The introduction of human papillomavirus (HPV) vaccine has the potential to save the lives of millions of women and girls worldwide. Based on a review conducted by the London School of Hygiene & Tropical Medicine and PATH, this brief highlights findings, key lessons and recommendations related to potential pitfalls decision-makers should consider when implementing an HPV vaccination programme.

**Findings and key lessons**

A range of pitfalls has hindered progress in countries implementing HPV vaccination. Planners can increase the likelihood of success by learning from – and avoiding – challenges encountered by others.

**PLANNING AND COORDINATION**

High-level political commitment is critical for implementing both demonstration projects and national programmes; those projects/programmes that did not secure this support encountered delays in vaccine importation and fund disbursement. In several cases, lack of political support also impeded social mobilisation preparations, including printing of training and community education materials, which subsequently affected the vaccine delivery schedule.

Most successful projects/programmes noted the importance of collaboration between health, education and finance ministries, particularly during the planning phase. Lack of early involvement of school representatives at national and local levels sometimes led to challenges in enumerating target populations, engaging teachers, timing school vaccinations and communicating consistent messages about HPV vaccination eligibility. Lack of early involvement by the ministry of finance at times led to insufficient or poorly timed funding and budgeting in subsequent years. Similarly, lack of strong involvement of the national immunisation programme caused problems for projects/programmes that were unable to leverage existing experience and routine systems for transportation, cold storage, reporting and human resources. Limited supervision of training also led to challenges: for example, when information was inadequately transferred from national to district to facility staff; when misinformation or lack of knowledge among health workers influenced parental refusal; or when integrated training with other vaccines was ineffective or incomplete. Many projects/programmes reported that not leaving sufficient time for planning challenged implementation. A range of factors were affected, including decision-making, information dissemination and funding disbursement.

**Key lesson:** Lack of political commitment early in the process caused delays later.

**Key lesson:** Failure to closely coordinate with the national immunisation programme, the ministry of education and the ministry of finance challenged effective planning, social mobilisation and delivery.

**Key lesson:** Not allowing enough time for planning challenged decision-making, availability of funds and timely disbursement.
COMMUNICATION AND SOCIAL MOBILISATION

Communication gaps allowed misinformation to affect implementation and resulted in rumours. For example, where refusal rates were high, community leaders may not have been informed about HPV vaccination, which in some cases led those leaders to advise against vaccination. Inadequate training of school staff in several countries meant they could not answer questions from parents, contributing to rumours about HPV vaccine in schools.

Some countries underestimated the power of negative media exposure, including the influence of social media. While most mentioned the importance of including strategies in planning documents to address rumours, in practice none reported having a crisis communications plan. In some instances, rumours gained media exposure, which may have affected coverage.

Several countries faced challenges with HPV vaccine acceptance in private schools because those schools were not engaged early or sufficiently in social mobilisation activities. Private schools required more information and time for communication with parents than government schools.

Key lesson: Not engaging, or engaging too late, with local community leaders derailed social mobilisation efforts in some cases.

Key lesson: Insufficient training of school staff and lack of a crisis communications plan perpetuated the spread of rumours.

Key lesson: Failure to engage sufficiently or early enough with private schools led to resistance by some school leaders and parents.

DELIVERY

Reaching out-of-school girls posed a challenge for many projects/programmes. Those without specific strategies generally failed to obtain high coverage in these populations. This review demonstrated that specific efforts are needed to identify and mobilise out-of-school girls. Those projects/programmes that only made vaccination available at nearby health facilities for out-of-school girls and/or did not employ mobilisation strategies generally reported low uptake.

Delivery experiences that failed to clearly define, implement or train health workers on eligibility criteria subsequently experienced challenges with target population enumeration and coverage calculation. Grade-based delivery was simpler to implement in schools. However, it was challenging to communicate why girls of the same ages in other grades could not be vaccinated. Age-based eligibility was easier to explain, but it may not have been reliable if parents and teachers did not have accurate age records and could cause disruption in schools by vaccinating girls across multiple grades. Targeting different populations in school and out of school, although potentially quicker during delivery, created problems in enumeration and coverage calculations. When eligibility criteria were complex, it was more difficult for health workers to understand, implement and explain to parents and the community.

Demonstration projects that failed to conduct accurate enumeration or implement eligibility criteria appropriately were unable to correctly calculate coverage. In many cases, this was a result of hurried planning or inadequate training of enumerators.

Key lesson: A limited focus on developing and evaluating strategies to deliver HPV vaccine to out-of-school girls led to low coverage in that group.

Key lesson: Failure to correctly understand and implement eligibility criteria during enumeration and vaccine delivery resulted in difficulties in accurately estimating coverage.
**About this project:** Since 2007, countries have been gaining knowledge about how best to deliver HPV vaccines through demonstration projects and national introductions. To aid decision-makers, the London School of Hygiene & Tropical Medicine and PATH conducted a review of HPV vaccine delivery experience in 46 low- and middle-income countries. These activities represent 12 national programmes and 66 demonstration projects – some of which implemented multiple delivery strategies – resulting in 92 distinct vaccine delivery experiences. Further topical summaries address preparation, delivery, communications, achievements, sustainability and value. Find those briefs and additional information at www.rho.org/HPVlessons.

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**Recommendations**

Based on country experience, decision-makers wanting to avoid pitfalls for future HPV vaccine programmes should:

1. **Secure political commitment early in the planning process.** This can facilitate implementation and garner support from communities, teachers, parents and girls.

2. **Closely coordinate planning and delivery with the national immunisation programme, schools, the ministry of education and the ministry of finance.** Ensure that adequate time is allowed for planning, as support from these partners can significantly improve communications, funding and delivery.

3. **Train teachers and community leaders to answer questions and combat rumours.** Social mobilisation efforts can be derailed by rumours that are allowed to take hold.

4. **Develop a crisis communications plan to address rumours in communities and media.** Having risk mitigation strategies in place can help dispel rumours quickly.

5. **Allow adequate time for private-school coordination.** Private schools require more time and information for decision-making and engaging parents.

6. **Develop additional delivery strategies to reach out-of-school girls.** Simply making the vaccine available at health facilities is not enough to ensure uptake.

7. **Clearly define eligibility criteria in advance.** Schools and health workers need to be adequately trained to both implement and explain these criteria to the community.

8. **Ensure adequate time and capacity and funding to conduct proper enumeration.** Failing to adequately calculate the target population can lead to inaccurate coverage estimates.

9. **Ensure sufficient funds for vaccine delivery.** Failing to secure and distribute financial resources on time can result in low coverage.