Background:
The IHS National Pharmacy and Therapeutics Committee (NPTC) provided a clinical discussion for the management of patients treated with hormone therapy for gender dysphoria or gender identity disorder (including transgender and transsexual patients) at the May 2013 meeting. While no modifications were made to the IHS National Core Formulary (NCF), it was felt that the topic included information that would be of interest to our providers.

Gender Dysphoria, Gender identity disorder, Transsexual

Transgender MTF (Male to Female):
Based on protocols developed by the Veterans Administration and current literature, it was determined that the most appropriate estrogen agent for Male to Female transgender therapy is Estradiol. NSSC review of patients with gender identity disorder revealed that many of these patients are currently being treated with conjugated estrogens. It is the intent of the committee to encourage providers to consider switching these patients from conjugated estrogens to estradiol tablets for the following reasons:

1. Serum Estradiol levels may be measured to help guide therapy for patients taking Estradiol.
2. Estradiol dosage should be titrated based on patient response and serum lab value; maintain estradiol levels less than 200 pg/ml.
3. It is believed that maintaining estrogen levels below the mean female premenopausal level (200 pg/ml) may help minimize cardiovascular risks to include myocardial infarction, stroke, pulmonary emboli, and deep vein thrombosis for transgender patients receiving hormonal therapies.

The use of spironolactone as an adjunct to reduce the amount of estrogen required to increase feminization in transgender MTF patients was also noted. The use of anti-androgens such as spironolactone appears to be beneficial to minimize the amount of estrogen required for MTF transgender patients. Testosterone plasma levels goal may be titrated, based on clinical response to less than 55ng/dL.

Transgender FTM (Female to Male):
Although testosterone is not included on the National Core Formulary, this product was reviewed for use in FTM transgender patients. It is generally recommended to keep testosterone levels between 320 - 1000 ng/dL for (normal male range) due to the cardiovascular risks associated with testosterone therapy.

If you have any questions regarding this document, please contact the NPTC at nptc1@ihs.gov.

References:
- World Professional Association for Transgender Health. (2011). Standards of Care for the health of Transsexual, Transgender, and Gender Nonconforming People. Minneapolis, Minnesota: ZSQUAREDESIGNS.