The HPV Vaccine Series

NCAB
June 25, 2012
Topics Today

- Update: HPV Vaccine Series
- Potential future topics
- Report for release 8/12
Mission
President’s Cancer Panel

- The Panel shall monitor the development and execution of the activities of the National Cancer Program, and shall report directly to the President.

- Any delays or blockages in rapid execution of the Program shall immediately be brought to the attention of the President.
Accelerating Progress in Cancer Prevention:
The HPV Vaccine Example

Approach

- Encourage interaction and discussion among participants using workshop model.
- Examine multiple issues that influence uptake of HPV vaccines and their effectiveness in reducing population cancer risks.
- Identify provocative questions for workshop discussions.
- Bring individuals from key organizations to table.
Workshop Goals

- From each workshop, develop a finite set of priority recommendations to increase uptake of HPV vaccines in U.S.
- Identify lessons learned from HPV vaccination that may be applied to future cancer prevention vaccines.
- Identify topics and issues for which there are knowledge gaps and require further study.
- Identify practice/application issues that require attention.
2012 Series
Accelerating Progress in Cancer Prevention:
The HPV Vaccine Example

Four Workshops

- HPV Vaccination as a Model for Cancer Prevention
- Achieving Widespread HPV Vaccine Uptake
- Clinical Practices, Standards, and Economic Implications
- Challenges of Global HPV Vaccination
Pap screening has reduced the incidence of cervical cancer by ~ 80%.

Incidence of HPV-positive oropharynx cancer 1988-2004 increased >3-fold.

United States: Annual Incidence of Cancers Attributable to HPV 2004-2008

- Cervix
- Anus
- Vulva/vagina
- Penis
- Oropharynx

**HPV16/18**

- ~70%
- >90%

**Annual number of cases**

- Pap screening has reduced the incidence of cervical cancer by ~ 80%
- Incidence of HPV-positive oropharynx cancer 1988-2004 increased >3-fold

*MMWR, 2012; Chaturvedi et al, J Clin Oncology, 2011; Gillison, Chaturvedi, and Lowy., 2008*
- Cervical cancer represents ~10% of all female cancers worldwide.
- >85% of global cervical cancers occur in developing world.
- In developing world, >90% of HPV-associated cancers are cervical cancers.

*Adapted from de Martel et al, Lancet Oncology 13: 607-15, 2012*
Workshop 1:
HPV Vaccination as a Model for Cancer Prevention
July 24, 2012
San Francisco, CA

Topics
- Background to vaccine development and FDA approvals
- Vaccine safety, efficacy, and duration of protection
- Candidate second-generation vaccines
- Potential population-wide impact of current vaccines and second-generation vaccines
HPV Vaccination as a Model for Cancer Prevention

Illustrative Questions

- Fewer than 3 doses sufficient?
- Eventual need for a booster dose?
- Reduce age of vaccination (childhood vaccination)?
- Potential impact on cervical cancer screening?
- Research gaps or other barriers to progress?
HPV Vaccination as a Model for Cancer Prevention

Modeling & Monitoring Vaccine Impact

- Are systems in place sufficient?
- Are more vaccine registries needed?
- Importance of monitoring intermediate end points (*e.g.*, HPV infection, pre-cancer)
- Is refinement of vaccination impact models needed?
Co-Chairs and Confirmed Participants

Kevin J. Cullen, MD, University of Maryland School of Med.
Gary Dubin, MD, GlaxoSmithKline Biologics
Denise Galloway, PhD, Fred Hutchinson Cancer Res. Ctr
Maura L. Gillison, MD, PhD, Ohio State University
Richard M. Haupt, MD, MPH, Merck Research Laboratories
Allan Hildesheim, PhD, NCI
Doug Lowy, MD, NCI: Co-Chair
Lauri Markowitz, MD, CDC
Joel M. Palefsky, MD, University of California San Francisco
Jeff Roberts, MD, FDA
Mark Schiffman, MD, MPH, NCI
Jennifer S. Smith, PhD, MPH, UNC Gillings School of Global Public Health
Claudia Vellozzi, MD, MPH, CDC
Cosette Wheeler, PhD, University of New Mexico: Co-Chair
HPV Vaccination as a Model for Cancer Prevention

A prelude to workshops 2, 3 and 4 and formulation of recommendations by the President’s Cancer Panel
HPV vaccination rates in U.S. should be increased to achieve optimal benefit in population impact.

Participants will discuss and identify the most important barriers to increased vaccine uptake (e.g., knowledge and communication gaps, policy and program limitations, cost).

Discuss effective programs in U.S. and elsewhere.
Workshop 2:
Achieving Widespread Vaccine Uptake

Co-Chairs

- Robert T. Croyle, PhD, Director, Division of Cancer Control and Population Sciences, NCI
- Noel T. Brewer, PhD, MS, Associate Professor, UNC Gillings School of Global Public Health; Director, Cervical Cancer-Free NC
Impact of HPV vaccination on cervical and other cancer rates still is not fully characterized.

Participants will examine current clinical practice standards for cervical cancer screening.

Discuss clinical and economic implications of widespread vaccination on other cancers and conditions.
Assess changes in risk evaluation and clinical practice standards that could be necessary as HPV vaccinations increase.

Consider other providers (e.g., dentists, pharmacists) who could deliver counseling about and administer HPV vaccines as well as expanded venues (e.g., pharmacies) in which vaccines could be provided.
Examine global distribution of HPV-related cancers.

Discuss programs in countries and regions where vaccination rates are exemplary.

Recommend a U.S. strategy regarding global HPV vaccination.
Potential Future PCP Topics

- Communicating more effectively about cancer—changing the paradigm
- **Accelerating clinical trials** through new discovery pathways and agents, trial designs, statistical methodologies, trial processes and policies: **in-depth focus** on a limited set of issues
- **Global network of cancer registries**—foundation for global health efforts
- **Accelerating progress** for cancers with mortality rates that have changed little
The Future of Cancer Research: Accelerating Scientific Innovation