GENDER AFFIRMING CARE

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By the end of this presentation, participants will be able to:

1) Identify health disparities, risks, and resiliencies for transgender, nonbinary, and gender queer patients;
2) Provide overview of preventative health care for trans patients;
3) Confidently initiate hormone therapy for gender-affirming care; and,
4) Share resources for information and referrals

During presentation, text confidential questions:

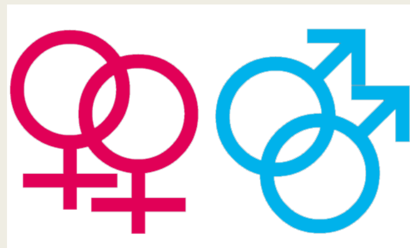
207-557-4351

Terminology: Sex, Gender, TG, NB

- **Sex:** (Phenotype) Anatomy, chromosomes, hormones
- **Gender:** (Societal/Cultural) Expression, identity, psychological, behavioral
- **Transgender (Trans):**
- Trans feminine (TF):Transgender women, trans women, trans female, male-to-female (MTF), transgender girls, Assigned male sex at birth (AMAB)
- Trans masculine (TM):Transgender men, trans men, trans male, female-to-male (FTM), transgender boys, Assigned female sex at birth (AFAB)
- **Cisgender:** Not transgender
- **Non-binary:** Two spirit, Pangender, agender, genderqueer, gender fluid, gender nonconforming (They/them/theirs; Ze/hir/hirs)

Gender Identity ≠ Sexuality Orientation

- Gender expression and identity are not related to sexual expression and orientation
- Sexual orientation: How a person describes their sexual, emotional, romantic, and/or physical attraction to others
- Transgender people can be of any sexual orientation
- Sometimes discussed/studied together. Sexual and Gender Minorities (SGM) is a health disparity population (officially designated in 2016 as HDP by NIH for purposes of research)

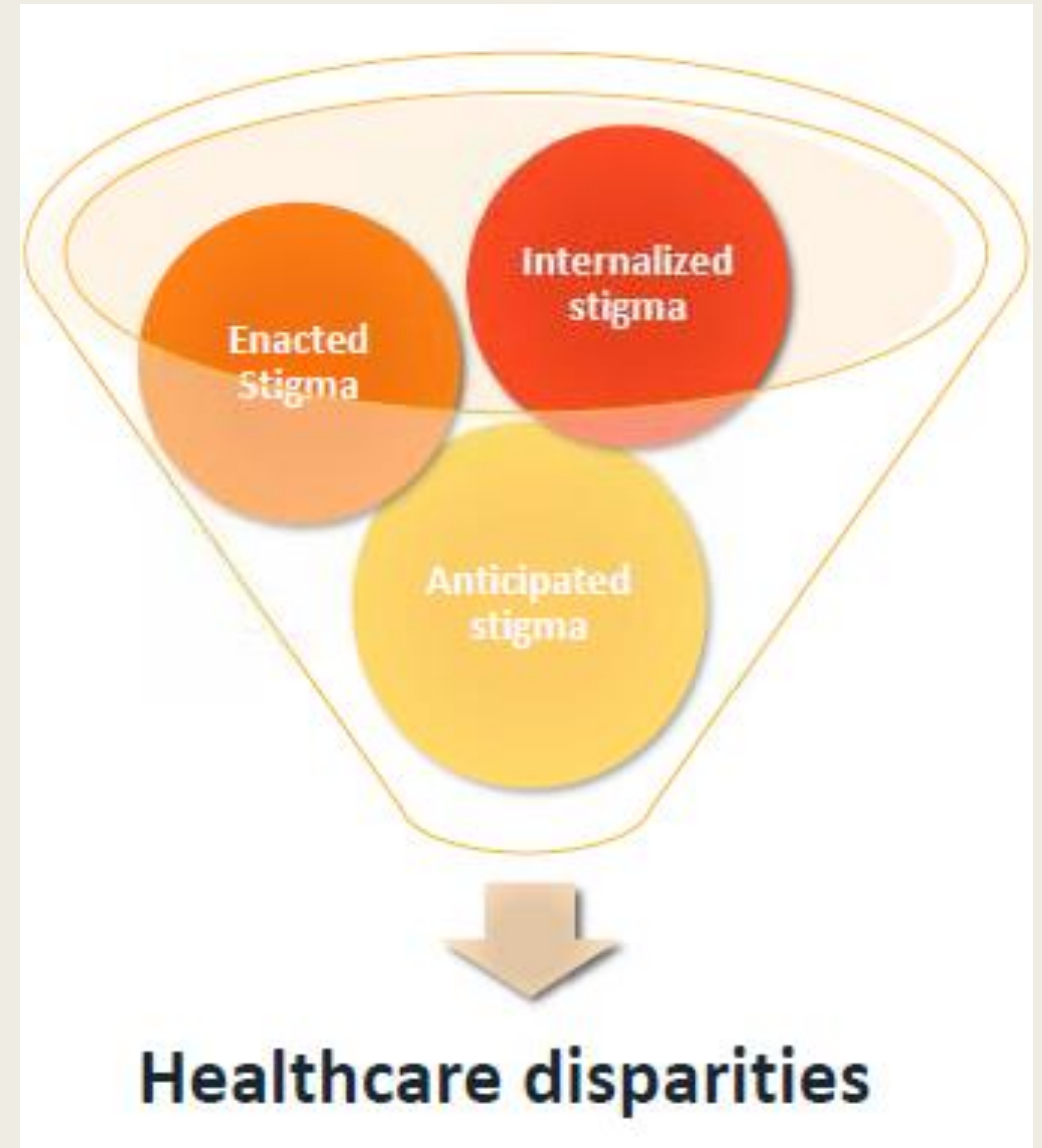


Gender Nonconformity= Diversity, not Pathology

- "The expression of gender characteristics, including identities, that are not stereotypically associated with one's assigned sex at birth is a common and culturally-diverse human phenomenon [that] should not be judged as inherently pathological or negative." (WPATH, 2010)
- Paradigm shift:
  - *Disorder →diversity*
  - *Gender Diversity ≠ pathology*
  - *Changed language in DSM*
- Gender nonconformity ≠ Gender dysphoria

Minority Stress…

- Structural Disadvantage
- Social and economic exclusion
- Stigma
- Discrimination
- Transphobia
- Violence Victimization



…Leads to Adverse Health Outcomes

- Poor self-rated general health
- HIV infection and other STIs
- Mental health
- Substance use and abuse
- Violence/victimization
- Disordered weight and shape control behaviors/eating disorders
- Homelessness/incarceration
- Lack of access to culturally competent care
- Barriers to health care (insurance, geography, providers, limited clinical research, lack of data)

Gender Affirming Medical Care

- Standards of care and paradigms for treating trans patients *(UCSF, WPATH)*
- Medical gender affirming care improves quality of life and menta health
- Patient-centered, affirming of patient’s gender identity or expression: Social, psychological, medical, legal
- Spectrum of treatment:
  - *+/- Hormone therapy*
  - *+/- surgery*
  - *Actualizing gender role/expression*
  - *Integration of trans feelings into gender assigned at birth*

Gender Affirming Primary Care and Preventative Health

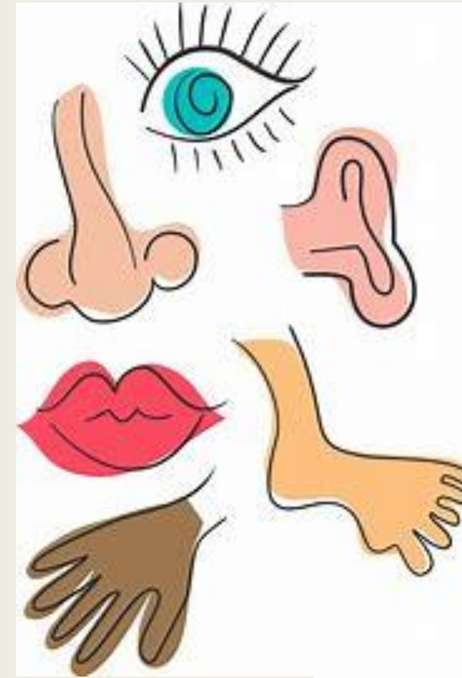
- DO Be sensitive of language used with all patients
- DO Ask patients the name and pronouns they use
- DO Assess for social stressors and other needs
  - *Discrimination, housing, employment, family, legal issues*
  - *Behavioral health needs, personal care/nutrition, health insurance*
- DO Treat the anatomy that is present.
- DON’T assume a patient wants to medically affirm their gender
- DON’T assume a person’s sexual orientation based on gender identity

Preventative Health Care

- Exercise, Weight, healthy food choices
- Sexual health (Contraception, STIs, pregnancy, HIV, Hep C)
- Preventing/managing chronic diseases (diabetes, blood pressure, heart disease)
- Smoking cessation/Lung cancer screening
- Alcohol use disorder/substance abuse
- Mental health issues: Depression, anxiety, eating disorders, self-harm
- Intimate Partner Violence
- Dental care
- Immunizations

Physical Exam

- Defer unnecessary questions and exams
- Build rapport before performing genital exams
- Avoid satisfying your curiosity (ie, do you really need to know/see?)
- Always explain the purpose of the exam
- Use gender neutral terms, ask patients what words they prefer
- Acknowledge barriers and offer solutions



Transmasculine/AFAB Health Maintenance

- Pap smears as per natal females
  - *Testosterone can cause atrophy of cervical epithelium mimicking dysplasia*
  - *Note on lab form that pt is on T and amenorrheic*
  - *Discuss possible abnormal/unsatisfactory results before the exam*
  - *Prep for speculum exams: trauma-informed language (and maybe meds)*
- Endometrial Hyperplasia
  - *No increased incidence of EM CA than gen population*
  - *Routine screening with US is not evidence based*
  - *Unexplained bleeding needs to be explored*
- Breast CA screening
  - *As per natal females if no chest reconstruction*
  - *No reliable screening evidence if post-op*

Trans-masculine/AFAB Health Maintenance (Cont)

- Bone Density Screening
  - *T appears to be overall protective*
  - *Insufficient evidence to guide recommendations (Consider >65yo, post-gonadectomy and off hormones >5y)*
- Contraception: Testosterone does NOT reliably prevent ovulation
  - *Consider LARCs w/o estrogen (Mirena, Nexplanon, Depo)*
  - *Also discuss desires around pregnancy/preservation of fertility*
- Diabetes: Slightly higher prevalence of T2DM than control population

Trans-masculine Health Maintenance (Cont)

Cardiovascular Disease: No increased risk of CV disease in several studies (but incr SBP, decr HDL, incr BMI, incr tob use)

Reference	n	Follow-up	Treatment regimen	Outcome
Asscherman, 1989	122	Median duration of HRT of 4.4 yrs	Testosterone 250mg IM q2wks or undecanoate 120-160mg/d	No increased cardiovascular morbidity
VanKesteren, 1997	293	Mean duration HRT of 8.2yrs	Testosterone 250mg IM q2wks or undecanoate 160mg/d	No increased cardiovascular morbidity
Asscherman, 2011	365	Median duration HRT 18.5yrs	Testosterone 250mg IM q2wks or undecanoate 160mg/d	No increased cardiovascular mortality rate
Dhejne, 2011	133	Median times since SRS was 9.1yrs	Not specified	Higher mortality due to CVD compared with controls
Bazarro-Castro, 2012	37	Mean duration HRT 4.9yrs	Difference T preparations	No difference in CV morbidity compared with control men and women
Weirckx, 2013	138	Median duration HRT of 6yrs	Difference T preparations	No difference in CV morbidity compared with control men and women

Trans-feminine/AMAB Health Maintenance

- Body part inventory for cancer screening
  - *Cervical cancer? (not necessary even with neovagina)*
  - *Prostate cancer? Yes*
  - *Breast cancer screening: Depends…per natal females*
- Pelvic Exam of neo-vagina/Pap smear
  - *No indication for pap tests*
  - *Consider pelvic exam for acute concerns, post-op checks*
  - *pH and microflora of neo-vagina very different:*
    - Mixed microflora of aerobe and anaerobe species —typically found on the skin, intestine, and in bacterial vaginosis
    - More complex BV -specifically presence of anaerobes (Tx with Clinda or Amox)
- Breast CA screening: No increase in incidence over gen pop
  - *Risk factors for male breast cancer: BRCA mutations, obesity, androgen insufficiency (Klinefelter), estrogen exposure*
  - *Consider screening in pts >50yo on feminizing agents >5y*

Trans-feminine/AMAB Health Maintenance (Cont)

- Prostate CA screening:
  - *Androgen antagonists may falsely decrease serum PSA levels, consider lower threshold for suspicion.*
  - *Also, Feminizing hormonal therapy appears to decrease prostate volume and the risk of prostate cancer but to an unknown degree*
  - *Recommendations: As per natal men*
- Bone Density Screening
  - *Mixed – incr osteo compared w cis-men, but less than cis-women*
  - *Also consider changes in body composition/mass*
  - *Recommendations: Consider if >60yo and off estrogen >5y (not indicated prior to orchiectomy)*

Trans-feminine/AMAB Health Maintenance (Cont)

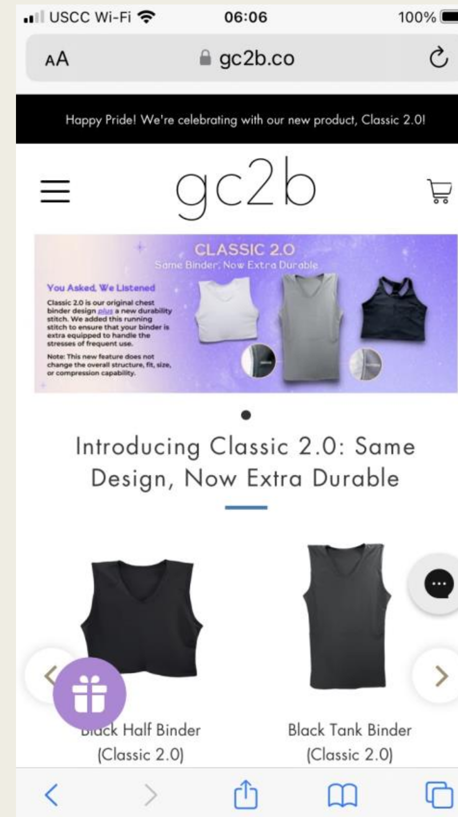
- Cardiovascular Disease: Higher mortality rate in trans women
  - *64% increased risk in CV mortality* (Asscheman, 2011)
  - *2018 Kaiser study: Significant increase risk of VTEs and ischemic stroke over both cis-male and female controls* (Getahun, 2018)
  - *Recommendations:*
    - Avoid Ethinyl estradiol (3-fold increase of CV death)
    - Consider transdermal or low-dose oral estradiol in patients >40yo
    - Counsel on lifestyle (diet, smoking, exercise) to reduce risk
    - Consider adding ASA to decrease VTE risk
- Diabetes
  - *Higher prevalence (most dx prior to estrogen therapy)*
  - *Studies suggest increased IR with estrogen, but no direct correlation w DM*

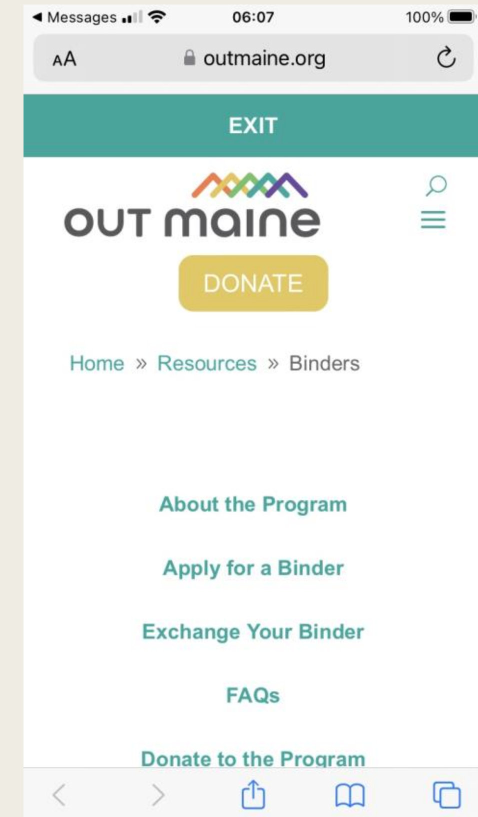
Gender-affirming Health Care: Possible Treatment Goals

- Hair
- Body fat distribution
- Voice
- Muscle
- Chest
- Skin
- Mood
- Sexuality
- Future fertility
- Genital organs

Non-"Medical" Gender Affirming Care

- Use of appropriate name, pronouns
- Clothing, makeup, jewelry
- Binders:
  - *Binding with Ace bandages can cause rib fractures, skin rashes, and reduced blood flow*
  - *Binders are a safer way to provide gender affirming body contouring*
- Adjunctive non-medication therapies: speech therapy, packers





https://transwellnessinitiative.ca/community-members/social-personal-care/gender-affirming-gear/

Gender Affirming Hormone Therapy

According to WPATH, criteria for hormone therapy are:

- Persistent, well-documented gender dysphoria;
- Capacity to make a fully informed decision and to consent for treatment;
- Age of majority in a given country (if younger, follow the Standards of Care outlined in section VI);
- If significant medical or mental health concerns are present, they must be reasonably well controlled.

Masculinizing Medical Therapy

- Hormones: testosterone injections, gel, patch, pellet, pill
- Medications that produce selective effects when used a monotherapy: SERMs
- Non-hormonal medications to counteract hormone side effects or address specific gender goals: menstrual suppression, acne medications, topical estrogen cream, finasteride for hair loss
- Surgeries: Top surgery, body contouring, phalloplasty

Starting testosterone

Injections

- Testosterone cypionate IM or SQ q2w
- Average starting dose 50-60mg, low starting dose 20-40mg, max 100mg
- Cottonseed oil may cause allergic reactions
- Other options include testosterone enanthate (sesame oil) and testosterone undecanoate

Testosterone Pellets (Less common)

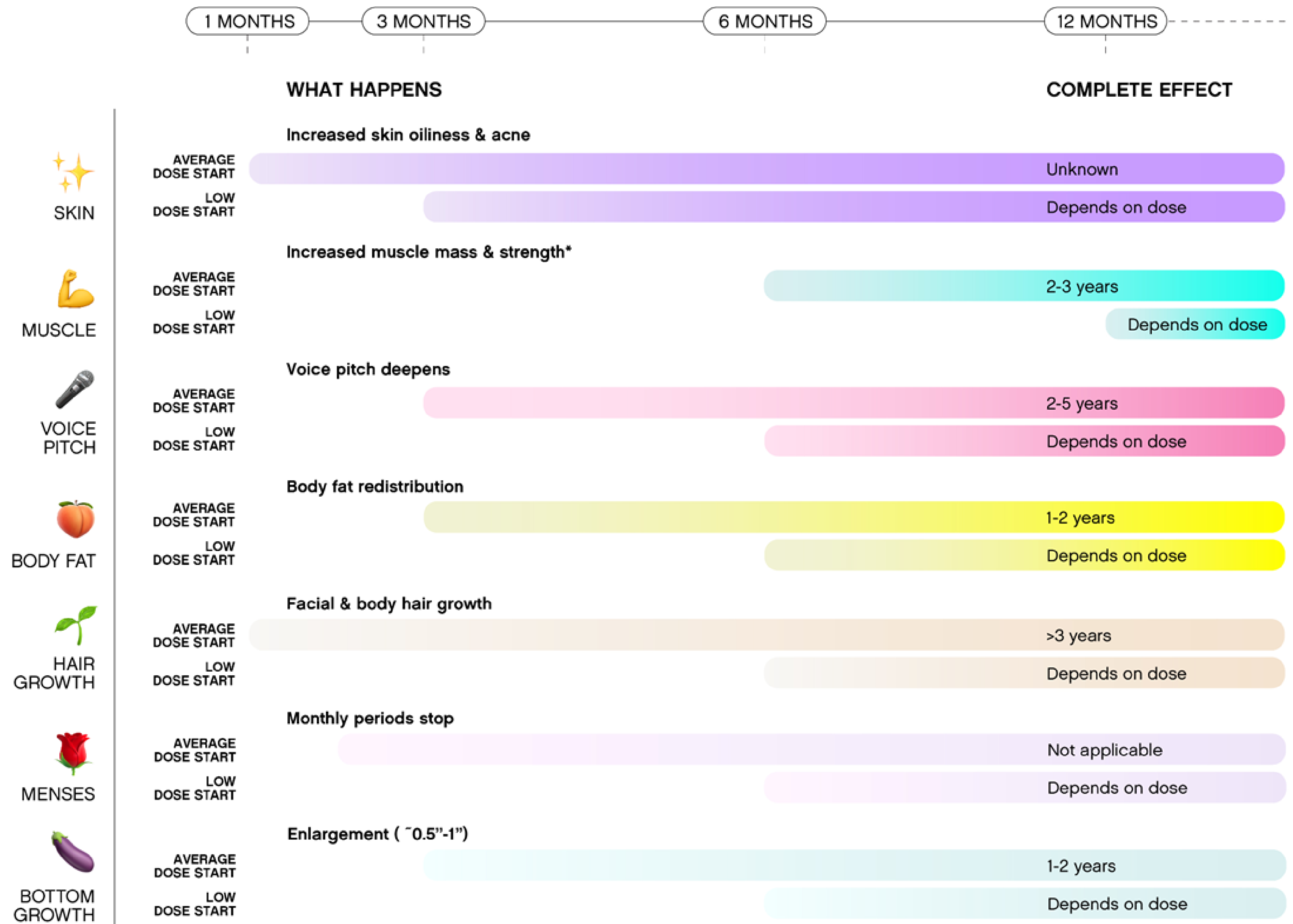
- implant 6-10 pellets q 3 to 6 months

Gel

- Most common dosage is 1.62% (20.25mg/act) and 1% (12.5mg/act) (2 and 4 mg patches) 2-8mg daily
- Average starting dose 40-60mg, low starting dose 12.5-20mg, max 100mg
- Takes 10m to apply, continues to absorb for 5-6 hours (no exercising, swimming, bathing during that time)
- Apply to shoulders, upper arms, thighs (not abdomen), can rub off on other people

Buccal Testosterone (Less common)

- 30 mg buccal system q 12 hours


TIMELINE FOR EXPECTED PHYSICAL CHANGES ON TESTOSTERONE HRT
1 MONTHS
3 MONTHS
6 MONTHS
12 MONTHS
WHAT HAPPENS
COMPLETE EFFECT
SKIN
Increased skin oiliness & acne
AVERAGE DOSE START
Unknown
LOW DOSE START
Depends on dose
MUSCLE
Increased muscle mass & strength*
AVERAGE DOSE START
2-3 years
LOW DOSE START
Depends on dose
VOICE PITCH
Voice pitch deepens
AVERAGE DOSE START
2-5 years
LOW DOSE START
Depends on dose
BODY FAT
Body fat redistribution
AVERAGE DOSE START
1-2 years
LOW DOSE START
Depends on dose
HAIR GROWTH
Facial & body hair growth
AVERAGE DOSE START
>3 years
LOW DOSE START
Depends on dose
MENSES
Monthly periods stop
AVERAGE DOSE START
Not applicable
LOW DOSE START
Depends on dose
BOTTOM GROWTH
Enlargement (˜0.5”-1”)
AVERAGE DOSE START
1-2 years
LOW DOSE START
Depends on dose
*depends significantly on amount of exercise
Sex drive also increases

Other masculinizing treatment considerations

- Clitoral enlargement: testosterone cream in aquaphor
- Vaginal atrophy: Estrogen cream/estring
- Male pattern baldness: minoxidil
- Cessation of menses: Progesterone may be helpful (also helpful at lowering estrogen)
- Persistent uterine bleeding: Aromotase inhibitors (anastrazole, letrozole), SERMs (raloxifene – estrogen antagonist in BR and uterus, estrogen agonist in bone), consider LARCs

Risks of Testosterone therapy

- Lower HDL and Elevated triglycerides
- Increased homocysteine levels
- **Polycythemia**
- Possible worsened migraine
- Male pattern baldness
- Variable effects on mood

- ? Increased risk of sleep apnea
- **Chronic pelvic pain**
- Mental health effects
- (Hepatotoxicity)
- Unknown effects on breast, endometrial, ovarian tissues
- **Infertility**

Lab Monitoring for Patients on Testosterone

- Initially: **CBC,** Lipid profile*, liver enzymes*, fasting glucose*, ?Screen for PCOS
- After 3-6 months: CBC
- Every 6-12 months: Lipid profile*, fasting glucose/a1c*

- Serum testosterone level: at 6-12 months, then as indicated.
- May be checked 6-12 weeks after dosage change
- About 350-700 ng/dl

- Estradiol levels? (should be less than 50pg/ml)

*As clinically indicated

Feminizing Therapies

- Oral Estrogens
  - *Estradiol 2-8 mg PO or SL daily(can be divided into BID dosing)*
  - *Conjugated estrogens 1.25-10mg PO daily (can be divided into BID dosing)*
- Transdermal Estrogens
  - *Estradiol patch 0.1-0.4mg twice weekly, may start lower in patients at risk of side effects. Maximum single dose patch available is 0.1 mg*
- Injectable Estrogens
  - *Estradiol valerate 5-20mg IM q2 weeks*
  - *Estradiol cypionate 2-10mg IM weekly*
- Anti-androgens
  - *Spironolactone 50-400mg PO daily (can be divided into BID dosing)*
  - *Finasteride 2.5-5mg PO daily*

Less Common Feminizing Therapies

- Cyproterone acetate (not available in US)
- GnRH agonist: goserelin acetate, leuprolide acetate
- Flutamide: an androgen receptor blocker, associated with severe liver toxicity
- Bicalutamide, used in treatment of prostate CA, ? Less liver toxicity, still with anecdotal reports of severe liver toxicity

Feminizing Therapies

- Progestins:
  - *? Benefit on breast development, mood, sexual function*
  - *associated with increased risk of cardiovascular events and breast cancer in WHI, but how does this translate to trans women?*
  - *also risk of weight gain and depression*

  - *Progesterone micronized: 100 –200 mg po daily*
  - *Depo form (IM): 150 mg IM q 3 months*
  - *Medroxyprogesterone: 2.5 to 10 mg PO daily**

  * Consider dosing 10days q month with PO form to minimize risk

Other feminizing treatment considerations

- Hydroquinone
  - *Topical treatment for pigmentation caused by estrogen therapy*
- Hair Removal
  - *Eflornithine cream*
  - *Electrolysis*
  - *Laser hair removal*

Risks of Feminizing Therapy: Estrogen

- **Venous thrombosis/ thromboembolism:** (TF > 40yo: Consider adding ASA or other anticoagulant to regimen; Transdermal estradiol therapy strongly recommended; Stop smoking!)
- Estrogen levels are decreased by smoking!
- Increased risk of cardiovascular disease
- Weight gain
- Decreased libido
- Hypertriglyceridemia
- Elevated blood pressure
- Decreased glucose tolerance
- Gallbladder disease
- **Benign pituitary prolactinoma**
- Mental health effects
- ? Breast cancer
- Infertility

Risks of Feminizing Therapy: Spironolactone

- Increased urinary frequency
- Hyperkalemia
- Hypotension
- Renal insufficiency

Lab Monitoring for Trans-feminine Patients on Hormones

- Baseline: Renal panel (spironolactone), Lipid profile*, liver enzymes*, fasting glucose*, testosterone level if suspect hypogonadism, prolactin level (if sx)
- If on spironolactone, serum electrolytes 2-8 wks after start/dose change, q3m x1year, then annually
- Every 6-12 months: Lipid profile*, fasting glucose/a1c*, LFTs*

- Serum testosterone levels (at 6-12 months) should be <55 ng/dl
- Serum estradiol levels (?) Ideally 100-200 pg/dl

*As clinically indicated

Gender Affirming Surgeries

According to WPATH, criteria for

- Non-sterilizing surgery: Persistent and well-documented gender dysphoria (6 mo); age of majority (18 in US); capacity to make informed decision and consent for treatment; and, reasonable control of any mental or medical concerns
- Sterilizing surgery: all the previous, plus all mental or medical concerns are well controlled; 12 continuous months of hormone therapy as appropriate to patient's gender goals (unless medically contraindicated)
- Genital reconstruction: All the previous, plus 12 months continuous living in gender congruent with person's gender identity

Feminizing Surgical Options

- Breast surgery: augmentation mammoplasty (implants/lipofilling)
- Genital surgery: penectomy, orchiectomy, vaginoplasty, clitoroplasty, vulvoplasty
- Non-genital, non-breast surgery & more: facial feminizations surgery (FFS), liposuction, lipofilling, voice surgery, thyroid cartilage reduction, gluteal augmentation (implants/lipofilling), hair reconstruction & removal, and other aesthetic procedures

Masculinizing surgical options

- Chest (top) surgery: subcutaneous mastectomy, creation of a male chest
- Genital (bottom/lower) surgery: hysterectomy/oophorectomy, urethral lengthening with a metoidioplasty or a phalloplasty, vaginectomy, scrotoplasty, erectile device, and/or testicular implants
- Non-genital, non-chest surgery: voice surgery (rare), liposuction, lipofilling, pectoral implants, and various aesthetic procedures

Referrals for Gender-Affirming Treatment

TRANSITIONING & MEDICATION

- Any supportive PCP (YOU!) MAINE QUEER HEALTH database
- Open Door TG Health at Maine Family Planning ((Lewiston, Augusta, Norway, Belfast, Waterville, Presque Isle, and telehealth)
- Mabel Wadsworth Center (Bangor)
- Planned Parenthood (southern Maine)
- Family Medicine residencies (Portland, Lewiston, Augusta, Bangor)
- Gender Clinic at Barbara Bush Children's (MMC)- Peds Endocrinology

SURGICAL

- Orchiectomy: York Urology, Northern Light Urology
- Hysterectomy: Drs. B. Mullaly (MGOB), Alec Anderson, others
- Top Surgery: Plastics and Hand Surg Assoc in Portland, Drs. Marble (York), Mayer (Kennebec), Bogdasarian (Penobscot)
- Boston Medical Center
- Boston Children's (up to age 35)

Active Allyship

Someone that you work with

1. continually misgenders trans patients. Is this a microaggression or explicit bias?

2. tells a joke with a punchline about “women with [slang term for penis].” Is this a microaggression or explicit bias?

What do you say?

How does your role on the team change your ability/safety to speak up? (eg: Attending physician? Brand new hire? MA vs. nurse vs. medical student vs custodian vs surgeon?)

Becoming an Active Bystander

- Be Clear: “That is not OK with me.” or “I don’t find that joke funny.”
- Be Curious or Ask Clarifying Question: “What do you mean by that?” or “I don’t understand. Can you explain?”
- Challenge Assumptions: “It sounds like you are generalizing that X is/does Y. Do you have any evidence to support that?”
- Challenge Behavior: “I’m noticing that you are having trouble remembering to use the patient’s appropriate pronouns. Is there something the team can do to help us all address her properly?”
- Clarify Impact: “That statement was hurtful, and I felt that it reflected some gender bias” or “Are you aware of how that might be interpreted?”
- Memorize and use ACRONYMS:
  - *LIFT: Lights on, Impact vs intent, Full stop, Teach*
  - *RAVEN: Redirect, ASK, Values, Emphasize, Next*

Maine Resources

- Statewide:
  - *Mid Coast Queer Collective) Call In Support*
  - *Maine Trans Net (Support groups, info, provider database)*
  - *OutMaine*
  - *Equality Maine*
- Trans Youth Equality Foundation (Portland)
- Ellsworth: Down East Gender Diversity Group:
- Lewiston: Outright L/A:
- Kennebunkport: Gender Innovation

More Resources…

- Fenway Health: www.fenwayhealth.org
- Callen-Lorde Community Health Center: http://callen-lorde.org/transhealth/
- UCSF COE Transgender Health: http://transhealth.ucsf.edu/
- Maine Trans Net (Resources, education, trainings, support groups)
- CompassFTM.org (referrals, resources, legal, financial)
- GLBT National Help Center Hotline: 1-888-843-4564
- GLBT National Help Center Hotline (Youth): 1-800-246-7743
- The Trevor Project (Crisis intervention for LGBTQ youth): 1-866-488-7386
- Trans Lifeline: (877) 565-8860

THANK YOU!

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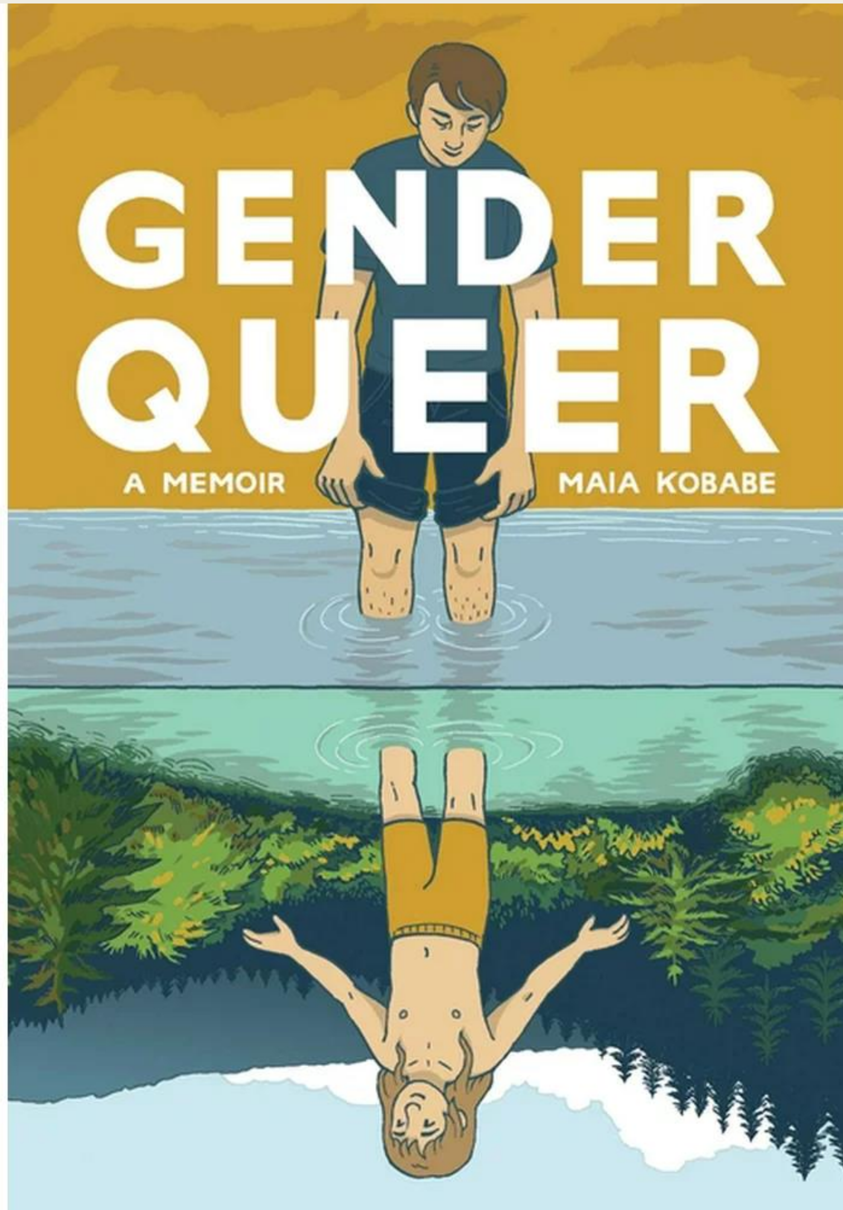
GENDER QUEER
A MEMOIR
MAIA KOBABE

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- Gender Affirming Hormone Therapy for Transgender and Gender Non-Binary Individuals presentation (Bowman, Fleming, Hastings, Julian, Wang 2023)
- Fenway Health (with web-based resources available at https://fenwayhealth.org/care/medical/transgender-health/)

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- Maine TransNet (https://www.mainetrans.net) - online support for patients and families
- Maine Family Planning: Open Door Transgender Health Program. Open-Door-Feminizing-Initial-Packet-.pdf (mainefamilyplanning.org)
- Great resources for families can be found at the National Center for Transgender Equality (https://transequality.org/families).
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