

Identifying strategies to reach out-of-school girls and those in hard-to-reach areas for HPV vaccination in Kenya



Key takeaways from multistakeholder consultation workshops

Background

Kenya introduced human papillomavirus (HPV) vaccination into its routine immunization schedule in October 2019 to protect against HPV-associated cancers. The goal was to target ten-year-old girls, in accordance with the current vaccination schedule. Since the vaccine's introduction, the Ministry of Health has used a mixed-delivery model focused primarily on facility-based services, complemented by school-based outreaches to girls in grade four. These efforts enabled HPV¹ coverage to reach 33 percent in 2020.

To improve equitable access to HPV vaccination, PATH collaborated with the Kenya Ministry of Health in organizing multistakeholder consultation workshops. Together, stakeholders outlined strategies, challenges, resource gaps, and enabling factors for identifying and enumerating out-of-school (OOS) and hard-to-reach (HTR) girls eligible for HPV vaccination.

The participants included the Ministry of Health National Vaccines and Immunization Program; Ministry of Education; Civil Registration Services; State Department for Children Services; Ministry of Gender, Children, and Social Development; interfaith leaders; and National Government Administrative Officers.



Participants engaged in discussion during a workshop in Kenya. Photo: PATH.

Kenya workshops:

- Naivasha: May 26–27, 2025
- Uasin Gishu, Busia, and Garissa: September 3–4, 2025
- Mombasa: September 9–10, 2025

Characterizing OOS and HTR girls and barriers to identification and enumeration

Historically, it has been challenging to identify and enumerate adolescent OOS girls and those who live in HTR locales. Identification and enumeration challenges occur among:

- Economically disadvantaged households.
- Refugee/displaced populations.

- Children without parents or who are otherwise vulnerable.
- Girls with disabilities.
- Nomadic and pastoralist families.
- Those living in peri-urban settlements.
- Limited availability of up-to-date census data, including for street connected children and persons with disabilities
- Weak alignment between faith-based organization registries and national registration systems”

Religious influences, misinformation, and limited awareness further increase vulnerability. These girls, particularly those with special needs, are often harder to reach and face multiple barriers to education and health services, reducing their likelihood of accessing HPV vaccination. In some cases, cultural barriers (e.g., male heads of household restricting nurses from visiting the household in their absence) may further limit access to vaccines. In addition, more than 11,000 girls ages 10 to 14 per year experience pregnancy, according to a report developed by the Kenya National Bureau of Statistics, UNICEF, and the United Nations Population Fund.² Many of these girls are forced to leave school.

Existing resources

Stakeholders identified several existing assets that can be better integrated to improve resource use and data accuracy:

- **Health systems data.** Registries maintained by the Kenya National Bureau of Statistics, the National Council for Persons with Disabilities (NCPWD), and Civil Registration Services, as well as health information systems such as the Kenya Health Information System, contribute to estimating the number of vulnerable girls. However, these systems often have limited accessibility and may reflect biases based on who interacts with the services.
- **Human resources.** Health, education, and social services workers are central to identifying and enumerating vaccine-eligible girls. Extension workers, including community health workers, community leaders, local organization leaders, committees, and religious leaders, also make important contributions to the identification and enumeration of OOS and HTR girls for HPV vaccination.

Enumeration strategies

Stakeholders across health, education, and social welfare organizations highlighted strategies, including:

- Line-listing in schools is used to identify and enumerate girls who drop out of school.
- Use of Community Health Promoters for Household Mapping and the Electronic Community Health Information System (eCHIS) to provide client information and conduct community tracking.
- The Department for Children Services, State Department for Social Protection and Senior Citizen Affairs, subcounty security committees, National Government Administrative Officers, and the intergovernmental framework have a database to identify and enumerate vulnerable children, including OOS and HTR girls.

Community-based approaches, such as community elders, leaders in *nyumba kumi* (clusters of ten households), and chiefs, also play a key role in identifying vulnerable populations due to their proximity. In

addition, stakeholders recognized engagement with the NCPWD and with the Street Families Rehabilitation Trust Fund as key mechanisms for enumerating eligible girls.

Moreover, resources such as the electronic Community Health Information System and locally or community-based organizations help ensure local presence and contextualized data collection. However, these may result in inconsistent reporting due to variable capacity.

Stakeholders further recommended new, underused approaches to improve HPV vaccination equity, as shown in the following table.

Table 1. Innovative or practical solutions.

Recommendations	Feasibility	Cost	Advantages	Ranking (based on cost and feasibility)
Scale advanced use of geographic information system technology	Requires equipment and training	Low cost when equipment is available	Enhances data quality and tracks mobile families	1
Digitize microplanning	Requires equipment, training, and connectivity	High initial cost	Integrates planning for improving accuracy	2
Model accurate populations using data from Kenya National Bureau of Statistics	Requires equipment and training	Low cost with equipment available but high cost with recurrent training	Gains data accuracy, cross-checking, and instant data validation	3
Strengthen electronic Community Health Information System	Requires equipment and training	High initial cost but long-term saving	Improves data quality and gains instant validation	4
Strengthen stakeholder collaboration	Planning and mobilization	High cost and requires coordination	Enhances data accuracy and provides instant data validation	5

Additional strategies discussed included:

- **Administrative oversight.** Coordination through National Government Administrative Officers and the Directorate of the State Department for Children Services.
- **Focus on access for vulnerable populations.** Collecting data specifically from the Street Families Rehabilitation Trust Fund and programs for orphans and vulnerable children.

- **Targeted social mapping.** Mapping nomadic populations and religious institutions to identify girls outside formal education.
- **Digital household mapping.** Using community health promoters to feed data into the national electronic Community Health Information System.

Developing an action plan

At the end of the workshops, stakeholders identified a set of elements to inform the development of an action plan, including key activities, required resources, responsible stakeholders, and monitoring plans. The most frequently cited activities included:

- Reinforcing intersectoral collaboration, starting with National Government Administrative Officers, the electronic Community Health Information System, and the NCPWD, to support real-time data validation and proper identification and enumeration of OOS/HTR girls.
- Promoting microplanning using geographic information system technology. Although resource-intensive due to equipment and capacity-building needs, geographic information system–supported microplanning enables mapping of relevant stakeholders and facilitates data triangulation for validation.
- Strengthening triangulation across existing registries, including the State Department for Children Services' Child Protection Information Management System, the Street Families Rehabilitation Trust Fund, and civil society and faith-based organizations, to improve the identification and enumeration of OOS/HTR girls through more accurate population estimates.

Conclusion and next steps

Stakeholders emphasized that accurately identifying and enumerating OOS/HTR girls remains a major gap in Kenya. Existing data systems, including the Kenya Health Information System, National Education Management Information System, and Child Protection Information Management System, are fragmented, leaving many girls unaccounted for. To achieve comprehensive coverage, the health system must strengthen its digital infrastructure while actively mobilizing community networks, including traditional chiefs, health promoters, teachers, faith leaders, and peer champions, to map and track girls with precision.

References

1. WHO. Kenya Cervical Cancer Profile. Cervical Cancer Country Profiles, 2021. Accessed: April 30, 2026. <https://ncpd.go.ke/wp-content/uploads/2024/08/Situation-Analysis-of-Kenyan-Adolescent-Report.pdf>
2. Odhiambo, A. Pregnant girls and young mothers in Kenya have the right to education. *Human Rights Watch*. May 13, 2021. <https://www.hrw.org/news/2021/05/13/pregnant-girls-and-young-mothers-kenya-have-right-education>