PATH’s history in cervical cancer prevention

For over two decades, PATH has been at the forefront of efforts to build an evidence base for appropriate cervical cancer prevention interventions, to share lessons related to successful strategies, and to provide technical assistance to countries interested in making progress in cervical cancer prevention.

Fueled by a recognition of the inequitable burden of cervical cancer in low-resource countries, access to human papillomavirus (HPV) vaccines for young women is expanding at an unprecedented pace. Simultaneously, new screening and treatment alternatives for adult women are on the rise. For the first time in history, it appears that elimination of cervical cancer is within reach.

Technical assistance for country HPV vaccine programs

PATH currently provides technical assistance to countries for the planning, implementation, and evaluation of national HPV vaccination programs. This work builds upon six years (2006–2012) of successful formative research, clinical studies, and vaccination demonstration programs in India, Peru, Uganda, and Vietnam (http://www.rho.org/HPV-practical-experience.htm).

Since 2012, the PATH Center for Vaccine Innovation and Access has received funding from Gavi, the Vaccine Alliance (Gavi) to support country introductions of HPV vaccine through two pathways: demonstration programs and national introductions (www.gavi.org/Support/NVS/Human-papillomavirus-vaccine-support). To date, PATH has supported demonstration programs in 27 countries and assisted 15 countries in national introductions (see map).

The PATH HPV technical assistance team includes staff based in Africa, Europe, and the United States. Our HPV technical assistance work complements PATH’s Cervical Cancer Prevention project focused on screening and pre-cancer treatment.

To increase access to HPV vaccines, PATH has close collaborations with local nongovernmental partners and ministries of health that are integral to this effort. In addition, PATH works closely with partners around the world. These partners include Gavi, the World Health Organization (WHO), United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA), Bill & Melinda Gates Foundation (BMGF), the United States Centers for Disease Control and Prevention (CDC), John Snow International (JSI), the Clinton Health Access Initiative (CHAI), Jhpiego, and GirlEffect.

PATH provision of HPV vaccine technical assistance (as of September 2019*)

Technical assistance work streams

The PATH HPV technical assistance team’s activities are channeled through five primary work streams: HPV vaccine introduction decision-making and Gavi application support, program planning and preparations, vaccine delivery and monitoring, program evaluation, and cervical cancer prevention and control strategies (see below). Throughout this work, the team coordinates with global and in-country partners, capitalizing on the strengths of each partner’s country presence and technical capacities to ensure the success of Gavi-supported HPV vaccination programs.

HPV decision-making and Gavi application support

The PATH HPV technical assistance team assists countries that are engaged in decision-making on whether and how to introduce HPV vaccine nationally as well as preparing applications for Gavi funding. Team members work closely with countries to review the evidence needed for the decision-making process, generate additional evidence such as cost-effectiveness, if needed, and facilitate stakeholder discussions during the process. PATH helps countries understand the Gavi program and its requirements, map out a preliminary strategy for the country program, prepare content and data needed, and assist the country with submitting a quality application.

Program planning and preparations

The HPV technical assistance team also assists countries in their Gavi-supported HPV vaccination program planning. This work typically starts by designating an in-country technical advisory group to provide program guidance. The team can assist countries with all aspects of program planning: identifying the target population and vaccine delivery strategies; determining appropriate vaccination venues and logistics; estimating costs and budgets; reviewing implementer roles and training plans; developing job aids; conducting training of health workers and teachers; developing communication materials and social mobilization strategies; revising recording and monitoring tools; and preparing for supportive supervision and evaluation.

Vaccine delivery and monitoring

The PATH team also supports countries as they put their HPV vaccination program plans into action. During implementation, PATH offers technical assistance such as real-time program support, review, and monitoring during the initial rollout phase of the first dose, feedback on delivery challenges and problem-solving, and program adjustments for improvements.

Program evaluation

Ensuring quality program evaluation is a key component of the PATH HPV technical assistance team’s support. Team members work with countries to plan and implement an appropriate program evaluation to meet the needs of the country. Evaluation expertise includes community-based vaccination coverage surveys, post-introduction evaluation of feasibility of vaccine delivery, and micro-costing analyses of the financial and economic costs of HPV vaccine delivery.

Cervical cancer prevention and control strategies

The HPV technical assistance team works closely with our PATH Women’s Cancers colleagues and other partners to support country efforts to strengthen comprehensive cervical cancer prevention and control efforts. PATH provides technical expertise to multiple World Health Organization working groups to develop evidence-based cervical cancer screening and treatment guidelines, and then works with countries to implement these best practices at a national or sub-national level. PATH evaluates novel approaches to screening and precancer treatment, such as DNA-based HPV testing and thermal ablation, with a particular focus on understanding how these technologies perform among HIV-infected women, a priority population that is disproportionately affected by cervical cancer morbidity and mortality. In collaboration with the National Cancer Institute, PATH is piloting automated reading of cervical images taken with mobile phones and guided with artificial intelligence algorithms, an innovation that will facilitate accurate and low-cost point of care diagnosis of cervical precancer. For more information on PATH’s efforts in secondary prevention of cervical cancer, see Target: elimination of cervical cancer:
https://www.path.org/articles/target-elimination-cervical-cancer/

The global effort to introduce HPV vaccines

This work is part of a larger effort to introduce HPV vaccines in low- and middle-income countries around the world. Since HPV vaccines first became available in 2006, more than 120 countries and territories have introduced HPV vaccines into their national immunization programs. This progress has been made possible through efforts from international organizations, governments, foundations, nongovernmental organizations, civil society groups, and other stakeholders.