HPV vaccine: a critical component in a comprehensive cervical cancer prevention program

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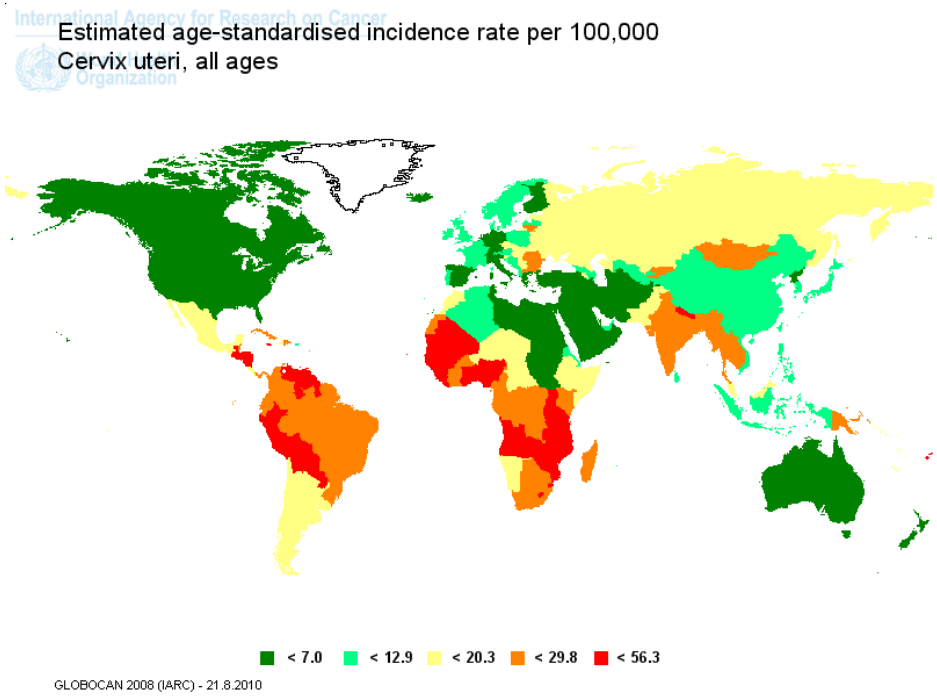
PATH

Background on cervical cancer

Incidence highest in low and middle income countries



*Globocan, 2008

- Estimated to increase from 529,828 cases in 2008 to 776,032 in 2030*
- Failure of cytology screening to have impact in low- or middle-income countries
- New prevention opportunity in form of vaccines against primary causal agent—human papillomavirus (HPV)

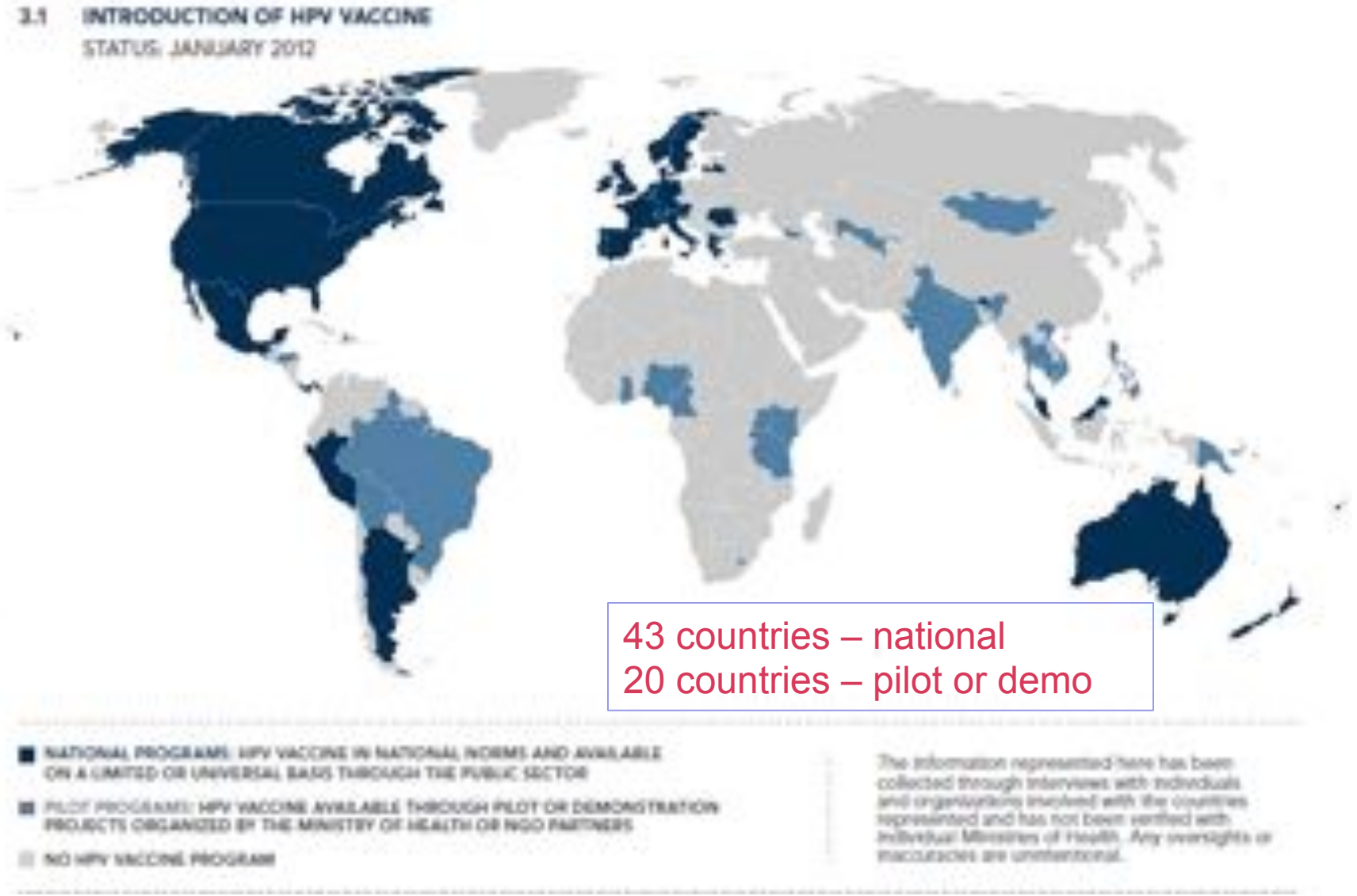
Two vaccines available

- Both highly effective against HPV types 16 and 18—responsible for **~70%** of cervical cancer*
- Both very safe—**no deaths**, rare serious adverse events (for women with other risk factors)

*One also protects against non-oncogenic types, HPV 6 and 11

- Both registered in >120 countries
- Both pre-qualified by WHO (i.e. safe and effective for UN purchase)
- Recommended by WHO for girls aged 9-13

National and pilot introductions



PATH HPV Vaccine Demonstration Projects

Vaccine delivery strategies

- Schools
  All countries

- Community health centers

  Vietnam, Peru, India (out-of-school girls)

- Outreach programs
  Uganda

Over 66,000 girls eligible

Overall, coverage was high – both initial acceptance and completion

Coverage survey data, school-based delivery

	India (Yr1)	Peru (Yr1)	Uganda (Yr2)	Vietnam (Yr2)
At least 1 dose	82%	84%	96%	97%
All 3 doses	79%	82%	89%	96%
Completion 1 → 3	97%	98%	93%	99%

- Little difference in coverage between strategies: greater variance in terms of cost per vaccinated child
- Strong community mobilization efforts; careful training of health workers

Communication materials developed

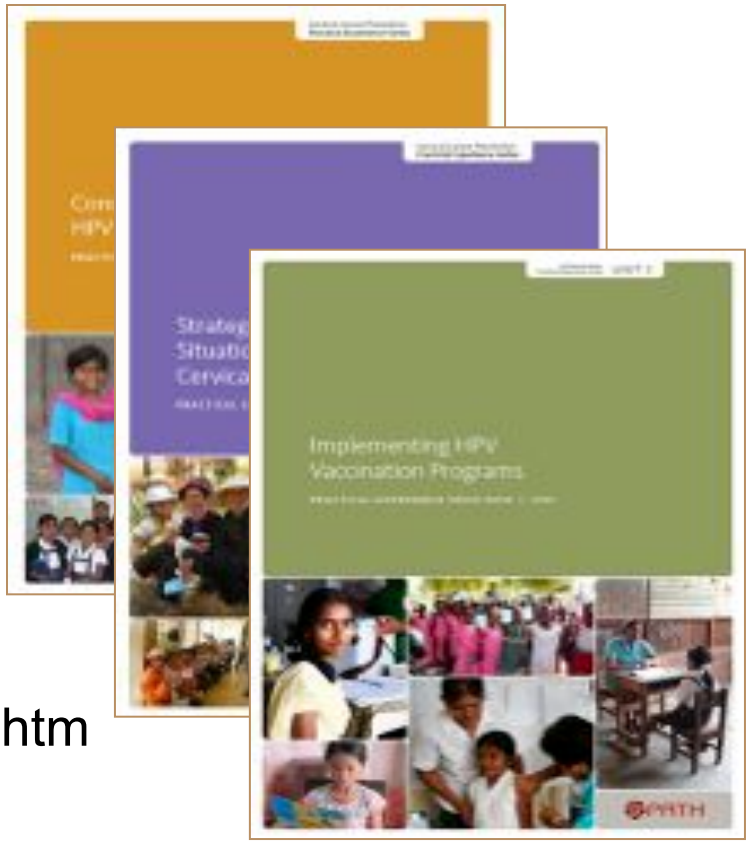
- Manuals
- Leaflets
- Posters
- Fact book
- Radio spots
- Banners

Lessons learned: Factors for success

1. Secure visible government endorsement / participation.
2. Provide training for health workers, teachers, and others involved in program.
3. Engage communities through sensitization and mobilization, with strategic use of media.
4. Use pulsed schedules to facilitate community awareness and ease health worker burden.
5. Build educational messages on positive attitudes towards vaccines, prevention of cancer.
6. Have crisis communication plan in place.
7. Tailor delivery strategy. Schools can reach majority of eligible girls, with mop-up for those not in school (or absent on vaccination day).

Practical Experience Series from PATH

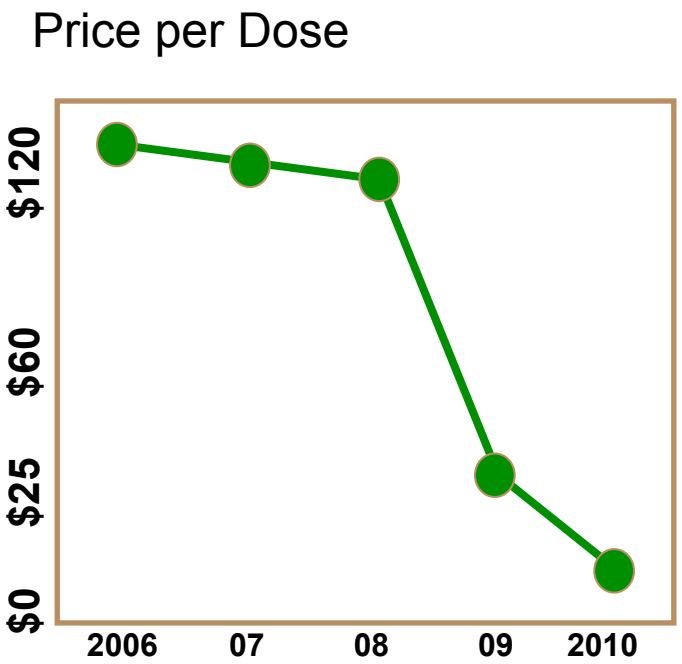
- Lessons learned and resources for decision-making and vaccination program planning.
  - Planning
  - Formative research
  - Vaccine implementation
  - Evaluation
  - Screening



www.rho.org/HPV-practical-experience.htm

Vaccine financing

- Low income countries
  - GAVI approved, 2011
  - Contingent on final price negotiated (<$5/dose) and country ability to deliver successfully
- Middle income
  - Price drop (~$15-30/dose)
  - PAHO Revolving Fund (~ $13/dose)

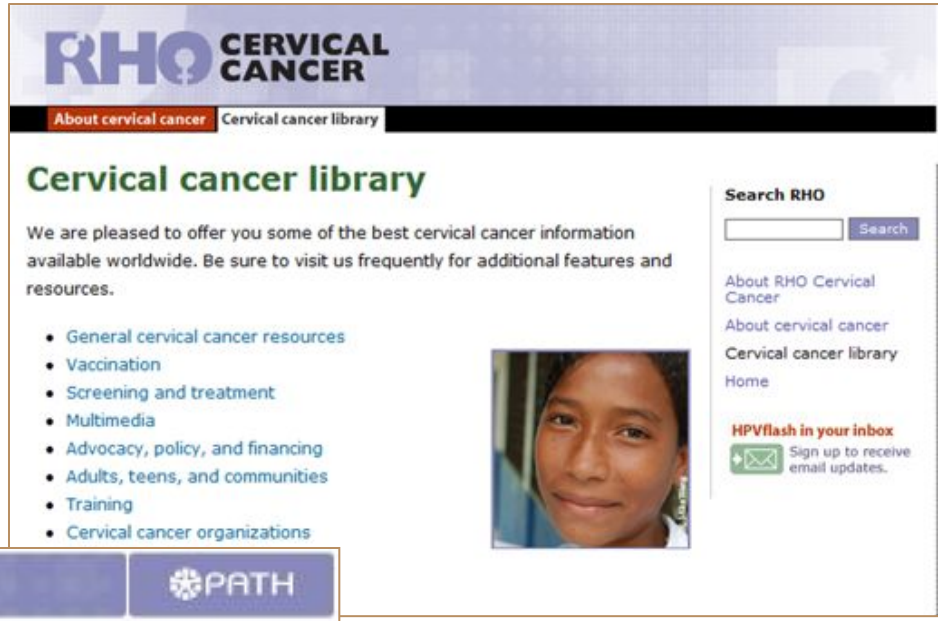


GAVI opportunity

- 57 countries eligible for GAVI assistance
- 2 HPV vaccine pathways approved
  - National introduction
  - Demonstration project
- Demonstration project has 3 objectives
  1. Learn by doing, on small scale first
  2. Explore opportunities for integrating with other adolescent interventions
  3. Strengthen or develop comprehensive national cervical cancer control strategy

Many resources now available

- Online library at www.rho.org
- Action planner



WHO tools for cervical cancer prevention and control

http://www.who.int/nuvi/hpv/resources/en/index.html
http://www.who.int/reproductivehealth/topics/cancers/index.html

Why a comprehensive prevention approach?

- Vaccine not 100% effective – still need screening
- Issue of generational equity – many women already infected, won't benefit from vaccine
- In long run, vaccine will ease burden on screening as there are fewer positives needing treatment
- Synergies in raising awareness about cervical cancer prevention – both screening and vaccine >> demand
- Engages broader range of stakeholders
- Allows countries to start from where they are and build accordingly

Conclusions

- Immunization is trusted, familiar, and less likely than other services to have inequities in coverage.
- Many synergies for combining screening and HPV vaccination, although timetables for introduction and scale-up may differ.
- Options for affordable screening and HPV vaccine now exist.
- In the long term, a comprehensive approach offers the biggest payoff.

Thank you

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www.path.org/cervicalcancer