Gender-Affirming Care for Transgender & Gender Non-Conforming Patients: A Guide for Generalists

Key Resources:
- **World Professional Association for Transgender Health (WPATH) - "Standards of Care" v8**
- **UCSF Guidelines for Gender Affirming Care - https://transcare.ucsf.edu/guidelines**
- **Legal support and name changing: transequality.org → Self-Help Guides → ID Documents Center**

Every person experiences each of these axes of human experience in their own way

Terms
• Sex assigned at birth: Usually assigned by appearance of external genitalia, distinct from gender identity
• Gender Identity: One's intrinsic sense of being male, female, neither
• Transgender: A person whose gender identity doesn't match their sex assigned at birth
• Cisgender: A person whose gender identity corresponds with their sex assigned at birth
• Trans **Man:** Identifies as **male;** assigned female at birth (AFAB)
• Trans **Woman:** Identifies as **female;** assigned male at birth (AMAB)
• Gender Incongruence: discrepancy between gender identity and sex assigned at birth
• Gender Nonbinary: Describes a person whose gender identity differs from normative for their assigned sex
• Gender expression: Manner in which a person communicates about gender to others through behavior or clothing
• Sexual orientation: Unrelated to gender identity; refers to emotional, romantic, or sexual feelings towards other people

	Expectations: Masculinizing GAHT (time to onset, time to max effect)	**Expectations: Feminizing GAHT (time to onset, time to max effect)**
Muscle mass	Increases: 6-12 months, max 2-5 years	Decreases: 3-6 months, max 2-5 years
Fat redistribution	3-6 months, max 2-5 years	3-6 months, max 1-2 years
Breast development	Testosterone doesn't affect breast size	3-6 months, max 2-3 years
Voice	Deepens: 3-12 months, max 1-2 years	GAHT does not change vocal pitch
Facial hair	Coarsens & increases: 3-6 months, max 3-5 years	GAHT does not reverse coarseness; growth slows
Body hair	Increases: 3-6 months, max 3-5 years	some reduction, growth slows: 6-12 months, max >3 years
Skin	↑ coarseness, acne, and oiliness: 1-6 months, max 1-2 years	Softens: 3-6 months, max unknown
Genitals	clitoral enlargement: 3-6 months, max 1-2 years	fewer spontaneous erections: (1-3 months, max 3-6 months); testicular atrophy (3-6 months, max 2-3 years)
Scalp Hair	Hair: male-pattern loss: >12 months, max variable	no regrowth, though loss stops: 1-3 months, max 1-2 years
Infertility	variable	usually permanent

● ULN: upper limit of normal ● GAHT: Gender affirming hormone therapy

Steps to Prescribe Gender Affirming Hormone Therapy

Step 1: Environment	- Educate staff, gender neutral bathrooms, don't editorialize - Two-step intake: 1) gender identity/pronouns, 2) sex assigned at birth
Step 2: Expectations	inform objectively of effects , Educate on **wide variability** of effects
Step 3: Readiness	- Ask if those effects are desired, describe permanence (infertility)/risks - **Informed consent model:** anyone can do, decide with patient
Step 4: Baseline history	- Comorbid risks: mood, smoking, suicidality, social disparities of health - **MUST ASK**: desire for fertility, history of hormone-sensitive cancers
Step 5: Physical exam	Establish trust, mirror your patient's language, none specific required
Step 6: Baseline labs	Baseline: BMP (BUN/Cr/K+), LFTS, albumin, CBC, +/- lipids and A1c Serum estradiol, serum testosterone, sex-hormone binding globulin
Step 7: Starting GAHT	Masculinizing: testosterone only (weekly, can dose q2 weeks; need syringes) - Testosterone cypionate IM: initial 40-80mg/wk; Max 100mg/wk - Testosterone topical gel 1%: initial 50 mg qAM; Max 100 mg qAM - For nonbinary people, ok to start lower (i.e. 12-25mg gel) Feminizing: estrogen and antiandrogen - PO estradiol (bioidentical): initial 2-4 mg/day, max 4mg BID - Transdermal estradiol: initial 50-100 mcg/day, max 400mcg/day - Estradiol valerate IM: initial 10-20mg IM q2week, max 40mg IM q2week (halve for weekly dosing). Rx w/ 23-25G needles; 18G needle to drawn up *NO ethinyl estradiol due to increased thrombogenicity* - **PO Spironolactone (antiandrogen):** initial 50mg BID, max 200mg BID
Step 8: Follow-up lab schedule	Reset schedule if Δ dose or med: **Baseline → 1mo → 3mo → 6mo → 12mo** Target ranges (get labs each visit; *measure midcycle if q(2)weekly injection*): Transwomen: estradiol 50-250 (some say 100-200) pg/mL, T <55ng/dL Transmen: testosterone 350-1100 ng/dL, estradiol unsuppressed **Outcomes**: follow patient goals, tools trending dysphoria exist but unnecessary, follow mental health/social impacts of tx
Step 9: Other lab ranges	Transmen: creatinine (use non-transgender male ULN), H&H (use male lower limit if amenorrheic, female if menstruating), ALP (use male ULN) Transwomen: creatinine (use non-transgender male ULN), H&H (use female lower limit (lack erythropoiesis) and male ULN, ALP male ULN
Step 10: Monitoring	Risk of harm very low, magnitude benefit extremely high (NNT ~1) Masculinizing GAHT: possible association erythrocytosis, osteoporosis - Pelvic pain or persistent menses: Try more frequent testosterone, workup reg causes of pelvic pain if occurs, may eventually prefer hysterectomy Feminizing GAHT: possible increased CV risk (poor controls), low libido, questionable associated with weight gain and migraines - VTE: VERY LOW absolute risk (bioidentical estradiol), some RR increase - Consider transdermal/IM estradiol for ?lower risk, though data is poor

Length of Hormones prior to Gender Affirming Surgery* 1 letter (per SOC8 - insurances may still require 2)	
Breast augmentation	12 months**
Chest reconstruction	N/A
Gonadectomy/hysterectomy	6 months
Vaginoplasty/phalloplasty	6 months

*unless contraindicated
**Recommended, not explicitly required

Needles for GAHT	IM	SQ
Drawing Up	1-1.5" 18-23G	1-1.5" 18-23G
Injecting	1-1.5" 23-25G	5/8-1" 25-27G
Syringe Size	1 mL usually (3mL if dose >1mL)	
Needle length should reach the muscle Narrower (↑ G) is slower/less painful injection		

Content adapted from Catherine Bielick & Hannan Braun; last updated Nov 2022