

# SEX AND GENDER SPECIFIC HEALTH LEARNING MODULES OVERVIEW AND SUMMARY

#### **OVERVIEW**

The learning modules are created by inter-professional teams of Texas Tech University Health Sciences Center faculty and students and are a combination of text and video instruction with assessments, including a pre/post-test, multiple choice exams, and USMLE type assessments.

There are three parts to each learning module. Each part provides fictitious patient/provider scenarios in which the disease topic is examined. Each part of the modules also contains an Expert Section, which covers didactic information regarding the disease topic.

The below summary of each learning module provides a review of the major topics covered over the three parts of the module.

#### **OSTEOPOROSIS**

The Osteoporosis Learning Module follows a female and male patient through their diagnosis and treatment of osteoporosis.

#### **Example Topics Covered:**

- biology of bone remodeling
- shared and sex specific factors for the prevention, development, screening, diagnosis, and treatment of osteoporosis
- sex and gender differences pertaining to the discharge plan for a patient with osteoporosis
- mortality and return to function difference per sex and gender

#### **DIABETES**

The Diabetes Learning Module follows a female and male patient through their diagnosis and treatment of diabetes.

## **Example Topics Covered:**

- insulin function, production, and malfunction
- shared and sex specific factors for the prevention, development, screening, diagnosis, and treatment of diabetes
- sex and gender differences pertaining to wound care and amputation
- sex and gender differences pertaining to diabetic CVD





#### **CARDIOVASCULAR**

The Cardiovascular Learning Module follows one, female patient as she learns about cardiovascular risk factors specific to females.

## **Example Topics Covered:**

- blood tests used to diagnose ACVD and blood test values that indicate increased risk of ACVD
- shared and sex specific factors for the prevention, development, screening, diagnosis, and treatment of ACVD
- the prevalence of heart disease among females
- why angiography may lead to a misdiagnosis of heart problems in females

### **ALCOHOL USE DISORDER**

The Alcohol Use Disorder Learning Module follows a mother and daughter, who are both struggling with alcohol use disorder issues.

#### **Example Topics Covered:**

- sex differences related to the NIAAA's at risk drinking guidelines
- how tissue damage from alcohol misuse differs between males and females
- the importance of using laboratory diagnostics, as well as the CAGE tool, to screen for alcohol misuse
- sex differences in alcohol tolerance and withdrawal

#### **INFECTIOUS DISEASE**

The Infectious Disease Learning Module differs from the others. Rather than following one or two patients through all three parts of the module, this module explores UTI in females and males at different stages of life: pediatric, adult, elderly/frail.

## **Example Topics Covered:**

- anatomic and physiologic differences related to UTI between males and females
- sex specific differences in epidemiology/etiologic risk factors for UTI among the following patients: pediatric, pregnant female, male with STD, elderly/frail
- diagnostic criteria of UTI in males vs females and sex specific UTI interventions
- differentiating presentations where antibiotic therapy is indicated from those where it is inappropriate