Care of Transgender and Gender Expansive Adults: How to Diagnose, Support, Prescribe, Monitor

Dr. Robert Obara (he/him), Family Physician

Dr. Leon Waye (he/him), Family Physician



No conflicts of interest to declare.

(Hormone prescribing may be off-label)



Klinic — Winnipeg, Canada

Treaty 1 territory, traditional territory of the Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene Peoples, and on the National Homeland of the Red River Métis

Trans Health:

HOW TO DIAGNOSE

WORLD PROFESSIONAL ASSOCIATION FOR TRANSGENDER HEALTH

WPATH STANDARDS OF CARE

for the Health of Transgender and Gender Diverse People

Version

8



WPATH.ORG

What is Gender (WHO)

"Socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men.

It varies from society to society and can be changed."

Transgender prevalence: 1.17% & 0.9% (Nova Scotia, BC) aged 15-34 (2021)

Gender Dysphoria (DSM-5, 2013)

A difference between one's experienced/expressed gender and assigned gender, and **significant distress or problems functioning**. It lasts at least **six months** and is shown by **at least two of the following**:

- A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics
- A strong desire to be rid of one's primary and/or secondary sex characteristics
- A strong desire for the primary and/or secondary sex characteristics of the other gender
- ☐ A strong desire to be of the other gender
- A strong desire to be treated as the other gender
- ☐ A strong conviction that one has the typical feelings and reactions of the other gender

The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.



ARTICLE

Gender Incon

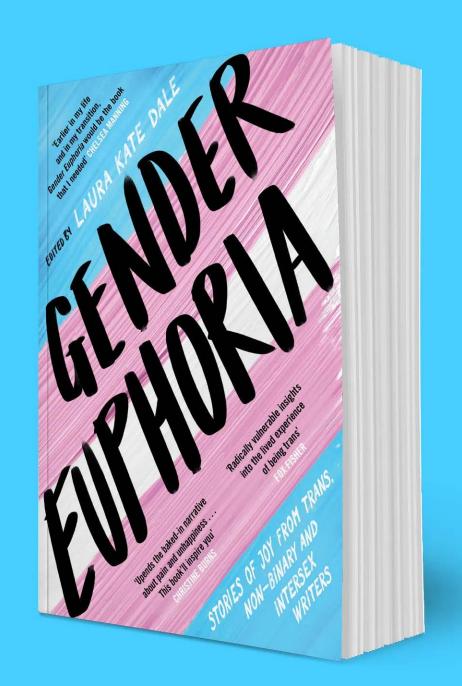
M. Fernández

¹Mental Health Asturias, Spain

²Gender Identit

³Master of Gen

⁴Intern Resider



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The Genderbread Person v3.3

Gender is one of those things everyone thinks they understand, but most people don't. Like Inception. Gender isn't binary. It's not either/or. In many cases it's both/and. A bit of this, a dash of that. This tasty little guide is meant to be an appetizer for gender understanding. It's okay if you're hungry for more. In fact, that's the idea.

For a bigger bite, read more at http://bit.ly/genderbread



Plot a point on both continua in each category to represent your identity, combine all ingredients to form your Genderbread 4 (of infinite) possible plot and label combos -

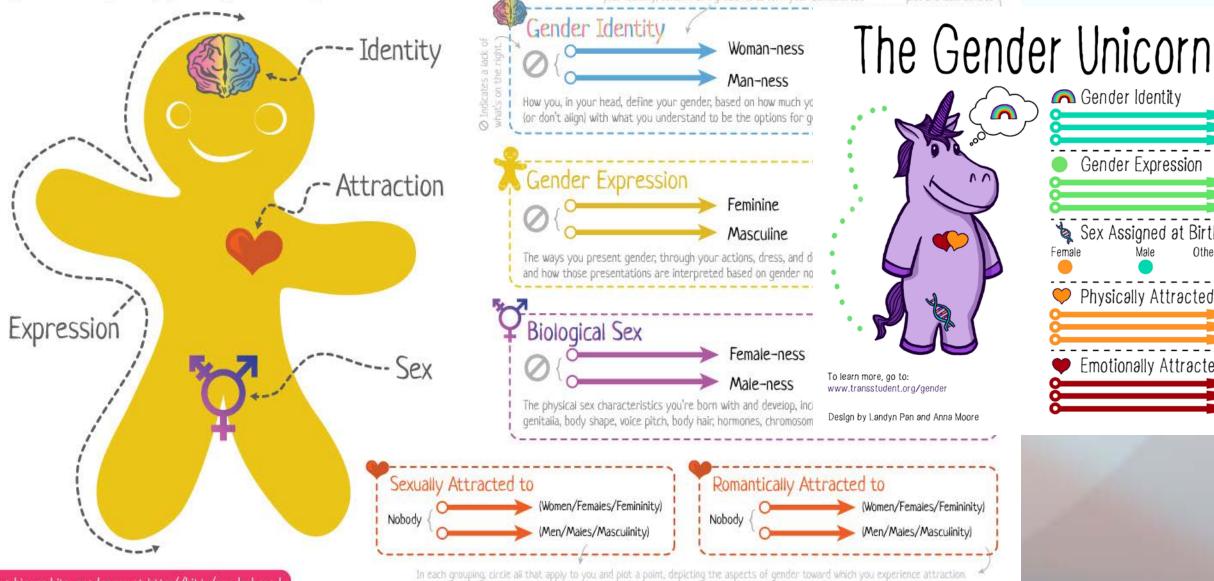
Gender Identity

Gender Expression

🍇 Sex Assigned at Birth

Physically Attracted to

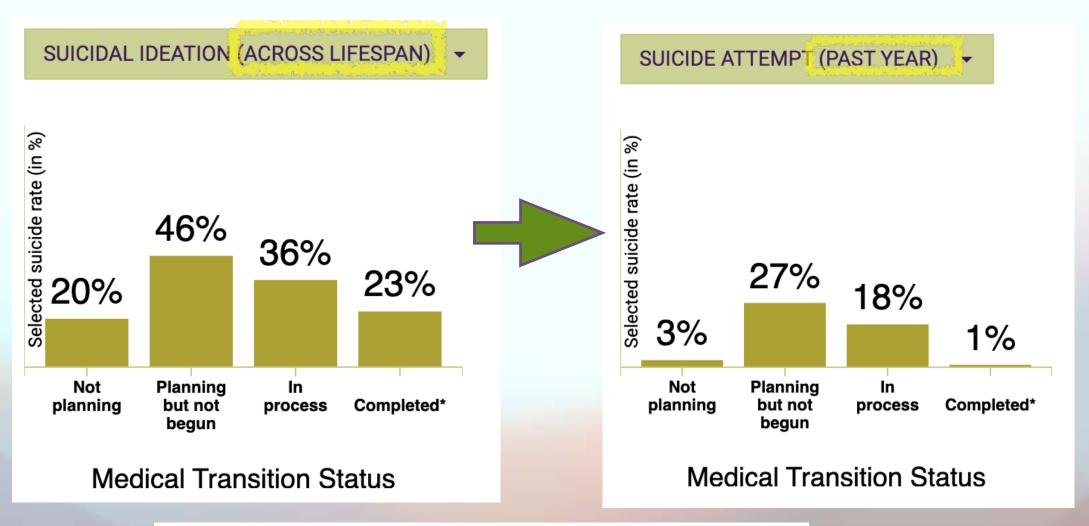
Emotionally Attracted to



Trans Health:

HOW TO SUPPORT (and why)

Gender Affirming Care is Life Preserving Care

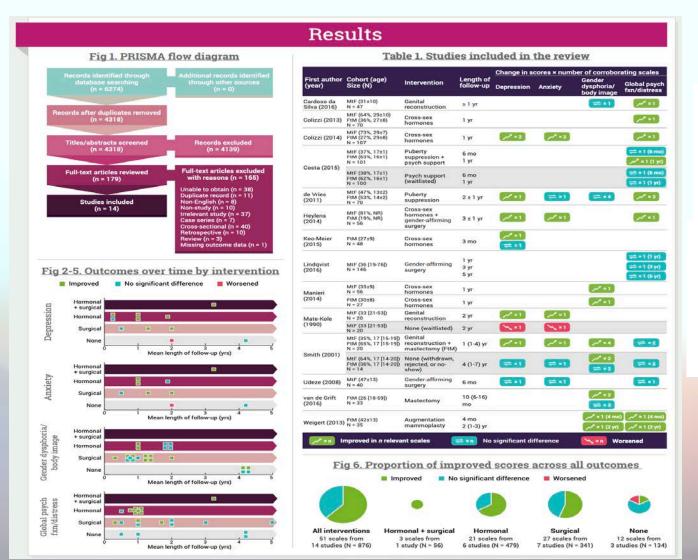


Sources -

- Bauer GR, Scheim AI, for the Trans PULSE Project Team (2015). Transgender People in Ontario, Canada: Statistics to Inform Human Rights Policy. 🖰
- Bauer, G., K. A., Pyne, J., Scanlon, K., & Travers, R. (2012). Improving the health of trans communities: Findings from the Trans Pulse Project. Conference presentation presented at the Rainbow Health Ontario Conference, Ottawa, ON. ©

Psychiatric Outcomes in Transgender Persons After Hormone Therapy or Gender-Affirming Surgery: A Systematic Review

Melissa Lee, BHSc,1 Ronald Leung, BHSc,2 Reha Kumar, BHSc1



Conclusions

- Hormonal and surgical treatment is usually followed by improved depression, anxiety, gender dysphoria/body image, and global psychological measures over months to years
- No change/stability in psychometric scores after treatment is common
- No change or worsening is more likely to occur with no treatment than with treatment

How to not be a

Hello, my name is _____, my pronouns are _____

What's your name and pronouns?

What's your gender identity; what sex were you assigned at birth?

Tell me about your yourself, your partner(s), and what kind of sex you have or would like to have.

Language Matters

Try	Instead of
Assigned female / Assigned male	Biological female / Biological male
Cisgender	Not trans / Normal / Real
Phenotypical development	Natural / Normal development
Common	Regular / Correct / Right
Hair loss	Male pattern balding
Sexual health screening / Internal exam / Cervical screening	Pelvic exam / Well woman exam
Looks healthy	Looks normal
Thinning of the internal genitalia tissue	Vaginal atrophy
Monthly bleeding	Period / Menses
Physical arousal / Hardening or stiffening of erectile tissue	Erection
External condom / Internal condom	Male condom / Female condom
Receptive IC / Insertive IC (IC = Intercourse)	Vaginal sex
Pregnant person	Pregnant woman
Parenthood	Motherhood / Fatherhood
Chestfeeding (for non-binary & transmasculine people)	Breastfeeding

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Try	Example	Instead of
Person with People with Anyone with	If a person with <u>a prostate</u> has urinary symptoms, they should speak with their doctor.	man with males with male-bodied people

① transhealth.ucsf.edu/video/story_html5.html?lms=1

Acknowledging

Menu Resources

- SECTION 0: COURSE WELCOME
- SECTION 1: THE NEED FOR CHANGE
- SECTION 2: TRANSGENDER HEALTH CARE
- **▼ SECTION 3: HEALTH CARE SCENARIOS**

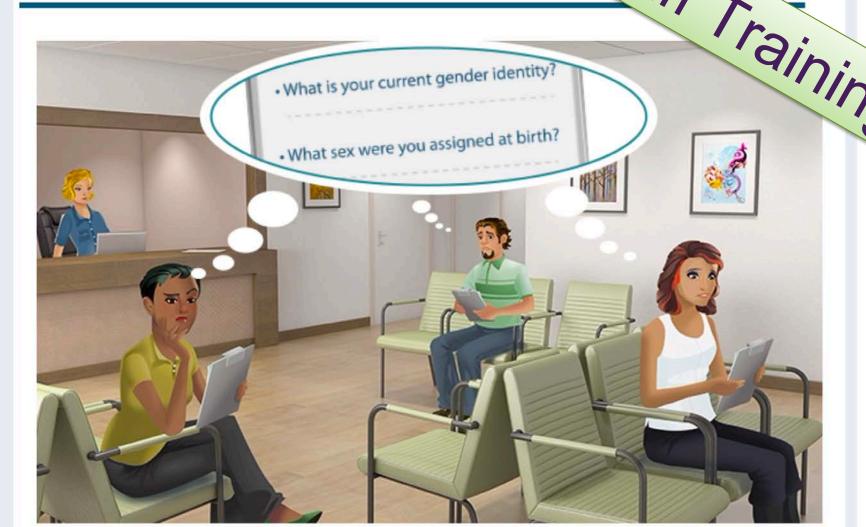
Encountering the Two Step Question

Staff Responds to Patient's Question A
Staff Responds to Patient's Question B
Clinician Responds to Patient A
Clinician Responds to Patient B
Question 1
Question 2

SECTION 4: SUMMARY

Acknowledging Gender and Sex

Encountering the Two Step Question



Making Mistakes

And correcting them



If you make a mistake in your choice of words, terms, names, or pronouns:

1 Apologize briefly

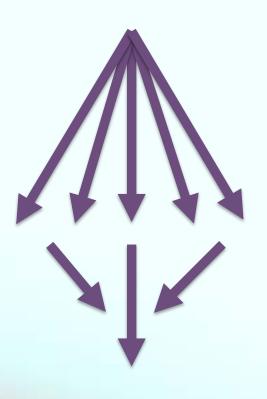
Use the correct word, term, name, or pronoun





Trans Health:

HOW TO PRESCRIBE



Step 1

Registration:

Fill out the registration form and mail or drop it off at Klinic OR fill out the registration form at Klinic.

Step 2

Social Work Intake:

Your first appointment at Trans Health Klinic will be an intake appointment with a social worker.

Step 3

Medical Care Intake:

Your second appointment at Trans Health Klinic will be for Nurse and Medical Practitioner intake. Blood work will be done and you will review and complete a hormone consent form.

Step 4

Medical Care Visit:

Your third appointment Trans Health Klinic will be with a medical practitioner. Hormones are typically prescribed at this appointment.

Step 5

Follow-up Care:

You will have several follow-up appointments at Trans Health Klinic including mandatory lab work and optional social work or peer support.

Step 6

Transfer of Care:

Once your medical transition goals are met, your care will be transferred to your primary care provider.

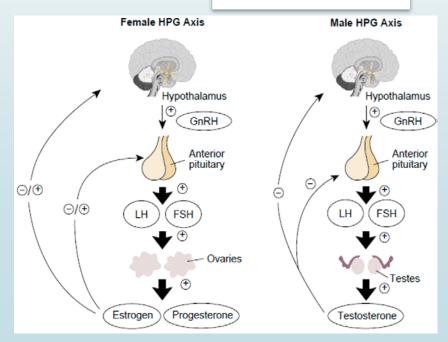


GnRH agonists (ie. Leuprolide)

THE ACTION FOR TOUR

- ☐ "Puberty blocker"
- ☐ q1mo or q3mo injection
- Stimulates LH and FSH secretion initially, but with chronic use leads to downregulation of GnRH receptors and decreased LH/FSH production resulting in hypogonadism and preventing puberty progression
- Reversible option to delay puberty in adolescents (usually Tanner stage 2-4) who experience worsening of gender dysphoria with puberty, or who need more time to explore their gender identity
- Generally follows a comprehensive multidisciplinary assessment (Child Psychiatry, Pediatric Endocrinology) with parental involvement





FORMULATIONS AND RECOMMENDED DOSES OF ANTI-ANDROGENS AND ESTROGEN

	Formulations	Starting Dose	Usual Dose	Maximum Dose	Cost* (4 weeks)
	Spironolactone (oral)	50 mg daily - BID	100 mg BID	150 mg bid ^a	\$15–\$41
	Cyproterone (oral)	12.5 mg (1/4 50 mg tab) q2d - daily	12.5 mg (1/4 50 mg tab) – 25 mg (1/2 50 mg tab) daily	50 mg dailyª	\$16-\$56
)	Estradiol (oral)*	1–2mg daily	4mg daily or 2mg bid	6 mg daily or 3 mg BID	\$18–\$54
1	Estradiol (transdermal, patch)*b	50 mcg daily/apply patch 2x/ week	Variable ^c	200 mcg daily/ apply patch 2x/ week	\$39 – \$76 ^d
	Estradiol (transdermal, gel)* ^e	2.5 g daily (2 pumps, contains 150 mcg estradiol)	Variable ^c	6.25 g OD (5 pumps, contains 375 mcg estradiol), may be limited by surface area requirements for gel application	\$58-\$154
	Estradiol valerate** Injectable (IM) ^f	3–4 mg q weekly or 6–8 mg q 2 weeks	Variable ^c (Or 2-5	10mg q weekly 5mg IM/SC twice v	\$36-\$46 weekly)









Contraindications

- Unstable ischemic cardiovascular disease
- · Estrogen-dependent cancer
- End stage chronic liver disease
- Psychiatric conditions which limit the ability to provide informed consent
- Hypersensitivity to one of the components of the formulation
- Estradot patches (no subs) = safest
- Injectable best for monotherapy
- Avoid ethinyl estradiol (eg. OCP)
- Once estrogen optimized, consider prometrium 100-200 qHS (consider stopping after 1-2 year)

The degree and rate of phylifestyle, and to some exter	ysical effects are	e largely depend	lent on patient-spe	cific factors	such	as age	e, gene	tics, l and	ile).8	d			E	
Physical Effects	Reversibility	Onsetª	Expected maximal effect ^a		1 		- 	2	3	-	4	· · · · · · · · · · · · · · · · · · ·)	
Softening of skin/ decreased oiliness	Reversible	3-6 months	Unknown	П)	
Body fat redistribution	Reversible/ Variable	3-6 months	2-3 years	М					D				****	
Decreased muscle mass/strength ^b	Reversible	3-6 months	1-2 years)					****	
Thinned/slowed growth of body/facial hair ^c	Reversible	6-12 months	>3 years	1								minn		
Scalp hair loss (loss stops, no regrowth)	Reversible	1-3 months	Variable	1										
Breast growth	Irreversible	3-6 months	1-2 years	М)					W. 2	
Decreased testicular volume	Variable	3-6 months	2-3 years			Variation (see a see					7		skin/decrease	
Decreased libido	Variable	1-3 months	3-6 months										nuscle mass/s	
Decreased spontaneous erections	Variable	1-3 months	3-6 months									Body fat redi		
Decreased sperm production	Variable	Variable	Variable	Σ							12	Decreased to Decreased L	esticular volun ibido	
Reduced erectile function	Variable	Variable	Variable	<u> </u>									pontaneous e perm product unction	

FORMULATIONS AND RECOMMENDED DOSES OF TESTOSTERONE

_	

Formulations	Starting Dose	Maximum Dose	Cost per unit*	Approx. Cost* (4 weeks)
Testosterone enanthate (IM/SC) ^a	20–50 mg q weekly or 40–100 mg q 2 weeks	100 mg q weekly or 200 mg q 2 weeks	\$73.50 per 5mL vial (each vial contains 200 mg/mL x 5 mL = 1000 mg)	\$14–\$29 (covered by ODB with EAP request)
Testosterone cypionate (IM/SC) ^a			\$64 per 10 mL vial (each vial contains 100 mg/mL x 10 mL = 1000 mg)	\$13–\$26 (covered by ODB with EAP request)
Testosterone path (transdermal) ^b	2.5–5 mg daily	5–10 mg daily	\$164 / 60 x 2.5 mg patches \$169 / 30 x 5 mg patches	\$76.50-\$315
Testosterone Gel 1% (transdermal)	2.5–5 g daily (2–4 pumps, equivalent to 25–50 mg testosterone)	5–10 g daily (4–8 pumps, equivalent to 50–100 mg testosterone)	\$67 / 30 x 2.5 g sachets \$110 / 30 x 5g sachets \$175 / 2 pump bottles ^c	Sachets: \$62–\$205 Bottles: \$81–\$327

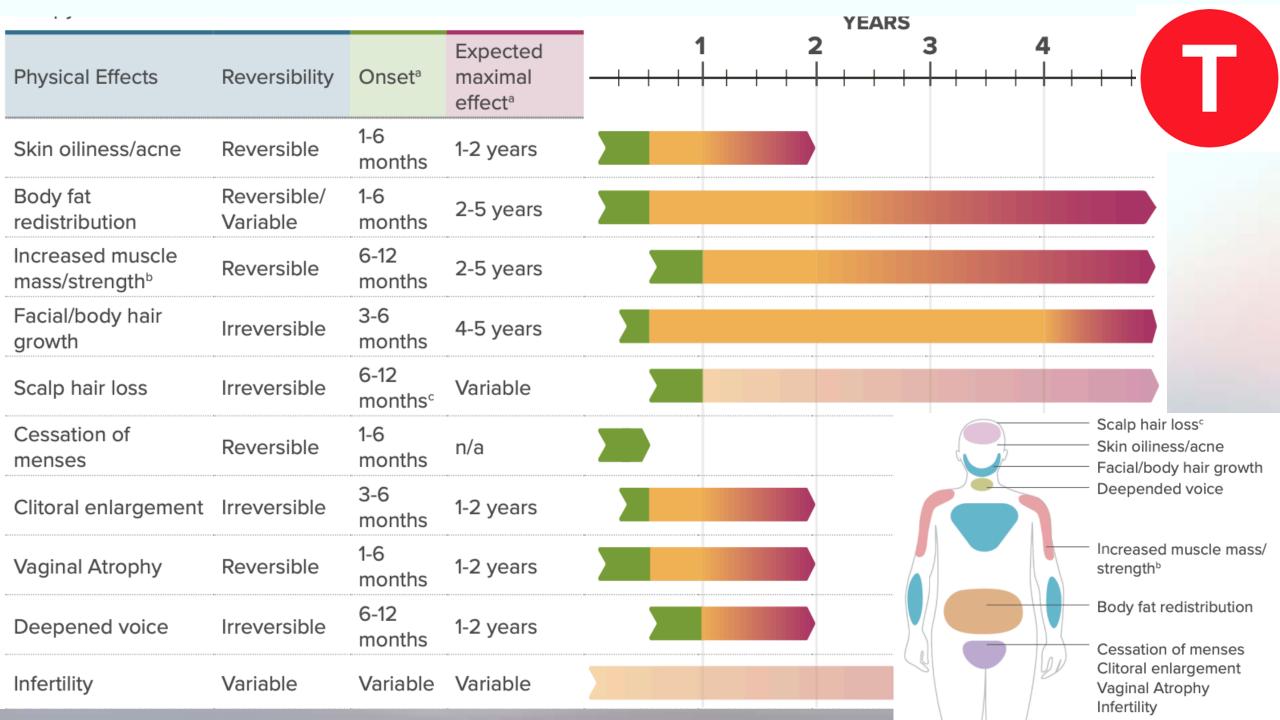


- p.o. & other options
 (3 monthly IM T undecanoate)
- Finasteride 1.25 mg qd
 +/- minoxidil if hair loss

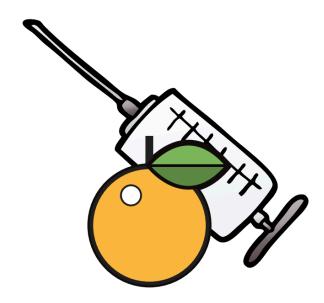
Contraindications

- Pregnancy or breast feeding
- Active known sex-hormone-sensitive cancer (e.g., breast, endometrial)
- Unstable ischemic cardiovascular disease
- Poorly controlled psychosis or acute homicidality
- Psychiatric conditions which limit the ability to provide informed consent
- Hypersensitivity to one of the components of the formulation





TRANSGENDER HORMONE INJECTION GROUP WORKBOOK



TRANS HEALTH KLINIC

T Supplies:

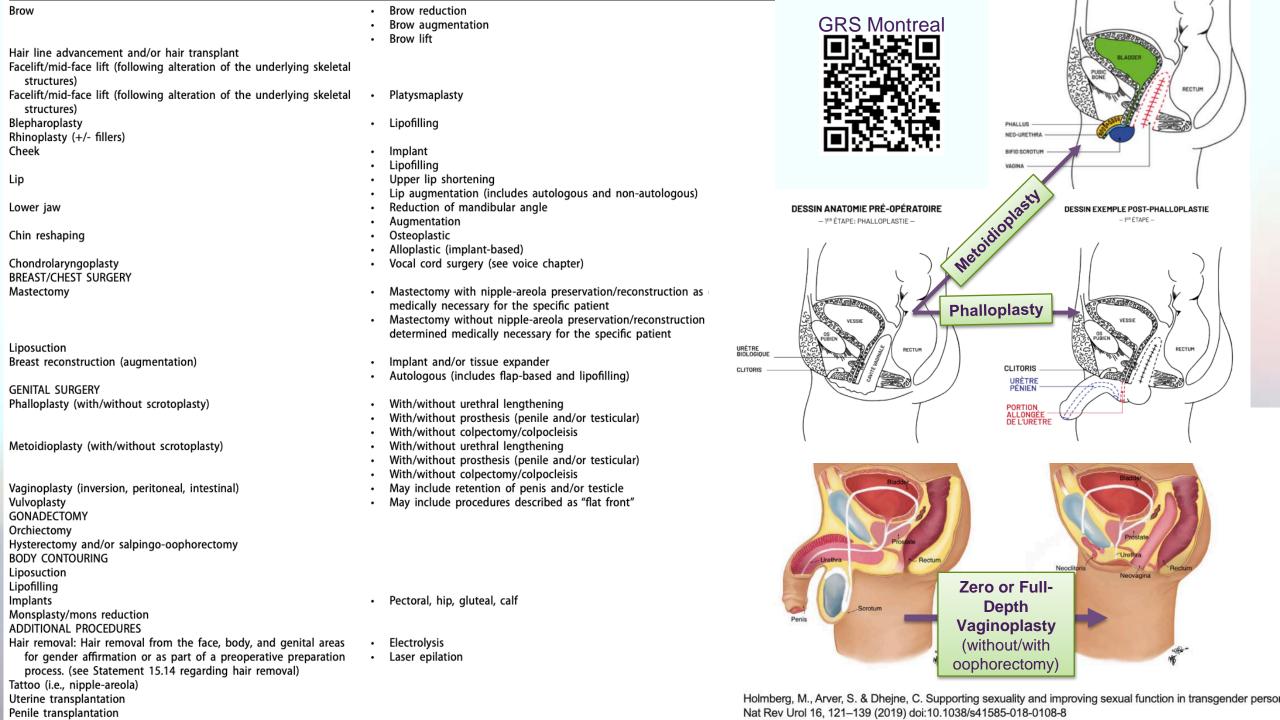
- 1 or 3cc syringes
- Blunt fill needles (no filter) or 18G
- IM: 23G 1" needles

SC: 25G 5/8" needles

Alcohol swabs, dressings, sharps bin







Trans Health:

HOW TO MONITOR

Monitoring







HORMONE MONITORING SUMMARY FOR TRANSFEMININE PATIENTS

In this table, smaller and lighter grey checkmarks indicate parameters that are measured under particular circumstances.

NB: Individual parameters should be considered more frequently if concerns identified or existing risk factors are present.

Non-hormone labs:

- Hemoglobin/Hematocrit use female reference for lower limit of normal and male reference for upper limit of normal
- · Creatinine use male reference for upper limit of normal.

	Baseline	Month 3	Month 6	Month 12 ^e	Yearly	According to guidelines for cis patients, or provider discretion	
Exam/ Investigations	Focused Physical Exam. Include: height, weight, BP, +/- breast inspection/ measurement(s)* BP, weight, +/- breast inspection/ measurement(s) at 12 months*				See Preventive care checklist for transfeminine patients and Accompanying Explanations in the fu Guidelines.		
BLOODWORK							
CBC ^a	✓	✓	✓	✓	✓		
ALT ^b	✓	1	✓	✓	~	✓	
Creatinine/Lytes ^c	✓	1	√	1	~		
HbA1c or Fasting Glucose	✓			✓		√	
Lipid profile	✓			✓		✓	
Total Testosterone	✓	✓	✓	✓	✓		
Estradiol	✓	✓	✓	✓	✓		
Prolactin ^d	✓	11 14400 1440		✓	√	✓-	
Other	Hep B and C						
Other	Consider: HIV, syphilis, and o	ther STI screening	ng as indicate	ed, frequency	depending o	on risk	

HORMONE MONITORING SUMMARY FOR TRANSMASCULINE PATIENTS

In this table, smaller and lighter grey checkmarks indicate parameters that are measured under particular circumstances.

Non-hormone labs:

Male reference ranges should be used for Hb/Hct (lower limit of female range can be used if menstruating).

	Baseline	Month 3	Month 6	Month 12 ^{b,c}	Yearly	According to guidelines for cis patients, or provider discretion
Exam/ Investigations	Focused Physical Exam with PAP if indicated. Include: height, weight, BP.	BP, weight			for Transm accompany Guidelines	ntive Care Checklist asculine Patients and ying explanations in the for Gender-Affirming are with Trans and Non- ients.
BLOODWORK						
CBC	✓	✓	✓	✓	✓	
ALT	✓			√ c		✓
HbA1c or Fasting Glucose	✓	()		√c		√
Lipid profile	✓			√ c		✓
Total Testosterone	✓	✓	✓	✓	✓	
LHa	4			1	~	

Labs Targets*





Estradiol target:
 eg. 200-740 pmol/L*
 (less if postmenopausal)
 suppressed T <2 nmol/L

 Midpoint Testosterone target eg. 10-25 nmol/L (or cessation of menses)

-phenotype may vary

-phenotype may vary

'Comorbidities'

□ Major depression	Eating disorders
□ Anxiety disorders	□ HIV
□ Self-harm	☐ Lower SES
□ Suicidal ideation	□ Asthma
 Dissociative disorders 	□ Diabetes
□ Autism spectrum disorder	
☐ Substance use disorders	☐ Higher health service use

Effectiveness Targets

Gender satisfaction?

Mental & social health satisfaction?

Sexual health satisfaction?

Pregnancy possibilities? Smoking?

Trans Health: HOW TO SCREEN

Cardiovascular risk Testosteron Calculator, Were started	Screening	(Think Logic	ally!)	
Chest/Breast cancer	Cardiovascular risk	Calculator, L Were starte September 2	Mammography (q2 yrs age 50-74 if no chest reconstruction) Cervical cytology (q3 yrs if ever sexually active and up to 69 yrs! Fecal immunochemical test (FiT) (up to 74 yrs q2 yrs) OR ☐ Sigmoldoscopy OR ☐ Colonoscopy	rted early in life, 1 Mammogram (estrogen 25 years total and any risk age 56-74 ag 27 ris) Mammogram (estrogen 25 years total and any risk age 56-74 ag 27 ris) Focal immunochemical test (FIT) (up to 74 yris) Focal immunochemical test (FI	
Age	preventive For annual health assess transmasculine patients, a patients who were assign and have a gender identit on the masculine spectrum surgical treatments for ge- gender incongruence.	Screen for: Depression	bits holeseterol ake supp) yaical activity se protective clothing sling/PrEP indications 5 39' -0.8 mg) bits holeseterol ake and a control of the control	Per BC C Depression De	
Osteoporosis Os	Age: Date of Examination:	TAH:	en leafy vegetables essation program ibstance use bstance use bstance use licty covered 65-70yrs)	Name:	BOTH
Osteoporosis Social supports:	CURRENT CONC	Diet: Fat/Cholesterol Fibre Calcium Sodium Exercise:		CURRENT CONCERNS LIFESTYLE/HABITS/PSYCHOSOCIAL: Diet: Fat/Cholesterol. Fiber Calcium Sodium. Exercise:	
Colon cancer Screening guidelings		Family: Relationships: Sexual History: Family Planning/Contraception: Name change/identification: Sleep: Smoking: Alcohol: Safe Guidelines s10/week, s2	phorecton n intake and weig	Poverty: Social supports: Family Relationships: Sexual History: Family Planning/Contraception: Name change/identification: Sieep: Smoking Alcohel: Safe Guidelines \$10 week, \$200gy Drugs:	

Health Promotion

Vaccines (HAV, HBV, HPV, MPox, MenACWY, MenB...)

PrEP (nb trans women) / Doxy PEP

STI testing *use it, swab it

Weight 1

Tobacco

Affirmation (beyond hormones)

- √Removal of laws that restrict gender affirming care
- √Name + gender marker change
 - Lab req (ALIAS: JANE DOE [SHE/THEY])
- √ Bathrooms
- √ Makeup/hair, clothing, jewelry
- √ Chest binding, packing, other gear
- √ SLP YouTube
- √ Filler, neurotoxins/Botox
- √ Support + family groups
- ✓ Antibullying policies + enforcement
- √ Pride + celebration

Resources



Rainbow Health Ontario Point of Care Guide



Trans Care BC Primary Care Toolkit



WPATH Standards of Care 8

Trans care is primary care.



