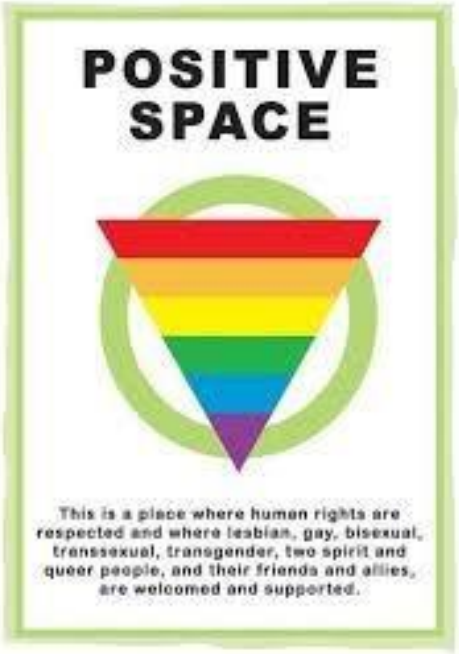


Gender Affirming Care in the General Primary Care Office

DR. SEAN T SULLIVAN, MD CCFP
(HE/HIM)

APRIL 6, 2022

Disclosure of Affiliations, Financial Support, and Mitigating Bias

Affiliations:

- Grants/Research Support: Site Investigator for the Ontario PrEP Cohort Study
- Honoraria: Réseau Access Network, Rainbow Health Ontario

Learning Objectives

- Describe ways that healthcare providers can make their practice more welcoming for trans and non-binary patients
- **Explain therapeutic options that primary care providers can initiate for trans and non-binary patients**
- Identify the appropriate language and best practices in communicating with patients who are trans and non-binary

rainbow health ontario

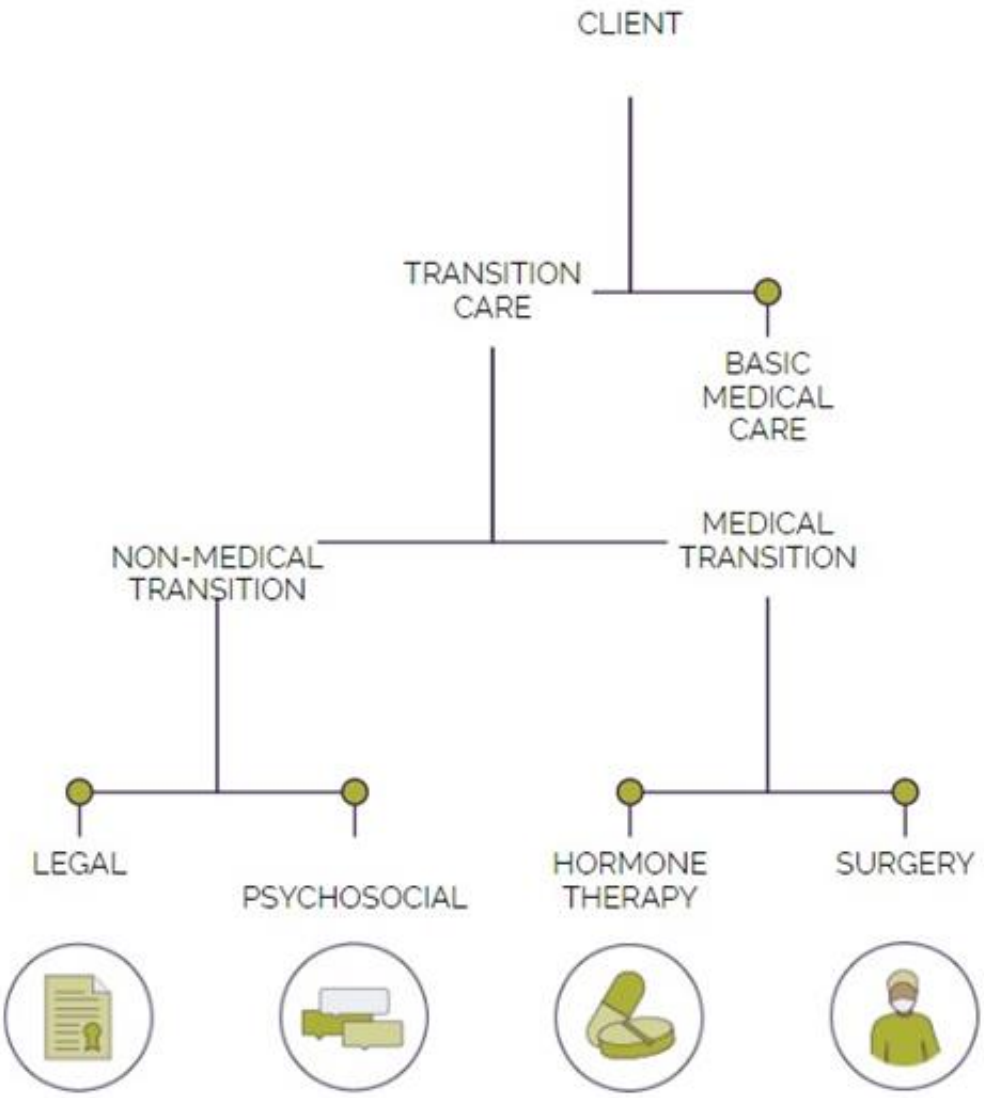
SHERBOURNE HEALTH

NOSM UNIVERSITY

Réseau ACCESS Network

HIV/Hepatitis Health and Social Services

Services sociaux et de santé pour l'hépatite et vih

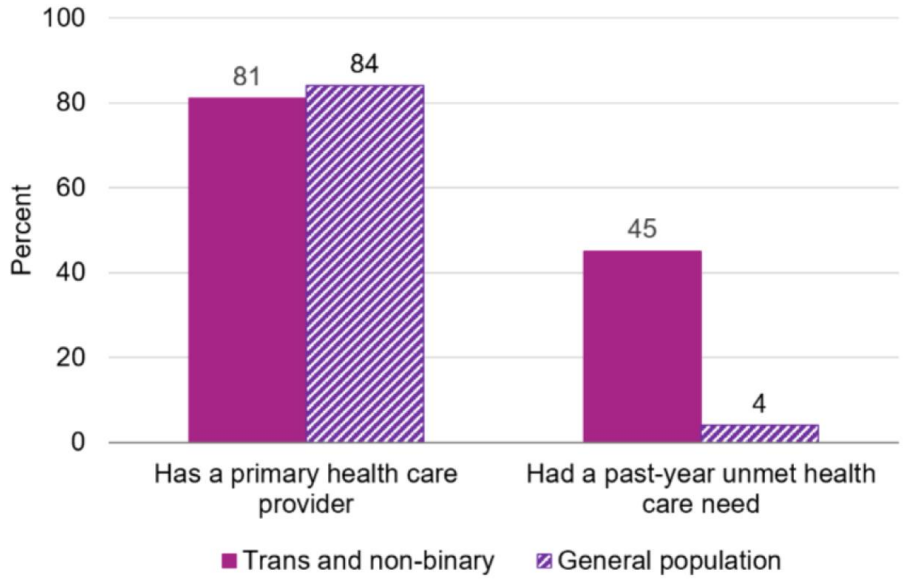

CLIENT
TRANSITION CARE
BASIC MEDICAL CARE
NON-MEDICAL TRANSITION
MEDICAL TRANSITION
LEGAL
PSYCHOSOCIAL
HORMONE THERAPY
SURGERY

70% of Transgender Patients in Ontario Live Outside of the GTA

TransPULSE, 2010

Trans PULSE CANADA

How does health care access for trans and non-binary people in Canada compare to the general population?



Cite this QuickStat: The Trans PULSE Canada Team. QuickStat #2 - Primary care and unmet health care needs. 2020-01-31. Available from: https://transpulsecanada.ca/research-type/quickstats/

General population data from Canadian Community Health Survey, 2015/2016. Accessed via ODESI.

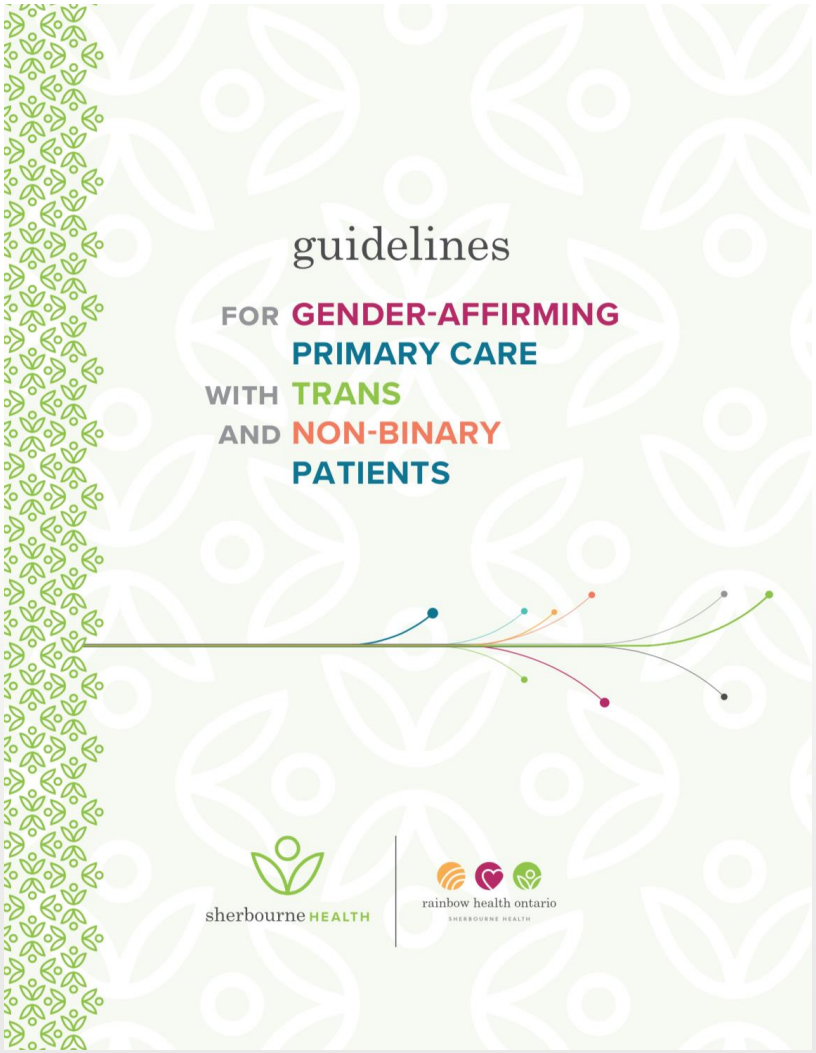
WPATH

WORLD PROFESSIONAL ASSOCIATION FOR TRANSGENDER HEALTH

TRANS CARE BC

Provincial Health Services Authority

center of excellence for TRANSGENDER health



TRANS PRIMARY CARE GUIDE

Gender Affirming Hormone Therapy

- Lessen dysphoria and increase patient comfort
- Avoid significant negative side effects

- Partnership
- Informed consent model
- Fertility!

- Within the scope of primary care

Gender Dysphoria

- 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

Feminizing Hormones

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 daily[a]	$16–$56
Estradiol (oral)*	1–2mg daily	4mg daily or 2mg bid	6 mg daily or 3 mg BID	$18–$54
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]	10mg q weekly	$36–$46

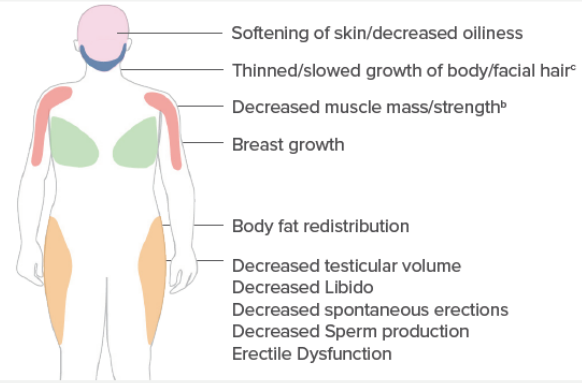
Contraindications

- 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

Target:

- Physical changes
- General level : 370-735, often feminization at 200-500.

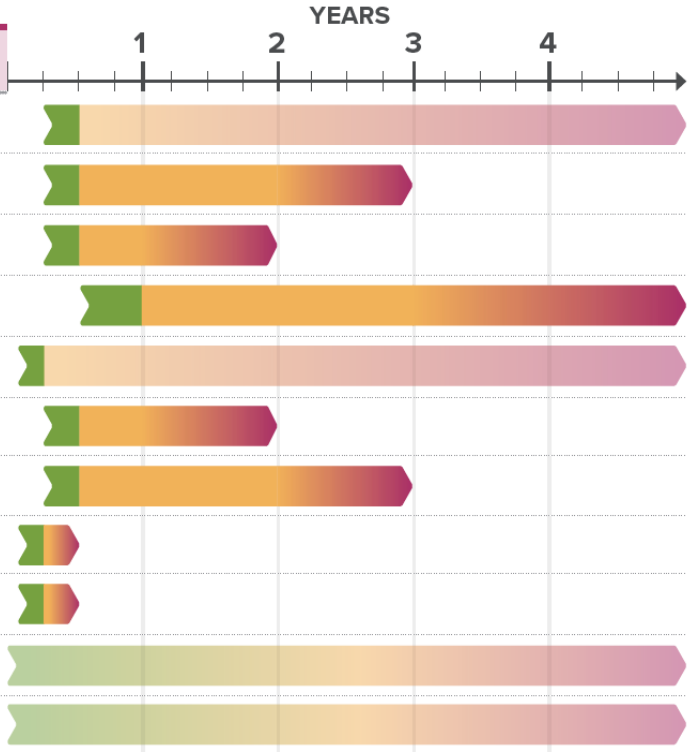
Feminizing Therapy



EFFECTS AND EXPECTED TIME COURSE OF FEMINIZING HORMONES

The degree and rate of physical effects are largely dependent on patient-specific factors such as age, genetics, body habitus and lifestyle, and to some extent the dose and route used (selected in accordance with a patient's specific goals and risk profile).[8]

Physical Effects	Reversibility	Onset[a]	Expected maximal effect[a]
Softening of skin/ decreased oiliness	Reversible	3-6 months	Unknown
Body fat redistribution	Reversible/ Variable	3-6 months	2-3 years
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
Scalp hair loss (loss stops, no regrowth)	Reversible	1-3 months	Variable
Breast growth	Irreversible	3-6 months	1-2 years
Decreased testicular volume	Variable	3-6 months	2-3 years
Decreased libido	Variable	1-3 months	3-6 months
Decreased spontaneous erections	Variable	1-3 months	3-6 months
Decreased sperm production	Variable	Variable	Variable
Reduced erectile function	Variable	Variable	Variable



Monitoring

Table 3
Recommended parameters for monitoring anti-androgen therapy

		Baseline[a]	3–6 months	12 months
SPIRONOLACTONE	History	screen for contraindications/ potential drug interactions	side effects (polyuria, orthostasis)	
	PE	| ——— +/- breast inspection[b] (baseline)	BP ——— |	
	Key labs	Cr, lytes, total testosterone		
CYPROTERONE	History	screen for contraindications/ potential drug interactions	side effects (depression, low energy), desired effects	
	PE	Wt, BP +/- breast inspection[b]	Wt, BP, abdominal exam	
	Key labs	CBC, AST/ALT, Cr, lytes, total testosterone	CBC[c], AST/ALT, total testosterone, Cr, lytes	CBC[c], AST/ALT, total testosterone, fasting glucose or Hba1c, lipid profile, +/-Cr, lytes[d]

a If not done in the preceding 3 months

b Breast inspection at baseline with attention to Tanner stage (+/- measurement), for patients who may have interest in OHIP-covered breast augmentation, see Part 1 - Physical exam and baseline investigations

c Red blood cell parameters can be expected to decrease with androgen blockade, female reference ranges for lower limits of normal should be used

d Necessary only if risks/concerns identified

Note: Additional parameters required as per guidelines with estrogen; pre-existing conditions or risk factors may require earlier/more frequent monitoring of specific parameters.

Table 6
Recommended bloodwork for monitoring feminizing hormone therapy

In this table, smaller and lighter grey "x"s indicate parameters that are measured under particular circumstances

Test	Baseline	4–6 weeks	3 months	6 months	12 months[e]	Yearly	According to guidelines for cis patients, or provider discretion
CBC[a]	X		x	x	X	x	
ALT/AST[b]	X		x	x	X	x	X
Creatinine/lytes[c]	X	x	x	x	x	x	
Hba1c or fasting glucose	X				X		X
Lipid profile	X				X		X
Total testosterone	X		X	X	X	X	
Estradiol	X		X	X	X	X	
Prolactin[d]	X				x	x	x
Other	Hep B, C						
	Consider: HIV, syphilis and other STI screening as indicated, frequency depending on risk						

a At baseline for all, and regularly with cyproterone, for Hb/Hct use female reference for lower limit of normal and male reference for upper limit of normal

b Baseline for all and regularly with cyproterone, otherwise repeat once at 6–12 months then as needed

c Cr, lytes, should be monitored at each visit with spironolactone, but is only required at baseline and then once between 6–12 months with cyproterone unless risk factors or concerns re: renal disease are present, use male reference range for upper limit of normal for Cr

d Prolactin should be monitored at least yearly with the use of cyproterone, and more frequently if elevation is noted

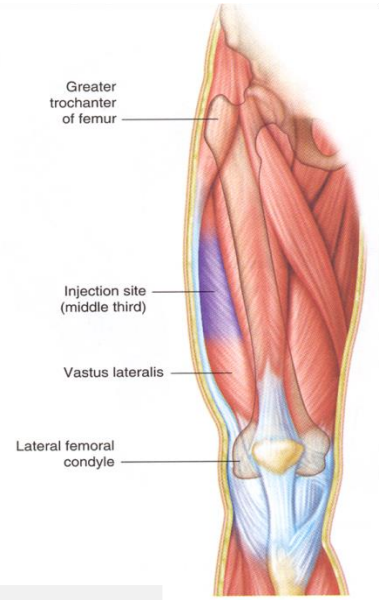
e During first year of treatment only

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

Masculinizing Hormones

FORMULATIONS AND RECOMMENDED DOSES OF TESTOSTERONE

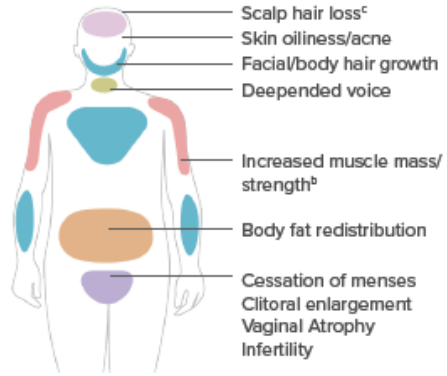
Formulations	Starting Dose	Maximum Dose	Cost per unit*	Approx. Cost* (4 weeks)
Testosterone enanthate (IM/SC)[a]	20–50 mg q weekly or 40–100 mg q 2 weeks	100 mg q weekly or 200 mg q 2 weeks	$73.50 per 5mL vial (each vial contains 200 mg/mL x 5 mL = 1000 mg)	$14–$29 (covered by ODB with EAP request)
Testosterone 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



Target:
- Physical changes
- General level : 8-28

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

Masculinizing Therapy



EFFECTS AND EXPECTED TIME COURSE OF TESTOSTERONE

The degree and rate of physical effects is dependent on the dose and route of administration,[2] as well as patient-specific factors such as age, genetics, body habitus and lifestyle. Hormone therapy results in both reversible and irreversible masculinization.

Physical Effects	Reversibility	Onset[a]	Expected maximal effect[a]
Skin oiliness/acne	Reversible	1-6 months	1-2 years
Body fat redistribution	Reversible/ Variable	1-6 months	2-5 years
Increased muscle mass/strength[b]	Reversible	6-12 months	2-5 years
Facial/body hair growth	Irreversible	3-6 months	4-5 years
Scalp hair loss	Irreversible	6-12 months[c]	Variable
Cessation of menses	Reversible	1-6 months	n/a
Clitoral enlargement	Irreversible	3-6 months	1-2 years
Vaginal Atrophy	Reversible	1-6 months	1-2 years
Deepened voice	Irreversible	6-12 months	1-2 years
Infertility	Variable	Variable	Variable

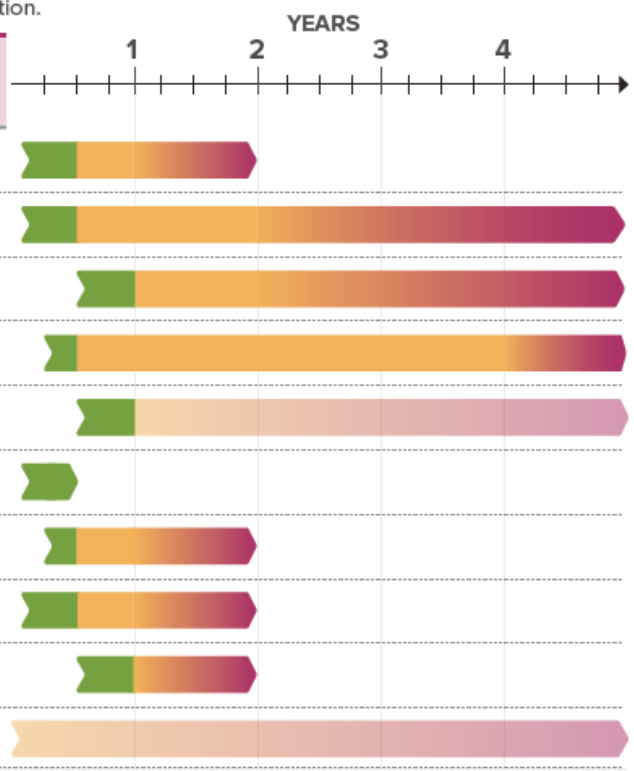


Table 10
Recommended bloodwork for monitoring masculinizing hormone therapy

In this table, smaller and lighter grey "x"s indicate parameters that are measured under particular circumstances

Test	Baseline	3 months	6 months	12 months[c]	Yearly	According to guidelines for cis patients, or provider discretion
CBC[a]	X	X	X	X	X	
ALT/AST	X		X[d]			X
Fasting Glucose/ Hba1c	X		X[d]			X
Lipid profile	X		X[d]			X
Total Testosterone	X	X	X	X	X	
LH[b]	x			x	x	
Other	Hep B, C, pregnancy test					
	Consider: HIV, syphilis and other STI screening as indicated, frequency depending on risk					

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

b Post-gonadectomy only: elevated LH may have implications regarding bone mineral density (See Osteoporosis and bone mineral density screening)

c During first year of treatment only

d Once at either 6 or 12-month mark

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

Cycle-related Considerations

Contraception dependent on patient factors

- Partners, Practices
- Barrier methods, Progesterone injection, implant or IUS
- Combined OCP

Hormones alone are not considered contraception!

Testosterone is teratogenic

Other options for breakthrough bleeding

- GnRH agonists ie. Leuprolide “Lupron”

Hormones

- “Second puberty”
- Time on hormones vs initial dose
- Undesired effects can be treated like for other causes
  - Ie. Acne, Male Pattern Hair Loss

Surgical Referrals

Current MOHLTC-funded transition-related surgeries[29]

	For patients assigned male at birth	For patients assigned female at birth
Upper body	Augmentation Mammoplasty[a]	Mastectomy[b]
Gonadal	Orchiectomy	Hysterectomy Salpingo-oophorectomy
External genital	Vaginoplasty	Clitoral release with vaginectomy Metoidioplasty Phalloplasty Testicular implants with scrotoplasty Penile implant

a MOHLTC funding criteria includes having "completed twelve (12) continuous months of hormone therapy with no breast enlargement (unless hormones are contraindicated)."[32]
b Masculinizing chest contouring is not currently MOHLTC-funded. Patients may choose to pay for this privately. Surgeons' fees for masculinizing chest contouring may vary.

- Diagnosis of persistent gender dysphoria
- Completed 12 continuous months of hormone therapy (unless hormones are not recommended)
- Lived 12 continuous months in the gender role identified with (for genital surgery only)

Surgery Planning Visits

- Qualified Provider(s)
- Informed Consent
- Request for Prior Approval Form
- Referral to Surgeon
- Northern ON- travel considerations
- Surgical follow up

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transition-related surgery (TRS)*

FREQUENTLY ASKED QUESTIONS

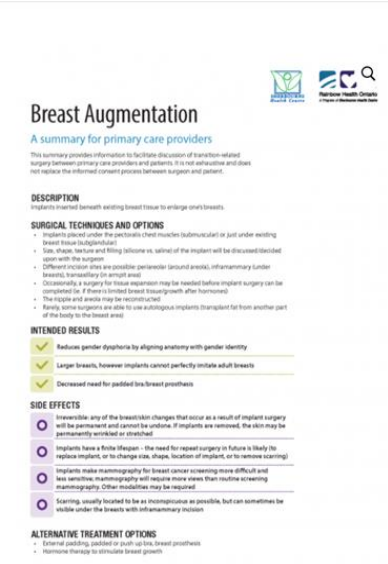
For Ontarians considering transition-related surgery and the people supporting them

Assessment and Referral Process for Ministry of Health and Long-Term Care (Ministry) Approval for Ontario Health Insurance Plan (OHIP) Funding

On March 1, 2016, the Ontario Health Insurance Plan (OHIP) changed the funding criteria for transition-related surgery to align with the World Professional Association for Transgender Health (WPATH)'s internationally-accepted standards of care for the health of transgender and gender diverse people.

This now allows qualified healthcare providers (HCPs) to not only assess and refer patients for surgery, but to apply for OHIP covered funding for these surgeries.

* *Transition-related surgery, also known as TRS, refers to a range of surgical options people may require for gender transition. There are many terms for this including gender-affirming surgery (GAS), sex-reassignment surgery (SRS), gender-confirming surgery (GCS).*



Breast Augmentation

A summary for primary care providers

This summary provides information to facilitate discussion of transition-related surgery between primary care providers and patients. It is not exhaustive and does not replace the informed consent process between surgeon and patient.

DESCRIPTION

Implants inserted beneath existing breast tissue to enlarge one's breasts.

SURGICAL TECHNIQUES AND OPTIONS

- Implants placed under the pectoralis chest muscles (submuscular) or just under existing breast tissue (subglandular)
- Size, shape, texture and filling (silicone vs. saline) of the implant will be discussed/decided upon with the surgeon
- Different incision sites are possible: periareolar (around areola), inframammary (under breasts), transaxillary (in armpit area)
- Occasionally, a surgery for tissue expansion may be needed before implant surgery can be completed (ie. if there is limited breast tissue/growth after hormones)
- The nipple and areola may be reconstructed
- Rarely, some surgeons are able to use autologous implants (transplant fat from another part of the body to the breast area)

INTENDED RESULTS

- Reduces gender dysphoria by aligning anatomy with gender identity
- Larger breasts, however implants cannot perfectly imitate adult breasts
- Decreased need for padded bra/breast prosthesis

SIDE EFFECTS

- Irreversible: any of the breast/skin changes that occur as a result of implant surgery will be permanent and cannot be undone. If implants are removed, the skin may be permanently wrinkled or stretched
- Implants have a finite lifespan - the need for repeat surgery in future is likely (to replace implant, or to change size, shape, location of implant, or to remove scarring)
- Implants make mammography for breast cancer screening more difficult and less sensitive; mammography will require more views than routine screening mammography. Other modalities may be required
- Scarring, usually located to be as inconspicuous as possible, but can sometimes be visible under the breasts with inframammary incision

ALTERNATIVE TREATMENT OPTIONS

- External padding, padded or push up bra, breast prosthesis
- Hormone therapy to stimulate breast growth

Home > Resources > Clinical guidelines > TRS Surgical Summary Sheets

TRS Surgical Summary Sheets

Intended for use by primary care providers, these summary sheets about transition-related surgeries (TRS) provide information to facilitate discussion of TRS between primary care providers and patients.

Please note that they are not exhaustive and do not replace the informed consent process between surgeon and patient.

Author: Sherbourne Health Centre, Rainbow Health Ontario
Publish Date: 2017-09-08
Resource Type: **Clinical guidelines**, **Free Downloads**.
Target Audiences: **Health/social service providers**, **Service Providers**.
Last Modified: 2017-09-08

All sheets (package)
Vaginoplasty
Phalloplasty
Orchiectomy
Metoidioplasty
Hysterectomy and BSO
Clitoral Release
Chest Reconstruction
Breast Augmentation

Thank you

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