# WOMEN'S REPRODUCTIVE HEALTH —IT'S COMPLICATED

HOW THE ENDOCRINE SYSTEM PLAYS A ROLE



# SEVEN RECOMMENDATIONS TO IMPROVE WOMEN'S HEALTH

- **1** Provide access to high-quality, specialized, and affordable care for women with endocrine conditions, regardless of income, employment, health status, or geographic location.
- 2 Provide access to preventive health services, including reproductive health care and programs such as the Diabetes Prevention Program, at little to no cost for the beneficiary.
- 3 Provide access to no-cost contraception.
- 4 Increase funding for research on PCOS and associated co-morbidities.
- 5 Increase funding for NIH's Office of Research on Women's Health.
- 6 Increase coverage for infertility services including cryopreservation services for people undergoing medical treatment that may affect future fertility.
- **7** Guarantee health insurance coverage with no lifetime caps or pre-existing conditions exclusions.

#### **KEY STATISTICS**

99% of women of reproductive age in the United State have used contraception during their lifetime.

**58%** of pill users also cite non-contraceptive health benefits such as treatment for excessive menstrual bleeding, menstrual pain, and acne as reasons for using the method.

**34%** of women voters reported having struggled with the cost of prescription birth control, prior to the implementation of the Affordable Care Act.

The Centers for Disease Control and Prevention (CDC) estimates that unintended pregnancies cost American taxpayers at least **\$21 billion** each year.

**68%** of unintended pregnancies are paid for by public insurance programs including Medicaid, Children's Health Insurance Program, and the Indian Health Service.

**\$1**→**\$7.09 ♣** 

For every public dollar invested in contraception, short-term Medicaid expenditures are reduced by \$7.09 for the pregnancy, delivery, and early childhood care related to births from unintended pregnancies.

7 Billion (\$)

In 2015, Title X-funded health centers prevented 822,000 unintended pregnancies, resulting in savings of \$7 billion to federal and state governments.



# **HOW THE ENDOCRINE SYSTEM PLAYS A ROLE**

Ovaries are glands that produce eggs and sex hormones—including estrogen, testosterone, and progesterone—which are vital to reproductive organ development, breast development, bone health, pregnancy, and fertility.

### **GLANDS**

Hirsutism affects 5-10% of all women. It refers to excess dark, thick hair in areas (such as the arms) where women usually don't have much hair. It is usually a sign of an underlying endocrine disorder, most commonly, polycystic ovary syndrome (PCOS).

As women approach mid-life, estrogen levels start to fluctuate and then drop. During **menopause**, a woman's ovaries stop producing eggs and produce fewer female hormones. This condition is a normal part of the aging process that women undergo, and symptoms vary greatly from woman to woman.

### **HORMONES**

#### **Estrogen**

Estrogen is one of two main sex hormones that women have. The other one is progesterone. Estrogen is responsible for women's physical features and reproduction.

#### **Progesterone**

Progesterone is a hormone released by the ovaries. Changing progesterone levels can contribute to abnormal menstrual periods and menopausal symptoms. Progesterone is also a crucial part of the menstrual cycle and maintenance of pregnancy. Progesterone helps to regulate women's cycles.

#### **Testosterone**

Testosterone helps with the growth, maintenance, and repair of women's reproductive tissues. When this hormone is not in balance, a lowered sex drive and health problems can occur.

### PREGNANCY AND FERTILITY



About **35-40%** of infertility cases are due to female infertility.



About **25%** of women with infertility have infrequent or absent ovulation. These women usually have irregular periods or no periods at all.



LH and follicle-stimulating hormone, FSH, signal an egg to develop and be released from the ovary. A woman's ability to get pregnant can also be affected by her age, since the number and quality of her eggs gradually decrease beginning around **age 35**.







Breast cancer is one of the most common cancers affecting 1 in 8 women. Estrogen and progestin can cause breast tissue to grow faster than normal. Women who have been treated for breast cancer may experience fertility issues.



## **5-6 Million PCOS**

PCOS affects an estimated **5 to 6 million** women in the U.S. and is the most common cause of infertility. PCOS is also associated with an increased risk of several endocrine disorders, including:







Obesity