

# SECTION 3: COSTS TO CONSIDER FOR AN HPV TEST-BASED CERVICAL CANCER SCREENING PROGRAM

## KEY MESSAGES

- Two types of costs are typically considered in developing cervical cancer screening programs: the cost per person screened, and the total cost of the program.
- Planning and consideration must be given to the costs of the initial investment to set up an HPV test-based program, recurring costs, and operational aspects of the program.
- Costs to consider range from the purchase of HPV tests, equipment and supplies, training, community education, and treatment, among others.
- The WHO Cervical Cancer Prevention and Control Costing Tool can be used to estimate the costs for setting up and operating an HPV test-based screening program.

## COSTS TO BE CONSIDERED

How much will an HPV test-based screening program cost? In order to answer this question, one must consider that the program will have initial capital costs, as well as recurring costs. Some costs will be specific to the use of the HPV test, but most costs are related to an organized screening program, regardless of the screening test used.

Several tools are available to help calculate a country's screening program. One such tool is the WHO Cervical Cancer Prevention and Control Costing Tool<sup>3</sup>.

Costs are influenced by the screening algorithm that is chosen. For example, costs are different if HPV testing is used in a screen-and-treat strategy, or if HPV testing is done first, followed by cytology triage in HPV positive women.

Calculating the costs of a screening program is not straightforward, since some expenses may not be obvious. To determine program costs, the fixed costs of the health system need to be considered (e.g., health worker wages) and the specific additional costs for inclusion of HPV testing need to also be considered. The following is a suggested list of items to consider in costing an HPV test-based screening program.

<sup>3</sup> Available at: [http://www.who.int/immunization/diseases/hpv/cervical\\_cancer\\_costing\\_tool/en/](http://www.who.int/immunization/diseases/hpv/cervical_cancer_costing_tool/en/)

- **Cost of education and community mobilization programs:**
  - Community educator wages, based on country standards
  - Training of community educators
  - Transportation for community educators
  - Printing and distribution of educational materials
- **Cost of specimen collection:**
  - Wages of health workers
  - Training of health workers
  - HPV test materials: brushes, specimen tubes, etc.
  - Transport of specimen collection materials to and from the health center
  - Transport of HPV tests to the laboratory
  - Other materials: gloves for personnel who handle samples, data collection forms, etc.
- **Cost of specimen processing:**
  - Wages of laboratory staff
  - Training of technicians and laboratory staff
  - HPV test equipment
  - HPV test processing supplies
- **Reporting HPV test results:**
  - Wages of personnel responsible for patient follow-up
- **Evaluation and treatment of women with HPV positive results:**
  - Pelvic examination: required materials and equipment, such as a table, lamp, etc.
  - Supplies for VIA: acetic acid, etc.
  - Colposcopy: equipment, training, wages of providers
  - Biopsy: biopsy forceps, materials for processing and reading specimens
  - Cryotherapy: cryotherapy equipment, gas
  - LEEP (loop electrosurgical excision procedure): equipment, wire loops, anesthesia
- **Treatment of patients with invasive cancer:**
  - Equipment and health worker wages for radical surgery, radiation therapy, and chemotherapy.

Although screening will be done on all women who agree to participate, follow-up and treatment will only be required in a smaller percentage of women, those with abnormal results. The proportion will vary by populations, but typically 10%-15% of all screened women will require follow-up care. This needs to be considered in the calculation of program costs and the calculation of costs per person screened.

The budget for the screening program needs to be ensured over the long term, along with the consistent availability of supplies and equipment to ensure access to HPV testing and treatment. This is an investment that can cost more at the beginning of a program, especially due to the purchase of the test, equipment and training of the health team. But, the prevention of invasive cancer, through HPV testing and treatment of precancerous lesions, in addition to HPV vaccination of girls aged 9-13, will bring considerable savings from the reduced number of women who need cancer treatment, and economic gains in preventing avoidable deaths.