# The Value of Diagnostic Tests in Detecting Cervical Cancer





### WHAT IS CERVICAL CANCER?

Cervical cancer is a disease in which normal cells on the surface of the cervix change, grow uncontrollably, and form a tumor.<sup>1</sup>
According to the American Cancer Society, in 2014 there were more than 12,000 new cases of cervical cancer in the U.S. and over 4,000 deaths from the disease. Prevalence of the disease, more pronounced worldwide however, is responsible for nearly 300,000 deaths annually, and 85 percent of those cases occur in developing countries.<sup>2</sup>

# THE ROLE OF DIAGNOSTIC TESTS

Although cervical cancer is one of the world's deadliest forms of cancer that can develop in women it is also one of the most easily preventable.<sup>3</sup> Diagnosis of cervical cancer is most commonly determined by a Pap test or a human papillomavirus (HPV) test, or



(Source: American Cancer Society & World Health Organization)

both tests used in combination (analyzing the same sample) for the complementary data these tests produce.<sup>4</sup> A Pap test is a procedure in which cells are scraped from the cervix and examined under a microscope. Pap tests provide real-time understanding

of current cell growth, and indicate whether abnormal cell growth is likely to become cancerous in the near-term if left untreated. In addition, the HPV test is used to identify infection with high risk HPV, the virus that causes cervical cancer.<sup>5</sup>

More than 55 million

Pap tests are performed every year in the U.S.

(Source: Journal of General Internal Medicine)

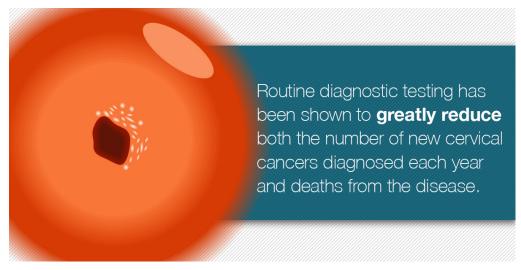
Routine cervical cancer screening has been shown to greatly reduce both the number of new cervical cancers diagnosed each year as well as deaths from the disease.6 High-income countries, including the U.S., typically provide insurance coverage that ensures women have affordable access to routine cervical cancer screenings.7 However, among certain populations living in high-income countries, cervical cancer incidence and death rates remain high, due primarily to low levels of patient awareness and education, psychosocial and cultural beliefs, and access barriers.8 In low- and middle- income countries, cervical cancer rates are high and it is often the most common cause of cancer-related death among women and a leading cause of death overall.9

# Since the 1950s, deaths from cervical cancer in the U.S. have been reduced by 70% due to diagnostic testing.

(Source: Jemal A. Cancer statistics)

## IMPROVING QUALITY OF LIFE AND REDUCING HEALTHCARE COSTS

High-quality screening with Pap and HPV testing has markedly reduced mortality from cervical cancer. O Since the introduction of Pap testing in the U.S. in the 1950s, cervical cancer, once the most frequent cause of cancer deaths in women, now ranks 14th, which marks a 70 percent reduction over that time span. This reduction in mortality is the direct result of Pap and HPV diagnostics that have increased detection of cancer at early stages, reducing the overall incidence of invasive cancer.



(Source: American Cancer Society)

The total economic cost of preventing, detecting, and treating cervical cancer in the U.S. is over \$8 billion.<sup>13</sup> Research proves that diagnostic tests for cervical cancer can lead to earlier detection, and in some cases, such testing can prevent cancers through early identification and health care management. In addition, these diagnostics tests can lower disease severity, reduce costs associated with treatment and, in some cases, save lives.<sup>14</sup> The savings from early detection and avoiding lengthy treatment can offset the cost of the cancer screenings.<sup>15</sup>

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