



From Test to Treatment ▶ The Value of Diagnostic Tests in WOMEN'S HEALTH

Diagnostic testing is critical at every stage of a woman's life—giving healthcare providers the ability and confidence to develop tailored health management strategies and treatment plans for each patient. Many conditions are unique to women or impact women differently than men, requiring distinct approaches to screening, prevention, and treatment. Diagnostic tests provide a broad range of solutions that patients and providers rely on to make critical healthcare decisions for women. **#TestToTreatment**

Diagnostic Tests Promote the Health and Healthcare of Women

Diagnostic tests have enabled researchers to uncover significant biological and physiological differences between men and women. There are a range of conditions and diseases that exclusively, disproportionately, or differently affect women. From reproductive health to heart health, diagnostic tests enable healthcare providers to make appropriate prevention, management, and treatment decisions for women.



Identifying Sex-Specific Health Signals for Women

Diagnostic tests enable doctors to recognize the sex-specific health challenges facing women and distinguish warning signs between women and men. For example, cardiovascular disease (CVD), including coronary heart disease and stroke, is the leading cause of death among women and men in the U.S. However, signs of cardiac diseases in women are often less evident compared to men. Advanced diagnostic tests allow doctors to identify and detect female-specific risk factors and novel biomarkers in women to aid in prevention, diagnosis, and treatment of cardiovascular disease.



Diagnostic Testing Is Advancing Women's Health in Many Disease Areas



Cervical Cancer Testing

Since cervical cytology (Pap smear) was first introduced in the U.S. in the 1950s, cervical cancer has gone from the leading cause of cancer deaths in women down to 14th – a **70 percent reduction** over that time span.¹ Following clinical recommendations to screen with cervical cytology and/or HPV testing, alone or in combination, can detect most cases of cervical cancers.²



Non-Invasive Prenatal Screening

Less than a decade ago, prenatal genetic screening required invasive procedures to get a fetal DNA sample—exposing their pregnancies to risk. Advances in **molecular technology** now enable screening of fetal DNA that naturally circulates in the mother's blood during pregnancy and **decrease procedure-related complications**.³



Preeclampsia

Preeclampsia, a common hypertensive disorder affecting **3–5% of pregnancies**, is a leading cause of maternal morbidity and mortality worldwide.⁴ Leveraging diagnostics to test for certain angiogenic biomarkers, physicians can predict risk of preeclampsia leading to improved pregnancy outcomes and a **reduced average per patient cost of \$1215**.^{5,6}



Gestational Diabetes

Gestational diabetes (GDM) occurs in **5–9% of all pregnancies**. GDM increases the risk of diabetes in both mother and the child, among other health consequences. Diagnostic testing can be used to measure multiple biomarkers in women **up to 7 years before pregnancy** to assess their risk for GDM—allowing for targeted intervention strategies.⁷



Heart Diseases

Major inequalities exist between men and women in the treatment and outcome of acute coronary syndromes, such as heart attacks, leading to an increase in deaths in women. Importantly, women are less likely to be diagnosed with myocardial infarction than men. Diagnostic assays tailored specifically for gender differences nearly double the diagnosis of myocardial infarction in women from **11% to 22%** and identify those at high risk of reinfarction and death.^{8,9}



Vaginitis/Vaginosis

Vulvovaginal complaints lead to more than **10 million health care visits** for women annually in the U.S. Delays in proper diagnosis and treatment may lead to increased risks of poor pregnancy outcomes and infections. Using traditional methods, up to 40% of women do not receive a proper diagnosis. New advances in molecular diagnostic testing support accurate diagnosis allowing clinicians to make effective treatment decisions on the first visit.

ENDNOTES

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