

Primary Care for Transgender and Gender Diverse People

Ole-Petter R. Hamnvik, MB BCh BAO, MMSc
Associate Physician, Brigham and Women's Hospital
Division of Endocrinology, Diabetes and Hypertension
Department of Medicine
Brigham and Women's Hospital
Associate Professor in Medicine
Harvard Medical School

Ole-Petter R. Hamnvik, MB BCh BAO, MMSc



Medical school: **Royal College of Surgeons in Ireland**
Internal medicine residency, chief medical residency,
endocrinology fellowship: **Brigham and Women's
Hospital**

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 FDA-approved for gender affirmation
- Images: The Gender Spectrum Collection (<https://genderphotos.vice.com>) unless otherwise specified

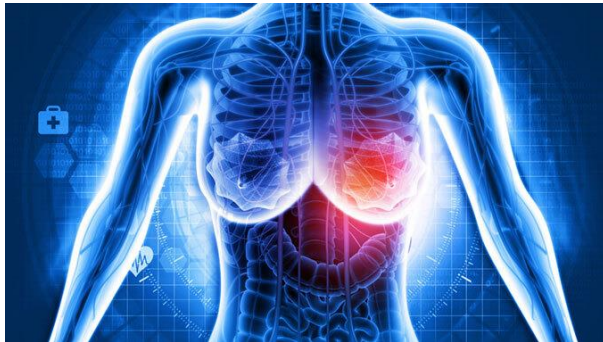
Objectives

- Describe the role of the primary care clinician in gender-affirming healthcare
- Apply screening recommendations to transgender and gender diverse people
- Discuss cardiovascular risk assessment in transgender and gender diverse people

This session will review primary care needs of TGD people



Primary care and TGD health



Screening in TGD people



ASCVD risk in TGD people



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 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)
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.

Table of contents		Page No.
	Introduction	S5
Chapter 1.	Terminology	S11
Chapter 2.	Global Applicability	S15
Chapter 3.	Population Estimates	S23
Chapter 4.	Education	S27
Chapter 5.	Assessment of Adults	S31
Chapter 6.	Adolescents	S43
Chapter 7.	Children	S67
Chapter 8.	Nonbinary	S80
Chapter 9.	Eunuchs	S88
Chapter 10.	Intersex	S93
Chapter 11.	Institutional Environments	S104
Chapter 12.	Hormone Therapy	S110
Chapter 13.	Surgery and Postoperative Care	S128
Chapter 14.	Voice and Communication	S137
Chapter 15.	Primary Care	S143
Chapter 16.	Reproductive Health	S156
Chapter 17.	Sexual Health	S163
Chapter 18.	Mental Health	S171

Cultural
competency

Routine
health
maintenance

Primary care
for TGD
people

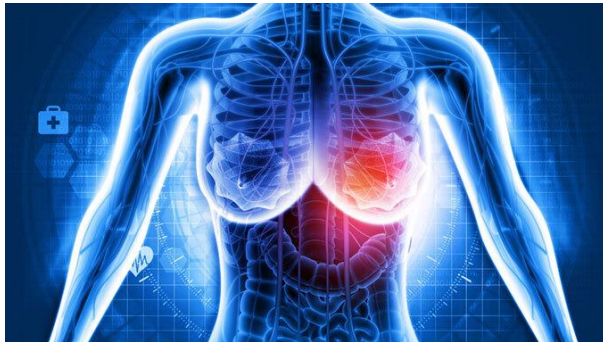
Gender-
affirming
medical
interventions

General
primary care

This session will review primary care needs of TGD people



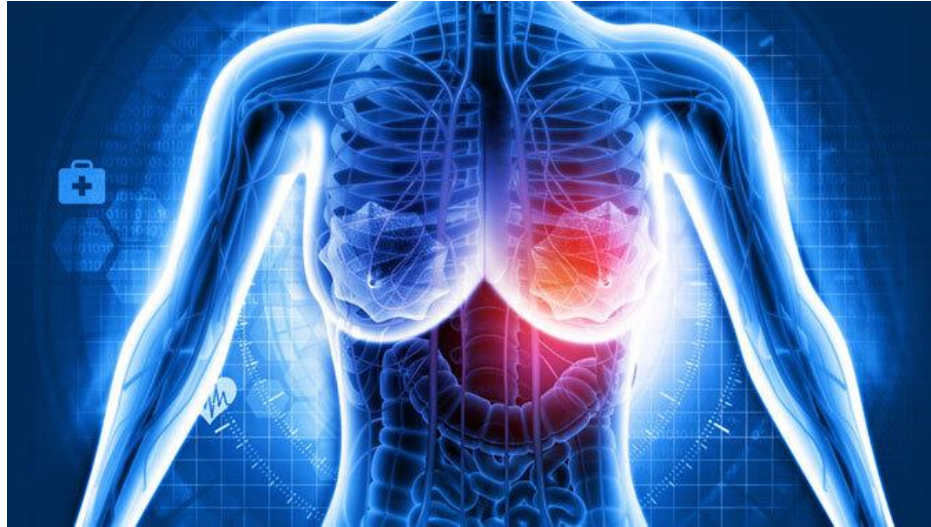
Primary care and TGD health



Screening in TGD people

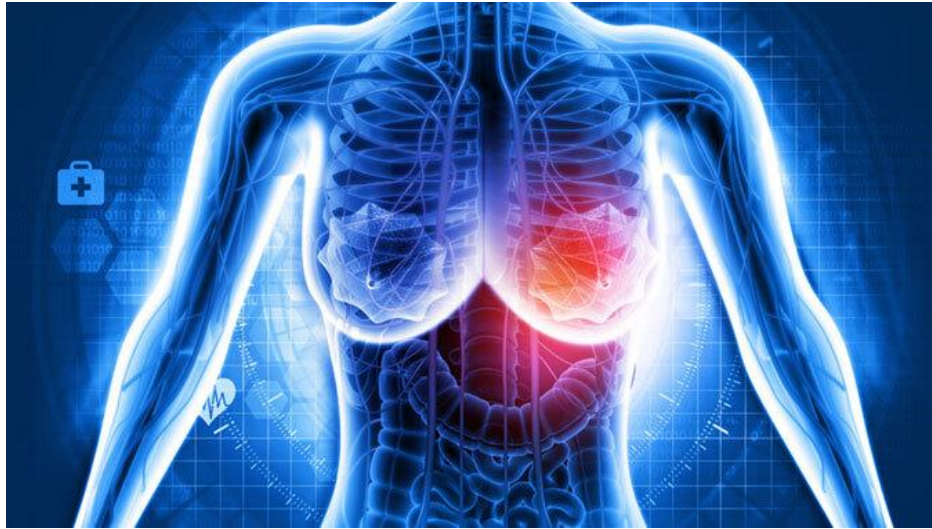


ASCVD risk in TGD people



Screening in TGD people

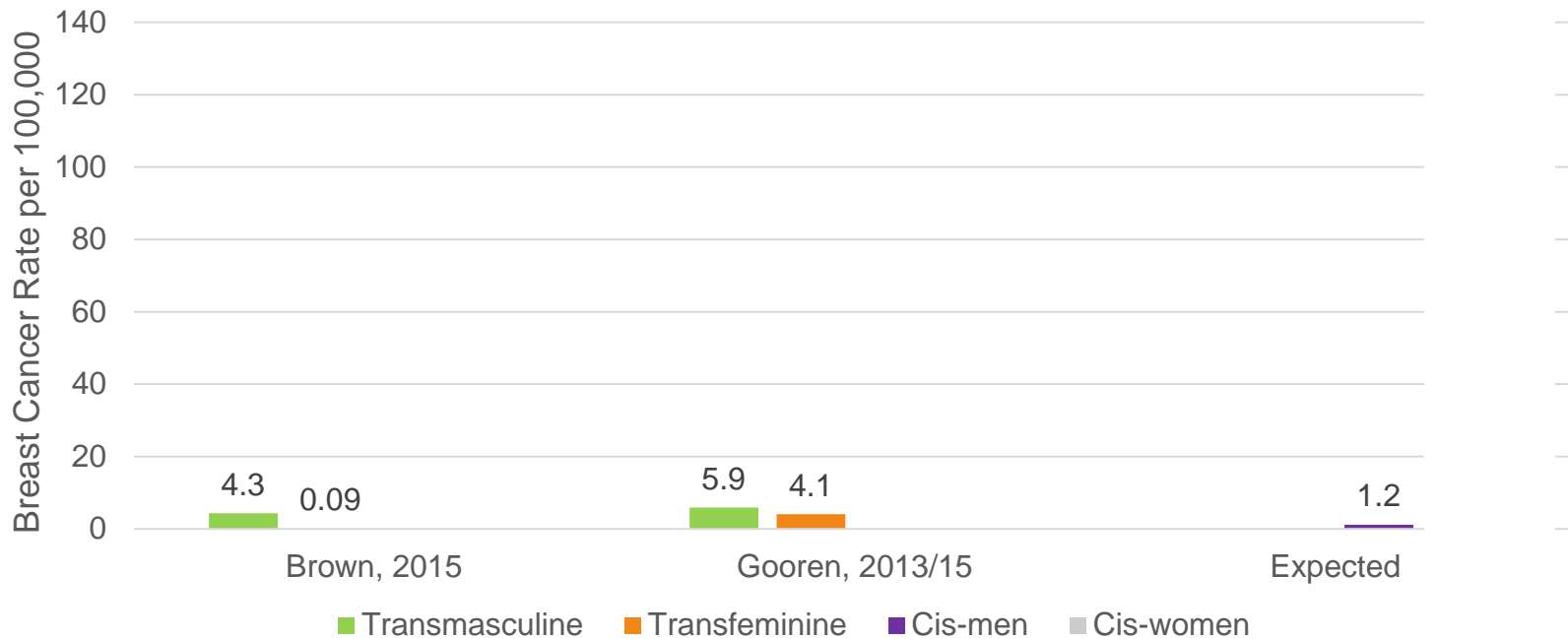
Breast cancer screening



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, 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 gender-affirming chest surgery.

Group (date)		US Preventive Services Task Force (2024)	American College of Obstetricians and Gynecologists (2017)	American College of Physicians (2019)	American Cancer Society (2015)	American College of Radiology (2021)	National Comprehensive Cancer Network (2018)
Frequency of screening (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



Which of these should receive screening for cervical cancer?

- A. A 20yo trans man who has received pubertal blockade and testosterone and is currently sexually active with men/women
- B. A 27yo trans woman who has taken estradiol since age 20 and has had genital surgery (vaginoplasty) and breast augmentation
- C. A 32yo trans man who is taking testosterone for 7 years, has had no surgeries, and is sexually active with cis women only
- D. A 33yo trans man who is taking testosterone for 3 years and has had TAH-BSO due to persistent vaginal bleeding

Which of these should receive screening for cervical cancer?

- A. A 20yo trans man who has received pubertal blockade and testosterone and is currently sexually active with men/women
- B. A 27yo trans woman who has taken estradiol since age 20 and has had genital surgery (vaginoplasty) and breast augmentation
- C. A 32yo trans man who is taking testosterone for 7 years, has had no surgeries, and is sexually active with cis women only
- D. A 33yo trans man who is taking testosterone for 3 years and has had TAH-BSO due to persistent vaginal bleeding

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)	<p>Testing is not recommended before age 25.</p> <p>At age ≥ 25, choose:</p> <ul style="list-style-type: none"> • Primary HPV testing every 5 years (preferred); or • Pap test and HPV testing every 5 years; or • Pap test every 3 years 	
USPSTF (2018)	<p>Age 21–29:</p> <ul style="list-style-type: none"> • Pap test every 3 years 	<p>At age ≥ 30, choose:</p> <ul style="list-style-type: none"> • Pap test every 3 years; or • Primary HPV testing alone every 5 years; or • Pap test and HPV testing every 5 years
ACOG (2016)	<p>Age 21–29:</p> <ul style="list-style-type: none"> • Pap test every 3 years • For those aged ≥ 25, can consider primary HPV testing every 3 years 	<p>At age ≥ 30, choose:</p> <ul style="list-style-type: none"> • 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)	<p>Age 21–29:</p> <ul style="list-style-type: none"> • Pap test every 3 years 	<p>At age ≥ 30, choose:</p> <ul style="list-style-type: none"> • Pap test every 3 years; or • (Alternative) Pap test and HPV testing every 5 years
ACS/ASCCP/ASCP (2012) and ASCCP/SGO (2015 interim guidelines)	<p>Age 21–29:</p> <ul style="list-style-type: none"> • Pap test every 3 years (preferred) • For those age ≥ 25, can consider primary HPV testing every 3 years 	<p>At age ≥ 30, choose:</p> <ul style="list-style-type: none"> • Pap test and HPV testing every 5 years (preferred); or • Pap test every 3 years; or • Can consider primary HPV testing every 3 years

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

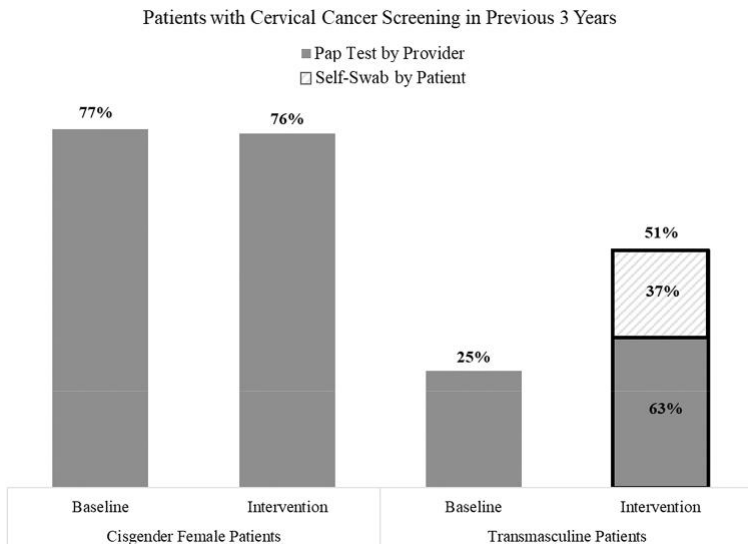
Last reviewed Jan 2021. Last modified Jan 2021. The information included here is provided for educational purposes only. It is not intended as a sole source on the subject matter or as a substitute for the professional judgment of qualified healthcare professionals. Users are advised, whenever possible,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

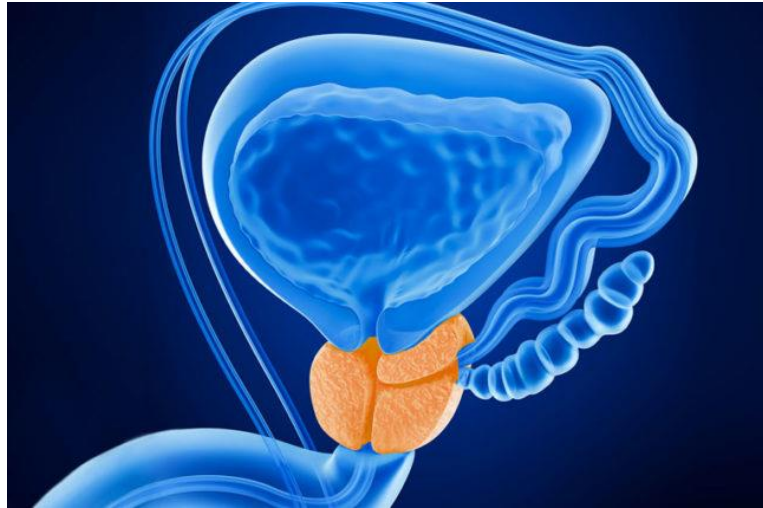


- Performance compared with provider-collected hr-HPV swab:
 - Sensitivity 71.4% (15 of 21 cases detected)
 - Specificity 98.2%
 - Participant preference: 90% self-collected

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



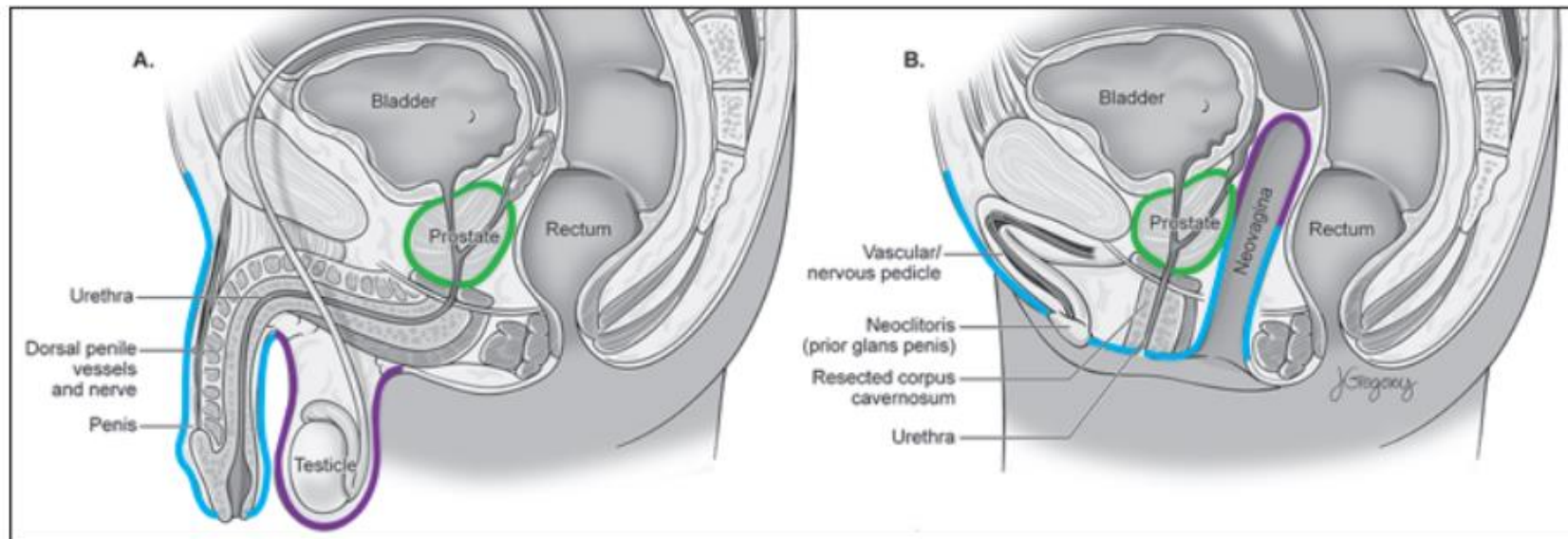
Prostate cancer in transfeminine people is rare

- 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

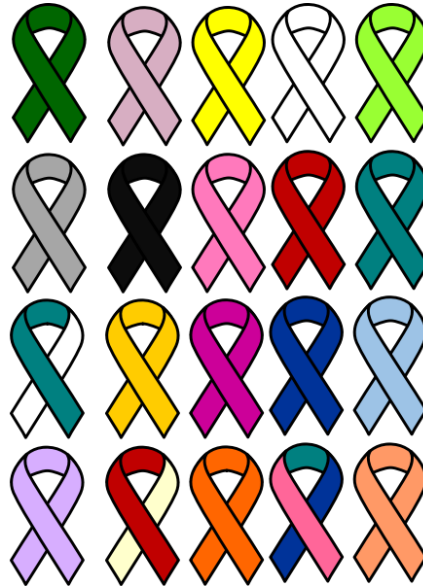
Prostate cancer screening considerations in transfeminine people

- 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

Sexual Orientation & Gender Identity



Patient pronouns:

Affirmation steps ☐ patient has taken, if any:

Patient's future affirmation plans, if any:

Organ Inventory

☐ Organs the patient currently has:

☐ Organs present at birth or expected at birth to develop:

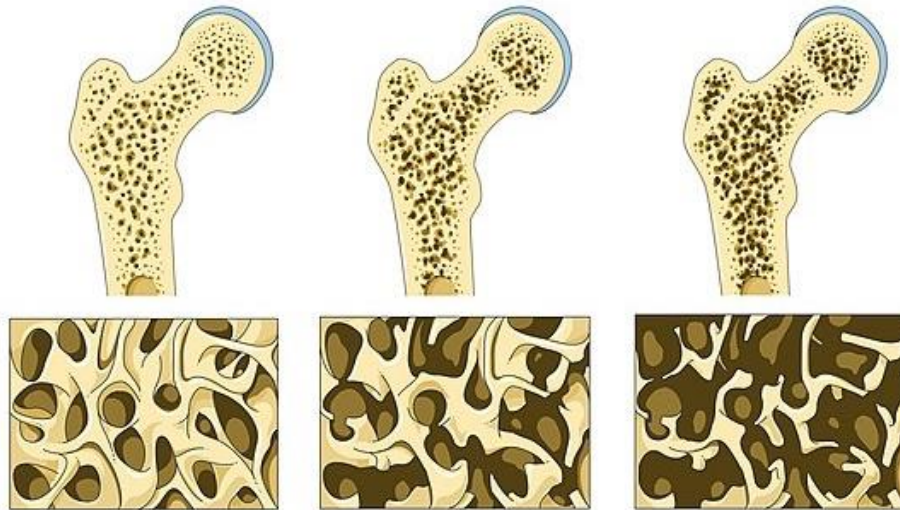
☐ Organs surgically enhanced or constructed:

☐ Organs hormonally enhanced or developed:

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	

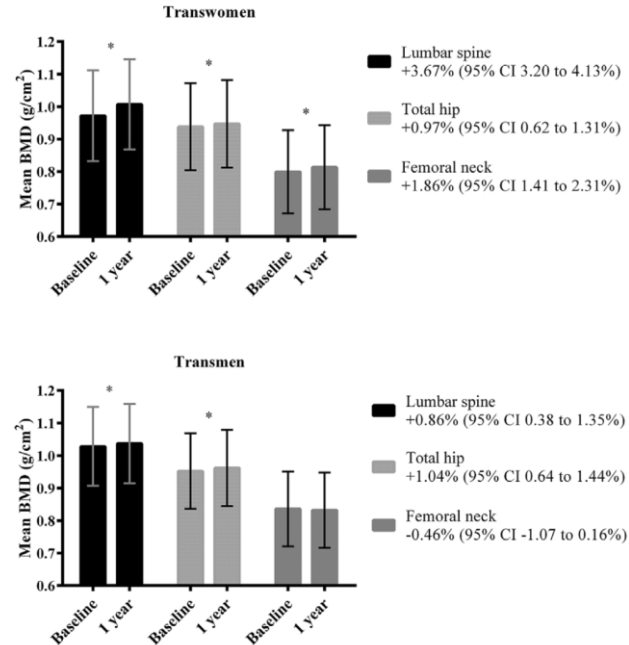
Cancer screening is based on the presence or absence of the structure at risk

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.

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

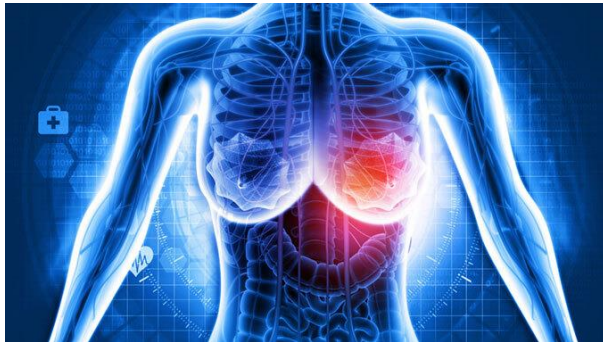
TGD people are at higher risk for other conditions where screening is recommended

- 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



Primary care and TGD health



Screening in TGD people



ASCVD risk in TGD people



ASCVD risk in TGD people

Transfeminine individuals are at higher cardiovascular 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)

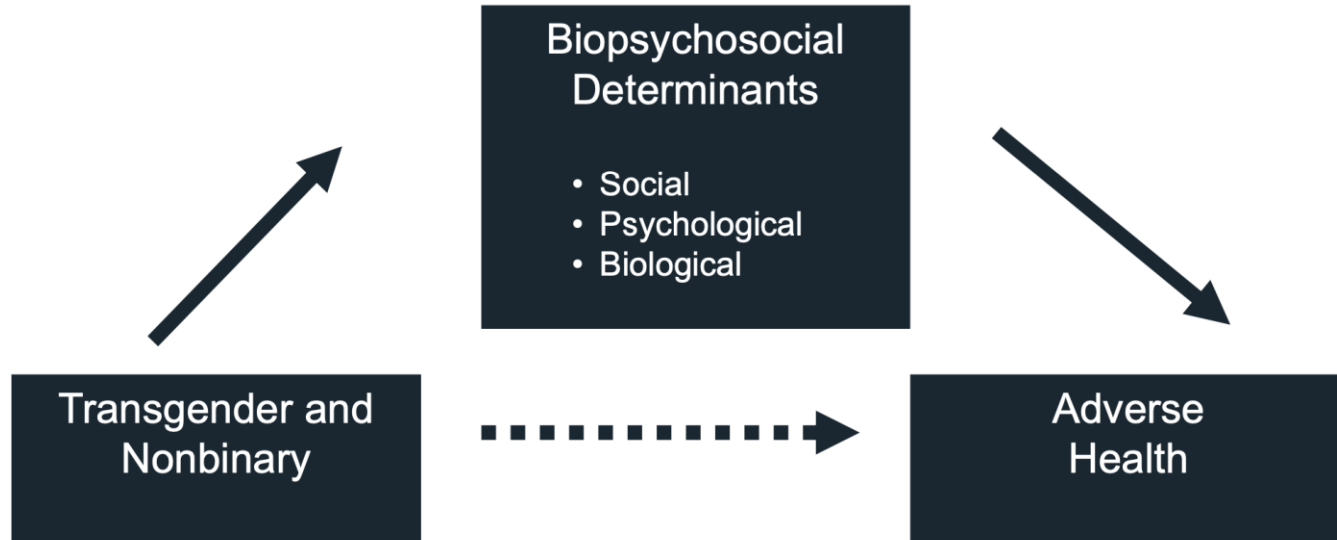
Risk of selected cardiovascular events in transfeminine people

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)	5.52 (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)	0.79 (0.54-1.11)	2.64 (1.81-3.72)
Getahun, 2018 (HR)	0.9 (0.6-1.5)	1.8 (1.1-2.9)
Alzahrani, 2019 (OR)	1.32 (0.92-1.90)	2.56 (1.78-3.68)

Stroke	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	1.80 (1.23-2.56)	2.42 (1.65-3.42)
Getahun, 2018 (HR)	1.2 (0.9-1.7)	1.9 (1.3-2.6)

Increased ASCVD risk may be mediated through minority stress



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)	0.36 (0.06-1.19)	0.41 (0.07-1.37)
Getahun, 2018 (HR)	1.6 (0.9-2.9)	1.1 (0.6-2.1)

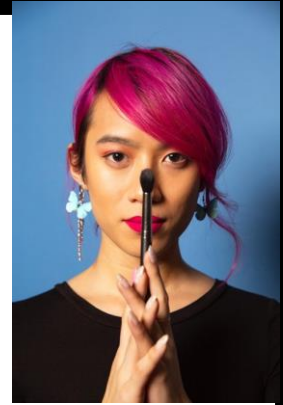
Myocardial infarction	Ref: Cis men	Ref: Cis women
Nota et al, 2019 (SIR)	1.72 (0.70-3.58)	3.69 (1.94-6.42)
Getahun, 2018 (HR)	0.7 (0.3-1.8)	1.3 (0.5-3.9)
Alzahrani, 2019 (OR)	2.53 (1.14-5.63)	4.90 (2.21-10.90)

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

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.

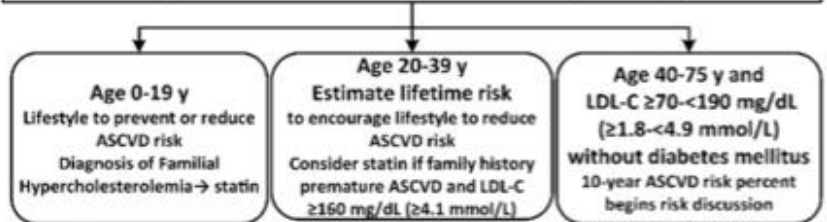
Statement 15.2

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.

Primary Prevention: Assess ASCVD Risk in Each Age Group Emphasize Adherence to Healthy Lifestyle



ASCVD Risk Enhancers:

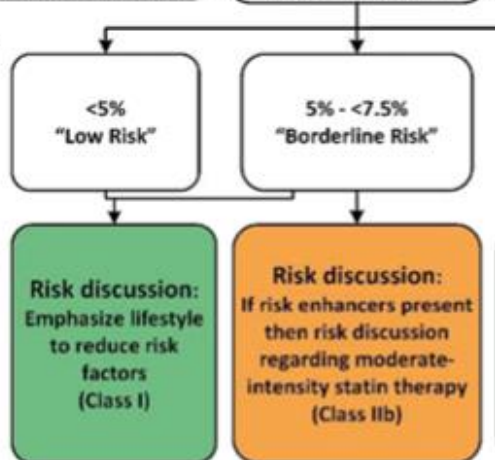
- Family history of premature ASCVD
- Persistently elevated LDL-C ≥ 160 mg/dL (≥ 4.1 mmol/L)
- Chronic kidney disease
- Metabolic syndrome
- Conditions specific to women (e.g., preeclampsia, premature menopause)
- Inflammatory diseases (especially rheumatoid arthritis, psoriasis, HIV)
- Ethnicity (e.g., South Asian ancestry)

Lipid/Biomarkers:

- Persistently elevated triglycerides (≥ 175 mg/dL, (≥ 2.0 mmol/L))

In selected individuals if measured:

- hs-CRP ≥ 2.0 mg/L
- Lp(a) levels > 50 mg/dL or > 125 nmol/L
- apoB ≥ 130 mg/dL
- Ankle-brachial index (ABI) < 0.9



Consider
CAC = zero (lowers risk;
premature
CAC =
CAC = 100+

In summary...

- 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

Trans and Gender Diverse Older Adults

 Webinar Originally presented on 7 November 2022
 This course is eligible for CME credit.
 This talk is from the 2022 Advancing Excellence in Transgender Health Care Conference.
[Read More »](#)

 Filed under LGBTQIA+ Older Adults, Transgender Health

Reproductive Care and Obstetrics for Transgender and Gender Diverse People

 Webinar Originally presented on 7 November 2022
 This course is eligible for CME credit.
 This talk is from the 2022 Advancing Excellence in Transgender Health Care Conference.
[Read More »](#)

 Filed under Reproductive Health, Transgender Health

Providing Mental Health Assessments for Gender Affirming Surgery Referral Letters

 Webinar Originally presented on 7 November 2022
 This course is eligible for CME credit.
 This talk is from the 2022 Advancing Excellence in Transgender Health Care Conference.
[Read More »](#)

 Filed under Behavioral Health, Transgender Health

Update on Trans-Competent Primary Care

 Webinar Originally presented on 7 November 2022
 This course is eligible for CME credit.
 This talk is from the 2022 Advancing Excellence in Transgender Health Care Conference.
[Read More »](#)

 Filed under Transgender Health

Filter resources by type

-  Learning Module
-  Publication
-  Toolkit
-  Video
-  Webinar

Filter resources by topic

-  Behavioral Health
-  Collecting Sexual Orientation and Gender Identity Data
-  COVID-19
-  Diabetes and Heart Health
-  HIV/STI Treatment and Prevention
-  Intersex Health
-  Introduction to LGBTQIA+ Health
-  LGBTQIA+ Children and Youth
-  LGBTQIA+ Older Adults
-  LGBTQIA+ People of Color
-  Organizational Change
-  Patient Education Materials
-  Pre-Exposure Prophylaxis (PrEP)
-  Reproductive Health
-  Sexual Minority Women
-  Transgender Health



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 Members pursuing WPATH GEI SOC7 Certification, but are open to all healthcare professionals across all specialties, regardless of WPATH Membership 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.com/doi/pdf/10.1080/26895269.2022.2100644>
- **Primary care for transgender individuals:**
UCSF Center of Excellence for Transgender Health (<http://transhealth.ucsf.edu/>)

Thank you!

ohamnvik@bwh.harvard.edu

