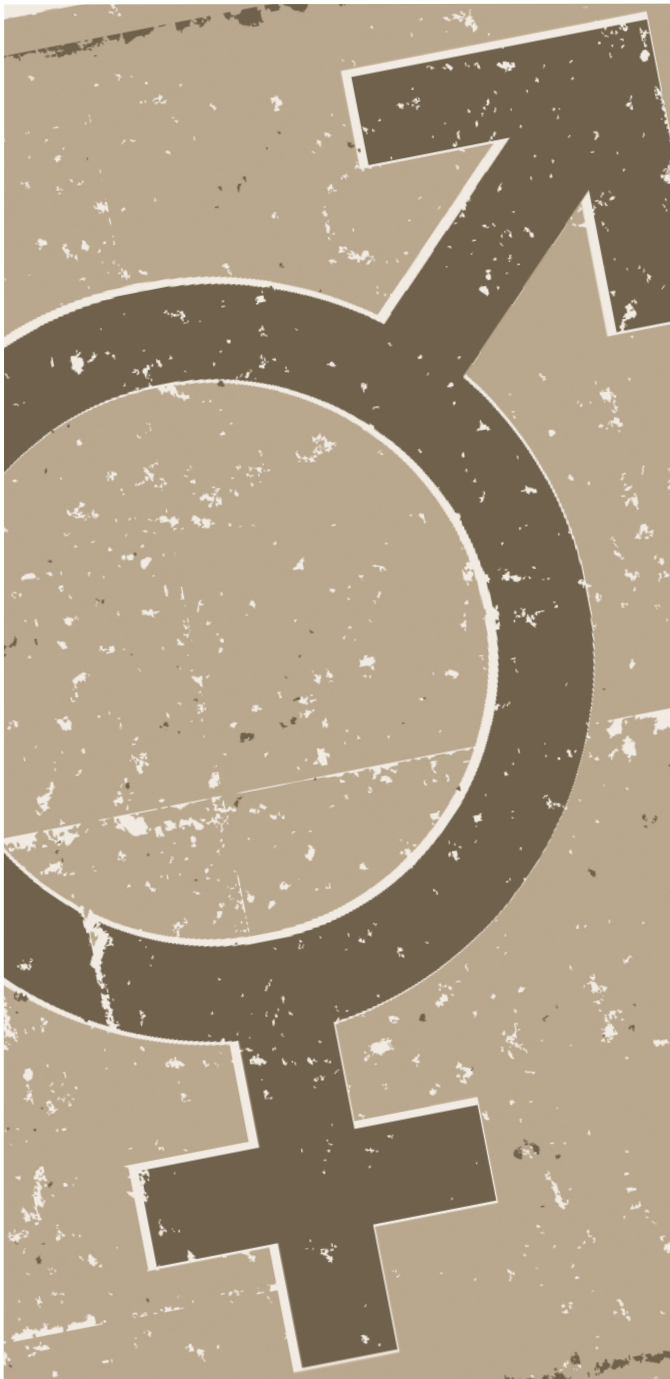


Transgender Health and HIV

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Transgender persons illuminate the complex interplay of social and biological factors that determine gender identity (an individual's own sense of maleness or femaleness) and contribute to both HIV risk and HIV health. This article highlights some of the unique challenges that transgender persons face in maintaining their health—including avoiding HIV infection or living well with HIV—and discusses ways in which health-care providers can better equip themselves to provide care that meets the needs of transgender clients.

Defining Transgender

Sex and gender are closely related concepts that encompass complex biological, behavioral, social, and cultural attributes. While “sex” is commonly used to classify persons as male or female based on their genetic make-up and reproductive organs, “gender” refers to an individual’s self-representation and includes the array of social beliefs, norms, customs, and practices that define “masculine” and “feminine” attributes and behavior. “Gender identity” refers to persons’ perceptions of their own gender, including their personal identity as male, female, or some variation.

“Transgender” is an inclusive term for persons whose genitals, gender identity, and/or gender expression differ from the sex assigned to them at birth. They may strongly identify with one gender or with something outside the “male/female” view of gender that is prevalent in Western cultures. Various gender identities fall under the “transgender” umbrella, including (but not limited to) transgender woman, transgender man, male-to-female (MTF), female-to-male (FTM), transsexual, drag queen/king, gender variant, and genderqueer. While some transgender persons seek physical transformation through the use of hormones, sex reassignment surgery, or cosmetic procedures, others pursue masculine or feminine gender expression through behavior or self-presentation (for example, by dressing as a man or a woman).

Transgender people may identify as heterosexual, homosexual, or bisexual (or as none of the above). According to gender scholars Suzanne Kessler of the State University of New York and Wendy McKenna of Barnard College, “Transgenders make clear that while sex, gender, and sexual orientation are interrelated, they are also separate.

Thus sex, which is given at birth, does not determine gender or sexual orientation; neither does gender determine sexual orientation or vice versa.”

HIV Prevalence in the Transgender Population

Because of the small reported numbers of transgender persons in the United States and elsewhere, little effort has been made to create a new demographic category for the purpose of epidemiology (that is, for tracking health conditions, including HIV, in different populations). MTF transgender persons have often been categorized as “men who have sex with men” (MSM) in epidemiological data collection—a label that may not accurately reflect their gender identity or sexual orientation. For example, one study found that the majority of MTF in the study sample identified as heterosexual and had biologically male sex partners.

The general lack of inclusion of gender-variance variables in health surveys makes collecting true estimates of the transgender population and the transgender HIV positive population that much more difficult. While the terms MTF and FTM are commonly used, it is important to note that these

are medicalized terms and do not necessarily represent the identities of all individuals who fall under the “transgender” umbrella. The Center of Excellence for Transgender HIV Prevention, part of the University of California at San Francisco (UCSF), suggests a two-question system that distinguishes “sex” from “gender” for data collection purposes (see sidebar, page 42).

Since no true population-based studies have been conducted and U.S. and global health surveys rarely include gender-variance variables, the data remain extremely patchy. Estimates published by the American Psychiatric Association in 2000 suggest that, in “smaller countries in Europe,” 1 in every 30,000 persons is MTF and 1 in every 100,000 is FTM. By contrast, Greit De Cuypere of Belgium’s Ghent University Hospital and colleagues estimate that 1 in 12,900 persons is MTF and 1 in 33,800 persons is FTM in Belgium. In addition to being derived from geographically limited samples, these figures are based on the number of transgender persons seeking mental health care or medical treatment, and may therefore dramatically underestimate the true number of individuals who identify as transgender. Despite the tremendous gaps in our knowledge about the extent of the transgender population, however, it is necessary to look at what data do exist for a better understanding of the effect of HIV on the transgender community.

A recent meta-analysis by Jeffrey Herbst of the U.S. Centers for Disease Control and Prevention and colleagues estimated a U.S. HIV prevalence of 27.7% among MTF, based on four studies in which HIV status was confirmed by testing, whereas a mean prevalence of 11.8% was found among MTF across 17 studies relying on self-reported HIV status. Rates of HIV infection are believed to be much lower among FTM persons; for example, a 2% HIV prevalence among FTM was found in a San Francisco-based study in which HIV status was confirmed by testing, and up to 3% prevalence has

Transgender across Cultures

A number of cultures have categories for gender variations beyond “male” and “female.”

For example, the Navajo traditionally respected “two-spirit” individuals who embody more than one gender, regarding them as able to “walk between worlds” and experience multiple realms of ordinary and spiritual reality. India uses the term *hijra* to describe men who act and dress like women, while Oman defines *xanith* as neither man nor woman, but with characteristics of both.

Fa’afafine is a term specific to Samoans who live as a “third gender.” *Fa’afafine* were born male and assume female gender roles, a practice that was not discouraged or disparaged in traditional Samoan society. Similarly, *mahu* is a cross-Polynesian term originally describing transgender women or female-acting males. In post-colonial Hawaii, *mahu* were stigmatized and discriminated against. Western society tends to view sex and gender much more rigidly and with less respect for deviations from the accepted norm.

A Two-Question System

1. What is your sex or gender? (Check ALL that apply.)

- Male
- Female
- Transgender male/transman. Please specify: _____
- Transgender female/transwoman. Please specify: _____
- Additional category. Please specify: _____

2. What sex were you assigned at birth? (Check one.)

- Male
- Female
- Decline to state

(Adapted from “Recommendations for Inclusive Data Collection of Trans People in HIV Prevention, Care and Services,” available at www.transhealth.ucsf.edu/pdf/data-recommendation.pdf.)

For free technical assistance, consultation, and tailored trainings for health professionals who work with transgender clients, contact the Center of Excellence for Transgender HIV Prevention (www.transhealth.ucsf.org).

been reported in nationwide studies in which HIV status was self-reported. However, lack of knowledge of transmission and prevention means, the misperception that FTM are at intrinsically low risk for HIV, and inconsistent use of latex barrier methods during vaginal and anal sex may all increase risk for FTM individuals.

Research on transgender health has tended to focus on MTF, and such studies have generated a wide range of HIV prevalence estimates, ranging from 11% to 78%. Assessments from across the United States have found varying HIV prevalence rates among MTF persons, from 14% in Chicago to 25% prevalence among a sample of people of color in Washington, DC, to 27% in Houston. The San Francisco Department of Public Health has been collecting health-related data on transgender persons from medical records since 1996; however, as with national and state-wide data, these data vary by study, depending largely on whether data are gathered through testing or self-report. Thus, estimated HIV-infection rates for MTF in San Francisco range from 35% to 48%.

The state of California and the city and county of San Francisco are notable

in their attempts to collect epidemiological data for the transgender population. In 2002, “FTM” and “MTF” became gender reporting options in publicly funded HIV counselling and testing sites in California. Transgender persons have the overall highest HIV diagnosis rate (6.3%) of any group in the state, higher than that of MSM (4.8%). Over half of these cases are in the San Francisco Bay Area; one-third are in Los Angeles and Southern California. African Americans bear the greatest HIV burden among the state’s transgender persons, with the highest rate of HIV diagnosis (28.6%).

HIV Risk among Transgenders

Transgender persons face myriad challenges that place them at increased risk for HIV infection. Precarious economic status, substance use, low self-esteem, social vulnerability, and lack of social support are common barriers to adopting and maintaining safer behaviors that can prevent the acquisition or transmission of HIV.

Economic Marginalization and Sex Work

Economic marginalization as a result of institutional discrimination, stigma,

and lower levels of education contributes to a severe lack of opportunity for many transgender persons. Studies have found that over one-third of MTF have experienced job discrimination, over one-fifth report income below the U.S. poverty level, and nearly two-thirds of 16-to-25-year-olds are unemployed. Such marginalization may lead MTF to engage in commercial sex work as a means of economic support. Forty-two percent of MTF in a recent meta-analysis reported participation in commercial sex work, as did 59% of transgender youth in another study.

Many MTF find that sex work offers a sense of social connection with other transgender persons, but sex work amplifies the risk of HIV transmission for MTF and their partners. Not only is HIV prevalence high among MTF engaged in sex work, it also appears that their infection rates are as much as four times higher than those of genetically female sex workers.

Sexual Practices and Partnerships

HIV risk among MTF is not limited to exposure through sex work, however; sexual practices and partnership arrangements also play a role. The desire to affirm a feminine gender identity may lead MTF to have concurrent (multiple) sex partners and unprotected receptive anal intercourse (URAI) in high-risk sexual networks with higher HIV prevalence. Concurrent sex partners and URAI appear to be common among MTF: Over one-third of MTF participants in one study reported multiple sex partners and nearly half reported URAI during casual sex.

Substance Use

In a study of MTF of color in San Francisco, URAI with primary and casual sex partners was associated with drug use before sex. Many MTF turn to substances to cope with discrimination, transphobia, and the sex-work environment. A risk-behavior study in San

Francisco found that the majority of its transgender sample had a history of using non-injected drugs, including marijuana (90%), cocaine (66%), and speed (57%). In addition, 34% had a history of injecting drugs, and nearly half of these individuals had shared syringes. These substance-use behaviors are established risk factors for HIV infection.

As in other populations, substance use among MTF persons is linked to mental health issues. A recent meta-analysis found that 35% of MTF had experienced anxiety, and 44% reported depression; both anxiety and depression are associated with increased HIV risk. Transgender persons are also nearly twice as likely as non-transgender men or women to have considered or attempted suicide.

Social Marginalization

MTF may feel socially marginalized due to an absence of social support, rejection by their peers and families, and a lack of connection to the lesbian, gay, and bisexual community, intensifying the risk of HIV transmission and disease progression. Transgender persons report the lowest levels of family support compared with MSM and women who have sex with both men and women. Rejection from family and peers may lead to alienation and feelings of hopelessness, and may increase psychological and social vulnerability—which may, in turn, increase HIV risk. For example, condoms may be perceived as undermining intimacy with primary partners, while sex with casual partners and willingness to engage in URAI may provide gender validation and a sense of attractiveness that MTF may not get from peers, family, and the larger society. HIV risk thus stems (in part) from willingness to engage with sexual partners who provide a sense of love and acceptance but who may also request unprotected sex.

Body Modification and HIV Risk

Body modification, such as hormone therapy, may offer the benefits of

affirming gender identity and both improving self-esteem and reducing discrimination by potential employers and others. However, unless monitored by a competent and knowledgeable health care provider, it may also create significant risk for HIV and other illnesses.

Hormones procured outside of a medical setting (on the street, for example) are typically injected rather than taken orally, and needle sharing may lead to increased risk for acquiring or transmitting HIV and or other blood-borne diseases.

Unsanitary silicone injecting is also common despite the risk of transmitting or acquiring HIV, hepatitis B and C, and multidrug-resistant *Staphylococcus aureus* (MRSA), as well as the danger of foreign substance reactions, in which the body rejects the silicone (see sidebar below). Nonetheless, many transgender persons who share syringes to inject hormones or silicone do not identify themselves as “drug users” and may not see the potential risk of what is, in fact, needle sharing.

Transgender Health and Hormone Therapy

Patients request hormones—synthetic versions of chemicals that naturally occur in the body and promote sex-linked characteristics, like breast growth—to develop physical features that allow them to express their gender identity. Hormones are available as pills and injections and in transdermal preparations (delivered through the skin as creams, gels, or patches). FTM persons may choose to take testosterone to increase body hair, deepen the voice, and develop more muscle mass, while MTF individuals may opt to take estrogen to enlarge the breasts, lose body and facial hair, transfer fat from the gut to the hips, and soften the skin. Hormone therapy can have the added benefit of connecting transgender people with medical care, including treatment for HIV and other chronic illnesses and education about HIV prevention.

The table on page 44 summarizes

Pump Parties
Unable or unwilling to acquire silicone injections or implants in a medical setting, some transgender women gather at “pump parties,” typically held at an acquaintance’s home, to have a non-professional inject silicone into their breasts, cheeks, hips, and/or buttocks.
The dangers of pump parties are clear. Clean needles and a sterile environment may not always be available, putting participants at risk for HIV, hepatitis, and other infections. Silicone procured outside of a medical setting is often not medical grade but industrial—in fact, it may have come straight from the plumbing department of a hardware store—and is sometimes mixed with paraffin, motor oil, cooking oil, antifreeze, or other non-sterile materials to make it flow more easily through the syringe and into body tissues.
Most such silicone injections are ultimately disfiguring, as the silicone migrates, changes shape, or hardens over time. Despite a long history of fatalities, infections, severe local tissue damage, and disfigurement, injecting “street” silicone is still seen as a viable way to feminize the face and body and help a transgender woman “pass,” and thus avoid discrimination, gain employment, and attract intimate partners.

Hormone, Drug, or Procedure	Permanent Effects	Temporary Effects	Risks	Contraindications	Notes
Testosterone	Atrophy of uterus and ovaries (resulting in sterility) Hair loss, baldness Increased body hair, including facial hair Deepening of voice Enlargement of clitoris Mild breast atrophy	Acne Increased muscle mass Redistribution of fat from breasts, hips, and thighs to abdominal area Weight gain Increased libido	Shift in lipid levels (levels of fats in the blood) to typical male patterns, which increases risk of cardiovascular disease Emotional instability Benign or malignant liver tumors	Active heart disease Pregnancy Smoking (May increase risk of heart attack)	Injected testosterone is released gradually from muscle tissue, and transdermal and injectable estrogens but are easy to stop in case of adverse events Non-oral forms do not pass through the liver; may be preferable for older patients or those with underlying liver disease or elevated lipids Transdermal patches may cause skin irritation; creams require frequent application to large areas of skin Injections require large-gauge needles which may create large puncture wounds and increase susceptibility to infection if the area is not kept clean; this form may stay in the body for four weeks or longer
Estrogen	Breast development Enlargement of nipples Loss of erection Loss of ejaculation Shrinkage of testicles Sterility	Decreased acne, facial/body hair, and muscle mass/strength Softening of the skin Slowing of balding pattern Decreased libido Suppression of testosterone production Redistribution of fat from abdominal area to hips and buttocks Emotional changes and mood swings	Prostatectomy (non-cancerous pituitary-gland tumors) Deep vein thrombosis (blood clot) Pulmonary embolism (blood clot in the lung) Aneurysm High blood pressure Gallbladder disease Thyroid problems Liver disease Migraine headaches Weight gain Worsening of existing depression Increased sensitivity to stress Melasma (skin darkening) Lipid abnormalities Nausea, vomiting Diabetes mellitus	Presence of estrogen-dependent cancers History of thromboembolism (blood clot that can move in the blood stream and block blood vessels) or severe thrombophlebitis (vein inflammation due to a blood clot)	Oral forms stress the liver more than transdermal and injectable estrogens but are easy to stop in case of adverse events Non-oral forms do not pass through the liver; may be preferable for older patients or those with underlying liver disease or elevated lipids Transdermal patches may cause skin irritation; creams require frequent application to large areas of skin Injections require large-gauge needles which may create large puncture wounds and increase susceptibility to infection if the area is not kept clean; this form may stay in the body for four weeks or longer
Anti-androgen drugs	Suppression of testosterone Decreased facial hair and body growth Decreased progression of male pattern baldness Decreased libido Decreased erections Mild breast growth		More frequent urination Hyperkalemia (high levels of potassium in the blood) Increased excretion of sodium, calcium, chloride Decreased libido	Renal insufficiency Serum potassium greater than 5.5 mEq/L	
spironolactone (Aldactone)				Prostate cancer	Used alone or in combination with spironolactone Inhibits the intracellular enzyme responsible for converting testosterone to its potent form
finasteride (Proscar, Propecia)	Reduced size of prostate gland Decreased progression of male pattern baldness				Desensitizes pituitary gland Effects fully reversible in adolescents Does not carry risk of thromboembolism
GnRH (gonadotropin-releasing hormone)					Irreversible procedure May shrink the amount of skin available for creating a neovagina May cause scarring of scrotal tissue
Bilateral orchiectomy (removal of testicles)	Eliminates 90% of testosterone production Results in a lower estrogen dose required for therapy				
Progesterone	Enhanced estrogen-related feminization effects		Cardiovascular disease Breast cancer Lipid abnormalities Weight gain Varicose veins Blood clots Edema (swelling caused by fluid retention in body tissues) Mood disorders (depression, irritability) Facial and body hair growth and coarsening		Not often prescribed; used for MTF patients on maximum estrogen doses who have had unsatisfactory effects, and for patients who cannot tolerate other drugs

the types of hormones and hormone-altering drugs and procedures used for feminization and masculinization, along with the permanent and temporary effects, risks, contraindications, and benefits and disadvantages of each.

Standards of Care

The World Professional Association for Transgender Health (WPATH, formerly known as the Harry Benjamin International Gender Dysphoria Association) has established internationally recognized standards of care (SOC) for the treatment of gender identity disorder (GID), defined as distress and social impairment caused by gender identity that is not aligned with birth sex.

The SOC is a consensus on psychiatric, psychological, medical, and surgical management of GID and protocols for hormonal reassignment of gender. Many physicians and transgender persons oppose the GID diagnosis, not viewing transgenderism as a “disorder” but rather as a natural, healthy expression of the range of gender variations that are part of the human experience.

Nonetheless, the SOC guidelines are commonly used for assessing mental health in transgender adults and children, and for managing surgery and hormone treatment in this too-often neglected population. According to the SOC, in order to begin hormone therapy, individuals should:

1. Be 18 years of age or older;
2. Demonstrate knowledge of what hormones can and cannot do medically, and their social benefits and risks;
3. Have completed either:
 - a. A documented period—known as the “real-life experience”—of

Recommended Monitoring Tests for Transgender Persons on Hormone Therapy

Baseline Tests

- Complete blood count (CBC)
- Liver panel (hepatic aminotransferase levels)
- Kidney panel
- Lipid profile
- Prolactin and fasting glucose

Follow-Up Tests Performed

- Intermittently
- At 3, 6, and 12 months, then annually if using oral estrogen
- At 3, 6, and 12 months, then annually if taking spironolactone (Aldactone)
- Intermittently
- Annually for three years

at least three months living as a member of the desired gender (including holding down a job or volunteer position and legally acquiring a first name that is gender identity-appropriate); or

- b. A period of psychotherapy of a duration specified by the mental health professional after the initial evaluation (usually a minimum of three months).

In some instances, the SOC notes, it may be acceptable to provide hormones to patients who have not fulfilled the third criteria—for example, to facilitate the provision of monitored therapy using hormones of known quality, as an alternative to black-market or unsupervised hormone use.

Beginning and Monitoring Hormone Therapy

Hormone therapy for transgender persons is highly individualized and should include medical monitoring. A number of contraindications must be discussed with a knowledgeable health care provider before hormone use begins, including a history of breast cancer or thrombosis (blood clots) and active substance abuse, as well as use of antiretroviral

drugs to manage HIV disease.

Health recommendations for those who wish to begin hormone treatment include smoking cessation, regular exercise, and reducing risk factors for cardiovascular disease. Transdermal or intramuscular hormones may be recommended for older individuals or those with other (non-age-related) risk factors for blood clots.

A large Dutch cohort showed that prescribed and monitored hormone therapy did not increase mortality; rather, the number-one cause of death in this cohort was suicide. As discussed previously, many transgender persons have attempted or committed suicide and often struggle with mental illness. Thirty-two percent of a San Francisco-based sample of transgender persons had attempted suicide; younger age, depression, substance abuse, and a history of forced sex, gender-based discrimination, or gender-based victimization were associated with attempted suicide. Thus, in addition to a full medical history, a complete psychosocial history should be taken and any necessary mental health treatment should be initiated before beginning hormone therapy, to ensure the best possible outcome.

When obtained on the black market, hormones come with no quality assurance, recommended dosages, or medical monitoring. Some transgender persons obtain hormones illegally to supplement prescribed hormones

To view the latest edition of the World Professional Association for Transgender Health *Standards of Care for Gender Identity Disorders*, visit <http://wpath.org/Documents2/socv6.pdf>.

and speed up or intensify the desired effects, which puts these individuals at increased risk for unwanted side effects and drug interactions. Medical monitoring is essential to safe and healthy hormone use.

Hormones and ART

“We don’t fully understand the impact of hormones by themselves on the transgender body, and we know even less about how hormones interact with HIV meds.”

—JoAnne Keatley, MSW, Director of the Center of Excellence for Transgender HIV Prevention, UCSF

Treatment with hormones may provide an opportunity for patients to address HIV disease. Tom Waddell Health Center (TWHC), a San Francisco-based center that offers a transgender health clinic, advises that transgender health care providers should have expertise in HIV care.

Cross-gender hormone therapy is not contraindicated in HIV-positive people on antiretroviral therapy (ART) at any stage of HIV-disease progression, although health care providers may still be wary, as there is so little medical literature on interactions between hormone therapy and antiretroviral drugs or the impact of hormones on CD4 counts for transgender persons. There is some evidence that certain HIV medications do impact hormone levels; for example, TWHC advises extreme care with the protease inhibitor indinavir (Crixivan) and the non-nucleoside reverse transcriptase inhibitor efavirenz (Sustiva), as they may increase

HIV Medications that <i>Increase</i> Estradiol and Ethinyl Estradiol Levels	HIV Medications that <i>Decrease</i> Estradiol and Ethinyl Estradiol Levels
amprenavir (Agenerase) atazanavir (Reyataz) delavirdine (Rescriptor) efavirenz (Sustiva) etravirine (Intelece) fosamprenavir (Lexiva) indinavir (Crixivan) saquinavir (Invirase)	darunavir (Prezista) lopinavir/ritonavir (Kaletra) nelfinavir (Viracept) nevirapine (Viramune) ritonavir (Norvir) tipranavir (Aptivus)
Other Drugs Commonly Used by HIV Positive Persons that <i>Increase</i> Estradiol and Ethinyl Estradiol Levels	Other Drugs Commonly Used by HIV Positive Persons that <i>Decrease</i> Estradiol and Ethinyl Estradiol Levels
cimetidine (Tagamet) clarithromycin (Biaxin) diltiazem (Cardiazem) erythromycin (E-mycin, Ery-Tab, Eryc) fluconazole (Diflucan) fluoxetine (Prozac, Sarafem) isoniazid (Lanizid, Nydrazid) itraconazole (Sprononox) ketoconazole (Nizoral) paroxetine (Paxil) sertraline (Zoloft) verapamil (Calan, Covera, Isoptin, Veralan)	dexamethasone (Decadron) phenobarbital (Luminal) phenylbutazone (Azolid, Butazolodin) phenytoin (Dilantin) progesterone (Crinone, Prochieve, Prometrium, Provera) rifampin (Rifadin, Rimactane)

levels of ethinyl estradiol, a form of the hormone estrogen. TWHC also advises transgender patients on hormone therapy to avoid the protease inhibitors fosamprenavir (Lexiva) and amprenavir (Agenerase; no longer widely available in the U.S.) because hormone therapy may decrease blood levels of these drugs by 20%, putting the patient at risk for drug-resistant HIV.

It is important to note that the *quantities* of hormones required for feminization and masculinization have not been thoroughly tested for interactions with other drugs. Drug interactions involving ethinyl estradiol—a form of estrogen used in birth control pills—offer some hints, but much higher doses of ethinyl estradiol are prescribed for hormone therapy for transgender persons compared with those taken for birth control. Decreased or increased levels of ethinyl estradiol in the body may lead to unwanted side effects, ranging from inadequate feminization of physical features to nausea and vomiting, headache, and drowsiness.

Sex Reassignment Surgery and HIV

Sex reassignment surgery (SRS)—also called “gender confirmation surgery”—includes a number of surgical options (see sidebar, page 47) which transgen-

Estrogen-Related Risks

An Amsterdam cohort study reported 36 incidents of blood clots in 816 subjects over 7734 patient-years. Most occurred in the first year of taking estrogens and most were in persons over age 40 who were taking oral ethinyl estradiol; of these, participants who switched to transdermal ethinyl estradiol saw their risk for blood clots decline.

While breast cancer may be a concern for transgender women, there have only been three reported cases in worldwide medical literature.

der persons may or may not choose to have, depending on their gender identity. SRS can be performed for HIV-positive transgender persons with a CD4 count of 200 cells/mm³ or above. The WPATH *Standards of Care* state that “it is unethical to deny availability or eligibility for sex reassignment surgeries or hormone therapy solely on the basis of blood seropositivity for blood-borne infections such as HIV, or hepatitis B or C, etc.”

As with any surgery, the quality of the care the patient receives before, during, and after SRS is a major factor in how well and how quickly the individual recovers, and his or her satisfaction with this part of the transition experience. For both MTF and FTM persons, pre-procedure communication with surgeons and other members of the health care team is essential to a healthy recovery—and to avoiding acquiring or transmitting HIV following surgery. Individuals should make sure they understand how long the healing time is for genital surgeries; sexual activity too soon may allow HIV to enter the body through unhealed surgical wounds or may put partners at risk for HIV transmitted through blood from surgical sites.

Once healing is complete, safer-sex tools like male or female condoms, dental dams, and latex gloves cut to fit a new “microphallus” can help protect the transgender individual and his or her sex partners from HIV and other sexually transmitted infections. Transgender women with neovaginas should be aware that most reconstructed vaginas cannot lubricate naturally; using a personal lubricant is recommended to decrease the likelihood that sex will cause abrasions and small tears through which HIV and other pathogens can pass. Care for a neovagina includes periodic dilation to prevent stenosis (narrowing). Microscopic tears caused by dilation or sex create ideal conditions for acquiring or transmitting HIV if barrier protection is not used during sexual intercourse.

In addition, the medical care team

should be aware of any and all medications (including ART) the individual undergoing surgery is using to ensure continuity and avoid drug interactions during and after surgery. And regardless of their HIV status, transgender individuals who have had any sex reassignment surgery but retain pre-transition organs or tissue remnants need regular screening for cancers commonly associated with their birth sex, including prostate, breast, cervical, and ovarian cancers.

Optimizing Health Care

“I try to model that I am comfortable talking, that [transgenderism] is nothing exotic. Routinize it, make it ordinary—but at the same time acknowledge that, for many transgender patients, their past has been very challenging and overwhelming.”

—Lisa Capalini, MD

Because transgender health needs are

complex and may intimidate health care providers, and due to the general lack of culturally competent medical settings, transgender people may struggle to find appropriate medical care. Lack of stable employment and other financial barriers may also hinder access to health insurance and medical care. Other barriers to care include fear of exposure or disclosure, geographic isolation, social isolation, and a dearth of transgender-specific clinical research and medical literature. Lack of gender-variance variables on medical history forms may also present an obstacle to care.

In addition, health insurance policies may not cover expensive treatments and surgeries sought by many transgender people; most insurance companies, employee health plans, and health maintenance organizations (HMOs) specifically exempt coverage for sex reassignment surgery, hormones, and electrolysis, deeming them elective or cosmetic.

Sex Reassignment Surgery

Masculinizing procedures:

- Mastectomy or breast reduction surgery: removal of breast tissue and folds below each breast.
- Oophorectomy: removal of the ovaries.
- Hysterectomy: removal of the uterus and possibly the cervix.
- Vaginectomy or colpectomy: removal of vaginal tissue and closure of the vagina.
- Phalloplasty: creation of a “neophallus” using vaginal tissue and skin grafts (usually from the forearm); includes urethral extension (lengthening of the tube that carries urine from the bladder) to allow urination through the neophallus; may also include (as a separate procedure) placement of penile implants to allow erection.
- Metoidioplasty: creation of a “microphallus” using the hormonally enlarged clitoris, labia minora (inner vaginal lips), and lengthened urethra.
- Scrotoplasty: creation of a scrotum using tissue from the labia minora and labia majora (outer vaginal lips).

Feminizing procedures:

- Augmentation mammoplasty: breast enlargement using saline-filled implants.
- Penectomy: removal of the penis and shortening of the urethra.
- Clitoroplasty: creation of a clitoris using tissue from the “head” of the penis (glans).
- Vaginoplasty: creation of a “neovagina” out of skin from the penis (penile inversion) or tissue from the lining of the colon (colon resection).
- Labiaplasty: creation of labia minora and majora out of skin from the penis and scrotal sac.

Thus, both real and perceived discrimination in medical settings, in addition to most providers' lack of experience working with transgender clients, may keep transgender individuals from accessing appropriate medical treatment, seeking legal hormones, or getting tested and/or treated for HIV. In a four-city study of antiretroviral drug use, for example, transgender persons had significantly lower rates of ART use compared with other populations.

Important guidelines developed by the Center of Excellence for Transgender HIV Prevention encourage medical providers to ask themselves whether the questions they are posing to transgender clients are medically necessary and relevant to their work. The California STD/HIV Prevention Training Center teaches providers working with transgender clients to frame questions in terms of what the provider needs to know and what he or she already

knows, and how to ask questions sensitively. Structuring communication with patients in this way will hopefully prevent providers and medical office staff from "asking unnecessary or inappropriate questions that lead to making assumptions or lead to making the client or patient feel uncomfortable," says Jen Shockey, MPH, Behavioral Intervention Trainer at the California STD/HIV Prevention Training Center.

At the same time, it is essential that patient-provider communication be open and frank in order to ensure the best possible care. Says Lisa Capalini, MD, "Don't make any assumptions. Ask. Just like you can't make any assumptions on sexual behavior based on whether someone is gay or straight, we really don't know anything about what (if any) medical, hormonal, or surgical treatments a trans person has had short of taking a focused and detailed history." The key is to make this history-

taking as comfortable as possible for the patient, and, as JoAnne Keatley, MSW, puts it, this requires "grounding your work in the community." Best practices for health care rely on provider education: "Being responsive to the needs of the patient—educating yourself around who the transgender community is and how to engage with them and address their health care needs—is the most important practice that providers can incorporate into their [medical] practice."

The following simple practices, recommended by WPATH and TWHC, can help medical providers offer a comfortable environment and sensitive treatment for transgender clients.

Use appropriate pronouns and language:

- Ask straightforwardly what patient prefers, if unsure.
- Change name and gender in medical

<h2>Transgender Health and Safety in Prisons and Jails</h2>	<h3>The Transgender, Gender Variant, and Intersex Justice Project</h3> <p>offers legal advice and referrals to defend the rights and dignity of incarcerated transgender, gender variant, and intersex persons.</p>
<p>Gender identity is relevant both to why transgender people are arrested and to their needs once they are brought into the justice system.</p>	<p>TGI Justice Project 342 9th Street, Suite 202B San Francisco, CA 94103 415-252-1444 info@tgijp.org</p>
<p>Social stigma and difficulty finding or maintaining employment, low self-esteem, substance use, and a need to fund hormones and surgery may lead to commercial sex work and, hence, incarceration. Rates of incarceration range from 37% to 65% among transgender persons.</p>	<p><i>(Prisoners can send legal mail to the above address, c/o Alexander Lee, Attorney at Law.)</i></p>
<p>Placement in incarceration facilities is typically "genitalia-based": birth sex or current anatomy, rather than gender identity, determines where transgender prisoners are housed. This contributes to an increased risk of HIV exposure, as transgender prisoners may be targeted for rape, coerced sex, and coerced prostitution.</p>	<p>Just Detention International provides legal and self-help resources to survivors of and people at risk for sexual assault in prisons and jails, juvenile facilities, immigration detention centers, and police lock-ups.</p>
<p>It is generally agreed (and supported by the SOC) that inmates should continue taking hormones prescribed prior to incarceration, as sudden cessation of hormone therapy may have serious medical consequences, including undesired regression of hormonally induced physical changes, emotional instability, and depression, anxiety, or suicide. Not surprisingly, however, getting transgender-appropriate medical treatment in prison can be difficult. While some jurisdictions permit continued hormone treatment, other facilities may not. Furthermore, simply <i>permitting</i> hormonal treatment does not necessary mean that prisoners will actually <i>receive</i> adequate treatment.</p>	<p>Just Detention International 3325 Wilshire Blvd., Suite 340 Los Angeles, CA 90010 213-384-1400 info@justdetention.org</p>
<p>The following legal and advocacy resources may be helpful to incarcerated transgender persons:</p>	<p><i>(Prisoners can send legal mail to the above address, c/o Melissa Rothstein, Esquire.)</i></p>
	<p>For additional resources and information about prisoners' rights to medical care, see "HIV Treatment in U.S. Jails and Prisons" in the Winter 2008 issue of <i>BETA</i>.</p>

For more information on trainings for providers, such as “Meeting the STD/HIV Prevention Needs of Transgender Clients,” visit the California STD/HIV Prevention Training Center at www.stdhivtraining.org or contact the organization at the addresses or telephone numbers below.

California STD/HIV Prevention Training Center
captc@cdph.ca.gov

300 Frank H. Ogawa Plaza, Suite 520
 Oakland, CA 94612
 Telephone: 510-625-6000
 Fax: 510-836-0239

or

2525 Grand Ave., Annex
 Long Beach, CA 90815
 Telephone: 562-570-4085
 Fax: 562-570-4190

chart to match patient’s preference.

- Avoid the terms “pre-op” and “post-op,” which can be confusing and assume that all transgender individuals intend to have sex reassignment surgery.
- Train front office staff to use language that is sensitive to transgender identities.
- Use trans-sensitive intake forms. For example, allow clients to write in their gender, or offer options in addition to “male” and “female.”

Acknowledge geographic and social isolation and potential trauma history:

- Be sensitive to the daily stress of living with a stigmatized and marginalized status.
- During physical exams, be mindful of potential past trauma or possible negative experiences with other medical providers.

- Avoid genital and rectal exams on first visit, if possible.
- Be mindful of other psychosocial issues, including depression and post-traumatic stress disorder, lack of support from family and others, current or past substance use, and difficulty maintaining employment.
- If possible, make unisex bathrooms available.

Conclusion

The transgender population is severely underserved and carries a disproportionate burden of HIV nationally and internationally. Many transgender individuals are uniquely dependent on an often inadequate health care system because their gender identity depends on feminizing or masculinizing medical procedures. All transgender persons, whether seeking such procedures or not, should have access to adequate medical care—including prevention of and treatment for HIV and other conditions—in a sensitive and supportive setting.

By adopting the practices recommended by the Center of Excellence for Transgender HIV Prevention, the Tom Waddell Health Center, and other transgender-focused organizations, health-care providers can take significant steps toward relieving some of the health disparities experienced by transgender persons. And by accessing the resources highlighted in this article, transgender individuals can become their own advocates in health clinics and doctors’ offices and work better with providers to optimize their own health and well-being.

Kimberly Keller, MSc, recently served as the San Francisco AIDS Foundation’s Research Analyst and helped to develop a peer-education program on acute HIV infection for the San Francisco Bay Area male-to-female transgender population.

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For more information on the transgender community:

Center of Excellence for Transgender HIV Prevention

50 Beale Street, Suite 1300
 San Francisco, CA 94105
 415-597-8198
www.transhealth.ucsf.edu

National Center for Transgender Equality

1325 Massachusetts Ave. NW,
 Suite 700
 Washington, DC 20005
 202-903-0112
www.nctequality.org

National Coalition for LGBT Health

1325 Massachusetts Ave. NW,
 Suite 705
 Washington, DC 20005
 202-558-6828
coalition@lgbthealth.net
www.lgbthealth.net

Transgender Law Center

870 Market Street, Room 822
 San Francisco, CA 94102
 415-865-0176
info@transgenderlawcenter.org
www.transgenderlawcenter.org

The Sylvia Rivera Law Project

322 8th Avenue, 3rd Floor
 New York, NY 10001
 212-337-8550
www.srlp.org

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van Kesteren, P. and others. Mortality and morbidity in transsexual patients treated with cross-sex hormones. *Clinical Endocrinology* 47(3):337–42. September 1997.

HIV Testing and HIV Health Resources

Knowing your HIV status is the first step toward staying healthy with HIV or remaining negative. As a *BETA* reader, chances are that you already know your HIV status—but do your friends and family members know theirs? Not everyone knows that they may be at risk for HIV, let alone that they may already have the virus. And not everyone knows where and how to get tested, and what to do if they find out they have HIV.

Please take advantage of these resources—all available in English and Spanish—to help keep yourself and those you care about safe and healthy.

The following hotlines offer information and anonymous counseling about HIV testing, transmission, prevention, and health.

AIDS in Prison Hotline

1-718-378-7022 (U.S.; all collect calls accepted)
Hours: Tuesday, Wednesday, Thursday, 3 pm to 8 pm ET
809 Westchester Ave.
Bronx, NY 10455
www.osborneny.org/aids_in_prison_project.htm

California HIV/AIDS Hotline

1-800-367-AIDS (Toll-free within California)
1-415-863-AIDS (In San Francisco and outside California)
1-888-225-AIDS (TTY for the hearing impaired)
Hours: Monday, Wednesday, Thursday, Friday, 9 am to 5 pm PT;
Tuesday 9 am to 9 pm PT
995 Market St. #200
San Francisco, CA 94103
www.aids hotline.org

GMHC AIDS Hotline

1-800-AIDS-NYC (1-800-243-7692)
1-212-645-7470 (TTY)
1-212-807-6655 (International)
Hours: Monday through Friday, 10 am to 9 pm ET; Saturday,
12 pm to 3 pm ET
www.gmhc.org/hotline.html

National AIDS Hotline

1-800-CDC-INFO (1-800-232-4636)
1-888-232-6348 (TTY)
Hours: 24 hours a day, 7 days a week

Women Alive

1-800-554-4876 (U.S.)
1-323-965-1564 (International)
Hours: Monday through Friday, 11 am to 6 pm PT
1566 Burnside Ave.
Los Angeles, CA 90019
www.women-alive.org/index.htm

The National Prevention Information Network, part of the U.S. Centers for Disease Control and Prevention (CDC), can help you or someone close to you find an HIV testing site, and can help answer questions about HIV testing and HIV prevention.

CDC National Prevention Information Network

1-800-458-5231 (U.S.)
1-404-679-3860 (International)
Hours: Monday through Friday, 9 am to 6 pm ET
P.O. Box 6003
Rockville, MD 20849
www.hivtest.org/contact.cfm