Pharmacy Role in Transgender Care
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Disclosures
Jessica Conklin and Cheyenne Newsome declare no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria.

The American Pharmacists Association is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

• Target Audience: Pharmacists
• ACPE#: 0202-0000-17-113-L04-P
• Activity Type: Knowledge-based

Learning Objectives
1. Define current and appropriate vocabulary for discussing transgender and gender non-binary (TGNB) people and having conversations with them.
2. Recognize the barriers to healthcare faced by TGNB patients as well as their unique medication needs.
3. Identify opportunities for pharmacists to provide positive, affirming care for TGNB patients.
4. List resources that pharmacists can refer to that reinforce appropriate care for TGNB patients.

1. What is an appropriate term for a person assigned the sex female at birth and identifies as male gender?
   A. Androgenous
   B. Male
   C. Trans-female
   D. Gender non-binary
2. Which of the following is a common effect of testosterone therapy in transgender men?

A. Increased irritation also known as "roid rage"
B. Increase in menstrual bleeding
C. Loss of ability to ever conceive a child
D. Increased skin oiliness/acne

3. Which of the following testosterone preparations are NOT commonly used in the transmasculine community?

A. Subcutaneous injected Testosterone
B. Topical Testosterone
C. Intramuscular Testosterone
D. Implantable Testosterone

4. Which of the following is a resource pharmacists can use to improve the care of transgender patients?

A. World Professional Association for Transgender Health (WPATH)
B. Society for the Advancement of Transgender People (SATP)
C. National Association Advocating for Gender Dysphoria (NAAGD)
D. Transgender Resource for Medical and Psychological Care (TRMPC)

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How would you describe your current role in the gender revolution?

- I am currently playing an active role in the gender revolution.
- I want to have an active role but need more training.
- I do not know anything about the gender revolution.

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TRANSitioning Pharmacy Practice to Meet the Needs of the Gender Revolution

Step 1: Understand the Gender Revolution
Terms Redefining Gender

- **Sex**: Assignment of gender based on external genitalia
- **Gender**: Assignment of gender based on an internal sense of self and how one fits into society
- **Transgender (TG)**
  - Identifies as the gender different than the sex assigned to them at birth
- **Binary Gender**: Relating to two genders
  - A gender that does not follow traditional ideas or stereotypes about how they should look or act based on the sex they were assigned at birth
    - Gender spectrum

  Gender identity is not the same as sexual identity

Terms Redefining Gender

- **Gender Dysphoria**
  - DSM-V diagnosis
  - Discomfort, distress OR functional impairment caused by incongruence between sex assigned at birth and affirmed gender
    - Treatable diagnosis
    - Life saving interventions

- **Common Questions**
  - Why does this happen (pathophysiology)?
  - What if I don’t understand?

Terms Redefining Gender

- **Male**
  - A person assigned the sex male at birth
  - A person assigned the sex female at birth and identifies as male gender; may also be referred to as a transgender male depending on patient preference
- **Female**
  - A person assigned the sex female at birth
  - A person assigned the sex male at birth and identifies as female gender; may also be referred to as a transgender female depending on patient preference

Step 2: Be a Part of the Revolution

WHY?

US Transgender Survey Report

- 1 out of 10 transgender people who come out to their family experience physical violence by a family member
- 30% of all transgender people have experienced mistreatment in the workplace
- 30% live in poverty
- 1 out of 3 transgender people have a negative experience at their medical visit
- 23% don’t engage in medical care due to fear of mistreatment
- 25-55% have problems with insurance covering their care

Prevalence of TGNB Patients in Boston

Estimated National Prevalence

- 1,397,150 people identify as transgender
- 0.58% of the country

Demographics

Population Survey from the Williams Institute based on 2014 data from CDC Behavioral Risk Surveillance System:
- New Mexico has an estimated 11,750 (CI 6,613-19,959) people (0.75% total population) who identify as transgender
- 3rd highest percentage in the country after Hawaii and California
- Ages 18-24 1,800
- 25-64  8,000
- 65+  1,850

How I went from providing diabetes/CV risk reduction services to hormone education and gender services.
- Jessica Conklin

How I went from not thinking about pronouns to being gender savvy.
- Cheyenne Newsome
Create an Affirming Setting

- Staff trained in basic cultural awareness of TGNB needs
  - All employees should be culturally aware
  - De-gender language when referring to patients
- Waiting area with visible TGNB-related education, publications, posters
- Written non-discrimination policy that is visible to patients
- Gender neutral bathrooms/all gender bathrooms
- Learn the terminology


Case #1

- A patient, Sam Flores, presents to your retail pharmacy to pick up a prescription for spironolactone and estrogen.

  - How would you address Sam?
  - What pronoun would you use to address Sam?

Create an Affirming Setting

- More than just he/him and she/her...
  - Ze/Zir
  - They/Them
- Preferred name and pronouns may change over time
- Use what the patient says is their gender, name, pronouns: don’t assume
- How to ask
  - “Hi my name is Julie, and I prefer female pronouns. Can you tell me about yourself?”
  - “Hi I’m Susie, what name do you go by?”
  - “When people talk about you, do you like them to use ‘she’, ‘he’ or some other word?”


Treatments for Gender Dysphoria

- Change in gender expression/role
  - Specific to particular cultural and social understandings of gender behaviors and roles
  - May not have to be in all environments
  - Hormone therapy
  - Surgery
  - Voice training
  - Electrolysis
  - Psychotherapy

Feminizing Hormone Therapy

Anti-Androgens
- Spironolactone
  - MOA: Directly inhibits testosterone synthesis and androgen binding to the androgen receptor (testicles and adrenal glands)
  - Dose is usually higher than cardiovascular disease (100-400mg/day)
  - Oral tablet
  - Inexpensive
- Gonadotropin-Releasing Hormone (GnRH) analog
  - MOA: Blocks the release of follicle stimulating hormone and luteinizing hormone at the level of the pituitary
  - Monthly IV injection
  - ~$3,000-$8,000 per month

Feminizing Hormone Therapy

Estrogen
- Oral
  - 17-beta estradiol (estradiol)
  - Micronized sublingual administration
  - Usual dose: 2-6mg/day
- Transdermal
  - Estradiol
  - Topical Patch
  - Compounded creams
  - Usual dose: 0.1-0.4 mg/24 hour twice weekly
- Parenteral (IM)
  - Estradiol valerate or cypionate
  - Used less
  - Usual dose: 20-80mg monthly
### Feminizing Hormones

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Decreased muscle mass/strength</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Softening of skin/decreased oiliness</td>
<td>3-6 months</td>
<td>Unknown</td>
</tr>
<tr>
<td>Decreased libido</td>
<td>1-3 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Decreased spontaneous erections</td>
<td>1-3 months</td>
<td>3-6 months</td>
</tr>
<tr>
<td>Male sexual dysfunction</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td>Breast growth</td>
<td>3-6 months</td>
<td>2-3 years</td>
</tr>
<tr>
<td>Decreased testicular volume</td>
<td>3-6 months</td>
<td>2-3 years</td>
</tr>
<tr>
<td>Decreased sperm production</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td>Thinning and slowed growth</td>
<td>6-12 months</td>
<td>&gt; 3 years</td>
</tr>
</tbody>
</table>

Adapted from WPATH Standards of Care 7th Version

### Case #2

- **NS** is a 24 year old male (female assigned at birth, identifies male, uses male pronouns) who has been prescribed testosterone cypionate for the treatment of gender dysphoria.
- He currently works at a local coffee shop in which he takes the bus for transportation.
- He has told his supportive boss about his transition however is not “out” to his parents. He lives at his parents house, but is saving money to get his own place. He has had 2 suicide attempts, but is currently psychiatrically stable.
- His past medical history is significant for depression/anxiety and asthma.
- He is on no other medications and has no allergies.

### Case #2 - Decision

- You are the clinical review pharmacist reviewing his request for a prior authorization and find that he does not meet the minimum requirement for approval. In your denial letter you list the denial reason:
  - “In order for this drug to be approved, you must be at least 18 years and have a diagnosis of persistent gender dysphoria diagnosed by a qualified licensed mental health professional experience in the field. You must have no other significant health concerns that are uncontrolled. Also, you must have either
    - Lived in your chosen gender full-time for at least twelve months
    - Have documents showing that you will live in your chosen gender full-time for at least twelve months OR have already completed gender transition and need hormone therapy to maintain physical characteristics of your chosen gender”

### Masculinizing Hormone Therapy

#### Testosterone Monotherapy
- **Injectable (IM and SubQ)**
  - Cypionate
  - Enanthate
  - Propionate
- **Transdermal**
  - Androderm (patch)
  - Androgel (gel)
  - Ointment (petrolatum base)
- **Subcutaneous Implant**
  - Testopel

### Musicalizing Hormone Therapy

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<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin oiliness/acne</td>
<td>1-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Facial/body hair growth</td>
<td>3-6 months</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Scalp hair loss</td>
<td>&gt;12 months</td>
<td>Variable</td>
</tr>
<tr>
<td>Increased muscle mass/strength</td>
<td>6-12 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Loss of menses</td>
<td>2-6 months</td>
<td>n/a</td>
</tr>
<tr>
<td>Clitoral enlargement</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Deepened voice</td>
<td>3-12 months</td>
<td>1-2 years</td>
</tr>
</tbody>
</table>

Adapted from WPATH Standards of Care 7th Version
Resources

• Fenway National LGBTQ Health Education Center
  • www.fenwayhealth.org/care/medical/transgender-health

• World Professional Association for Transgender Health
  • www.WPATH.org

• University of California San Francisco, Center of Excellence for Transgender Health
  • http://transhealth.ucsf.edu

Step 3: Start your own Revolution

What ways will you use the information you learned today to improve the care of your patients?

Be an Ally

• Implement gender affirming pharmacy services
  • Risk Reduction
  • Smoking Cessation
  • Obesity management
  • HIV prevention counseling and testing
  • Gender services
  • Hormone education and monitoring
  • Immunization services
  • Other

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