

# Preventing Cervical Cancer

## Jhpiego innovates to save lives

Cervical cancer is one of the most common cancers in women worldwide, with more than 570,000 new cases and 311,000 deaths reported in 2018.<sup>1</sup> The problem is worse for women living with HIV who are at four to five times greater risk of developing cervical cancer than other women.<sup>2</sup> Approximately 85% of new cases and 90% of deaths occur in developing countries, where screening and treatment rates are low.<sup>1</sup> Vaccines are now available that prevent human papillomavirus (HPV), which can lead to cervical cancer. Increasing HPV vaccination and screening and treating precancerous lesions are key to eliminating cervical cancer within the century.<sup>3</sup>

### Jhpiego's cervical cancer prevention response

Jhpiego is committed to advancing cervical cancer prevention (CECAP) to help eliminate this preventable disease. Known globally as an influential, technically respected organization, Jhpiego advocates for, raises awareness of, and galvanizes governments and funders to take action and build their capacity for CECAP. For many years, Jhpiego has supported countries around the world to implement CECAP programs, focusing on screening and treatment of precancerous lesions using the single-visit approach, which consists of screening with visual inspection with diluted acetic acid (VIA) and, if needed, immediate treatment with cryotherapy or referral for treatment of advanced lesions.<sup>4</sup> Since 2010, over a million women in low- and middle-income countries (LMICs) have benefited from CECAP services supported by Jhpiego. To provide a practical and inexpensive cryotherapy treatment for LMICs, Jhpiego developed the CryoPop, which has a modular design and efficiently uses carbon dioxide in cylinders, similar to those used in soda machines, to bring the single-visit approach to remote areas. The U.S. National Institutes of Health awarded Jhpiego a grant to study the performance, safety, and efficacy of CryoPop in the Philippines (2014–2019).

To rapidly expand access to secondary prevention services and help countries chart their pathway to cervical cancer elimination, Jhpiego has embraced a range of bold, transformative change strategies and solutions. These include supporting countries to introduce newer technologies—HPV vaccination, HPV testing of self-sampling,

and thermal ablation—and designing woman-centered, life-course, decentralized, and integrated service delivery models, within the overall framework of primary health care.

### Jhpiego's approach to expand prevention and treatment

Following WHO recommendations, Jhpiego promotes screening of women aged 30–49 years with a high-performance test (i.e., HPV test), followed by assessment of the cervix (i.e., visual inspection) for women with a positive high-risk (hrHPV) HPV result to determine eligibility for treatment. The HPV testing of self-sampling helps reduce the workload in clinics, as all women do not need to undergo speculum examination, and increases the proportion of women who will be accurately identified as requiring treatment. Jhpiego's comprehensive quality, health systems approach to CECAP programming includes the following:

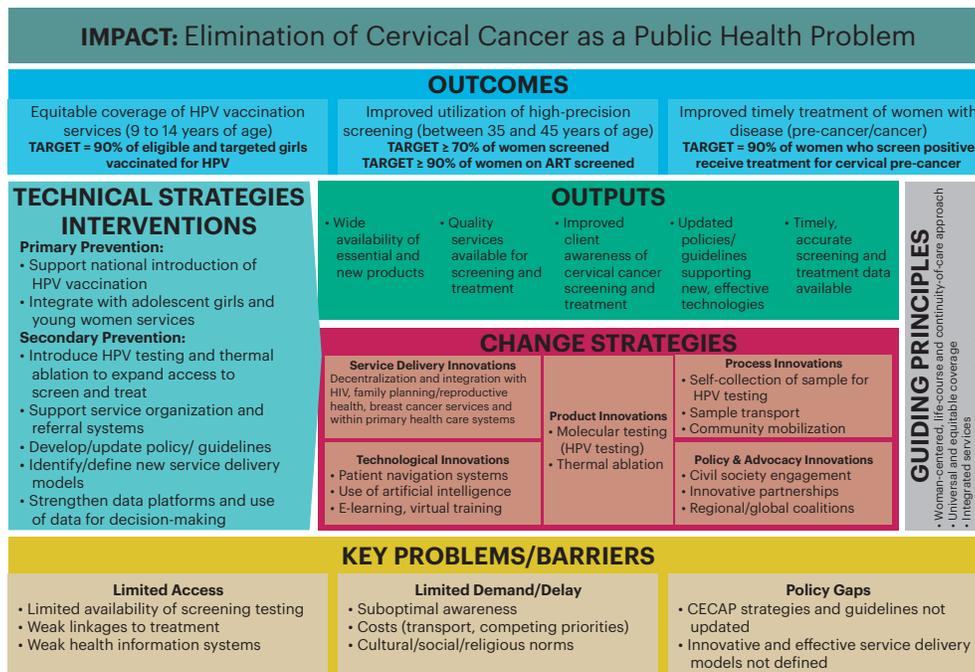
- **Policy and advocacy:** support development of CECAP policies and guidelines; engage with civil society; and form regional/ global coalitions to raise awareness and share information.
- **Human resource development:** develop training resources, including e-learning tools, and conducting competency-based training for health care providers and mentors; providing mentorship of providers for consistent quality of care.
- **Innovative service delivery:** work with local stakeholders to build a sustainable service delivery system that also addresses procurement, repair, and maintenance of equipment.
  - Decentralize services, including home- and/or community-based self-collection of samples and availability of thermal ablation at primary health centers and outreach facilities.
  - Integrate services with HIV, family planning, breast health, and reproductive health services into primary health care systems.
  - Referral systems: strengthen health system linkages to ensure that women receive appropriate follow-up and treatment.
- **Outreach and education:** develop culturally appropriate materials for community education and mobilization, and training community outreach workers to effectively promote screening and treatment.

1. World Health Organization (WHO). 2019. Human papillomavirus (HPV) and cervical cancer. WHO fact sheet.

2. UNAIDS. 2016. HPV, HIV and cervical cancer: Leveraging synergies to save women's lives.

3. WHO. 2019. Global strategy towards eliminating cervical cancer as a public health problem.

4. WHO. 2013. WHO guidelines for screening and treatment of precancerous lesions for cervical cancer prevention.



- **Monitoring and evaluation (M&E):** adapting standard data collection and analysis tools that address key performance indicators.
- **Documentation and data use:** strengthen documentation and the quality and use of data to drive program implementation.

### Highlights from Jhpiego’s cervical cancer portfolio

Jhpiego has implemented cervical cancer prevention activities in 23 countries, adapting programs to meet each setting’s unique needs, goals and resources:

**Botswana:** Since 2003, Jhpiego has supported the Ministry of Health (MOH) to expand and consolidate a national CECAP program, including the development and implementation of a national CECAP strategy. In 2017–2018, Jhpiego supported a study in Botswana to assess feasibility and acceptability of introducing HPV testing of self-sampling.<sup>5</sup> Of the 1,022 participants, nearly all self-collected samples had conclusive results and nearly all women received their results. Among HIV-positive women, 40% tested hrHPV positive and 95% received treatment. Among HIV-negative women, 25% tested hrHPV positive and 96% received treatment. The majority of participants (> 95%) found self-sampling easy. The successful results of this study have been used to inform the development of policies, guidelines, trainings, informational materials, and M&E plans for the scale-up of HPV testing into

existing CECAP programs in Botswana and other Jhpiego-supported countries.

**Zambia:** Since 1999, Jhpiego has supported the MOH to develop a national cancer control plan and strengthen the training and M&E system for CECAP. In 2006, with Jhpiego’s support, the MOH established the National Cervical Cancer Prevention Program. From 2015– 2016, Jhpiego collaborated with the Zambian Defence Force to integrate family planning and CECAP services into HIV care and treatment services offered to military personnel and their families. Jhpiego also supported Zambia to introduce thermal ablation, loop electrosurgical excision procedure, and HPV testing to expand access to cervical cancer screening and treatment.

**Tanzania:** Since 1999, Jhpiego has partnered with the MOH to found a national comprehensive CECAP program, focusing on capacity-building, advocacy, communications, social mobilization, and service delivery. Jhpiego has worked at multiple levels to advocate for HIV/CECAP integrated services and has used a monitoring system to track clients living with HIV who have been screened for cervical cancer. By 2016, more than 475,000 women were screened, with 5% being VIA-positive; and 52% receiving same-day cryotherapy. Jhpiego has provided technical assistance to the nationwide scale-up and implementation of the HPV vaccination program, the introduction of thermal ablation, and the integration of early detection of breast cancer into CECAP platforms.

5. Castle PE, et al. High-risk human papillomavirus prevalence in self-collected cervicovaginal specimens from human immunodeficiency virus (HIV)-negative women and women living with HIV living in Botswana. *PLoS One*. 2020;15(2):e0229086.