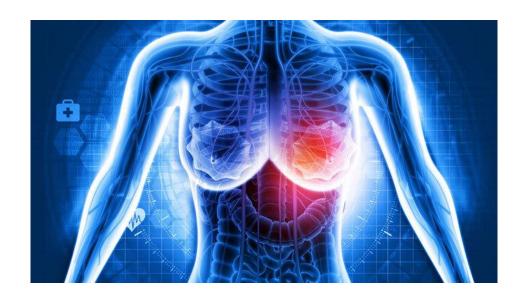
Screening in TGD people



Primary care and TGD health

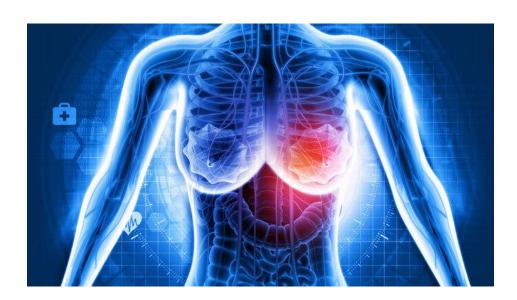


ASCVD risk in TGD people



#### **Screening in TGD people**

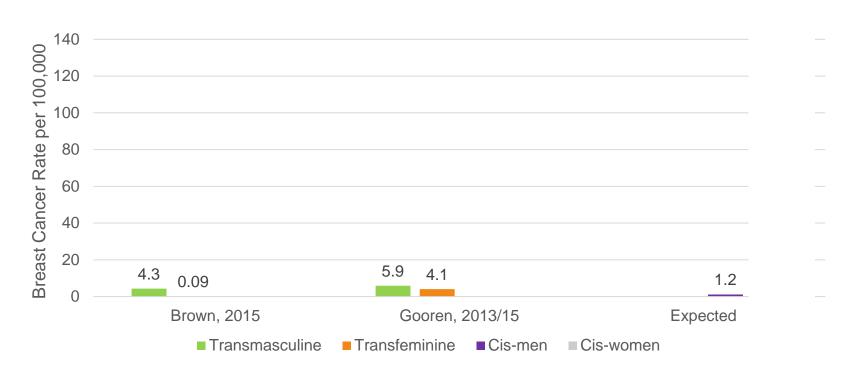
### **Breast cancer screening**



# Which of these patients should receive mammography?

- A. A 55yo trans man who started testosterone 6 months ago and has not had any surgery
- B. A 52yo AMAB non-binary person who has taken estradiol and spironolactone for 8 years and has not had any surgery
- C. A 60yo trans man who has never taken hormones and had a mastectomy 3 years ago
- D. A 62yo trans woman who has taken estradiol for 2 years and has had breast augmentation

## Rates of Breast Cancer in Transgender and Gender Diverse People



#### Statement 15.6

We recommend health care professionals follow local breast cancer screening guidelines developed for cisgender women in their care of transgender and gender diverse people who have received estrogens, taking into consideration length of time of hormone use, dosing, gender-affirming chest surgery. current age, and the age at which hormones were initiated.

#### Statement 15.7

We recommend health care professionals follow local breast cancer screening guidelines developed for cisgender women in their care of transgender and gender diverse people with breasts from natal puberty who have not had

Group (date)		Services Task	American College of Obstetricians and Gynecologists (2017)	000300.	American Cancer Society (2015)	American College of Radiology (2021)	National Comprehensive Cancer Network (2018)
Frequency of scr	reening (years)	2	1 to 2	2	1 year age 45 to 54 1 to 2 years age ≥55	1	1
Screening recommendation (average risk)	40 to 49 years of age	Yes	Yes	Individualize	Individualize through age 44 Yes, start age 45	Yes	Yes
	50 to 69 years of age	Yes	Yes	Yes	Yes	Yes	Yes
	≥70 years of age	Yes, to age 74	Yes, to at least age 75	Yes, to age 74	Yes	Yes	Yes

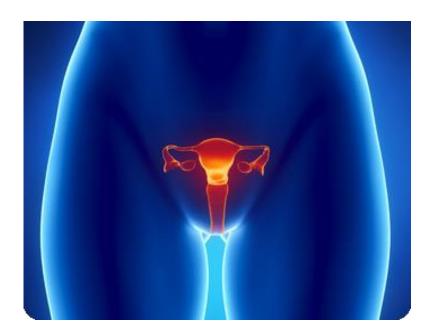
# TGD-specific guidelines for breast cancer screening

- Transmasculine:
  - ☐ Guidelines as for cis women if no mastectomy
  - ☐ No screening if mastectomy
  - □ Evaluate masses
- **■** Transfeminine:
  - ☐ No screening if no hormones
  - ☐ Guidelines as for cis women after 5-10 years of hormones

# Which of these patients should receive mammography?

- A. A 55yo trans man who started testosterone 6 months ago and has not had any surgery
- B. A 52yo AMAB non-binary person who has taken estradiol and spironolactone for 8 years and has not had any surgery
- C. A 60yo trans man who has never taken hormones and had a mastectomy 3 years ago
- D. A 62yo trans woman who has taken estradiol for 2 years and has had breast augmentation

### Cervical cancer screening



#### Statement 15.10

We recommend health care professionals offer cervical cancer screening to transgender and gender diverse people who currently have or previously had a cervix, following local guidelines for cisgender women.

#### Guidelines for Cervical Cancer Screening in Average-Risk Women

Guideline	Recommended Test and Frequency		
ACS (2020)	Testing is not recommended before age 25.  At age ≥25, choose:  • Primary HPV testing every 5 years (preferred); or  • Pap test and HPV testing every 5 years; or  • Pap test every 3 years		
USPSTF (2018)	Age 21–29: Pap test every 3 years	At age ≥30, choose:  • Pap test every 3 years; or  • Primary HPV testing alone every 5 years; or  • Pap test and HPV testing every 5 years	
ACOG (2016)	Age 21–29: • Pap test every 3 years • For those aged ≥25, can consider primary HPV testing every 3 years	At age ≥30, choose:  Pap test and HPV testing every 5 years (preferred); or  Pap test every 3 years; or  Can consider primary HPV testing every 3 years	
ACP (2015)	Age 21–29: Pap test every 3 years	At age ≥30, choose:  • Pap test every 3 years; or  • (Alternative) Pap test and HPV testing every 5 years	
ACS/ASCCP/ ASCP (2012) and ASCCP/SGO	Age 21–29: • Pap test every 3 years (preferred) • For those age ≥25, can consider primary HPV testing every 3 years	At age ≥30, choose:  • Pap test and HPV testing every 5 years (preferred); or  • Pap test every 3 years; or  • Can consider primary HPV testing every 3 years	

(2015 interim

guidelines)

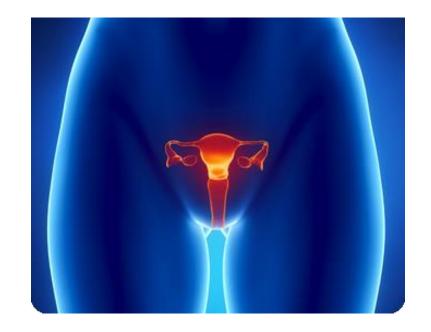
ACS = American Cancer Society
USPSTF = United States Preventive Services Task Force
ACOG = American College of Obstetricians and Gynecologists
ACP = American College of Physicians
ASCCP = American Society for Colposcopy and Cervical Pathology
ASCP = American Society for Clinical Pathology
SGO = Society of Gynecologic Oncology

Last reviewed Jan 2021. Last modified Jan 2021. The information included here is provided for educational purposes only. It is not intended as a sole source on the subject matter or as a substitute for the professional judgment of qualified healthcare professionals. Users are advised, whenever possible, to confirm the information through additional sources.

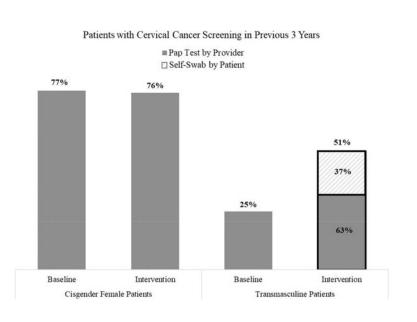
## Cervical cancer screening considerations in transmasculine people

- HPV vaccination!
- Can stop after total hysterectomy
- Consider mitigation of discomfort
  - Trauma-informed care
  - Vaginal dryness
- Cytology on testosterone:
  - Unsatisfactory samples: 10.8% vs. 1.3%
  - Cytopathology more challenging

     "small cells", transitional cell
     metaplasia
  - Inform lab of testosterone use / amenorrhea



## Alternative: Self-collected hr-HPV swabs

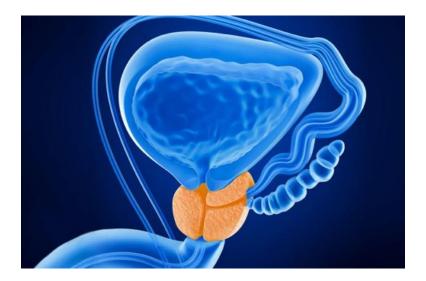


- Performance compared with provider-collected hr-HPV swab:
  - Sensitivity 71.4% (15 of 21 cases detected)
  - Specificity 98.2%
  - Participant preference: 90% self-collected

# Self-collection is now FDA approved

- Cobas HPV and Onclarity HPV are self-collection HPV kits approved by FDA 5/2024 (others under review)
- Vaginal sample collected **in healthcare setting** by patient and sent for analysis
- Requires the specific solution and processing
- Sensitivity/specificity (provider-collected as gold standard) for any HPV: 95/70% (Cobas), 86/76% (BD)
- Teal Wand approved 5/2025 for self-collection at home processed on Cobas platform

#### Prostate cancer screening



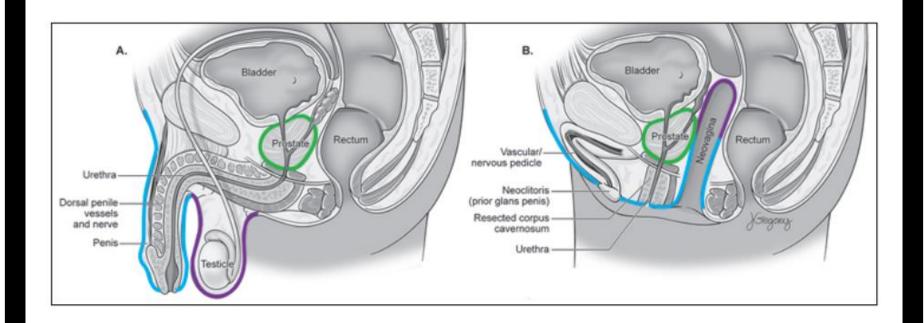
## Prostate cancer in transfeminine people is rare

- Amsterdam Gender Clinic 1972-2016
- 2281 transgender women, 68.9% post orchiectomy
- **Expected** cases of prostate cancer: **30**
- Observed cases of prostate cancer: 6
- SIR 0.20, 95% confidence interval 0.08-0.42

## Prostate cancer screening considerations in transfeminine people

- Endocrine Society & UCSF: Follow guidelines for cis men
- Androgen deprivation lowers PSA – consider lowering cut-off for further eval to 1.0 ng/mL
- My practice: Before hormones, then stop
- Physical examination: Via neovagina if vaginoplasty



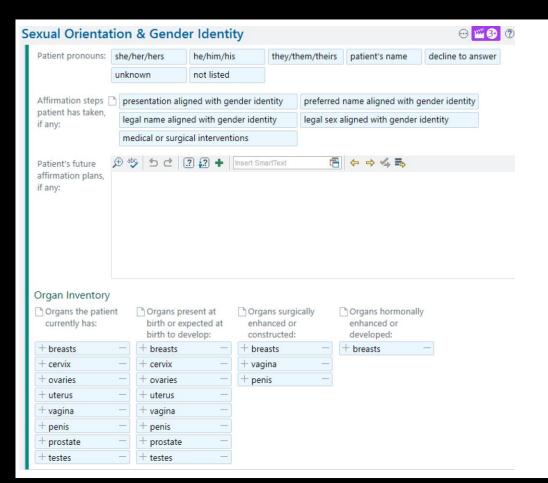


### Screening for other cancers



## Screening for other cancers is not affected by TGD status

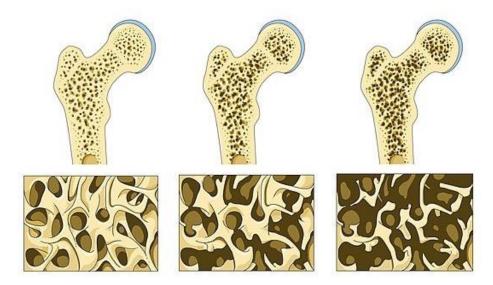
- Colon and lung cancer: Screen per general guidelines
- Anal cancer: Increasing data for screening in HIV+
- Testicular cancer: No change in risk do not screen
- Uterine and ovarian cancer: No change in risk do not screen, no indication for prophylactic hysterectomy/oophorectomy
- In all cases, evaluate symptoms (masses, bleeding, etc.) as in a cis person with same organs



Cancer	Transfeminine	Transmasculine		
Breast	Mammogram per cis women guidelines after 5-10 years on estrogen	Mammogram per cis women guidelines. Can stop after mastectomy (?annual sub- / periareolar breast exam)		
Cervix	Not indicated	Cervical smear or hrHPV (self- collected?) per cis women guidelines until hysterectomy		
Prostate	PSA at baseline. Then per cis men guidelines but ULN of 1 ng/mL? DRE - neovaginal Consider ending screening if undetectable testosterone	Not indicated		
Colon	Per current guidelines			
Anal	Consider based on risk factors			
Cancer so	Cancer screening is based on the presence or absence of the structure			

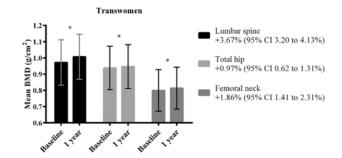
Cancer screening is based on the presence or absence of the structure at risk

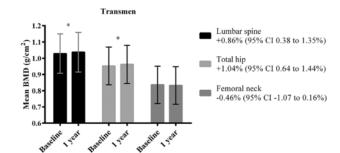
### Osteoporosis screening



## TGD people may be at higher risk of bone fragility

- Adult trans women: Slightly lower BMD at spine/hip before hormones compared with cis men/women
- Adult trans men: BMD identical to control cis men/women





#### Statement 15.12

We recommend health care professionals obtain a detailed medical history from transgender and gender diverse people that includes past and present use of hormones, gonadal surgeries as well as the presence of traditional osteoporosis risk factors, to assess the optimal age and necessity for osteoporosis screening. For supporting text, see Statement 15.13.

#### Statement 15.13

We recommend health care professionals discuss bone health with transgender and gender diverse people including the need for active weight bearing exercise, healthy diet, calcium, and vitamin D supplementation.

End	ocrine Society:
	Every 1-2y during
	pubertal suppression
	If risk factors
	(hypogonadism)
	Consider baseline DXA
	In all at age 60
UCS	SF:
	In all at age 65
	Age 50-65 if risk factors
	If >5 years off GAHT

### TGD people are at higher risk for other conditions where screening is recommended

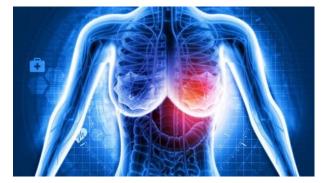
- Substance use / "unhealthy drug use" – screen (e.g., NIDA-modified ASSIST)
- Depression, suicidality screen (e.g., PHQ-2)
- HIV
  - Screen
  - Offer PrEP
  - SOC8: "antiretroviral medications is not a contraindication to gender-affirming hormone therapy"

- Gonorrhea/chlamydia
  - USPSTF: "Women" ≤24, or ≥25 at high risk
  - Routine with PrEP
- HPV and other infections
  - Immunize per CDC

## This session will review primary care needs of TGD people



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Screening in TGD people



Primary care and TGD health



ASCVD risk in TGD people



**ASCVD** risk in TGD people

# Transfeminine individuals are at higher cardiovascular risk

	Transgender w	Transgender women			Transgender men		
	Number who died (n)	SMR compared with general population men	SMR compared with general population women	Number who died (n)	SMR compared with general population women	SMR compared with general population men	
Overall*	241	1.6 (1.4-1.9)	2-4 (2-1-2-7)	34	1.6 (1.1–2.1)	1.1 (0.8–1.5)	
Cardiovascular disease	50	1.4 (1.0–1.8)	2.6 (1.9–3.4)	<10	1.6 (0.5–3.2)	0.8 (0.3–1.6)	
Myocardial infarction	17	1.1 (0.7–1.7)	3.0 (1.7-4.5)	<10	1.0 (0.0-3.7)	0-4 (0-0-1-4)	
Thromboembolism	NA	NA	NA	NA	NA	NA	
Other	33	1.5 (1.1-2.1)	2.5 (1.7-3.4)	<10	1.8 (0.5-4.0)	1.1 (0.3-2.3)	

### Risk of selected cardiovascular events in <u>transfeminine</u> people

Venous thromboembolism	Ref: Cis men (SIR / OR / HR, 95% CI [adjusted])	Ref: Cis women (SIR / OR / HR, 95% CI [adjusted])
Nota et al, 2019 (SIR)	4.55 (3.59-5.69)	<b>5.52</b> (4.36-6.90)
Getahun, 2018 (HR)	1.9 (1.4-2.7)	2.0 (1.4-2.8)

Myocardial infarction	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	<b>0.79</b> (0.54-1.11)	2.64 (1.81-3.72)
Getahun, 2018 (HR)	<b>0.9</b> (0.6-1.5)	1.8 (1.1-2.9)
Alzahrani, 2019 (OR)	<b>1.32</b> (0.92-1.90)	2.56 (1.78-3.68)

Stroke	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	1.30 (1.23-2.56)	<b>2.42</b> (1.65-3.42)
Getahun, 2018 (HR)	<b>1.2</b> (0.9-1.7)	1.9 (1.3-2.6)

## Transmasculine individuals are not clearly at higher ASCVD risk

	Transgender women			Transgender men		
	Number who died (n)	SMR compared with general population men	SMR compared with general population women	Number who died (n)	SMR compared with general population women	SMR compared with general population men
Overall*	241	1.6 (1.4–1.9)	2.4 (2.1–2.7)	34	1.6 (1.1-2.1)	1.1 (0.8–1.5)
Cardiovascular disease	50	1.4 (1.0-1.8)	2.6 (1.9-3.4)	<10	1.6 (0.5–3.2)	0.8 (0.3–1.6)
Myocardial infarction	17	1.1 (0.7-1.7)	3.0 (1.7-4.5)	<10	1.0 (0.0-3.7)	0.4 (0.0–1.4)
Thromboembolism	NA	NA	NA	NA	NA	NA
Other	33	1.5 (1.1-2.1)	2.5 (1.7-3.4)	<10	1.8 (0.5-4.0)	1.1 (0.3-2.3)

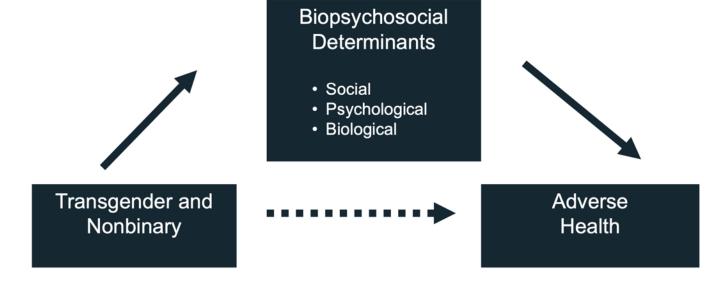
### Risk of selected cardiovascular events in transmasculine people

Venous thromboembolism	Ref: Cis men (SIR / OR / HR, 95% CI [adjusted])	Ref: Cis women (SIR / OR / HR, 95% CI [adjusted])
Nota et al, 2019 (SIR)	<b>0.36</b> (0.06-1.19)	<b>0.41</b> (0.07-1.37)
Getahun, 2018 (HR)	<b>1.6</b> (0.9-2.9)	<b>1.1</b> (0.6-2.1)

Myocardial infarction	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	<b>1.72</b> (0.70-3.58)	3.60 (1.94-6.42)
Getahun, 2018 (HR)	<b>0.7</b> (0.3-1.8)	<b>1.3</b> (0.5-3.9)
Alzahrani, 2019 (OR)	2.53 (1.14-5.63)	4.30 (2.21-10.90)

Stroke	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	<b>1.46</b> (0.59-3.04)	<b>2.42</b> (1.65-3.42)
Getahun, 2018 (HR)	<b>1.1</b> (0.6-2.0)	<b>1.3</b> (0.7-2.5)

### Increased ASCVD risk may be mediated through minority stress



## How to incorporate this in clinical practice?

- Address all traditional ASCVD risk factors esp. smoking, excess adiposity
- Monitor for changes in lipids on initiation of GAHT
- ASCVD risk calculators do not capture all risk factors, including those related to minority stress or adverse life events
- What to do with sex marker in risk calculator?

### Case - Boonsri

- 47-year-old trans woman
- S/p gender-affirming top and bottom surgery age 20
- On estradiol age 18-22, 33-current (4 mg PO daily)
- Currently feels well
- Presents for routine PCP follow-up. Exam with BP 147/83
- A lipid panel showed: Tchol 250, HDL 34, LDL 176, triglycerides 200.
- ASCVD risk: 7.1% ♂/ 3.5% ♀



#### Statement 15.1

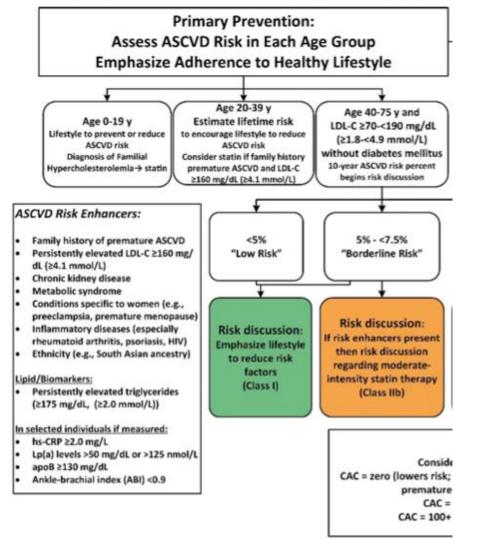
We recommend health care professionals obtain a detailed medical history from transgender and gender diverse people, that includes past and present use of hormones, gonadal surgeries, as well as the presence of traditional cardiovascular and cerebrovascular risk factors with the aim of providing regular cardiovascular risk assessment according to established, locally used guidelines. For supporting text, see Statement 15.3.

#### Statement 15.2

We recommend health care professionals assess and manage cardiovascular health in transgender and gender diverse people using a tailored risk factor assessment and cardiovascular/cerebrovascular management methods. For supporting text, see Statement 15.3.

### Statement 15.3

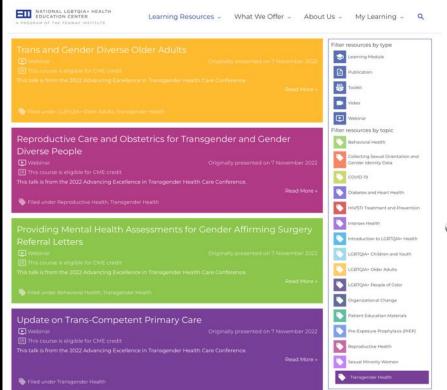
We recommend health care professionals tailor sex-based risk calculators used for assessing medical conditions to the needs of transgender and gender diverse people, taking into consideration the length of hormone use, dosing, serum hormone levels, current age, and the age at which hormone therapy was initiated.



Arnett et al. Circulation. 2019 Sep 10;140(11):e596-e646.

### **Key take-home points...**

- Despite all of today's talk, recall that most of primary care to TGD people is similar to that provided to cis people
- Awareness of the specific health needs of trans people is important to ensure that these are met
- Knowing available resources, approaching the patient in a sensitive manner, and committing to learning more will help you provide excellent care to all your patients







#### **CURRENTLY, OVER 5,000 ATTENDEES HAVE BEEN GEI TRAINED!**

WPATH offers our Global Education Institute (GEI) Certified Training Courses: Best Practices in Transgender Medical and Mental Health Care first and foremost to increase access to knowledgeable healthcare providers for the transgender community by training those providers globally in the context and principles of the WPATH Standards of Care, and their implementation into clinical practice. GEI certified Training Courses are offered in an interdisciplinary, interactive, live format, providing ample opportunity for networking and building referral systems. These courses serve as the Core Curriculum for WPATH Membersip surisuing WPATH GEI SOCT Certification, but are open to all healthcare professionals across all specialities, regardless of WPATH Membersip Status.

### Useful references

#### **■** Hormone treatment:

Endocrine Treatment of Gender-Dysphoric / Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. Hembree et al, JCEM Nov 2017, 102(11):1-35.

#### Broader overview of transgender care:

Standards of Care for the Health of Transgender and Gender Diverse People, Version 8, World Professional Association for Transgender Health

https://www.tandfonline.c om/doi/pdf/10.1080/268952 69.2022.2100644

#### Primary care for transgender individuals:

UCSF Center of Excellence for Transgender Health (http://transhealth.ucsf.ed u/)

### Thank you!

