President’s Cancer Panel: A new beginning

2/28/2012
Mission

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.
Topics today

- New appointments to President’s Cancer Panel
- How we will function
- Meeting approach
- First topic
- Potential topics for other years
- Report in process
President Obama Announces More Key Administration Posts

WASHINGTON, DC — Today, President Barack Obama announced his intent to nominate the following individuals to key Administration posts:

- Frederick “Rick” Barton – Assistant Secretary for Conflict and Stabilization Operations and Coordinator for Reconstruction and Stabilization, Department of State
- Arun Majumdar – Under Secretary of Energy, Department of Energy
- Marie F. Smith – Member, Social Security Advisory Board

The President also announced his intent to appoint the following individuals to key administration posts:

- Barbara K. Rimer – Chairman, President’s Cancer Panel
- Owen N. Witte – Member, President’s Cancer Panel

President Obama said, “These men and women have demonstrated knowledge and dedication throughout their careers. I am grateful they have chosen to take on these important roles, and I look forward to working with them in the months and years to come.”
Our approach

- Focus on actionable recommendations
- Track recommendations over time
- Meeting format based on topic goals
- Interaction & discussion among participants
- Participants from different sectors and perspectives
Criteria for topic selection

- Related to **FUNCTIONAL OUTCOMES** that influence resource allocation, organizations, industry practices and, potentially, cancer prevention, detection and therapeutic interventions

- **SIGNIFICANT**: AFFECTS CRITICAL ASPECTS of cancer-related discovery, prevention, early detection, treatment, delivery, control and policy

- **MANAGEABLE AND FOCUSED**

- **CAN LEAD TO ACTIONABLE RECOMMENDATIONS**

- **ADDRESSED** within timeframes and resource constraints of PCP
Criteria for topic selection

- NOT EXCLUSIVELY FOCUSED ON NCI issues
- SALIENT, RELEVANT AND TIMELY
- NOT EXAMINED RECENTLY by other credible leadership organizations (except where deeper/broader exploration is needed)
- Based on SOUND SCIENCE and policy
- NOT CREATING GUIDELINES
Rationale

Globally, HPV infections cause most cervical cancers: over 560,000 new HPV-related cases/year (cervical and other cancers).

Vaccines protect against most common forms of oncogenic HPV infections (e.g. HPV 16, 18).

Only 1.4% of US males and 32% of US females ages 13-17 have received 3 vaccine doses.

US rates are too low to achieve population potential of HPV vaccines to reduce cancer incidence.

Increasing HPV vaccination could effect a major reduction in HPV-related cancers.
United States: Incidence and Distribution of Cancers Attributable to HPV

- Pap screening has reduced the incidence of cervical cancer by ~80%

<table>
<thead>
<tr>
<th>Location</th>
<th>HPV cases</th>
<th>Total cases</th>
</tr>
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<tbody>
<tr>
<td>Cervix</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Anus</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Vulva/vagina</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Penis</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>2,000</td>
<td>4,000</td>
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</tbody>
</table>

HPV16/18
~70%
>90%

* From D. Lowy presentation to NCAB, 12/11
Worldwide Incidence and Distribution of Cancers Attributable to HPV*

- Cervical cancer = ~10% of all female cancers worldwide
- ~80% of cervical cancers occur in developing world

Adapted from Parkin, Int J Cancer 118:3030, 2006
* From D. Lowy presentation to NCAB, 12/11
Trends in U.S. Vaccination Rates: Ages 13-17 Yrs**

49%*
32%*

* Females; adolescent male vaccination 1.4%

Abbreviations: Tdap = tetanus, diphtheria, acellular pertussis vaccine; MenACWY = meningococcal conjugate vaccine; HPV-1 = human papillomavirus vaccine, ≥ 1 dose; HPV-3 = human papillomavirus, ≥ 3 doses.

* Tdap and MenACWY vaccination recommendations published March and October 2006
† HPV vaccination recommendations published March 2007

** from presentation at NCI 2011 by Noel Brewer
Approach

- Workshop model: encourage interaction and discussion
- Invite two co-chairs for each of 3 workshops.
- Identify provocative questions.
- Assess scientific basis for, current status of, and continuing efforts for effective HPV vaccination.
Approach

- Examine epidemiologic, behavioral, sociopolitical, communication, and policy issues that influence effectiveness of HPV vaccines in reducing population cancer risks.

- Also: clinical and economic issues

- Consider global impact and strategy.
Workshop goals

1. Develop actionable recommendations that focus on ways to increase uptake of HPV vaccines in US.

2. Identify lessons learned from vaccination programs that may be applied to future cancer-related vaccines.

3. Address issues related to global HPV vaccination strategy.

4. Identify topics and issues that require further study.
Preventive vaccine for HPV serotypes most commonly associated with cervical, vulvar, vaginal, anal, penile, oral cavity and oropharyngeal cancers is a major advance in preventive oncology.

Potential impact of HPV vaccine on cancer incidence and mortality has not been realized.
HPV Vaccination as a Model Cancer Prevention Method:
State-of-the-science and evidence

Fundamental science that laid foundation for development of HPV vaccine, specifically, basic, translational, and clinical research that brought the vaccine from discovery to approval.

Surveillance and epidemiology to determine:

- durability of immunity
- safety
- cross-protection among multiple oncogenic HPV strains
- high risk groups
- incidence of CIN, HPV infections, and cervical, vaginal, vulvar, anal, penile, oral cavity and oropharyngeal cancers among vaccinated populations
HPV Vaccination as a Model Cancer Prevention Method: State-of-the-science and evidence

- Implications for future vaccines
- Financing development and dissemination of HPV vaccines; implications for other vaccine development
- Improvements in formulation and delivery of HPV vaccines that will inform development of future vaccines
US HPV vaccination rates should be increased.

Assess vaccine dissemination, communication/education, sociopolitical issues, barriers to greater use, and current policy environment.

Recommend strategies to improve communication, other critical factors, decision making, and vaccine uptake.
Achieving Widespread HPV Vaccine Dissemination:
Policy, program, and communication considerations

- Policies that determine where and by whom vaccines are administered, and who is eligible to receive them, under what conditions, affect use.
- What, if any, policy changes are needed to increase use of HPV vaccines?
- Issues related to messaging strategies, campaigns and use of social and other internet media
- Vaccine characteristics that are barriers to uptake
- Choice of vaccines (Gardasil vs. Cervarix)
Impact of HPV vaccination on cervical cancer rates is uncharacterized.

Cervical cancer screening still is needed to minimize cancer incidence and mortality.

Examine current clinical practice standards for cervical cancer screening—and related economic implications of widespread vaccination.
HPV Vaccination:
Clinical practice issues, standards and economic implications

- Definition of potential changes in risk evaluation and clinical practice standards that effective HPV vaccination may catalyze
- Cost-effectiveness of widespread vaccination
- Economic approaches (e.g., tiered pricing, innovative financing mechanisms, interdisciplinary partnerships) that may increase access to vaccines
- Potential economic effects of increased vaccination rates on federal, state, and private health care and insurance costs
Potential future topics

- Accelerating clinical trials through new discovery pathways and agents, trial designs, statistical methodologies, trial processes and policies

- Creating a global network of cancer registries as foundation for global health efforts

- Communicating more effectively about cancer—changing the paradigm
The Future of Cancer Research: Accelerating scientific innovation

Tentatively scheduled for release late Spring, 2012