Linked Immunisation Action Network

Overcoming barriers to introduce and scale the HPV vaccine

Istanbul, Turkey
11–12 July 2023

DAY ONE
Welcome!!!!!
Introductions
Icebreaker

- Please start by introducing yourselves
- Find a common preference across the following questions:
  - Do you prefer to drink tea or coffee?
  - When you go on holidays, do you prefer to go to the beach or the mountains? Adventure or relaxation?
  - Do you prefer dogs or cats?
  - Are you a night or morning person?
  - Are you messy or tidy?
  - Do you prefer paperback or ebooks?
  - Do you prefer airplanes or trains?

Have fun: get to know each other!
<table>
<thead>
<tr>
<th>Time</th>
<th>Length</th>
<th>Session Title</th>
<th>Presenter(s) and Facilitator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00</td>
<td>60 min</td>
<td>Welcome, introductions, and framing</td>
<td>Elizabeth Ohadi, R4D, Priscilla Rouyer, R4D, Rebecca Casey, US CDC</td>
</tr>
<tr>
<td>10:00-11:00</td>
<td>60 min</td>
<td>Coffee break and poster walk</td>
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<tr>
<td>11:00-11:50</td>
<td>50 min</td>
<td>Session 1: Country experiences</td>
<td>Country presentations from Mongolia, Vietnam</td>
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<tr>
<td>11:50-12:00</td>
<td>10 min</td>
<td>Group photo</td>
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<tr>
<td>12:00-13:00</td>
<td>60 min</td>
<td>Lunch</td>
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<tr>
<td>13:00-13:50</td>
<td>50 min</td>
<td>Session 2: Key success factors and learnings to successfully introduce the HPV vaccine</td>
<td>Country presentations from Philippines, Tunisia</td>
</tr>
<tr>
<td>13:50-15:00</td>
<td>70 min</td>
<td>Breakout room discussions</td>
<td>CIF</td>
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<tr>
<td>15:00-15:15</td>
<td>15 min</td>
<td>Coffee break</td>
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</tr>
<tr>
<td>15:15-15:30</td>
<td>15 min</td>
<td>Lessons learned and country examples on HPV introduction</td>
<td>Priscilla Rouyer, R4D</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>15 min</td>
<td>Lessons learned for HPV introduction in the EURO region</td>
<td>CIF</td>
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<tr>
<td>15:45-16:00</td>
<td>15 min</td>
<td>Question &amp; Answer Discussion</td>
<td>CIF</td>
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<tr>
<td>16:00-16:30</td>
<td>30 min</td>
<td>Report-out activity</td>
<td>Elizabeth Ohadi, R4D</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>15 min</td>
<td>Closing</td>
<td>Elizabeth Ohadi, R4D</td>
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<tr>
<td>19:30</td>
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<td>Gala Dinner</td>
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<tr>
<td>Time</td>
<td>Length</td>
<td>Session Title</td>
<td>Presenter(s) and Facilitator(s)</td>
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<tr>
<td>9:00-9:35</td>
<td>35 min</td>
<td>Opening and recap</td>
<td>Priscilla Rouyer, R4D, Miriam Faid, Gavi</td>
</tr>
<tr>
<td>9:35-10:35</td>
<td>60 min</td>
<td>Session 3: Collaborative problem-solving discussions on selected countries’ challenges: Addressing vaccine hesitancy: demand generation communication strategies</td>
<td>Country presentation from the Philippines</td>
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<tr>
<td>10:35-10:50</td>
<td>15 min</td>
<td>Coffee break</td>
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<tr>
<td>10:50-11:50</td>
<td>60 min</td>
<td>Session 3: Collaborative problem-solving discussions on selected countries’ challenges: Service delivery strategies and implications on sustainable financing</td>
<td>Priscilla Rouyer, R4D</td>
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<tr>
<td>11:50-12:50</td>
<td>60 min</td>
<td>Lunch</td>
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<tr>
<td>12:50-14:00</td>
<td>70 min</td>
<td>Session 4: Developing an action plan to accelerate the introduction and scale-up of the HPV vaccine</td>
<td>Priscilla Rouyer, R4D</td>
</tr>
<tr>
<td>14:00-15:00</td>
<td>60 min</td>
<td>Peer country break out session</td>
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<td>15:00-15:30</td>
<td>30 min</td>
<td>Coffee break</td>
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<tr>
<td>15:30-16:00</td>
<td>30 min</td>
<td>Country presentation preparation</td>
<td>CIF</td>
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<tr>
<td>16:00-17:00</td>
<td>60 min</td>
<td>Country action plan presentations</td>
<td>CIF</td>
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<tr>
<td>17:00</td>
<td></td>
<td>Closing</td>
<td>Elizabeth Ohadi, R4D</td>
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</tbody>
</table>
Rebecca Casey

Vaccine Introduction Team, Global Immunization Division, Centers for Disease Control & Prevention
USA
HPV vaccination: Global policy update, programme opportunities and challenges

Rebecca Mary Casey, MBBS, MPH
Medical Epidemiologist
Vaccine Introduction Team
Strengthening Immunization Systems Branch
CDC Global Immunization Division, Atlanta, USA

New vaccine introduction in Middle Income Countries
Linked Immunisation Action Network
Istanbul, July 2023
Overview

- HPV and the WHO Global Cervical Cancer Elimination Strategy
- Global progress and challenges for HPV vaccination programs
- Current HPV vaccination catalysts
- Single dose HPV vaccine schedule option

Disclaimer: The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the official position, policies, or views of the U.S. CDC or partners.
Human Papillomavirus (HPV)

- Extremely common, small DNA virus that infects skin or mucosal cells
- At least 13 of 100+ known HPV genotypes cause cancer of the cervix and are associated with other cancers (anogenital, head and neck)
  - Two most common "high-risk" genotypes (HPV 16 and 18) cause 70% of all cervical cancers
  - Two "low-risk" genotypes (HPV 6 and 11) are the most common cause of genital warts

Epidemiology of HPV-related cancers

WHO Global Cervical Cancer Elimination Strategy

• Cervical cancer is considered nearly completely preventable because of the highly effective primary (HPV vaccine) and secondary (screening) prevention measures.

• WHO Global Cervical Cancer Elimination Strategy calls for:
  • Vaccination of 90% of girls by age 15 years
  • Other targets: screening, treatment

• Elimination:
  ▪ All countries to reach < 4 cases 100,000 women years

The life-course approach for cervical cancer prevention

WHO, Global cervical cancer elimination strategy
https://www.who.int/publications/i/item/9789240014107
Burden of cervical cancer is high and disproportionately affects low- and middle-income countries (LMICs)

4th

Cervical cancer is the fourth most common cancer among women worldwide

~342K

annual deaths caused by cervical cancer

~90%

of those deaths happen in LMICs

Global progress:
National HPV vaccination introduction status

Year: 2006

Introduction status
- National introduction

Global progress:
National HPV vaccination introduction status, 2023

Global HPV vaccination coverage is low; declined during 2020–2021

<table>
<thead>
<tr>
<th>Category</th>
<th>Reported HPVc vaccination coverage by year</th>
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<tbody>
<tr>
<td></td>
<td>2019</td>
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<tr>
<td><strong>Geography</strong></td>
<td></td>
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<tr>
<td>Global</td>
<td>54%</td>
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<tr>
<td>WHO Region</td>
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<tr>
<td>AFR</td>
<td>62%</td>
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<tr>
<td>AMR</td>
<td>47%</td>
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<tr>
<td>EUR</td>
<td>60%</td>
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<tr>
<td>SEAR</td>
<td>54%</td>
</tr>
<tr>
<td>WPR</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Country income level</strong></td>
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<tr>
<td>High income</td>
<td>63%</td>
</tr>
<tr>
<td>Low and middle</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Country GAVI eligibility</strong></td>
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</tr>
<tr>
<td>Non-GAVI</td>
<td>52%</td>
</tr>
<tr>
<td>GAVI</td>
<td>64%</td>
</tr>
</tbody>
</table>

Note: HPVc coverage is HPV vaccination coverage of final dose in schedule

Global progress: HPV vaccination coverage (%) by country and income level, 2021

High income country HPV vaccination coverage (HPV1 and HPVc)

Low- and middle-income country HPV vaccination coverage (HPV1 and HPVc)
Global HPV vaccination coverage — lower than all other recommended antigens

HPV vaccine is highly effective

Estimated relative reduction in cervical cancer rates compared with the unvaccinated cohort

- 87% reduction in 12-13 years
- 62% reduction in 14-16 years
- 34% reduction in 16-18 years

HPV vaccine is safe

"Excellent Safety profile"

WHO Global Advisory Committee on Vaccine Safety (GACVS)

Statement on the continued safety of HPV vaccination (2017)

"Since licensure of HPV vaccines, GACVS has found no new adverse events of concern based on many very large, high-quality studies. The new data presented at this meeting have strengthened this position."

Safety of HPV further confirmed in 2022 Systematic Review on safety of HPV vaccines by Cochrane Review

-see WHO Position Paper (Dec 2022)

Source: WHO

* https://www.who.int/groups/global-advisory-committee-on-vaccine-safety/topics/human-papillomavirus-vaccines
Increasing HPV coverage in girls will avert more deaths per person vaccinated than any other immunization activity.

HPV vaccination is one of 16 “Best Buys”

Source:
So why aren’t we doing better?

- Often no standard answers for efficient HPV vaccine delivery
- Target population not routinely reached in many countries
- May be a new immunization/adolescent health platform
- Challenges with reaching out-of-school girls
- Vaccine hesitancy leading to disrupted introductions or declining coverage
  - Demand/vaccine confidence related challenges in many countries
- Global vaccine supply shortages
New opportunities: Global HPV vaccination catalysts

- Single dose schedule recommendation
- Improving HPV vaccine supply
- Funding support

Accelerate WHO’s cervical cancer elimination initiative:
- accelerate national HPV vaccine introductions
- improve HPV vaccination coverage
# Summary of 2017 WHO position compared to the current WHO position (December 2022)

<table>
<thead>
<tr>
<th>Primary target group</th>
<th>Previous WHO position (2017)</th>
<th>Current WHO position (December 2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary target group</td>
<td>Girls aged 9–14 years old</td>
<td>Girls aged 9–14 years old</td>
</tr>
<tr>
<td>Vaccination Schedule by age (years)</td>
<td>9–14</td>
<td>2-dose schedule</td>
</tr>
<tr>
<td></td>
<td>15–20</td>
<td>3-dose schedule</td>
</tr>
<tr>
<td></td>
<td>≥21</td>
<td>3-dose schedule</td>
</tr>
<tr>
<td>Immuno-compromised, including people living with HIV (any age)</td>
<td>3-dose schedule</td>
<td>Should be prioritized and should receive at least 2 doses* but ideally 3 doses, if programmatically feasible.</td>
</tr>
</tbody>
</table>
Summary of trials with data on single-dose vaccination

<table>
<thead>
<tr>
<th>Trial/Country</th>
<th>Key findings</th>
</tr>
</thead>
</table>
| CVT<sup>12</sup> Costa Rica 2vHPV Females 18–25 | - Protection after 1, 2 or 3 doses of 2vHPV through 14 years: persistent HPV 16/18 infection among single dose recipients was 1.8% (95% confidence interval (CI) 0.3–5.8; n=112) compared to 1.6% (95%CI 0.1–7.7; n=62) among 2-dose recipients and 1% (1.3–2.8; n=1365) among 3-dose recipients. Vaccine efficacy (VE) was 81.1%, 83.8% and 80% among recipients of 1, 2, and 3 doses respectively.  
- Sixteen years after HPV vaccination, HPV16 and 18 seropositivity was almost 100% among HPV-vaccinated women remained seropositive irrespective of the number of HPV vaccine doses received.  
- Minimal decline in the antibody concentration was observed over time, especially for the single-dose HPV vaccine group. |
| India IARC<sup>14</sup> India 4vHPV Females 10–18 | - Protection after 1, 2 or 3 doses of 4vHPV through 10 years: persistent HPV 16/18 infection among single dose recipients was 0% (95% CI 0–0.3; n=2454) compared to 0.2% (95%CI 0–0.4; n=1685) among 2-dose recipients and 0.1% (0–0.4; n=) among 3-dose recipients. Vaccine efficacy was 95.2%, 94.4% and 91.2% among recipients of 1, 2, and 3 doses respectively compared to control group.  
- Ten years after vaccination, the antibody levels were at least two times higher in single dose recipients compared to those following natural infection.  
- No HPV16/18-related CIN2/3 detected in vaccinated women. |
| KEN SHE<sup>16</sup> Kenya 2vHPV, 4vHPV Females 15–20 | - Single-dose HPV vaccination was highly efficacious (>95%) over 3 years;  
- 4vHPV vaccine efficacy (VE) was 98.8% (95%CI 91.3–99.8%, p<0.0001);  
- 2vHPV VE was 97.5% (95%CI 90.0–99.4%, p<0.0001). |
| DoRIS<sup>7</sup> Tanzania 2vHPV, 4vHPV Females 9–14 | - Immunogenicity: Seropositivity >97.5% for all dose groups for both vaccines  
- Immunobridging showed that 1-dose responses were non-inferior in DoRIS compared with those in studies where 1-dose efficacy observed (CVT, India IARC) |
Opportunity:
Single-Dose HPV Vaccination could...

- simplify delivery
- provide new integration opportunities
- lower costs
- create new opportunities with resources saved
  - adolescent/school health platform
  - multi-age cohort catch-up strategies
  - cervical cancer screening and treatment

Image: PATH
Country-led decision-making process

- Systematic, accountable, evidence-based decision-making, planning and prioritization process
  - often by NITAG or appropriate decision-making body

- Coordinated with other components of the health system

- Some factors may outweigh and override others, depending on the specific circumstances.

NITAG; National Immunization Technical Advisory Group
Uses: simplify delivery

- Less inconvenience for caregiver/girl
- Less perceived or actual expenditures or adverse events relating to immunization
- Reduced time burden for healthcare worker
- Fewer outreach visits to schools
- Reduced catch-up activities
- Less time commitment for other key stakeholders e.g., teachers
Potential programme benefits: integrated delivery

- Increase available resources
- Leverage other single visit interventions
- Leverage existing platforms e.g., Child Health Days

Source: Working Together. An integration resource guide for immunization services throughout the life course. WHO, 2018
Implications of off-label usage

An off-label vaccine recommendation generally refers to a difference between the labelled instructions by the regulatory authorities (or “label”), vs. the recommendations for use issued by public health advisory bodies.

Examples of off-label use: PCV schedule, fractional dosing (YF, IPV), use of influenza vaccines during pregnancy.

As with any other off-label vaccination use – country needs to understand considerations, including liability, in their context.

Opportunity to improve the programme and health system.

Option to conduct a situation analysis of the immunization programme to identify weak areas that could be strengthened before/during the intro/switch:

- safe immunization practices, adverse event surveillance and reporting
- monitoring and evaluation of programme performance, including disease surveillance/registry and immunization data quality
- communication strategy and crisis communication plan

Regular monitoring of progress or barriers to reaching targets should be conducted, and documentation of lessons learned.
Summary

- Cervical cancer burden remains high, especially in LMICs
- Safe, highly effective HPV vaccine, available > 15 years
- New opportunities:
  - Single dose schedule option
  - Improving vaccine supply
  - Donor funding
Thank you
Acknowledgements

- Paul Bloem, WHO HQ
- Hiroki Akaba, WHO HQ
- Terri Hyde, Vaccination Introduction Team Lead, CDC HQ
Poster walk
Poster walk guidance

***You have 60 minutes to observe the posters of peer countries and find out:

- What are common themes, challenges or learnings you can identify with other peer countries?
- What experience or tool can you share that could be helpful to this country in addressing one of its challenges?

Notes:
1. One representative from each country remains at their poster to interact with peers and answer questions.
2. Each country is required to prepare 1–2 questions to ask peers during the panel discussions.
Country presentations

Mongolia & Vietnam
Country presentations
Philippines & Tunisia
# Country breakout – Situational analysis

## Objective:
- Please summarize your country’s objective for the introduction/scale up of the HPV vaccine: coverage, pilot/nation wide, timeline, cohort

### 1. Context
- What steps have you already taken to prepare for the HPV introduction?
- What political priority has been granted for the HPV vaccine?
- NITAG status

### 2. Key decisions steps
- What are the next important decision steps to introduce/scale up HPV vaccine?

### 3. Scope
- Are you looking to pilot the introduction – if so, where? - or introduce nation-wide?

### 4. Constraints
- What constraints could hinder your efforts? (e.g., concurring introduction of another vaccine, outbreak, covid-19 efforts, financial sustainability…)

### 5. Stakeholders
- Who are your key allies?
- Who are your champions?
- Who needs to be rallied to your objectives?

### 6. Your levers of influence
- How would you rate your level of influence over this decision-making process? (H/M/L)
- Where do you have influence? What would you need to exercise more of your influence?
## Country breakout rooms

<table>
<thead>
<tr>
<th>Country</th>
<th>Breakout room</th>
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<tbody>
<tr>
<td>Mongolia</td>
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<tr>
<td>Philippines</td>
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<td>Tunisia</td>
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<tr>
<td>Vietnam</td>
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</tbody>
</table>
Lessons learned and country examples on HPV introduction
HPV Vaccine introduction: selected country examples & lessons learned

Linked HPV vaccine workshop, July 11–12th, Istanbul

Priscilla Rouyer
Consultant, Results for Development
What do we know about HPV vaccine introduction across the world?

Global reviews of HPV programs identified key lessons learned

- A review of 72 different programs from 60 countries was done between LSHTM and PATH in 2015/2016
- The work of the LSHTM was revalidated with a review of national introduction evaluations from 17 LMICs in 2022
- A recent study of the delivery approaches and cost for ongoing HPV vaccination programs, to be published by Path (to be published soon)

One takeaway

- These reviews have led to a strong understanding of what works and what doesn’t for HPV introduction.
- The challenge is in “how” these lessons learned are adapted to your country context
HPV vaccine lessons learned (1/3)

Preparation

- High-level political commitment led to more effective projects and national programmes.
- Timely intersectoral planning and coordination – across health, education, and finance (particularly for national programmes) – was critical to successful implementation and sustainability.
- Integrating HPV vaccine with routine vaccination programme models and resources created efficiencies.

**Malawi**: Three departments in the Ministry of Health (Non-Communicable Diseases, Expanded Programme on Immunisation, Reproductive Health) worked collaboratively to plan and implement an HPV vaccine delivery programme with a high level of political commitment from the government.

**Botswana**: conducted two demonstration projects prior to national introduction and directly incorporated lessons learnt from the projects into the national scale-up implementation plan.

Source: HPV Vaccine Lessons Learnt Project Overview, Path and LSHTM (here)
Effective community mobilisation activities were conducted at least one month prior to vaccination, used multiple methods, and were carried out by health workers and community leaders.

The most effective messages were: HPV vaccine prevents cervical cancer, is safe, will not harm future fertility, and is endorsed by the government and the World Health Organization.

Face-to-face communication with parents and communities enhanced support and mitigated spread of rumours.

Opt-in consent, where not used for routine vaccines, increased rumours. An opt-out approach was acceptable where implemented.

Bolivia: carried out comprehensive community sensitisation using multiple modalities, including local media, well in advance of vaccination days.
Including schools in the strategy attained the highest coverage
Enumerating the population before vaccination proved challenging and expensive but useful in developing vaccine registers and planning vaccine stock for future years
In schools, grade-based eligibility was logistically easier to implement than age-based eligibility
Utilizing a two-dose vaccination schedule was easier and cheaper than a three-dose schedule
Delivery of all doses within one school year minimised dropout and resulted in higher coverage
Use of community health workers assisted in identifying out-of-school girls and those who missed doses
Providing a second opportunity for vaccination was successful in reaching girls and parents who initially refused and those who were absent or out of school

**Laos PDR:** Achieved greater than 90% coverage in urban and peri-urban districts through school-based delivery

**Bhutan:** School-based and health facility-based delivery were implemented nationally in 2010 and 2011–2013, respectively. School-based delivery resulted in 20% higher coverage, so the country decided to use this approach from 2014 onward.

**Tanzania:** Successfully used schools for vaccine delivery & is testing health facility-based delivery with outreach to schools and communities in 2015–2016.

Source: HPV Vaccine Lessons Learnt Project Overview, Path and LSHTM (here)
Delivery approaches and cost

- Path will release this summer a recent study of the delivery approaches and cost for ongoing HPV vaccination programs
- Countries in focus: Guyana, Rwanda, Senegal, Sri Lanka, Uganda, and Ethiopia
- Early takeaways:
  - Schools are the primary location for HPV vaccinations, even in “mixed” strategies
  - Drivers of sustainability costs include: vaccine product (# of doses), delivery mode and # of sessions: what are the levers you would like to use and sustain in the next few years?
What’s next?

- Share ideas and experiences with your peers on how to apply these lessons learned into your own journey
- Ask questions to clarify anything you don’t understand or where you need additional support
- Reflect on the influence you and other stakeholders have over how HPV vaccine is introduced: where do you have most influence? Where can you extend your influence through building allies?
Lessons learned for HPV introduction in the EURO region
HPV Vaccination in Linked EURO countries:
Key challenges and learnings

Linked HPV workshop, July 11, Istanbul

Ivdity Chikovani, Eka Paatashvili
Curatio International Foundation
From early experience to Decision-making

<table>
<thead>
<tr>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Gavi</td>
<td>High burden of cervical cancer, sub-optimal screening programs</td>
<td>Pilot humanitarian project (capital city 2010-12) failed - poor planning &amp; communication</td>
<td>• Pilot through donation (2011-12) – poor coverage • Negative experience with other vaccines hesitancy</td>
</tr>
</tbody>
</table>

2015 Gavi HPV window opened, last opportunity for transitioning countries, access to vaccine fixed price for 10 y.

**Data generation / advocacy**
- WHO-Euro support: supply with global evidence on vaccine effectiveness, safety, efficacy; advocacy work
- Professional groups involvement (champions)
- NITAG recommendations
- Intensive preparatory work
- HPV cost-effectiveness study
- Denmark, Ireland, Japan experience learned
- HPV cost-effectiveness study

**Decision making**
- ICC decision on Introduction
- MoH/ Cabinet of Minister’s decision on Introduction (domestic financial resource allocations)

**Applying to Gavi**
- 2016
- 2016
- 2016
- First 2014 (postponed due to other vaccine introduction) • Second 2017
NVI National Decision-making – Georgia example

- **Stakeholder Sensitization:** Global evidence dissemination (WHO)
  - **2015**

- **Problem identification:** Local disease burden data generation; (WHO, National CDC)
  - **2015-16**

- **Policy recommendations / projections:**
  - NITAG prepares recommendation on vaccine introduction
  - NCDC develops financial projections (vaccine introduction implication on program budget)
  - WHO supplies cost-effectiveness data
  - **2016**

- **Policy Formulation:** Defibrations at ICC (vaccine safety, effectiveness, cost-effectiveness, financial sustainability)
  - **2016**

- **Final decision:** ICC
  - **2016**

**Global evidence:** (WHO)
MoF role in decision-making – Georgia example

- **Role** – Member of ICC, participatory of all Gavi / WHO / Sabin organised regional or local meetings dedicated to NVI & financial sustainability

- **Criteria for decision-making** on New Vaccine Introduction:
  - The disease burden is significant
  - The vaccine effectiveness is proved
  - The vaccine is available of competitive and stable prices: **4.50 USD for 10 years vs 14.34 USD market price**
  - Evidence on vaccine cost-effectiveness is available (desirable national)
  - Previous vaccine introductions were successful
  - Public sector budget projections allow introduction
### Preparation

<table>
<thead>
<tr>
<th>Age-groups</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Uzbekistan</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Demo: 13 y girls</td>
<td>Demo: 9-10 girls</td>
<td>Demo: 10 y girls</td>
<td>No Demo project</td>
</tr>
<tr>
<td></td>
<td>Nationwide: 13-45 y</td>
<td>Nationwide: 10-12 y</td>
<td>Nationwide: 9 y girls</td>
<td>Nationwide intro delayed to 2019 (vaccine global shortage)</td>
</tr>
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<table>
<thead>
<tr>
<th>Preparation</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Uzbekistan</th>
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<tr>
<td></td>
<td>Formative research:</td>
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<td></td>
<td>• explored barriers and drivers for positive HPV vaccination behaviors among target groups</td>
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<tr>
<td></td>
<td>• Informed communication strategies</td>
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<td></td>
<td>• Communication strategy and crises communication plan development</td>
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<td></td>
<td>▪ Trainings of HWs</td>
<td>▪ Trainings of HWs</td>
<td>▪ Trainings of HWs (Communication component integrated)</td>
<td>▪ More time for preparation</td>
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<td>▪ Study visit to Moldova</td>
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<td>▪ Roadmap with the MoE on introduction and joint working schedule</td>
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<td>▪ Trainings of HWs</td>
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</table>

Moldova

• Demo project (countrywide) – 2017
• Post introduction evaluation (PIE) – 2018
• Nationwide intro – 2019

• Demo project (countrywide) – 2017
• Nationwide intro – 2019

Uzbekistan

• Demo project (countrywide) – 2017
• Nationwide intro delayed to 2019 (vaccine global shortage)
## Communication / demand generation

<table>
<thead>
<tr>
<th></th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Uzbekistan</th>
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</thead>
<tbody>
<tr>
<td><strong>Communication in practice</strong></td>
<td>• Communication <strong>plan NOT fully implemented</strong>&lt;br&gt;• Crisis communication plan not completed &amp; implemented&lt;br&gt;• Vaccination became highly politicized topic</td>
<td>• Communication <strong>plan NOT fully implemented</strong>&lt;br&gt;• Activities not aligned with communication plan&lt;br&gt;• SCO low involvement&lt;br&gt;• Information camp &amp; media engagement lacked intensity and consistency&lt;br&gt;<strong>Weak engagement</strong> with <strong>Education sector</strong></td>
<td>• Communication plan <strong>implemented in practice</strong>&lt;br&gt;• Social media monitoring&lt;br&gt;• Webpage and platforms for interaction&lt;br&gt;• Engagement of parents&lt;br&gt;• Media engagement&lt;br&gt;<strong>Strong engagement</strong> with <strong>Education system</strong></td>
<td>• Comprehensive Communication plan &amp; crises communication plan <strong>implemented in practice</strong>:&lt;br&gt;• Social media campaigns and monitoring&lt;br&gt;• Webpage for interaction&lt;br&gt;• Parents’ platform&lt;br&gt;• Engagement with parents, NGOs&lt;br&gt;consistent media activities (talk-shows,&lt;br&gt;<strong>Strong engagement with Education system</strong></td>
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## Service Delivery

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<th>Armenia</th>
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<tbody>
<tr>
<td><strong>Platforms &amp; related factors</strong></td>
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</tr>
<tr>
<td>• Public clinics</td>
<td>• Private for-profit clinics (95%) – poor dedication to immunisation services</td>
<td>• Public clinics</td>
<td>• Public clinics</td>
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<tr>
<td>• School-vaccination services in 4 regions</td>
<td>• Village doctors</td>
<td></td>
<td>• School-based vaccination services countrywide through campaigns</td>
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<td></td>
<td>• Poor integration with adolescent services</td>
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<tr>
<td><strong>Age groups &amp; adjustments</strong></td>
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<tr>
<td>• Demo: – 13 y girls</td>
<td>• Demo: 9–10 girls</td>
<td>• Demo: 10 y girls</td>
<td>• Nationwide: 9 y girls</td>
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<tr>
<td>• Nationwide: – 13–45 y (to increase uptake and eliminate wrong perceptions about age)</td>
<td>• Nationwide: –10–12 y</td>
<td></td>
<td>• ‘increase 9–14 y</td>
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<td></td>
<td>• To increase uptake gradually up to 18 y and 26 y, &gt; 27 based on clinician’s decision</td>
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<td><strong>Coverage 1st year</strong></td>
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<tr>
<td>• 2018 – 8%</td>
<td>• 2018 – 20%</td>
<td>• 2018 – 44%</td>
<td>• 2019 – 98% (after 1 month)</td>
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</tbody>
</table>
Lessons Learned – what worked well

Decision-making

- Strong justifications for decision-makers (cervical cancer disease burden, vaccine efficacy, safety, economic evaluations – global and/or national)
- Advocacy work (involvement of partners, sensitisation meetings, sharing of evidences, discussions, continuous work)
- Involvement of MoF early on in the discussions
- Champions among professional groups, gov structures
Lessons learned

Critical challenges during introduction

- Vaccine safety concerns among
  - health workers including specialists
  - parents
  - school teachers
- Anti vaccination movements mainly through social media
- Religious groups
Lessons learned

Preparatory stage

- Thorough planning
- More intensified preparatory work compared to other routine vaccines (1-2 years)
- Strong communication campaign based on research of public concerns and health workers knowledge and attitudes
- Continuous training of health workers (primary care)
- Training of specialists (gynaecologists particularly)
- Strong collaboration with education system
Lessons learned

Service delivery

- Integration with preventive services (screening, adolescent health)
- School-based where possible
- Continuous on-the-job training of HW to increase their confidence
“Building a mountain”

Report out activity

• Each country team contributes a new insight, observation, impression, or question (**cannot repeat what another team contributes**) from the day’s discussions.

• Teams are selected at random.

• Each contribution builds upon the others...to build a mountain

• 15 mins of team discussion

• 15 mins for exercise.
Conclusion