

Framework for Gender and Sex Concepts in Teaching

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Note: TGEI is one acronym used to encompass transgender, nonbinary, gender expansive, and intersex individuals

	Principle	Examples
Research Studies	<p>In discussing studies that have enrolled or stratified patients based on gender or sex, include context about whether or how TGEI individuals were included, and how gender and sex categories were determined.</p> <p>Many historical research studies exclude and thus limit how we might apply their findings to TGEI people.</p>	<ul style="list-style-type: none"> • "Patients in the study were asked to identify as men or women, other genders were not included." • "Authors of this study did not specify how gender was determined or whether it was self-identified" • "It is likely that all of the patients in this study were cisgender"
Lab Reference Ranges	<p>Address limitations of clinical tools and laboratory reference ranges that are based on study populations that historically excluded TGEI people and people of color.</p> <p>If known, give more specificity about how ranges are determined and what ranges are appropriate to use for TGEI patients according to organ inventory and hormone exposure.</p>	<ul style="list-style-type: none"> • "There have been no studies to determine whether clinicians should use sex assigned at birth or gender for assessment of osteoporosis when using the FRAX[®] tool" • "For patients who are undergoing gender affirming hormone therapy with estrogen, it may be appropriate to use "female" range lower limit of normal when interpreting H&H"
Risk Factors	<p>Avoid describing sex or gender as a non-modifiable risk factor, as gender is an aspect of identity that is modifiable over the course of a person's life.</p> <p>Gender-affirming care recognizes the potential acquisition or loss of new risk factors as organ inventory or hormone exposure is modified in accordance with a person's particular identity.</p>	<ul style="list-style-type: none"> • "Because this patient had a bilateral mastectomy, we do not need to be concerned about their risk for developing breast cancer" • "This patient does not have a uterus, so we are not concerned about their chance of pregnancy" • "For transgender patients, it may be reasonable to assess risk using both the male and female calculators and using an intermediate value"
Epidemiology	<p>When teaching about associations between gender and physiologic and/or medical conditions explain whether associations are truly related to the social construct of gender, or aspects of biology (such as hormone exposure, inventory, etc) whenever possible.</p>	<ul style="list-style-type: none"> • "Breast cancer is historically more prevalent in cisgender women because of the effects of constant estrogen exposure on breast tissue" • "In transgender women, factors that may contribute to a reduced risk of breast cancer relative to cisgender women include potentially less lifetime overall or cyclical exposure to estrogen"

Genetic Contribution	<p>Try to break down cisnormative assumptions which link egg production/XX chromosomes/gestation to women and sperm production/XY chromosomes to men.</p> <p>Reflect the patient's language about family members, but be aware of your own cisnormative assumptions about those family members.</p>	<ul style="list-style-type: none"> • “Patients who inherit a 15q11 deletion from their egg contributing parent will develop Angelman Syndrome” • “A woman who is s/p orchiectomy but has cryopreserved sperm presents with questions about her and her partners’ risk of conceiving a child with DMD because her nephew (XXY chromosomes) has DMD.”
Gendered Terms	<p>Replace gendered terms with gender neutral language to include non-binary, intersex, and trans patients, as well as patient who have undergone surgeries to remove natal gonads, within statements.</p>	<ul style="list-style-type: none"> • Pregnant women → pregnant people or pregnant patients • Erections in men → erections • Female genitalia → vulva, vagina, uterus
Patient Cases	<p>Introduce patients with name, gender identity, and pronouns, and when appropriate and relevant to their care, include pertinent aspects of their sex Doing so interrupts the cisnormative assumption that occurs when only stating sex assigned at birth.</p> <p>In cases involving a child, introduce the child using the gender identity that the parent/guardian provides, unless the child provides a different gender identity (in which case, the child’s self-reported gender identity should be used).</p>	<ul style="list-style-type: none"> • “A 25-yo woman with a uterus with a family history of cancer presents to her PCP for evaluation of endometrial cancer risk...” • “A 65 year-old man (he/him/his) status post hysterectomy and bilateral salpingo-oophorectomy, on testosterone, presents with his children for evaluation of a positive BRCA mutation...” • “A mother brings her 4-year-old son, JA, into your clinic to request genetic screening for developmental delay...”
Representation	<p>Increase representation of transgender, nonbinary, intersex, and queer people in cases, but avoid associating these patients only with stigmatized conditions.</p> <p>This allows students to master the skills of talking about patients with diverse identities before encountering them in the cynical setting.</p>	<ul style="list-style-type: none"> • “A 49-year-old genderqueer person (he/him/his or they/them/their) presents to a genetic counselor with questions about a recent direct-to-consumer 23&Me genetic test results indicating they are a carrier for cystic fibrosis...”

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