Cervical cancer is one of the most common cancers in women worldwide. More than 604,000 new cases and 342,000 deaths were reported in 2020. The problem is worse for women living with HIV who are at six times greater risk of developing cervical cancer than other women. Approximately 90% of new cases and deaths from cervical cancer occur in low- and middle-income countries, where coverage of prevention interventions are low. Increasing human papillomavirus (HPV) vaccination, screening and treatment of precancerous lesions and linking to cancer care are key to eliminating cervical cancer within the century.

Jhpiego’s cervical cancer prevention response

Jhpiego is committed to advancing cervical cancer prevention to help eliminate this preventable disease. Known globally as an influential, technically respected organization, Jhpiego raises awareness and advocates for governments and funders to take action and build their capacity for cervical cancer prevention. For many years, Jhpiego has supported countries around the world to implement prevention 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. Following a 2017 pilot project in Botswana, and in support of WHO’s 2021 screening guidelines, Jhpiego is now providing technical guidance and implementation support to countries introducing HPV DNA testing and providing precancerous treatment through thermal ablation, as an alternative to more resource-intensive cryotherapy.

Since 2010, over a million women in low- and middle-income countries have benefited from cervical cancer prevention services supported by Jhpiego. 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 high quality, woman-centered, life-course, decentralized, and integrated service delivery.

Jhpiego’s approach to expand prevention and treatment

Following WHO recommendations, Jhpiego promotes screening of women in the general population aged 30–49 years and of women living with HIV aged 25–49 years with a high-performance test (i.e., HPV test), followed by assessment of the cervix (i.e., with visual inspection) for women with a positive high-risk HPV result, and treatment for those who are eligible. 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.

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Jhpiego’s comprehensive quality, health systems approach to cervical cancer prevention programming includes the following:

- **Policy and advocacy:** support development or update of cervical cancer prevention and elimination 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 conduct competency-based training for health care providers and mentors; provide mentorship of providers for consistent quality of care and promotion of data use.

- **Innovative service delivery:** work with local stakeholders to build sustainable service delivery systems that also prioritize supply chain management systems and laboratory optimization.

- **Accessibility:** decentralize services, including home- and/or community-based self-collection of samples for HPV testing and availability of thermal ablation at primary health centers and outreach facilities.

- **Integration:** integrating HPV testing and self-sampling within HIV, family planning, reproductive health, breast health and immunization service with a priority on accessibility within 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 of community outreach workers to effectively promote screening and treatment.

- **Monitoring and evaluation:** 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.

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**IMPACT: Elimination of Cervical Cancer as a Public Health Problem**

**OUTCOMES**

<table>
<thead>
<tr>
<th>Equitable coverage of HPV vaccination services (9 to 14 years of age)</th>
<th>Improved utilization of high-precision screening (between 35 and 45 years of age)</th>
<th>Improved timely treatment of women with disease (pre-cancer/cancer)</th>
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</thead>
<tbody>
<tr>
<td>TARGET &gt;90% of eligible and targeted girls vaccinated for HPV</td>
<td>TARGET &gt;70% of women screened</td>
<td>TARGET &gt;90% of women who screen positive receive treatment for cervical pre-cancer</td>
</tr>
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**TECHNICAL STRATEGIES INTERVENTIONS**

**Primary Prevention:**
- Support national introduction of HPV vaccination
- Integrate with adolescent girls and young women services

**Secondary Prevention:**
- Introduce HPV testing and thermal ablation to expand access to screen and treat
- Support service organization and referral systems
- Develop/update policy/guidelines
- Identify/define new service delivery models
- Strengthen data platforms and use of data for decision-making

**OUTPUTS**

<table>
<thead>
<tr>
<th>Wide availability of essential and new products</th>
<th>Quality services available for screening and treatment</th>
<th>Improved client awareness of cervical cancer screening and treatment</th>
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<tbody>
<tr>
<td>Updated policies/guidelines supporting new, effective technologies</td>
<td>Timely, accurate screening and data available</td>
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**CHANGE STRATEGIES**

**Service Delivery Innovations:**
- Decentralization and integration with HIV, family planning/reproductive health, breast cancer, and services within primary health care systems

**Product Innovations:**
- Molecular testing (HPV testing)
- Thermal ablation

**Technological Innovations:**
- Patient navigation systems
- Use of artificial intelligence
- E-learning, virtual training

**Process Innovations:**
- Self-collection of sample for HPV testing
- Sample transport
- Community mobilization

**Policy & Advocacy Innovations:**
- Civil society engagement
- Innovative partnerships
- Regional/global coalitions

**GUIDING PRINCIPLES**

- Universal and equitable access
- Integrated and comprehensive health care system
- Local and global partnerships

**KEY PROBLEMS/BARRIERS**

<table>
<thead>
<tr>
<th>Limited Access</th>
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<tr>
<td>Limited availability of screening testing</td>
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<tr>
<td>Weak links to treatment</td>
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<td>Weak health information systems</td>
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<tr>
<th>Limited Demand/Delay</th>
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<tr>
<td>Suboptimal awareness</td>
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<tr>
<td>Costs (transport, competing priorities)</td>
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<td>Cultural/religious norms</td>
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<tr>
<th>Policy Gaps</th>
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<tr>
<td>CECAP strategies and guidelines not updated</td>
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<tr>
<td>Innovative and effective service delivery models not defined</td>
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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 to expand and consolidate a national cervical cancer prevention program, including the development and implementation of a national strategy. In 2017–2018, Jhpiego supported a study in Botswana to assess feasibility and acceptability of introducing HPV testing of self-sampling. 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 high-risk HPV positive and 95% received treatment. Among HIV-negative women, 25% tested high-risk HPV 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 monitoring and evaluation plans for the scale-up of HPV testing into existing cervical cancer prevention programs in Botswana and other Jhpiego-supported countries.

- **Zambia**: Since 1999, Jhpiego has supported the Ministry of Health to develop a national cancer control plan and strengthen the training and monitoring and evaluation system for cervical cancer prevention. In 2006, with Jhpiego’s support, the Ministry of Health established the National Cervical Cancer Prevention Program. From 2015–2016, Jhpiego collaborated with the Zambian Defence Force to integrate family planning and cervical cancer prevention 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 Ministry of Health to found a national comprehensive cervical cancer prevention program, focusing on capacity-building, advocacy, communications, social mobilization and service delivery. Jhpiego has worked at multiple levels to advocate for HIV/cervical cancer prevention 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 cervical cancer prevention platforms.

- **SUCCESS Project**: Since 2019, Jhpiego has led the global Unitaid-funded Scaling Up Cervical Cancer Elimination with Secondary prevention Strategy (SUCCESS) consortium, primed by Expertise France, with the Union for International Cancer Control as the lead global advocacy partner. This dynamic consortium is introducing HPV testing, self-sampling and thermal ablation in Burkina Faso, Côte d’Ivoire, Guatemala and the Philippines through an integrated health systems approach. With a commitment to screen 175,000, SUCCESS’ implementation focuses on accessibility through facility and community mobilization approaches, health provider support, as well as overall feasibility and acceptability within facilities and laboratories, regionally and nationally within the health system.

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