HPV Vaccine
Lessons Learned &
New Ways Forward

The Gavi Alliance
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Overview

1. Background

2. Lessons learned

3. New Way Forward
1

Background
HPV Background

HPV is responsible for a growing burden of cervical cancer
- 266,000 deaths per year (GLOBOCAN 2012)
- 85% of the disease burden in developing countries

In 2012 there was very limited access to HPV vaccine in Gavi countries

Initially there was doubt whether HPV vaccination would be feasible
- Due to a lack of experience vaccinating adolescent girls.

Gavi started supporting the HPV vaccine in 2012
- Gavi provided funding for HPV demonstration programmes for countries with no experience.
- Gavi provided opportunity for national roll-outs for countries with experience.
HPV is one of the highest impact vaccines in Gavi’s portfolio

**HPV vaccines offer strong efficacy**

- The two vaccines currently on the market protect against 70% of HPV related cervical cancers.
- New vaccines (with increased strain coverage) entering the market could yield up to 90% protection.

**Gavi negotiated a price reduction for the HPV vaccine**

- Gavi achieved a reduction from $150/dose in developed countries to just $4.50/dose for Gavi eligible countries.

**HPV vaccine is one of the highest impact vaccines in Gavi’s portfolio**

- 20 deaths are averted per 1,000 vaccinated.

Deaths averted per 1,000 vaccinated
Demand for demonstration programmes is high

30 countries have applied to the HPV demonstration program
  • 28 have been approved and 23 have introduced

Five countries have applied for national HPV introduction support without Gavi-supported demo
  • 4 have been approved and 3 countries have introduced

Transition from demo to national has been slower than expected
  • Only one country with a completed demo has applied for national

HPV Program status in Gavi-eligible countries

- National
- Demonstration underway
- Demonstration complete

![Graph showing HPV Program status](chart.png)
Competing priorities in countries that have completed Gavi demonstration programme

Countries that have completed Gavi demo

- Ghana
- Kenya
- Lao PDR
- Madagascar
- Malawi
- Mozambique
- Zimbabwe
- Cameroon
- The Gambia
- Senegal
- Tanzania

Pre-2010

2011

2012

2013

2014

2015

2016

2017

2018

April 2016

OPV switch

YF

PCV

MEASLES/MR

IPV (planned)

MENA

JE

PENTA

ROTA

HPV demo

Campaign

National

National

National

National

National

National

National

National
Lessons learned
HPV Vaccine implementation has been demonstrated to be feasible

**Countries used school-based delivery**
- Most countries opted to vaccinate at a younger age due to higher school enrolment.
- Challenges in enumerating and follow-up of out-of-school girls.

**Communication and social mobilisation ensure high coverage**
- Messaging focused on cervical cancer prevention.
- Early, face-to-face engagement with communities and religious leaders.

**Engagement of key stakeholders and building political will at all levels is vital**

**Ownership by EPI is critical for programme success**

Most countries achieved high coverage around 80%
Countries recognise the opportunity for adolescent health integration

HPV was successfully integrated with some adolescent health interventions
- Deworming, health education and health worker training.

There exist opportunities for strengthening integration to facilitate cost sharing
- Identify harmonised funding for integrated delivery.
- Improve coordination and ownership between departments.
- Overcome implementation challenges for joint delivery.
Operational cost of HPV demonstration programme is relatively high

Demonstration programme design did not incentivise testing of sustainable delivery strategies

- National projected cost per dose is ~$2.50, a significant reduction from the ~$6.50 observed in demonstration projects*.

Key cost drivers:

- High social mobilisation to reach a non-traditional target; service delivery & supervision (variation between countries).
- School based delivery via campaign-like approach incurred additional costs, e.g. renumeration for multiple stakeholders.

Gavi provides $0.65 per target for other SIAs

* Cost estimates from the WHO Cervical Cancer Prevention and Control Costing Tool (C4P)
Cost of HPV Vaccination is decreased when Service Delivery is integrated with routine immunisation

School-based delivery costs decrease by leveraging routine outreach

- The implementation cost per dose decreased from $2.97 in campaign mode to $0.51 when leveraging routine outreach in Rwanda, while maintaining coverage >95%.
- Uganda and Tanzania followed a similar model.

Bhutan tested a health-centre approach

- Coverage reduced from 90% to 75% following a switch from school based delivery.
- Country was able to make an informed decision based on trade-offs of coverage and cost.

Indonesia will try an annual vaccination schedule which could reduce costs further

![Graph showing implementation cost per dose (Rwanda)]
Key lessons learned

1) EPI ownership of HPV programme and multi-stakeholder engagement are critical for scale-up.

2) Service delivery strategies for HPV should be integrated into routine immunisation platforms e.g. mix of outreach and health facility.

3) Programme adjustments at the national level may be required to optimise cost and coverage objectives e.g. Rwanda and Bhutan.

4) Early, effective social mobilisation and primary communication, focussed on cervical cancer and country appropriate messaging, are necessary to ensure successful uptake.

5) HPV integration with adolescent health interventions may offer opportunities for improved coverage and operational cost sharing.
New Way Forward
Where are we today in reaching our target?

2015 target to reach 1 million girls has been achieved

Emerging risk of missing 30 million girls by 2020, due to a combination of factors:

1. Programme design does not encourage cost-effective, sustainable strategies and delays national scale-up.
2. Country hesitancy from perceived programmatic and co-financing cost.
3. Weak programme ownership by EPI.
4. External factors including competing health and vaccine priorities.

With accelerated transition from demo to national introduction, the original target may be achievable

Allowing countries to vaccinate multiple cohorts could increase number of girls reached
HPV vaccine would constitute a small percentage of overall health expenditure

Note: Co-financing grouping at time of HPV introduction
Bars indicate percentage of health expenditure on vaccines – the darker bar indicates the incremental increase with introduction of national HPV, as forecast by SDFv12
New Way Forward: Implementing programmatic changes

Gavi will consider providing front loaded technical support
  - Platform to share key lessons learned on HPV roll-out strategy (e.g. delivery strategy, social mobilisation, …)
  - Modelling costs for different delivery strategies

Gavi proposes moving away from demonstration projects towards national introduction
  - Encourage of the use of sustainable strategies for scale-up
  - Phased roll-out possible for countries without experience
  - Reduce administrative delay through single pathway

Gavi will assess the impact of vaccinating multi-year cohort in the first year of national introduction
  - Earlier potential health benefits, programme resilience and lower operational cost per dose
  - Increase in the number of girls reached from 2016 to 2020
New Way Forward: Integration with adolescent health

Gavi will expand partnerships (e.g. UNAIDS, Global Fund, Girl Effect, USAID, GFF, PEPFAR’S DREAMS)

- Leverage resources from adolescent health, reproductive health, HIV/AIDS and NCD/cancer prevention and control

Programmatic changes

Adolescent health integration

Targeted country consultations
New Way Forward: Targeted country consultations

Gavi will run country consultations to understand the factors affecting national decision making.

This will be undertaken in countries who have completed demonstration projects (>1 yr) but have not moved to national roll-out.

Factors to be considered:

- Cost of introduction
- Vaccine price
- Competing priorities in the health-care space
- Human resource capacity
- Fiscal space

Findings will inform a revised Alliance approach for the HPV programme.

Programmatic changes

Adolescent health integration

Targeted country consultations
Next steps

June – September ‘16
Run consultations to discuss the proposed changes moving forward
- Gavi will convene a high level consultation with an HPV expert working group to discuss programme scalability
- Consultation with key country stakeholders

October ’16
Review proposed HPV programme changes with the PPC

December ’16
Present any necessary programme changes to the Board
With thanks to

Evaluating HPV vaccination pilots
PRACTICAL EXPERIENCE FROM PATH | 2012

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