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PERSPECTIVE

Strengthening human papillomavirus vaccination programs through multi-country peer learning: lessons from the CHIC initiative

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Introduction

Human papillomavirus (HPV) vaccination is a cornerstone of cervical cancer prevention, particularly in low- and middle-income countries (LMICs), where the burden of disease remains high[1].

The World Health Organization (WHO) HPV Vaccine Introduction Clearing House reported that 147 countries (of 194 reporting) had fully introduced the HPV vaccine into their national schedules as of 2024[2]. After COVID-19 pandemic disruptions, global coverage is again increasing. For 2024, the WHO reported that global complete vaccination coverage (which varies according to national schedules) was 28% among eligible girls worldwide. Among countries that have introduced vaccination, immunization programs have achieved an average 63% coverage with at least one vaccine dose in 2024[3]. To achieve global cervical cancer elimination targets[4], first, more countries, particularly highly populous countries, must introduce HPV vaccination into national schedules; second, national programs must find ways to achieve 90% vaccination coverage of girls by the age of 15 years.

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Despite global support and country commitment, challenges persist in the introduction, scale-up, and sustainability of HPV vaccination programs. This perspective explores the role of multi-country peer learning as a strategy to address these challenges, by drawing on the experience of the Coalition to Strengthen the HPV Immunization Community (CHIC), a multi-year initiative supported by the Gates Foundation[5]. The CHIC initiative emphasizes participatory dialogue, country-led action planning, and evidence translation to support HPV vaccine implementation in LMICs[6].

The CHIC initiative: structure and objectives

The CHIC initiative is designed to support HPV vaccine implementation in low-resource settings by fostering the development of an HPV vaccination community; translating evidence into practice; and amplifying the voices of country-level stakeholders, particularly in countries eligible for support from Gavi, the Vaccine Alliance (**Figure 1**). The initiative, guided by a diverse advisory group comprising international and national experts, focuses on 2 primary activities: (1) developing technical products to synthesize evidence and support tailored solutions, and (2) organizing multi-country regional symposia. These symposia serve as platforms for peer learning, which enable countries in various stages of HPV vaccine introduction to share experiences, identify common barriers, and co-develop solutions.

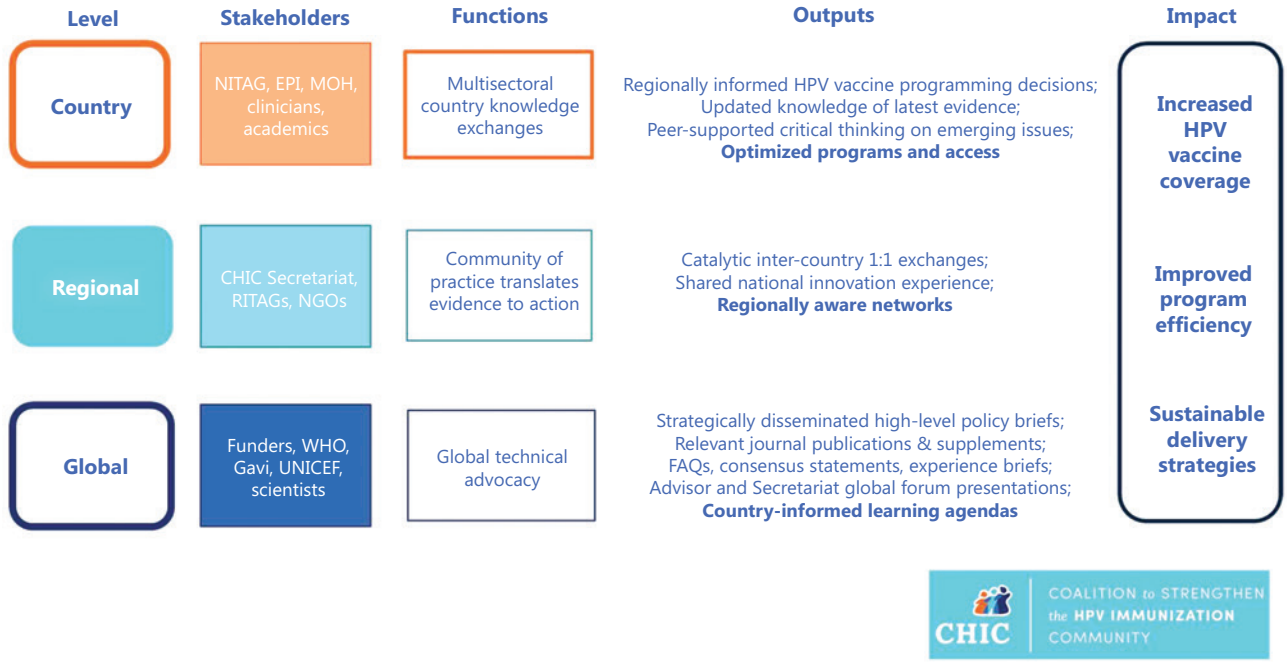


Figure 1 Schematic of the structure, objectives, functions, and core components of the Coalition to Strengthen the HPV Immunization Community (CHIC) Initiative; NITAG – National Immunization Technical Advisory Group; EPI – Expanded Programme on Immunization; MOH – Ministry of Health; RITAGs – Regional Immunization Technical Advisory Groups; NGOs – Non-Governmental Organizations; WHO – World Health Organization; Gavi – Gavi, the Vaccine Alliance; UNICEF - United Nations Children's Fund; HPV – Human Papillomavirus; FAQ – Frequently Asked Questions.

Peer learning symposia: format and participation

CHIC symposia, which are carefully planned through consultation with major local and international stakeholders, are structured to foster peer-to-peer exchange rather than top-down dissemination. Each symposium includes countries that have not yet introduced the vaccine, those in the planning phase, and those with established programs. Countries are selected on the basis of extensive mapping of their regional context; the status of their HPV vaccine programs; and specific strategic needs identified by the advisory group and local scientific committees. Participants typically include 2 to 4 representatives per country, encompassing program managers and technical experts. Representatives are invited according to their roles in national immunization programs; their expertise in HPV vaccine implementation, cervical cancer elimination, and adolescent health; and their ability to contribute actively to peer discussions.

The agenda consists primarily of country-led presentations that share experiences, lessons learned, best practices, and innovations. These presentations are complemented by participatory discussions and action planning sessions, during which each country develops and iterates an action plan. The content of these discussions informs topics for subsequent meetings and technical outputs. A small proportion of the agenda is reserved for international updates from regional and global partners, including the World Health Organization (WHO); Gavi, the Vaccine Alliance; the United Nations Children's Fund (UNICEF); the World Bank; and non-governmental organizations working in immunization. These updates provide context, share current global guidance, and inform subsequent country-driven discussions. Between 2022 and 2024, symposia were held in Ethiopia, India, Côte d'Ivoire, and the Philippines, and engaged a community of practice comprising more than 500 participants from more than 60 countries (**Table 1**).

Themes emerging from peer learning symposia

From peer learning discussions at CHIC symposia, several recurring themes have surfaced. Sustaining vaccine supply and

Table 1 Symposia Organized by the Coalition to Strengthen the HPV Immunization Community (CHIC) Initiative, 2022–2024

Region	Symposia location and date	Number of countries represented	Number of participants
Africa	Addis Ababa, Ethiopia *September 2022*	19 countries	92 participants
South Asia	New Delhi, India *December 2022, with satellite concurrent sessions in Islamabad, Pakistan*	7 countries	251 participants
Francophone Africa	Abidjan, Côte d'Ivoire *December 2023*	22 countries	78 participants
East Asia and Western Pacific	Manila, Philippines *October 2024*	17 countries	98 participants

program funding remains a central concern, and countries have expressed interest in regional cooperation and better strategies to advocate for increased domestic financing. Participants have emphasized that integrating HPV vaccination into existing immunization platforms is insufficient without additional resources for outreach, particularly in schools and communities[7]. Additional priorities that have emerged from peer learning discussions include the importance of articulating the evidence for single-dose schedules[8], and upgrading immunization data and information systems, including digital records.

Reaching underserved populations—such as youth who are out of school, and those located in conflict zones, or difficult-to-reach or marginalized communities—is another key cross-cutting focus. Peer learning conversations have enabled participants to cross-pollinate awareness of diverse efforts to reach such populations. Country leaders have highlighted the importance of tailoring communication strategies and building partnerships with professional associations, cultural and community leaders, and youth organizations[9], to support long-term trust in vaccines. Linking HPV vaccination to cervical cancer screening and treatment has consistently been considered a promising approach to enhance program impact and community engagement[10].

Earlier publications have reported on deliberations in CHIC symposia in Africa and South Asia[6,11]. As an example, we present a brief overview of the most recent cross-country symposium, held in Manila, Philippines, in October 2024. This event involved 98 participants across 17 countries from Southeast Asia and the West Pacific, who gathered for 3 days of cross-country learning and peer-to-peer sharing of common practices in diverse HPV vaccination programs[4]. Participants involved in national immunization programs, technical experts, and implementation partners exchanged their experiences, lessons learned, and practical strategies drawn from their diverse HPV vaccination programs. Key priorities included scale-up from subnational to national levels, thereby ensuring program sustainability; strengthening policies and implementation practices; and addressing coverage challenges. Through a combination of interactive sessions, country snapshots, workshops, and roundtable discussions, each country developed a country-specific action plan for a more sustainable HPV vaccination program, highlighting next steps, good practices, and a list of priority actions to pursue after the symposium.

Other CHIC outputs

Beyond symposium activities, the CHIC initiative produces a range of supporting technical outputs (including slide decks and evidence briefs on topics including the support of single-dose schedules and similar emerging topics) and facilitates high-level conversations among global decision-makers. These efforts are aimed at translating established evidence into formats useful to decision-makers and implementers, in a manner that sustains the HPV community of practice.

In one such engagement, the Secretariat presented its peer-to-peer approach, along with regionally relevant work, at the 22nd Annual Meeting of the China National Cervical Cancer Consortium and Symposium on Cervical Cancer Prevention. China remains one of the high-population countries yet to undertake national scale-up of HPV vaccination (as of August 2025). We hope that increased peer-learning efforts across provinces will help demonstrate the feasibility of, and demand for, HPV vaccination.

CHIC also organizes post-symposium online engagement sessions after each symposium. These sessions facilitate continued peer-learning, promote collaborations, provide a forum for structured country updates, enable breakout group discussions of emerging issues, and help identify key topics for

future symposia. Participants include symposium attendees, regional stakeholders, researchers, advocacy groups, and policy advisors. This structured approach reinforces regional ownership and ensures continued momentum toward strengthening HPV vaccination programs and shaping regional and global dialogues.

CHIC outputs additionally comprise publication of evidence derived from LMIC presentations at symposia and the outcomes of working group discussions; these efforts enable implementers and early career researchers to build their publication profiles and make grass-roots perspectives available to the wider immunization and cervical cancer communities of practice. Some outputs of the CHIC initiative approach to peer learning have been captured in detail in several key areas: discussion of sustainable delivery strategies by program implementers attending the first Africa symposium[12]; cross-country comparisons of program status[11]; the roles of health care professionals as immunization allies[13]; lessons learned in effective communication[14]; and the application of lessons learned from pandemic resilience to HPV vaccination programs[15]. Between annual symposia, CHIC continues engagement through webinars and, in limited cases, support of country-specific action plans. CHIC materials are openly accessible at www.stophpv.org.

Future directions

Future topics for evidence generation include considerations for countries to consider in expanding vaccination beyond the primary target of girls 9–14 years of age, to secondary targets such as older girls, young women, and potentially boys. Articulating the return on investment of HPV vaccination, improving electronic data systems, and introducing innovations to identify and reach priority populations are also on the agenda. These efforts align with global strategies such as the Immunization Agenda 2030; the WHO call for cervical cancer elimination; and other initiatives, including the HPV Vaccine Acceleration Program Partners Initiative Consortium (HAPPI), The Linked Immunization Action Network ("Linked"), and the HPV Prevention and Control Board.

Conclusion

The CHIC initiative exemplifies how structured peer learning can support the introduction and sustainability of HPV vaccination programs in LMICs. By centering on country voices, fostering cross-national collaboration, and translating evidence into actionable plans, CHIC contributes to building resilient immunization systems. As countries navigate evolving challenges—including the growing range of vaccine products, sustaining services for school-age clients, and the integration of adolescent health services—peer learning platforms such as CHIC offer a valuable mechanism for shared problem-solving and policy innovation.

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Conflict of interest statement

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Methods, Investigation, Formal analysis, Data curation, Funding acquisition. Dur-e-Nayab Waheed: Writing—review & editing, Supervision, Methods, Investigation, Data curation, Validation. Nicolas Theopold: Writing—review & editing, Validation. Anissa Sidibe: Writing—review & editing, Investigation, Formal analysis, Validation. Ana Bolio: Writing—review & editing, Investigation, Formal analysis, Data curation. Elaine Charurat: Writing—review & editing, Supervision, Methods, Data curation, Conceptualization. Felix Ricardo Burdier: Writing—review & editing, Investigation, Methods, Data curation. Emilie Karafillakis: Writing—review & editing, Investigation, Methods. Shana Kagan: Writing—review & editing, Visualization, Methods, Supervision. Alex Vorsters: Writing—review & editing, Supervision, Methods, Formal analysis, Funding acquisition.

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