

Barbara K. Rimer, DrPH  
Chair, President's Cancer Panel

---



# Update to the National Cancer Advisory Board

September 9, 2014



# 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 the rapid execution of the Program shall immediately be brought to the attention of the President.



# Members

**Barbara K. Rimer, DrPH**

*Univ. of North Carolina at Chapel Hill*

**Hill Harper, JD**

*Cancer Survivor, Actor, and Best-Selling Author*



**Owen N. Witte, MD**

*University of California Los Angeles*





**A key criterion for topics**

---

**Actionable  
recommendations**



# Overview

- ❑ **2012-2013 Report to the President – UPDATE**  
*Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer*
- ❑ **June 13, 2014 Planning Workshop**  
*Cancer Communication in the Digital Era: Opportunities & Challenges*
- ❑ **2014-2015 Series**  
*Connected Health: Improving Patients' Engagement and Activation for Cancer-Related Health Outcomes*



# 2012-2013 Report to the President – ACTION UPDATE

## Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer



HPV Vaccines **Prevent Cancers.**  
Why Are **So Few** U.S. Adolescents Vaccinated?



A Report to the President of the United States  
from  
The President's Cancer Panel

President's Cancer Panel Annual Report 2012-2013

## ACCELERATING HPV VACCINE UPTAKE: URGENCY FOR ACTION TO PREVENT CANCER

Share:

Human papillomaviruses (HPV) cause most cases of cervical cancer and large proportions of vaginal, vulvar, anal, penile, and oropharyngeal cancers. HPV also causes genital warts and recurrent respiratory papillomatosis. HPV vaccines could dramatically reduce the incidence of HPV-associated cancers and other conditions among both females and males, but uptake of the vaccines has fallen short of target levels. The President's Cancer Panel finds underuse of HPV vaccines a serious but correctable threat to progress against cancer. In this report, the Panel presents four goals to increase HPV vaccine uptake: three of these focus on the United States and the fourth addresses ways the United States can help to increase global uptake of the vaccines. Several high-priority research questions related to HPV and HPV vaccines also are identified.

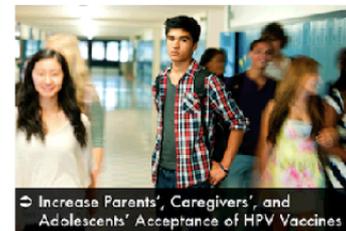
- Letter to President Obama
- Executive Summary
- Recommendations at a Glance
- Download Full Report (PDF)

Click below to read more.

### HOW TO ACCELERATE HPV VACCINE UPTAKE IN THE U.S.



➔ Reduce Missed Clinical Opportunities to Recommend and Administer Vaccines



➔ Increase Parents', Caregivers', and Adolescents' Acceptance of HPV Vaccines



➔ Maximize Access to HPV Vaccination Services

INCREASE GLOBAL HPV VACCINATION

CONDUCT HIGH-PRIORITY RESEARCH



# HPV Report Presentations

- ❑ National Vaccine Advisory Committee (February 2014): Drs. Rimer & Lowy
- ❑ NIH Office of Research on Women's Health (March 2014): Dr. Sandler
- ❑ Policy session at AACR Annual Meeting (April 2014): Drs. Witte and Sandler
- ❑ Webinar for the National Foundation for Infectious Diseases (May 2014): Drs. Rimer and Noel Brewer
- ❑ Accepted poster for APHA Annual Meeting (November 2014) – J. Sienko/L. Paradis



# Upcoming NCI “Research to Reality” Cyber-Seminar



## **Accelerating HPV Vaccine Uptake: What is Working and Why**

Tuesday September 23, 2014

2:00-3:00 pm ET

For more information and to register:

<http://researchtoreality.cancer.gov>

Speakers include Abby Sandler, PhD, Executive Secretary,  
President’s Cancer Panel.



# Social Media Engagement

## #HPVReport

- We created & disseminated a comprehensive hashtag to magnify reach, engage stakeholders, and monitor online sentiment.
- Tweets and Facebook posts revealed strong support for report.



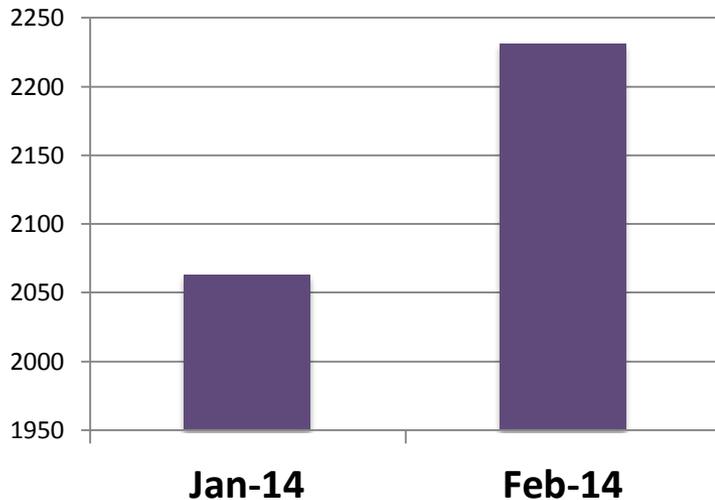


# Social Media Engagement

Promotional efforts, partner engagement, and report acclaim boosted monthly Twitter network and engagement numbers, enhancing online visibility and reinforcing the role of the Panel.



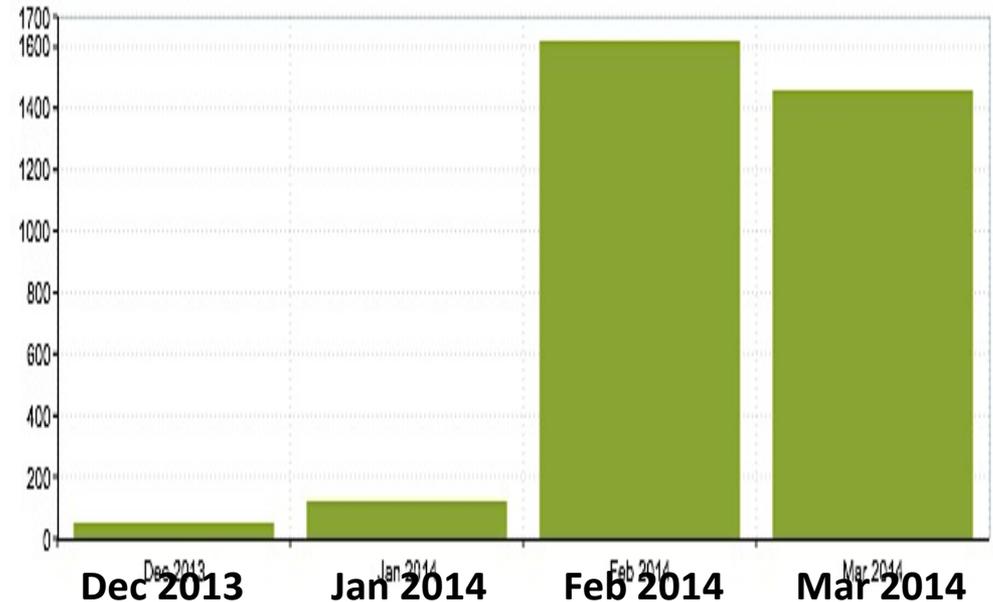
@PresCancerPanel Monthly Network Growth  
Jan 2014–Feb 2014



## Report Release Week Analytics (Feb. 10-17, 2014)

- Reach: Over 4 million Twitter users
- Engagement activity: 170
- Followers: 65 new followers

@PresCancerPanel Monthly Engagement Levels  
Dec 2013–Mar 2014





# 2013 HPV Vaccination Coverage for Adolescents

**In 2013:**

- ❑ **37.6% of girls ages 13-17 completed three-dose series (compared to 33.4% in 2012).\***
- ❑ **13.9% of boys ages 13-17 completed three-dose series (compared to 6.8% in 2012).**

*\*Healthy People 2020 goal: 80 percent of girls ages 13-15 complete HPV vaccine series.*

CDC. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years – United States, 2013. *MMWR* 2014;63(29):625-33. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6329a4.htm>



# Implementation of Panel Recommendations – NCI

**NCI announced one-year grant supplements:** Promote collaborations between NCI-designated cancer centers and state/local cancer coalitions and HPV immunization programs.

Release date: July 17, 2014; Request Receipt date: August 4, 2014; Earliest Anticipated Start Date for Awards: September 10, 2014.



# Implementation of Panel Recommendations – CDC

## CDC announced funds

- ❑ Develop and administer national network of cancer prevention organizations.
- ❑ Goal: improve HPV vaccination delivery for prevention of HPV-related cancers.

CDC-RFA-IP14-1410PPHF14 PPHF 2014: Immunization - HPV Roundtable: Creating a National Network of Partners to Promote Cancer Prevention through Human Papillomavirus (HPV) Vaccination financed solely by 2014 Prevention and Public Health Funds.



# Implementation of Recommendations – Immunization Action Coalition (IAC)

❑ IAC issued “Dear Colleague” letter encouraging strong HPV vaccine recommendations

❑ Signed by:

AAFP    ACP  
AAP    CDC  
ACOG    IAC

As a healthcare provider, we urge you to improve the strength and consistency of your recommendation for HPV vaccination to your patients. Your recommendation is the number one reason why someone will get the HPV vaccine and be protected from HPV-associated cancers and disease.

Signed:

Handwritten signature of Reid B. Blackwelder, MD.

REID B. BLACKWELDER, MD  
President  
American Academy of Family Physicians

Handwritten signature of Thomas K. McInerney, MD.

THOMAS K. MCINERNEY, MD  
President  
American Academy of Pediatrics

Handwritten signature of Jeanne Conry, MD.

JEANNE CONRY, MD  
President  
American College of Obstetricians  
and Gynecologists

Handwritten signature of Molly Cooke, MD.

MOLLY COOKE, MD  
President  
American College of Physicians

Handwritten signature of Thomas Frieden, MD.

THOMAS FRIEDEN, MD  
Director  
Centers for Disease Control and Prevention

Handwritten signature of Deborah Wexler, MD.

DEBORAH WEXLER, MD  
Executive Director  
Immunization Action Coalition



# 2014 Planning Workshop

## Cancer Communication in the Digital Era: Opportunities & Challenges



# 2014-2015 Series

## Connected Health: Improving Patients' Engagement and Activation for Cancer-Related Health Outcomes



# Improve communication, health care, health & reduce costs

**“The participation of patients in their own healthcare could substantially improve their care...Access to electronic personal health information and interfaces that make it easy for public and private clinical organizations to share health information with each other and with patients could enable healthcare providers and patients to collaborate in informed decision-making.”**

P. 17, PCAST, *Realizing Potential of Health IT*, 2010



# Medicine's Move to Electronic Connectivity: The Supply Side (Robert Wood Johnson Foundation Annual Report)

Robert Wood  
Johnson Foundation:  
Report on Health  
Information  
Technology (2014)

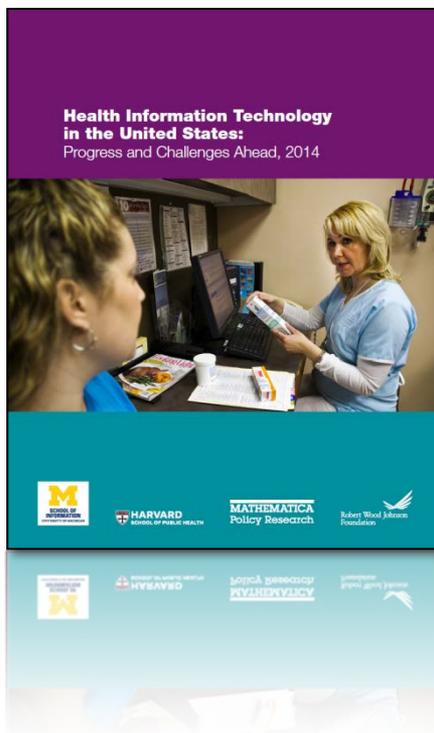
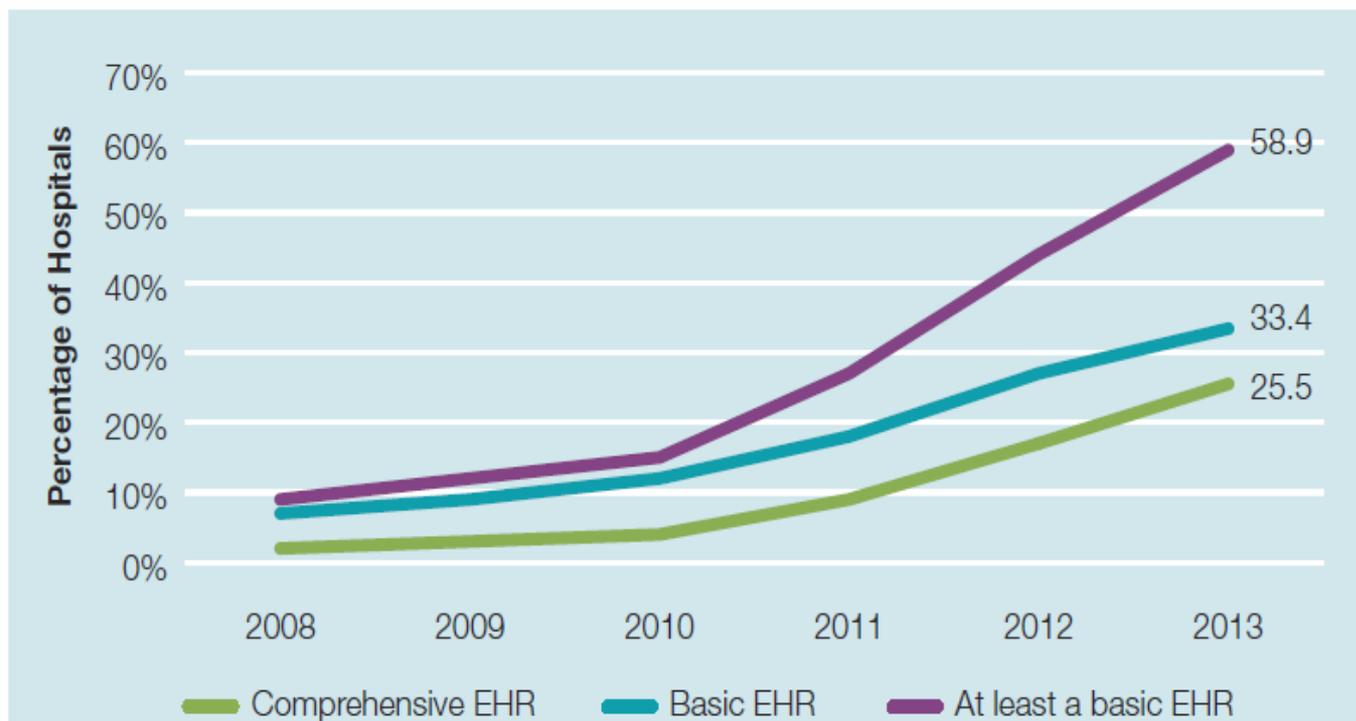


Exhibit 4: **Changes in Adoption of Basic and Comprehensive EHRs, 2008–2013**

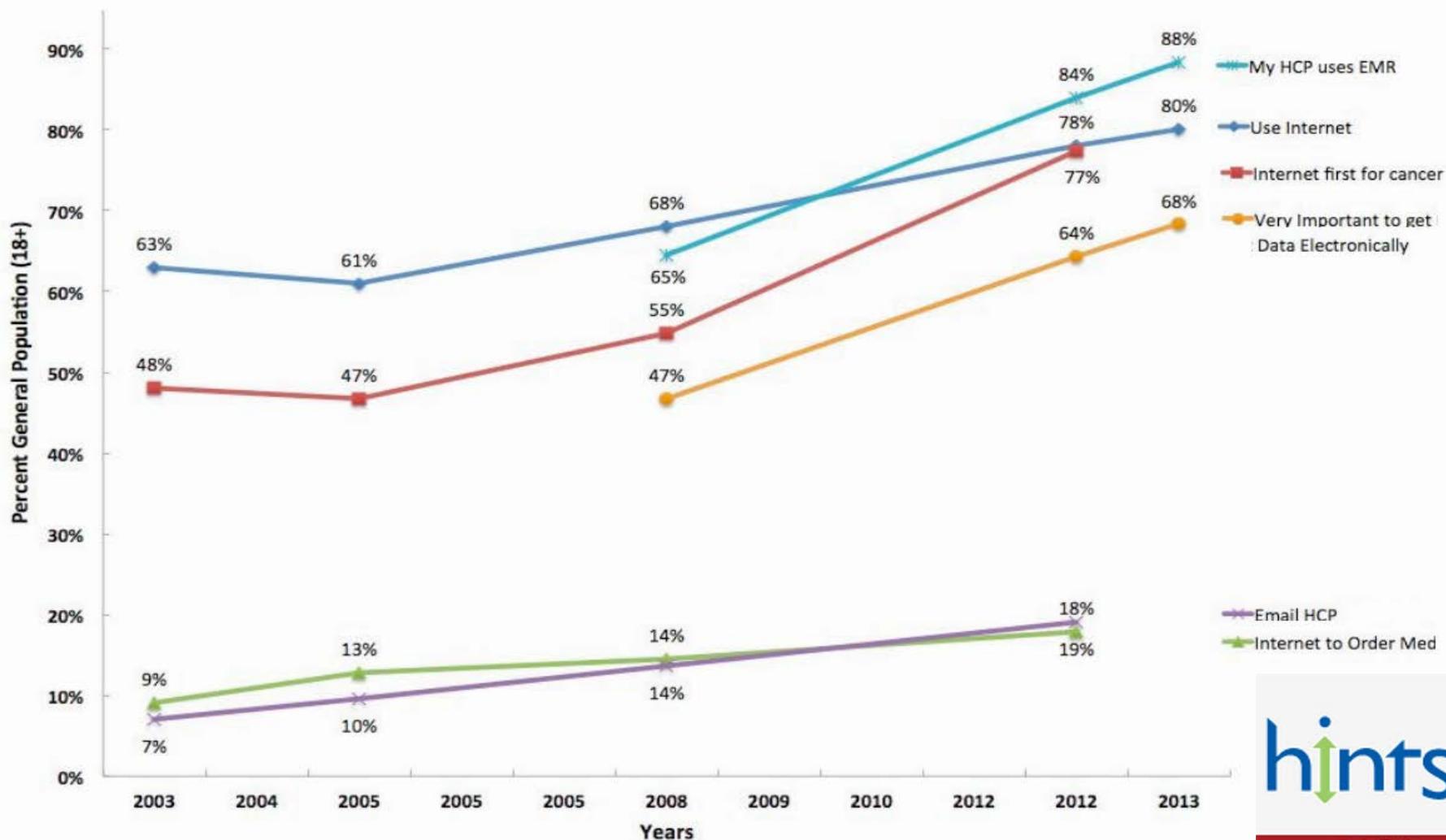


Source: Authors' calculations of data from the American Hospital Association Annual Survey Information Technology Supplement

Note: All analyses were statistically weighted for potential nonresponse bias.



# The Public's Move to Electronic Connectivity: The Demand Side (NCI's Health Information National Trends Survey [HINTS])



hints

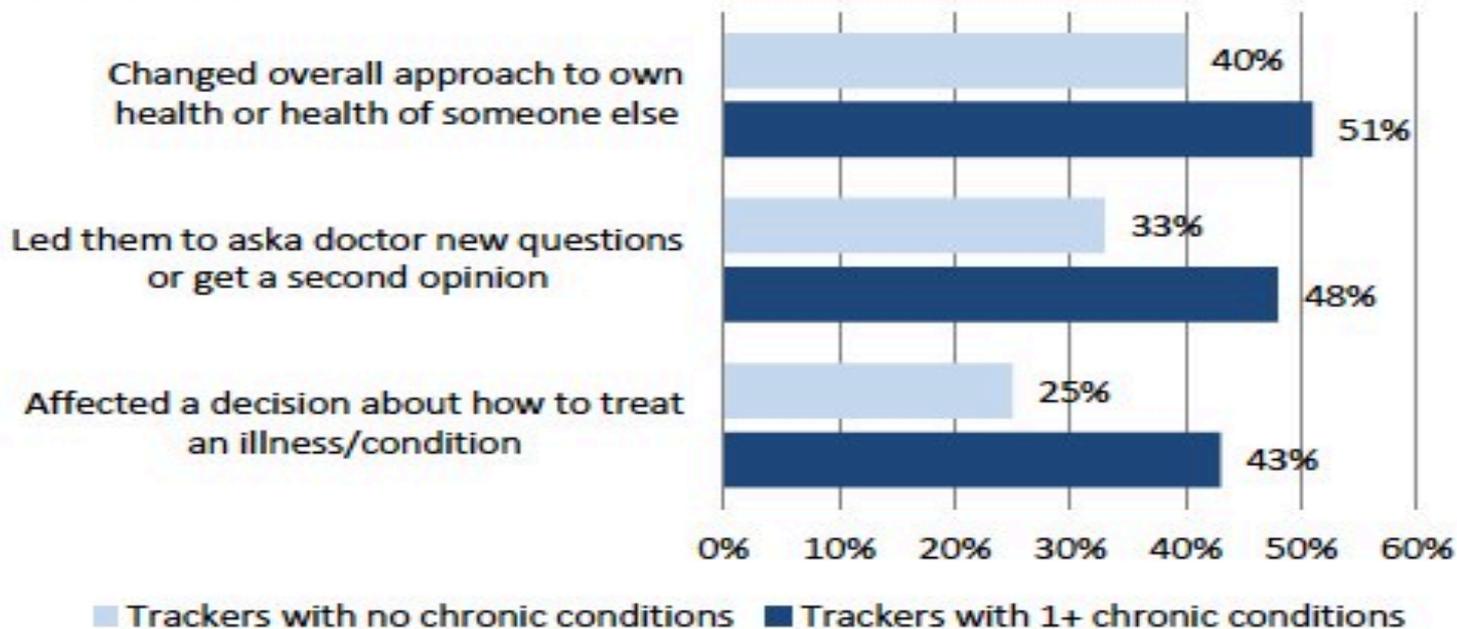
at NCI



# People with Chronic Conditions Are Highly Likely to Track Their Symptoms

## Impact of tracking health

Among trackers, the % who say tracking their health has had the following impacts, by chronic condition status



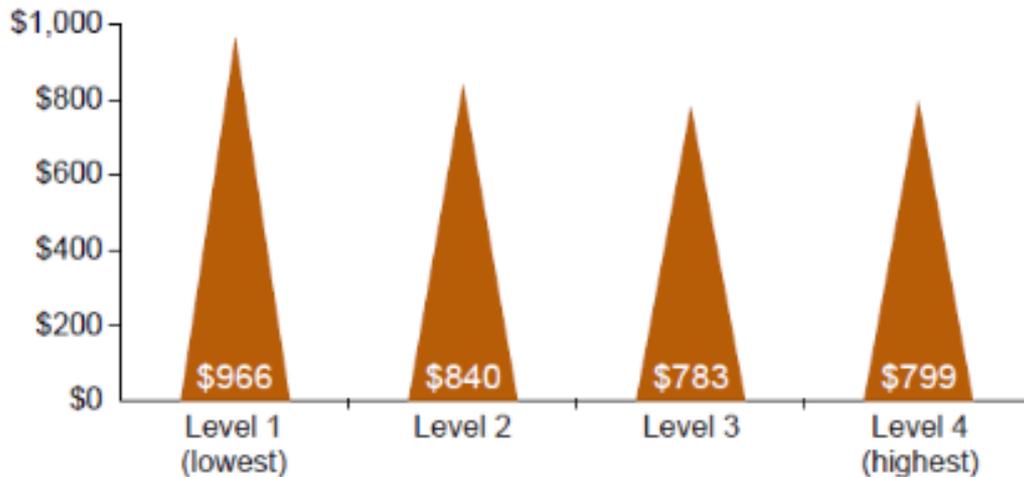
Source: Pew Internet Health Tracking Survey, August 07 – September 06, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 2 percentage points for results based on all adults.



# Highly Engaged and Activated Patients Have Lower Healthcare Costs

Patients Who Are More Actively Engaged in Their Care Have Lower Costs Than Patients Who Are Less Engaged

Predicted per capita billed costs in dollars, January–June 2011, by patient activation method (PAM) level



Notes: Inpatient and pharmacy costs not included. Dollar amounts are adjusted for differences in disease severity and demographics.

Source: Adapted from J. H. Hibbard, J. Greene, and V. Overton, "Patients with Lower Activation Associated with Higher Costs; Delivery Systems Should Know Their Patients' Scores," *Health Affairs*, Feb. 2013 32(2):216–22.

**"People who are disengaged in their health are the toughest group to manage and account for a disproportionate share of healthcare costs.**

**Joseph Kvedar, MD  
Director**

**Center for Connected Health  
Partners HealthCare System**



# Intelligent devices: potentially powerful new tools for health



Intelligent devices include remote sensors, wearables, digital cameras, and mobile phone apps.



# Apple Announces HealthKit Today

What is HealthKit? How the iPhone will get you fit

by Jon Mundy 01 September 2014 | [Go to comments](#)

Share: [f Like](#) 12 [t Tweet](#) 12 [g+1](#) 2 [Email](#) 1 [p Share](#) 45



How Apple HealthKit is going to keep the doctor away

On the 9th of September, Apple will launch the [iPhone 6](#), which means that it will also be launching a new version of iOS.



# Connecting Health Data to Clinical Systems Through Sensors, Wearables & Other Devices

Robert Wood Johnson  
Foundation: Personal Data  
for the Public Good (2014)



- ❑ **“Quantified Self” movement spurs new interest in prevention and healthy behaviors relevant to cancer control.**
- ❑ **“Meaningful Use” incentives to health care providers focus on requirement to demonstrate “patient engagement” through health information technology (Phases 2 & 3).**



# Connected health may improve medication adherence.

- **Non-adherence is a problem for oral cancer medications.**
- **Increased resource use, incl. ER visits, costs, reduced regimen efficacy**
- **Connected health could improve adherence.**
  - Tailored reminders to patients
  - Feedback re: barriers to adherence
  - Live chats with pharmacists & others
  - Portals for easier medication refills
  - Social support from other patients
- Darkow et al. (*Pharmacoeconomics*, 2007): 31% of patients had Rx interruptions that led to increases in medical costs for patients on imatinib. Decrease in med persistence betw 4 & 14 months of Rx.
- Hohneker et al. (JOP, 2011): 54% to 80% of breast cancer patients receiving hormone therapy adhere to Rx.
- Kondryn et al. (*Lancet Onc*, 2011): 63% of teens & young adults do not adhere to cancer Rx regimens.
- **Consistent with other findings re: non-adherence to oral regimens**



# Communication Problems Significant in Cancer Care

- ❑ Interviews with 416 cancer patients across 3 clinical sites (Mazor, et al, 2012)
- ❑ Asked about events where something “went wrong,” the event could have been prevented, and the event could have caused significant harm

## Results

- ❑ 28%: problems with medical care
- ❑ 47%: **communication** problems
- ❑ 24%: problems with **communication & medical care**



# Envisioning the Future of Patient Care in Oncology: The 2011 ASCO Blueprint



Imagining the Future: A Patient's Experience

- ❑ “You will receive a saliva reader that plugs into your smart phone, together with a few mobile applications that allow you to record your symptoms” (p. 3, line 8).
- ❑ “Every eight hours, your phone will buzz to remind you to take your medicine and answer a short series of questions about how you are feeling” (p. 3, line 10).

**ACCELERATING  
PROGRESS  
AGAINST CANCER**

ASCO's Blueprint for  
Transforming Clinical  
and Translational  
Cancer Research



# Creating a Connected Cancer Care Platform



- ❑ CancerLinQ provides real-time quality feedback to providers.
- ❑ Real-time clinical decision support can inform discussions between patients and physicians & choice of therapy.
- ❑ Powerful analytic tools help uncover patterns that can lead to improved care.



# Pilot Program Uses “Connected Health Technologies” to Improve Cancer Care



- ❑ Navigator programs increase 5-year survival rates for breast cancer patients—are expensive.
- ❑ ONC funded pilots to improve navigation through connected technology.
- ❑ GA Tech computer scientists creating computational model with triggers for improving patient navigation/health outcomes.

8/12/2013 in [Biotechnology & Biomedicine](#), [People & Technology](#), [Public Service, Leadership & Policy](#), [Rotator](#)

[Print This Page](#)

## MyJourney Compass: National Pilot Project Uses Information to Improve Cancer Treatment

An experimental health information exchange being tested in the north Georgia city of Rome is helping Koren Sinnock keep her travel plans. A breast cancer patient, Sinnock had been reluctant to travel very far from her doctors until the new program promised to provide access to her medical records from anywhere she might happen to be - including the beach.

"It gives me a sense of freedom that I can actually leave town and know that I can have medical information related to my cancer with me," she said. "I'm excited to be part of creating something that other people across the country might use."

- [Watch a video](#) describing this project

Providing easy access to medical histories and treatment records is just one aspect of MyJourney Compass, a pilot project designed to help patients navigate the complex cancer treatment process and become more involved their health care decisions. Operated through the [Georgia Department of Community Health](#), the



Koren Sinnock is shown using the Nexus 7 tablet computer provided to patients through the MyJourney Compass pilot project. The computer provides medical information, access to health information records and a symptom tracker for regular communication with physicians. (Click image for high-resolution version. Credit: Rob Felt)



# Cancer-Related Connected Health: Key Questions

- Does connected health improve patients' activation, engagement & patient-provider communication?
- What cancer-related outcomes can be achieved through connected health?
- Are there negative consequences for patients or the system?
- Is cancer-related connected health being developed at the right pace?



# Cancer-Related Connected Health: Key Questions

---

- Does providing computationally-tailored information to patients improve cancer care & care outcomes?
- Barriers to connected health?
- What would accelerate the process?
- Impact of connected health on diverse patients?
- Transformative processes, ideas, intelligent devices & technologies on the horizon with potential to improve cancer-related connected health care?
- Research needs?



# Connected Health Series Workshops (working titles)

- ❑ **Workshop 1: Engaging Patients with Connected Health Technologies** December 2014: Boston, MA
  - Connected health landscape and potential cancer applications
  
- ❑ **Workshop 2: The Personal Health Data Revolution, Connected Health & Cancer** March 2015: San Francisco, CA area
  - Role of health data in promoting health, consumer and patient activation, optimizing self-management, and supporting insight-driven healthcare leading to optimal outcomes
  
- ❑ **Workshop 3: Imagining the Future of the Connected Cancer Patient** TBD
  - Recommendations to accelerate progress re: connected health technologies in cancer



# Contact Us

## President's Cancer Panel

9000 Rockville Pike

Bld. 31/B2B37

Bethesda, MD 20892

(301) 451-9399

[pcp-r@mail.nih.gov](mailto:pcp-r@mail.nih.gov)

<http://pcp.cancer.gov>

@PresCancerPanel on Twitter