The logo features a stylized human figure with a light green circle for a head and a large green arrow pointing upwards for a body. The word "hints" is written in a blue, lowercase, sans-serif font, with a green double-headed arrow passing through the letter "i".

Health
Information
National
Trends
Survey

hints

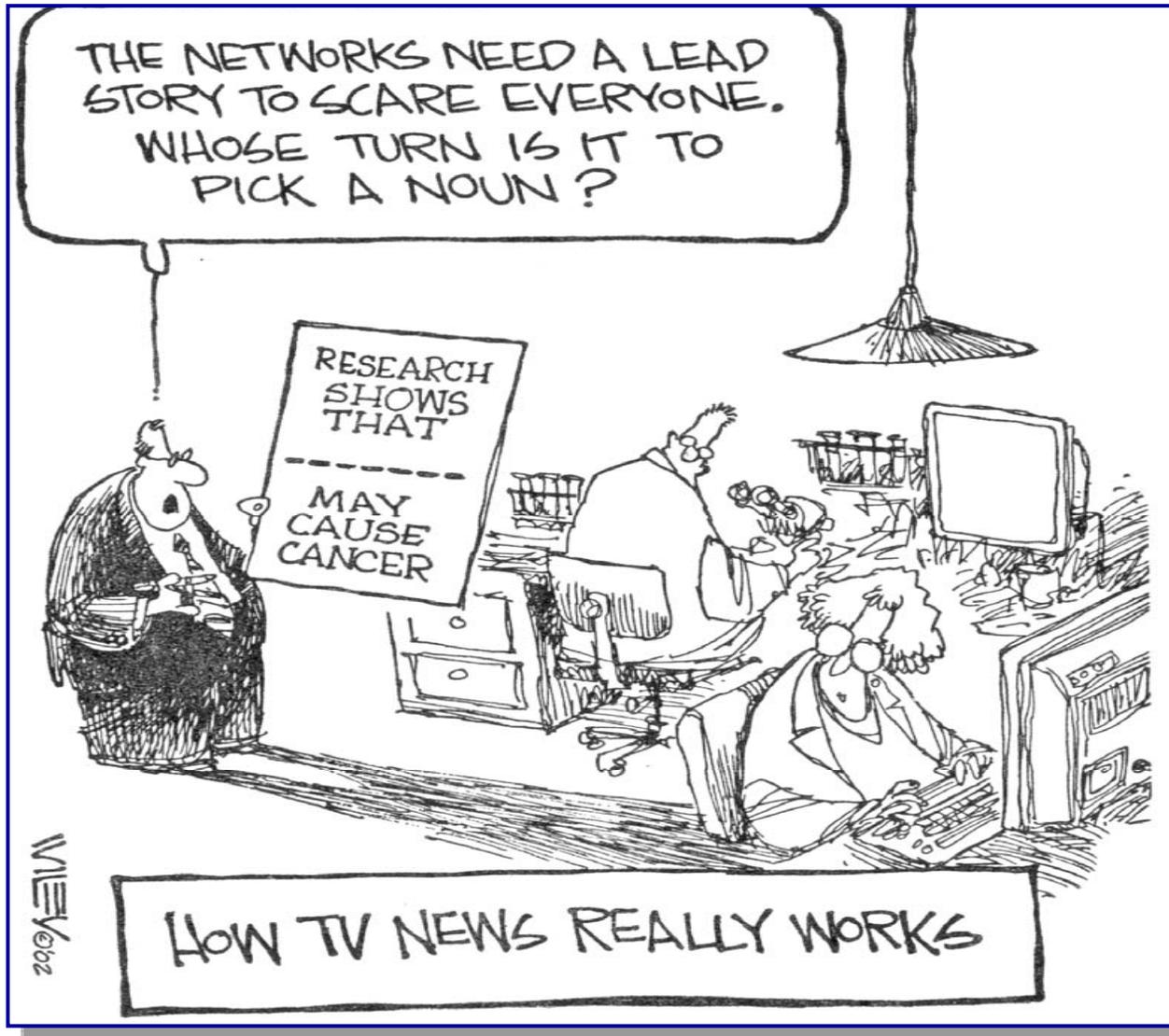
**Creating a National Evidence Base for
Health Communication &
Informatics**

**HINTS Data Users Meeting
January 20-21, 2005**

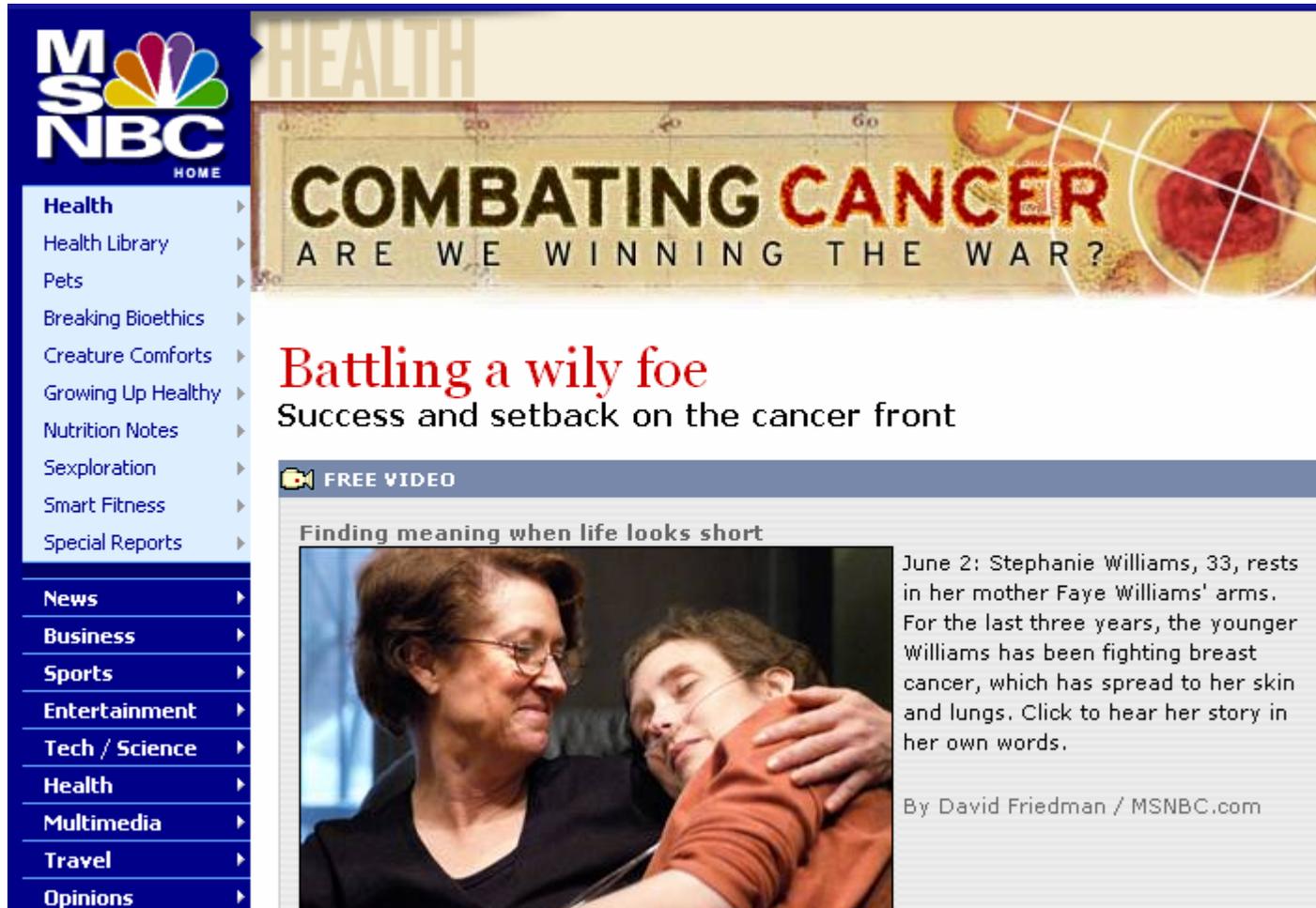
History and Vision



The Way it Has Often Been ...



But Stakes are High



The screenshot shows the MSNBC.com website's Health section. On the left is a navigation menu with categories like Health, News, Business, Sports, Entertainment, Tech / Science, Health, Multimedia, Travel, and Opinions. The main content area features a banner for 'COMBATING CANCER ARE WE WINNING THE WAR?' and an article titled 'Battling a wily foe' with the subtitle 'Success and setback on the cancer front'. Below the article title is a 'FREE VIDEO' section with a video player showing a woman being embraced by another woman, and a text block describing the video's content.

MSNBC HOME

- Health ▶
- Health Library ▶
- Pets ▶
- Breaking Bioethics ▶
- Creature Comforts ▶
- Growing Up Healthy ▶
- Nutrition Notes ▶
- Sexploration ▶
- Smart Fitness ▶
- Special Reports ▶
- News ▶
- Business ▶
- Sports ▶
- Entertainment ▶
- Tech / Science ▶
- Health ▶
- Multimedia ▶
- Travel ▶
- Opinions ▶

HEALTH

COMBATING CANCER

ARE WE WINNING THE WAR?

Battling a wily foe

Success and setback on the cancer front

FREE VIDEO

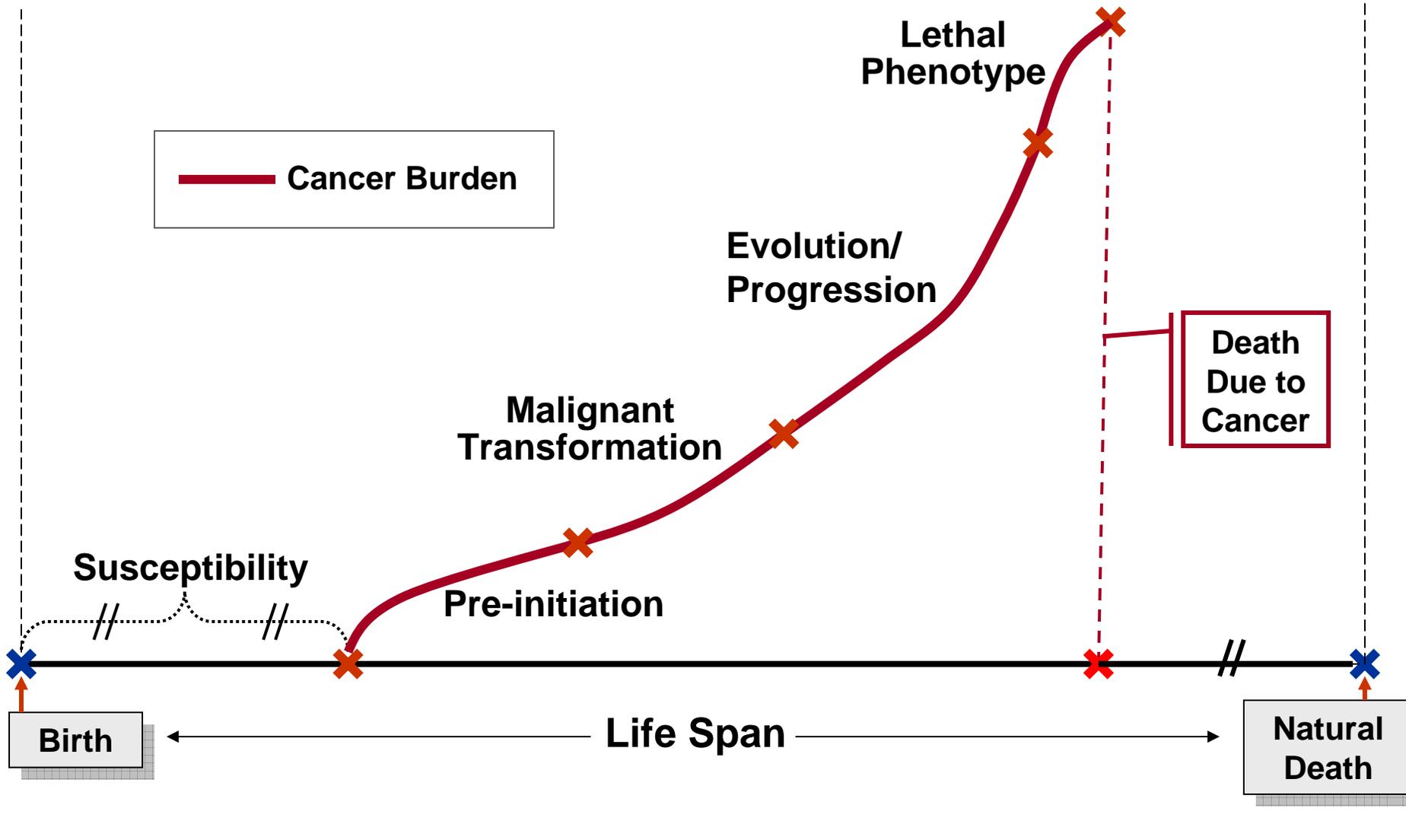
Finding meaning when life looks short



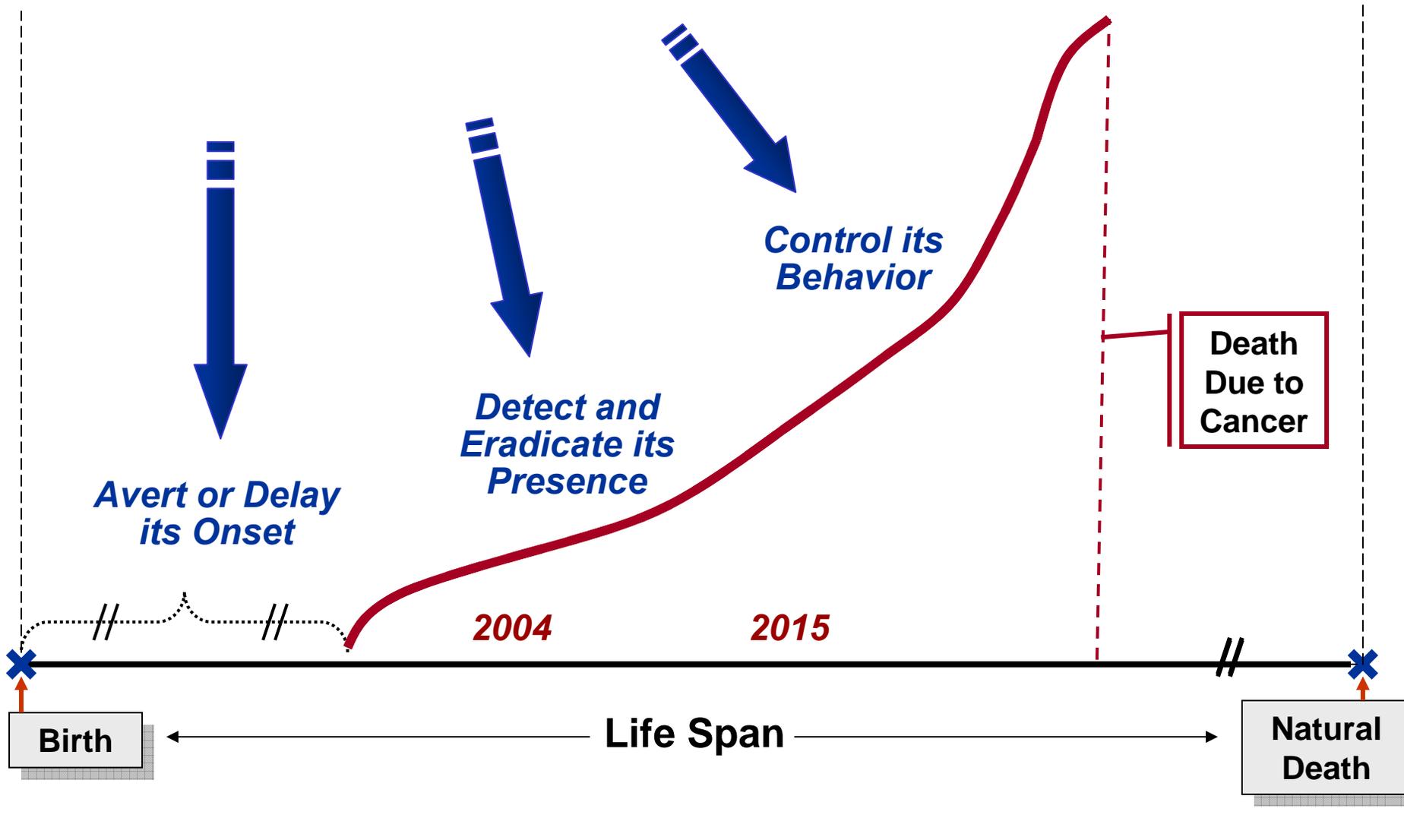
June 2: Stephanie Williams, 33, rests in her mother Faye Williams' arms. For the last three years, the younger Williams has been fighting breast cancer, which has spread to her skin and lungs. Click to hear her story in her own words.

By David Friedman / MSNBC.com

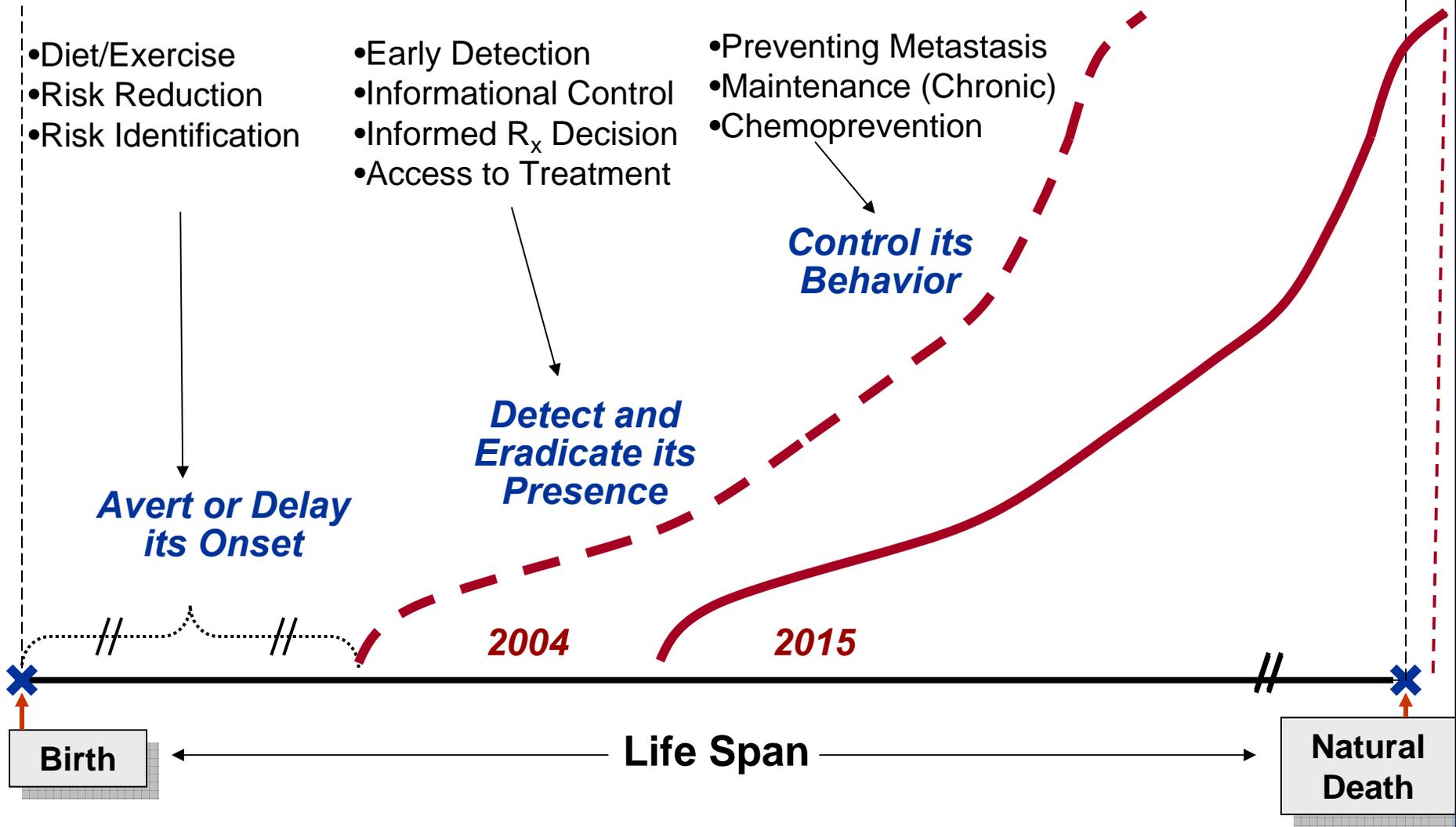
The Cancer Process



Opportunities for Intervention

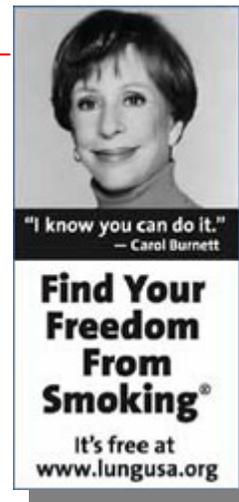


Opportunities for Communication



Traditional Channels

- Diet/Exercise
- Risk Reduction
- Risk Identification



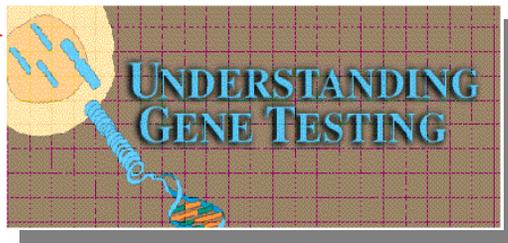
*Avert or Delay
its Onset*

Mass Media
Population "Targeting"
Community Intervention



Amplifying Capacity

- Diet/Exercise
- Risk Reduction
- Risk Identification



Avert or Delay its Onset

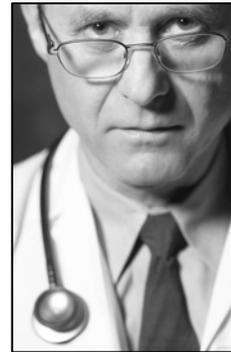
- "Psychographic" push
- Message tailoring
- Personal health technologies
- Genomic risk assessment



Traditional Channels

- Diet/Exercise
- Risk Reduction
- Risk Identification

- Early Detection
- Informational Control
- Informed R_x Decision
- Access to Treatment



Breast Cancer Awareness



Avert or Delay its Onset

Detect and Eradicate its Presence

*Awareness Campaigns
Patient Provider Interaction*



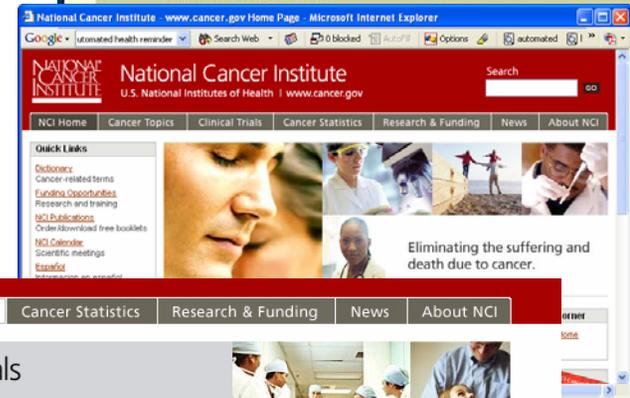
Amplifying Capacity

- Diet/Exercise
- Risk Reduction
- Risk Identification

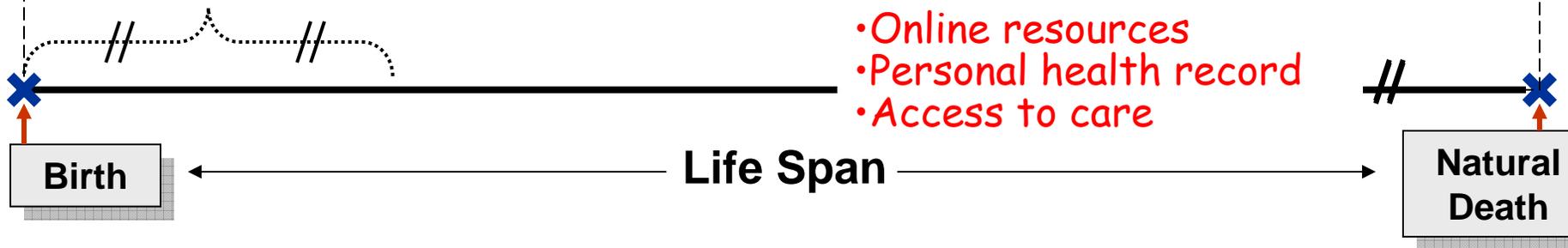
- Early Detection
- Informational Control
- Informed R_x Decision
- Access to Treatment

Avert or Delay its Onset

Detect and Eradicate its Presence



- Online resources
- Personal health record
- Access to care



Traditional Channels

- Diet/Exercise
- Risk Reduction
- Risk Identification

Avert or Delay its Onset

- Early Detection
- Informational Control
- Informed R_x Decision
- Access to Treatment

Detect and Eradicate its Presence

- Preventing Metastasis
- Maintenance (Chronic)
- Chemoprevention

Control its Behavior



Paper-Based Medical Records



Amplifying Capacity

- Diet/Exercise
- Risk Reduction
- Risk Identification

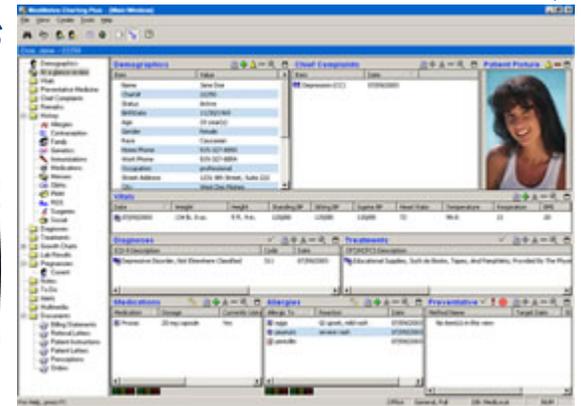
- Early Detection
- Informational Control
- Informed R_x Decision
- Access to Treatment

- Preventing Metastasis
- Maintenance (Chronic)
- Chemoprevention

Avert or Delay its Onset

Detect and Eradicate its Presence

Control its Behavior



- Electronic Medical Records
- Personal Monitoring



Experts Recommend National Surveillance Program



- To monitor changes in health information environment over time
- To explore usage across channels and sources nationally
- To combine channel usage with knowledge, attitudes, behaviors
- To build an evidence base for planners, administrators, communicators, practitioners, and policy makers

1999, Number 25

Cancer Risk Communication: What We Know and What We Need To Learn

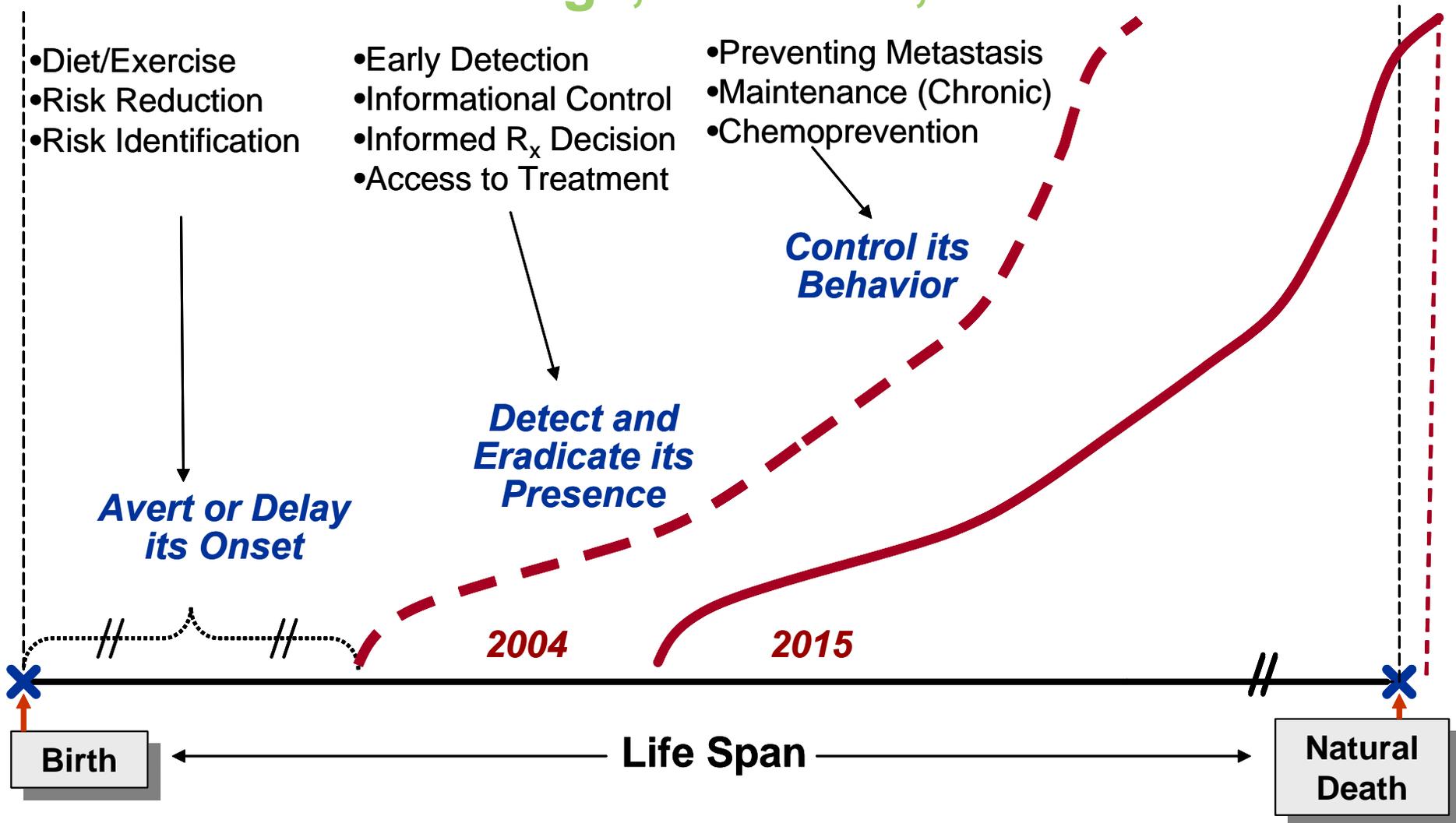
Health
Information
National
Trends
Survey

hints

HINTS I: Construction & Operations



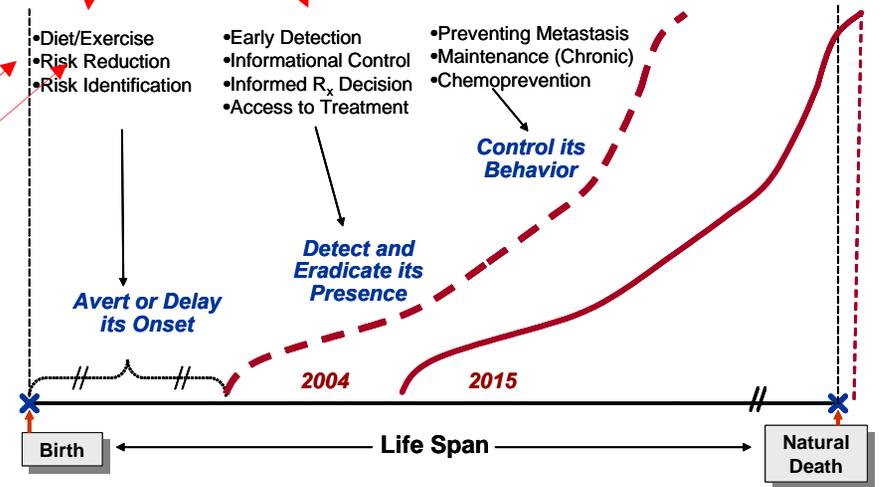
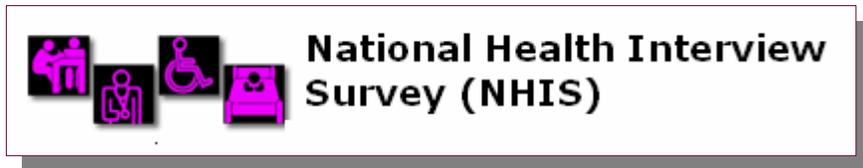
Measure Knowledge, Attitudes, Behavior



Measure Knowledge, Attitudes, Behavior

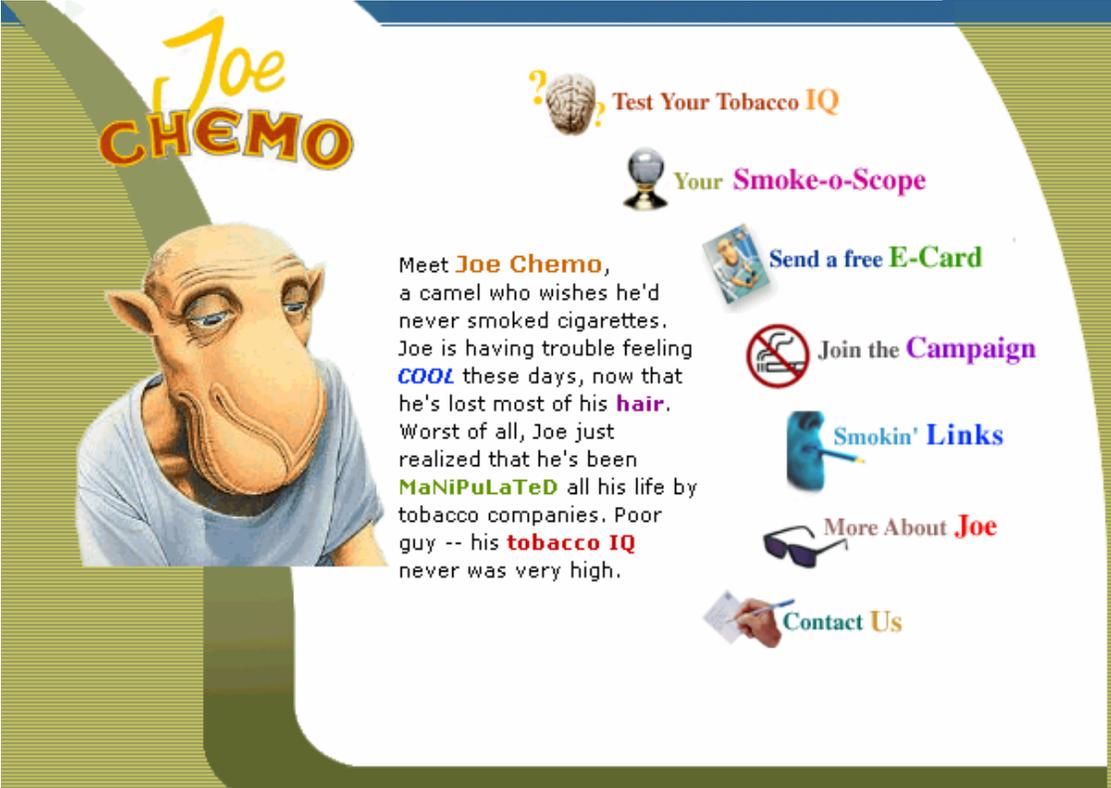


Marker Items From Other National Surveys



Measure Attributes of New Media

- Demassified
- Decentralized
- Interactive
- Adaptable
- Connected

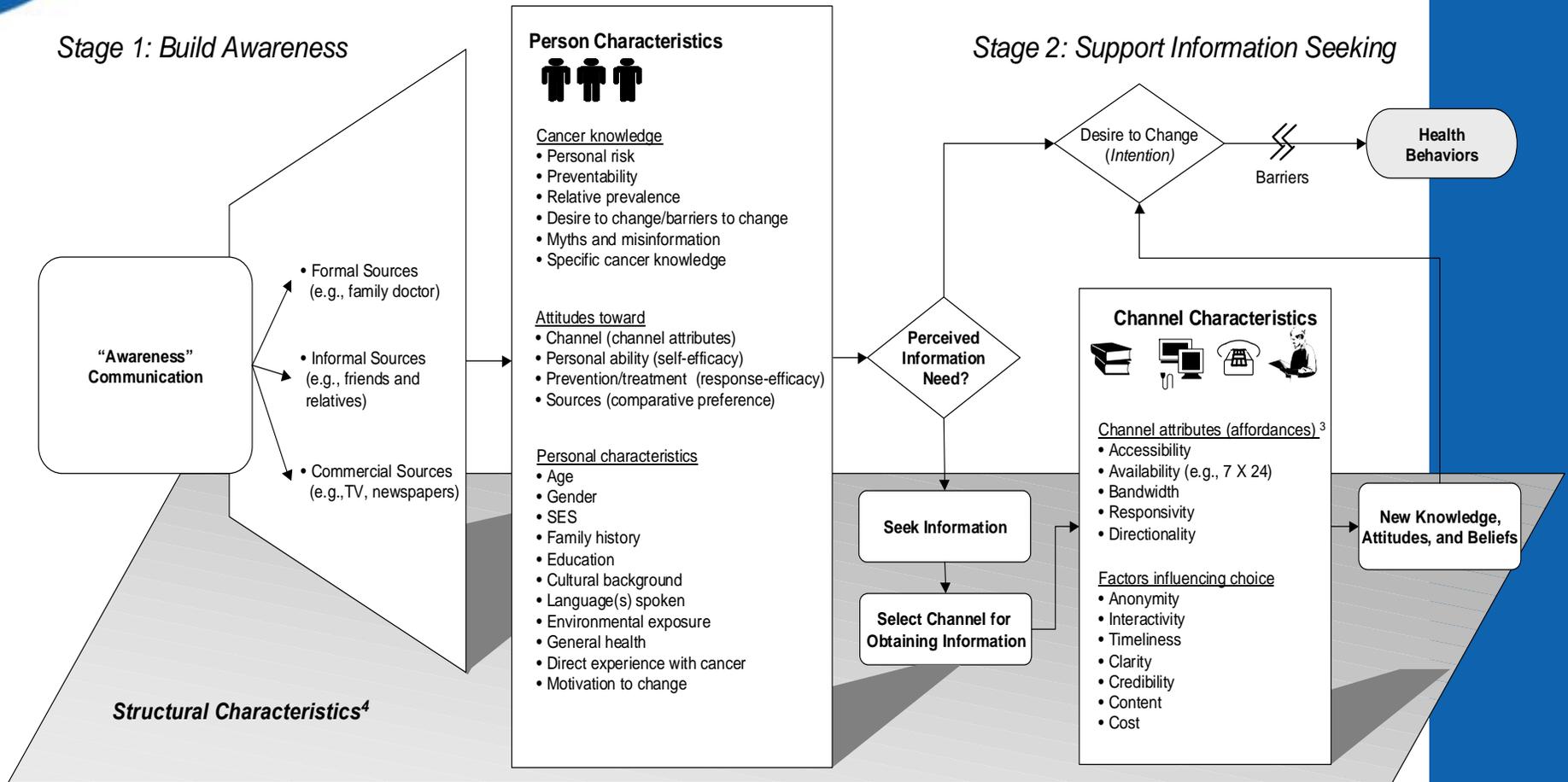


Joe CHEMO

Meet **Joe Chemo**, a camel who wishes he'd never smoked cigarettes. Joe is having trouble feeling **COOL** these days, now that he's lost most of his **hair**. Worst of all, Joe just realized that he's been **MaNiPuLaTeD** all his life by tobacco companies. Poor guy -- his **tobacco IQ** never was very high.

-  **Test Your Tobacco IQ**
-  **Your Smoke-o-Scope**
-  **Send a free E-Card**
-  **Join the Campaign**
-  **Smokin' Links**
-  **More About Joe**
-  **Contact Us**

Expand Framework to Accommodate New Media Attributes



Initial Set of Constructs

Constructs	# of Items
Health Communication	
Social ties/interpersonal channels	17
Media exposure	10
Internet usage (general)	25
Source outcomes	8
Message discrimination	9
Information seeking	20
Channel credibility, reliance	15
Information efficacy	5
Other	1
Cancer Knowledge, Attitudes	
Personal risk	2
Preventability	5
Relative prevalence	3
Desire to change/barriers to Change	27
Myths and Misinformation	7
Specific cancer knowledge	38
Cancer-Related Behaviors	
Screening (Breast, Cervical, Colon, Prostate)	
Alcohol consumption	4
Exercise	10
Fruits and vegetables	14
Weight control	3
Tobacco Use	30
Individual Characteristics	
Cancer history/ health status	18
Demographics	19
Access to health care	35



Timing: 65 Minutes

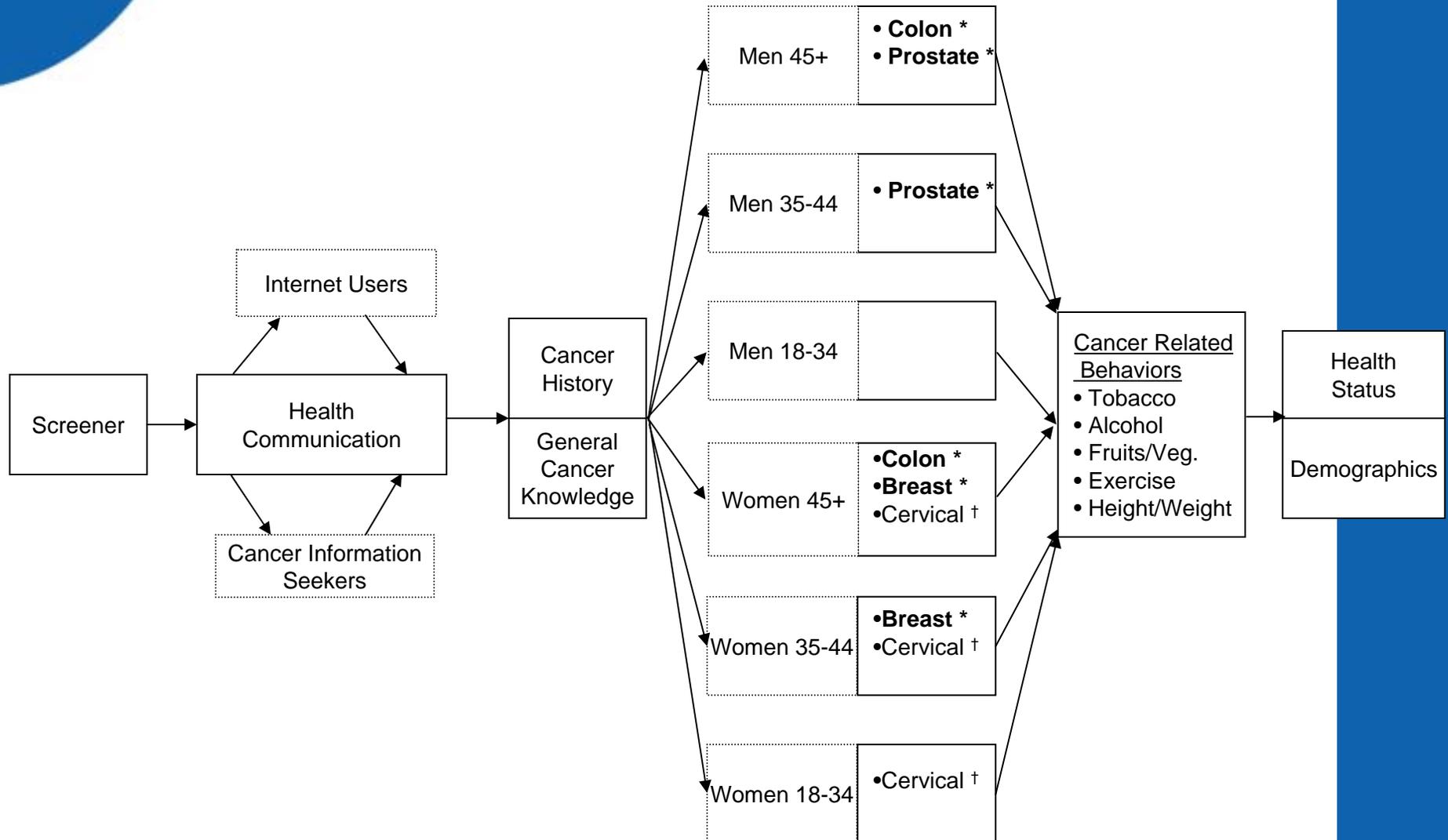
Health
Information
National
Trends
Survey

hints

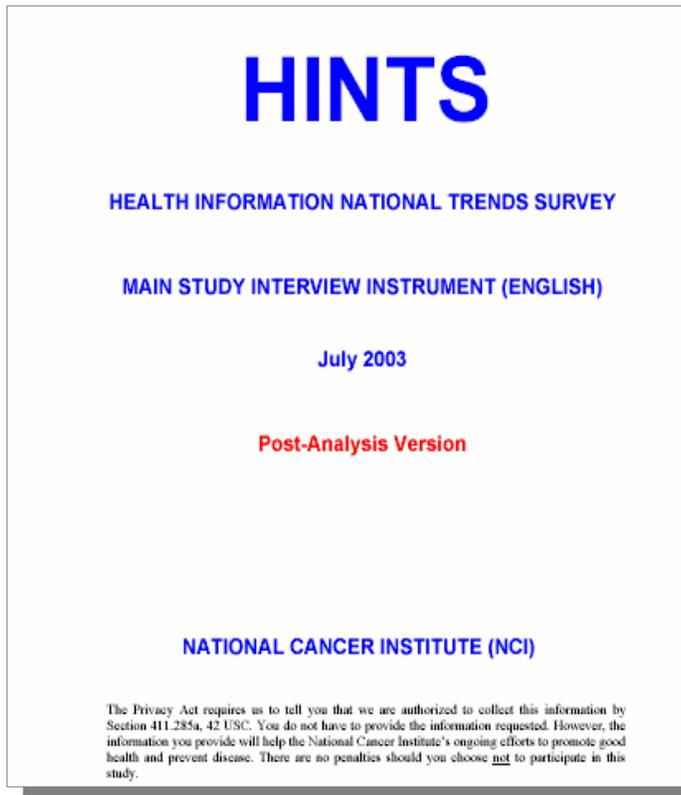
Conducted Extensive Pre-testing



Reduced, Reworked Structure



Streamlined Coverage: 30+ Minutes



Category and Topic Area	# of Questions
<i>Household Screener</i>	11
<i>Health Communication</i>	34
<i>Cancer History/General Cancer Knowledge</i>	16
<i>Cancer-Specific Risk / Screening</i>	
Colon cancer	28
Breast cancer	13
Cervical cancer	5
Prostate cancer	8
<i>Primary Cancer Risk Behaviors</i>	29
<i>Health Status and Demographics</i>	14
Total number of survey questions:	158



Data Sharing and Dissemination



Dissemination

Data Users (Richard Moser)

- Clean, prepare data for dissemination
- Conduct internal research on NCI priorities
- Release data set to extramural community
- Support scientific publication & research

Results Users (Kelly Blake)

- Coordinate with NCI Office of Communication
- Conduct needs analysis (APHA)
- Produce information products
- Distribute to targeted audiences

Data Sharing

<http://cancer.gov/hints/>

National Cancer Institute U.S. National Institutes of Health | www.cancer.gov

Cancer Control Home Help Contact Us

Health Information National Trends Survey (HINTS)

HINTS Home | About HINTS | Download Instrument | Download Data | HINTS Research

- Learn About HINTS
 - What HINTS does
 - How HINTS data are used
 - NCI presentations
 - Schedule of events
- Download Survey Instrument
 - HINTS I Sampling Plan
 - HINTS I Final Report
 - HINTS I Survey Instruments
 - HINTS I Codebooks
- Download Data
 - Registration Required
 - Dataset (last updated June 24, 2004)
 - Data in SAS format
 - Supporting materials
- See Research Using HINTS
 - Presentations
 - Registered research abstracts
 - Publications
 - Submit a research abstract

Announcements

- The Cancer Bulletin: NCI Announces Release of HINTS Data (2/17/2004)

Upcoming Meetings

- HINTS Results Users Meeting
November 10, 2004
Grand Hyatt Hotel
Washington, D.C. [Register Now!](#)
- HINTS Data Users Conference
January 20-21, 2005
Tradewinds Sandpiper Hotel & Suites
St. Petersburg, FL [Call for Abstracts](#)



- Posted data for download, Feb. 2004

Health
Information
National
Trends
Survey

hints

Data Sharing

<http://cancer.gov/hints/>

The screenshot shows the National Cancer Institute website for the Health Information National Trends Survey (HINTS). The page includes navigation links for 'Cancer Control Home', 'Help', and 'Contact Us'. A search bar is present. The main content area is titled 'Health Information National Trends Survey (HINTS)' and features several sections:

- Learn About HINTS**
 - ▶ What HINTS does
 - ▶ How HINTS data are used
 - ▶ NCI presentations
 - ▶ Schedule of events
- Download Data**
 - ▶ Registration Required
 - ▶ Dataset last updated June 24, 2004
 - ▶ Data in SAS format
 - ▶ Supporting materials
- Download Survey Instrument**
 - ▶ HINTS I Sampling Plan
 - ▶ HINTS I Final Report
 - ▶ HINTS I Survey Instruments
 - ▶ HINTS I Codebooks
- See Research Using HINTS**
 - ▶ Presentations
 - ▶ Registered research abstracts
 - ▶ Publications
 - ▶ Submit a research abstract
- Announcements**
 - The Cancer Bulletin: NCI Announces Release of HINTS Data (2/17/2004)
- Upcoming Meetings**
 - HINTS Results Users Meeting, November 10, 2004, Hyatt Hotel

A red arrow points from the 'Download Survey Instrument' link to a callout box containing the following text:

HINTS
HEALTH INFORMATION NATIONAL TRENDS SURVEY
MAIN STUDY INTERVIEW INSTRUMENT (ENGLISH)
July 2003
Post-Analysis Version
NATIONAL CANCER INSTITUTE (NCI)

Below this text are two identical privacy notices:

The Privacy Act requires us to tell you that we are authorized to collect this information by Statute 42 USC, 21120. You do not have to provide the information requested. However, the information you provide will help the National Cancer Institute's ongoing efforts to promote good health and prevent disease. There are no penalties should you choose **not** to participate in this study.

- Posted data for download, Feb. 2004
- Posted technical documentation

Data Sharing

<http://cancer.gov/hints/>

The screenshot shows the HINTS website interface. At the top, it says 'National Cancer Institute' and 'U.S. National Institutes of Health | www.cancer.gov'. Below that is 'Cancer Control & Population Sciences'. A search bar is visible. The main content area is titled 'Health Information National Trends Survey (HINTS)'. There are several navigation links: 'Learn About HINTS' (What HINTS does, How HINTS data are used, NCI presentations, Schedule of events), 'Download Data' (Registration Required, Dataset last updated June 24, 2004, Data in SAS format, Supporting materials), 'Download Survey Instrument' (HINTS I Sampling Plan, HINTS I Final Report, HINTS I Survey Instruments, HINTS I Codebooks), and 'See Research Using HINTS' (Presentations, Registered research abstracts, Publications, Submit a research abstract). There is an 'Announcements' section with a link to 'The Cancer Bulletin: NCI Announces Release of HINTS Data (2/17/2004)'. Below that is an 'Upcoming Meetings' section with links for 'HINTS Results Users Meeting November 10, 2004 Grand Hyatt Hotel Washington, D.C.' (with a 'Register Now!' button) and 'HINTS Data Users Conference January 20-21, 2005 Tradewinds Sandpiper Hotel & Suites' (with a 'Call for Abstracts' button). At the bottom, there is a list of authors for a report: 'The Health Information National Trends Survey (HINTS): Development, Design, and Dissemination' by David E. Nelson, Gary L. Kerner, Bradford W. Hesse, Robert T. Cusler, Gordon Wills, Nereka R. Barbera, Barbara K. Rimer, K. Vise Viswanath, Neil Weinstein, and Sara Alden. A photograph of a large conference room with many tables and chairs is also visible on the left side of the screenshot.

- Posted data for download, Feb. 2004
- Posted technical documentation
- Hosting data users conference, Jan. 2005

Health
Information
National
Trends
Survey

hints

Creating Informatics Support for Public & Researchers



How many hours do Americans watch Television?

A screenshot of the HINTS website interface. The top navigation bar includes "National Cancer Institute", "U.S. National Institutes of Health", and "www.cancer.gov". Below this, there are links for "Home", "Cancer Topics", "Clinical Trials", "Cancer Statistics", "Research & Funding", "News", and "About NCI". The main content area features the "hints" logo and the text "Health Information National Trends Survey". A search bar is located in the top right corner. The main content area displays a survey question: "On a typical weekday, about how many hours do you watch television?". Below the question is a pie chart visualization. To the right of the chart, there are controls for "Chart Type" (set to "Pie"), "Data Included" (set to "Sample Percentage"), and "Output Type" (set to "Flash"). At the bottom of the chart area, there is a table with the following information: "Variable: H:", "SAS Variable Name: HCEaWatchTV", and "SAS Format Name: XXXX.XX.XXXX".

HINTS
Database
SAS,
PSS

Working with Results Users



How can I use findings to communicate to the public better?



Today, people have more ways than ever before to get information about cancer. They can watch TV, listen to the radio, talk to others by phone or in person, read newspapers and magazines, talk to their healthcare providers, or surf the Web. We know there's a lot of information out there—and that it varies in quality and reliability.

What we did not know, until now, was how to bridge the gap between the information people want and need and the information they get. Where do people turn for guidance on diet and exercise? What happens when a person or loved one needs to make important medical decisions about treatment or cancer care? What channels do they rely on and to what sources do they turn? What makes them believe a source is credible?

The National Cancer Institute's Health Information National Trends Survey (HINTS) is answering those and many other questions.

Where can I learn more?
You can find more information online at <http://hints.cancer.gov> where you can also:

- Download HINTS data
- See HINTS research including presentations, abstracts, and publications
- Download the HINTS survey instrument

National Cancer Institute
Division of Cancer Control and Population Sciences
6130 Executive Boulevard
Suite 6134
Bethesda, Maryland 20892
<http://hints.cancer.gov>



NH Publication No. xxxxxxx

HINTS
How Americans find and use cancer information

HINTS
How Americans find and use cancer information

hints

DRAFT

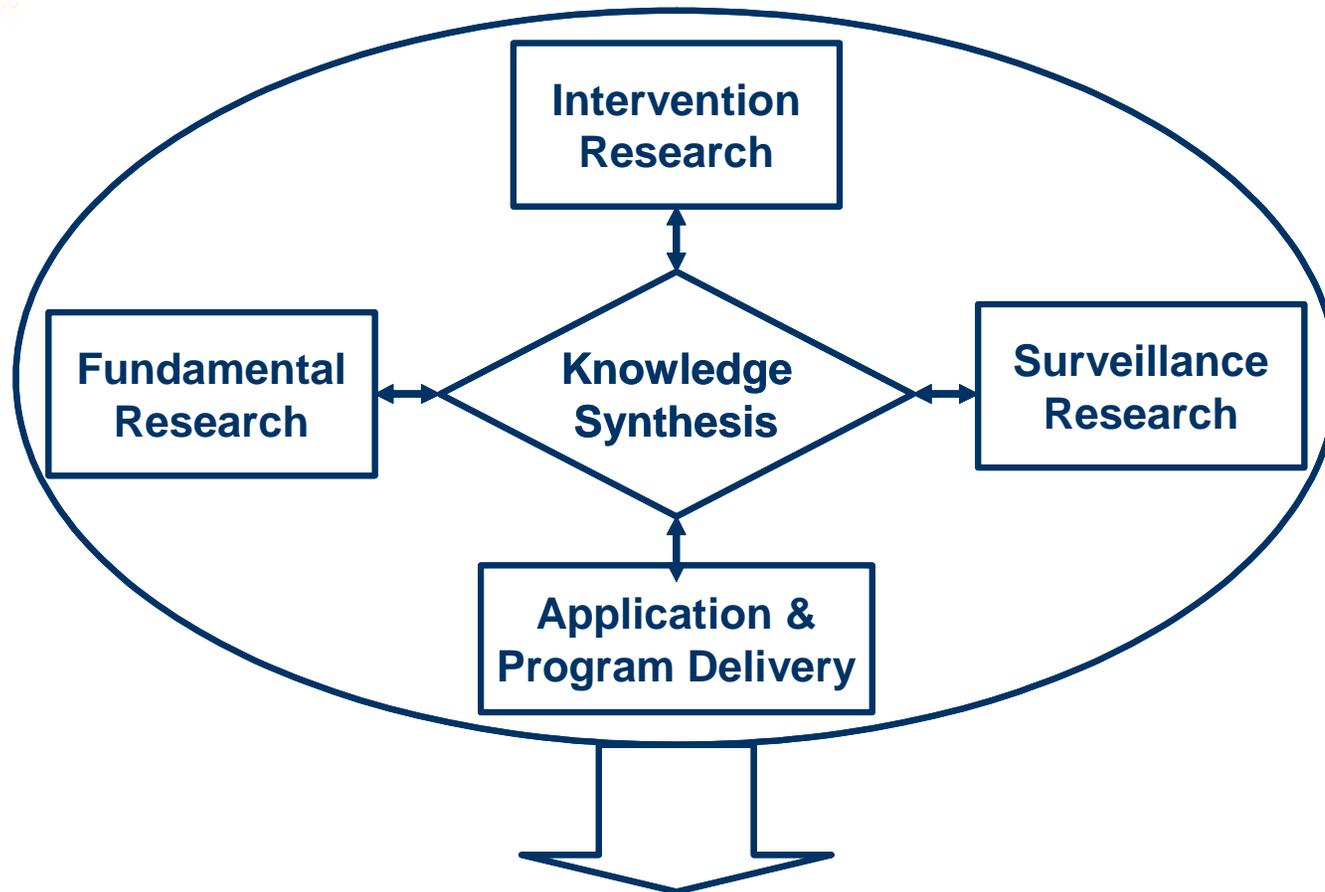
**Creating Knowledge
Products**



HINTS II and Beyond



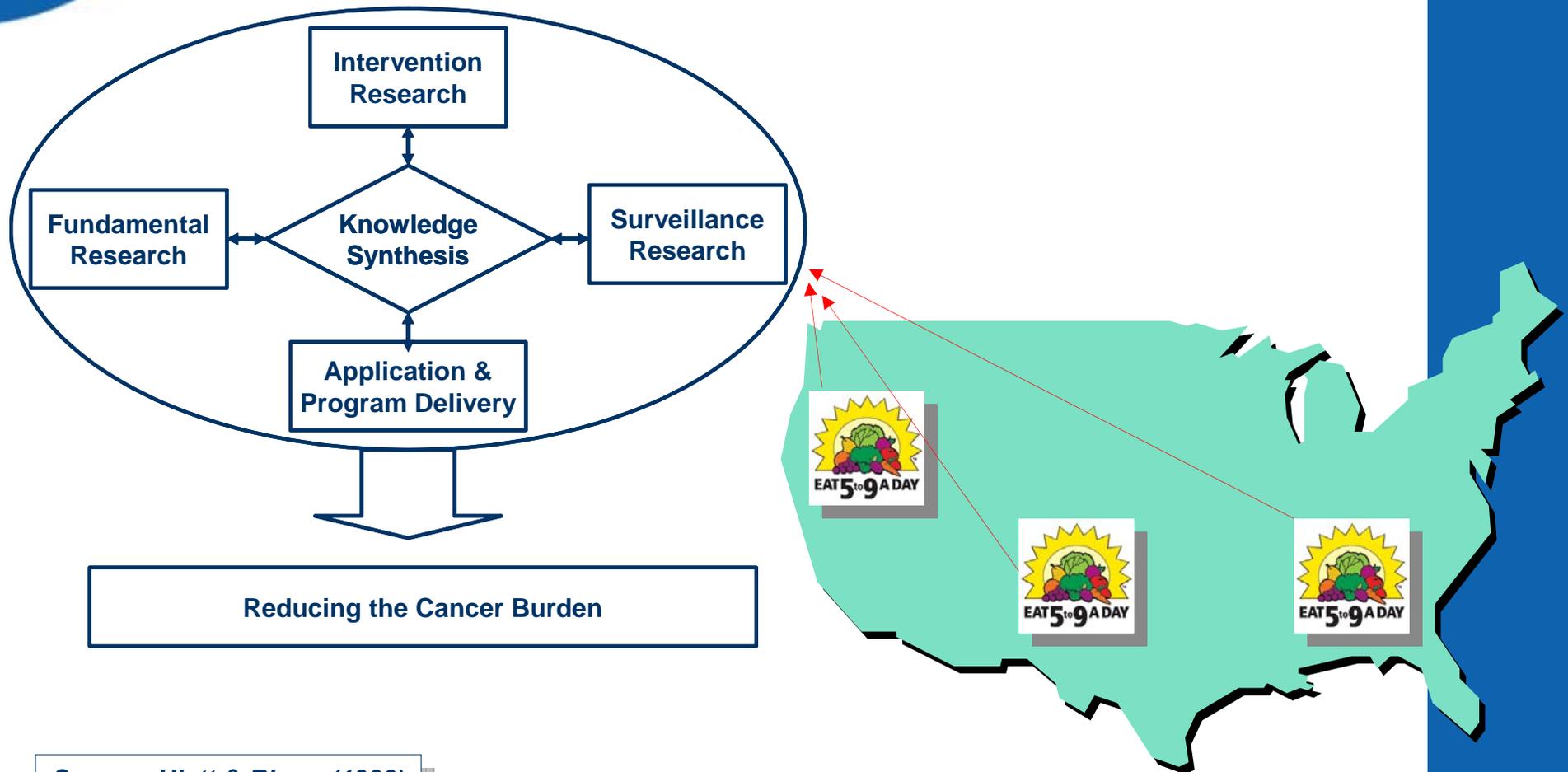
NCI Strategic Framework



Source: Hiatt & P

Reducing the Cancer Burden

Goal: Retain 50% of Survey for Surveillance Purposes



Source: Hiatt & Rimer (1999)

Goal: Dedicate Remaining Space to New Research Ideas



***Social Support,
Health Disparities***



***Lay Models of
Cancer***

HINTS 2

HEALTH INFORMATION NATIONAL TRENDS SURVEY 2

MAIN STUDY INSTRUMENT – draft 1/18/05

January 2005

NATIONAL CANCER INSTITUTE (NCI)

The Privacy Act requires us to tell you that we are authorized to collect this information by Section 411.285a, 42 USC. You do not have to provide the information requested. However, the information you provide will help the National Cancer Institute's ongoing efforts to promote good health and prevent disease. There are no penalties should you choose not to participate in this study.

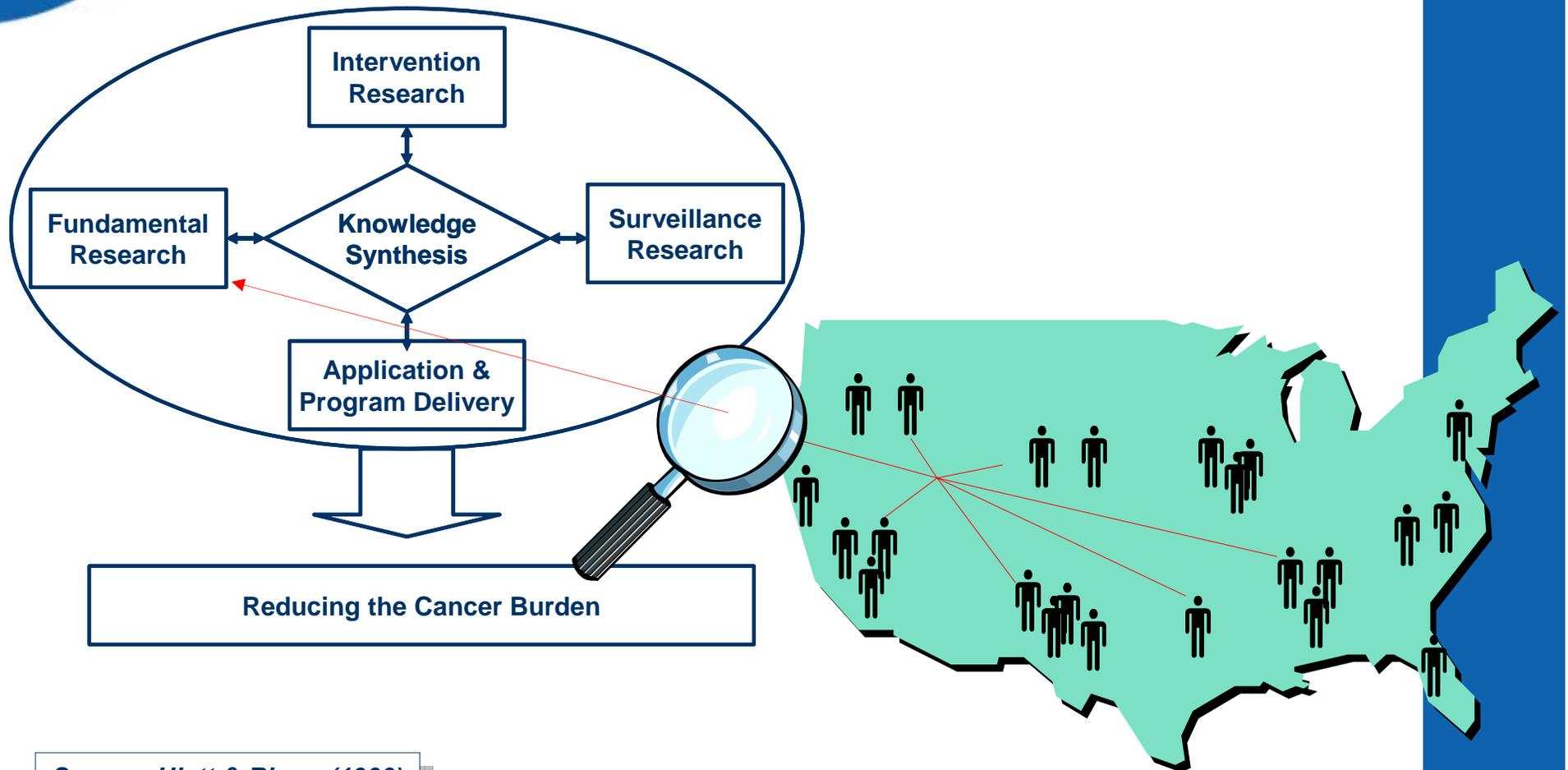
The information we collect in this study is in accordance with the clearance requirements of the paperwork Reduction Act of 1995. We may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a valid control number in the Office of Management and Budget in the Federal Government. We estimate that it will take you between 25 and 30 minutes to answer our questions in this interview. This includes the time it takes to hear the instructions, gather the necessary facts, and complete the interview. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: NIBL, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-0538)

OMB # 0925-0538
Expiration Date: 11/30/2007



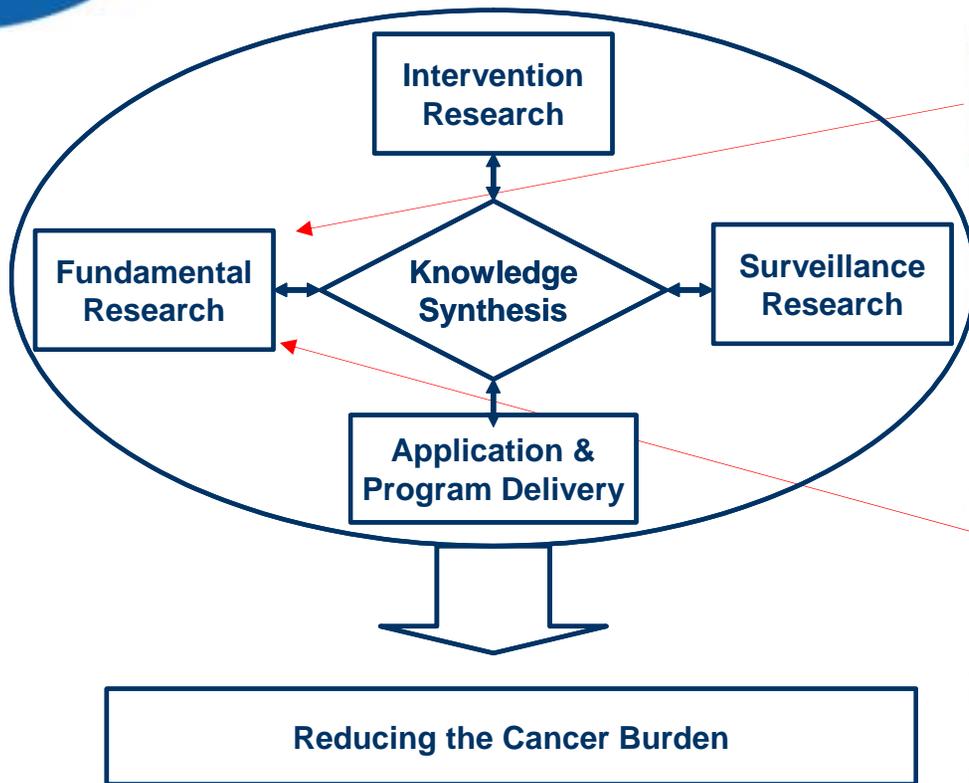
***Media Exposure,
Seeking/Scanning***

Goal: Offer Complement to Laboratory Science



Source: Hiatt & Rimer (1999)

Goal: Monitor Effects of New Communication Media



Attributes

- Demassified
- Decentralized
- Interactive
- Adaptable
- Connected

Source: Hiatt & Rimer (1999)

Goal: Advance Methods & Science Relevant to New Media

Total Survey Error:

- ϵ → coverage
- ϵ → sampling
- ϵ → response rates
- ϵ → measurement

The screenshot shows a web browser window titled "Hints 2 Survey - Microsoft Internet Explorer". The page header includes the National Cancer Institute logo and the title "Hints 2 Survey". Below the header, there are tabs for "Hints 2 Survey" and "Help". The main content area is yellow and contains the following text:

Before the questions specifically about cancer, there are some questions about how you get information in general.

On a typical weekday, about how many hours do you...
watch television?

If you NEVER watch television, please enter 95.

Don't know

Rather not answer

At the bottom of the form, there are three buttons: "Save and Exit", "Previous", and "Next".

Health
Information
National
Trends
Survey

hints

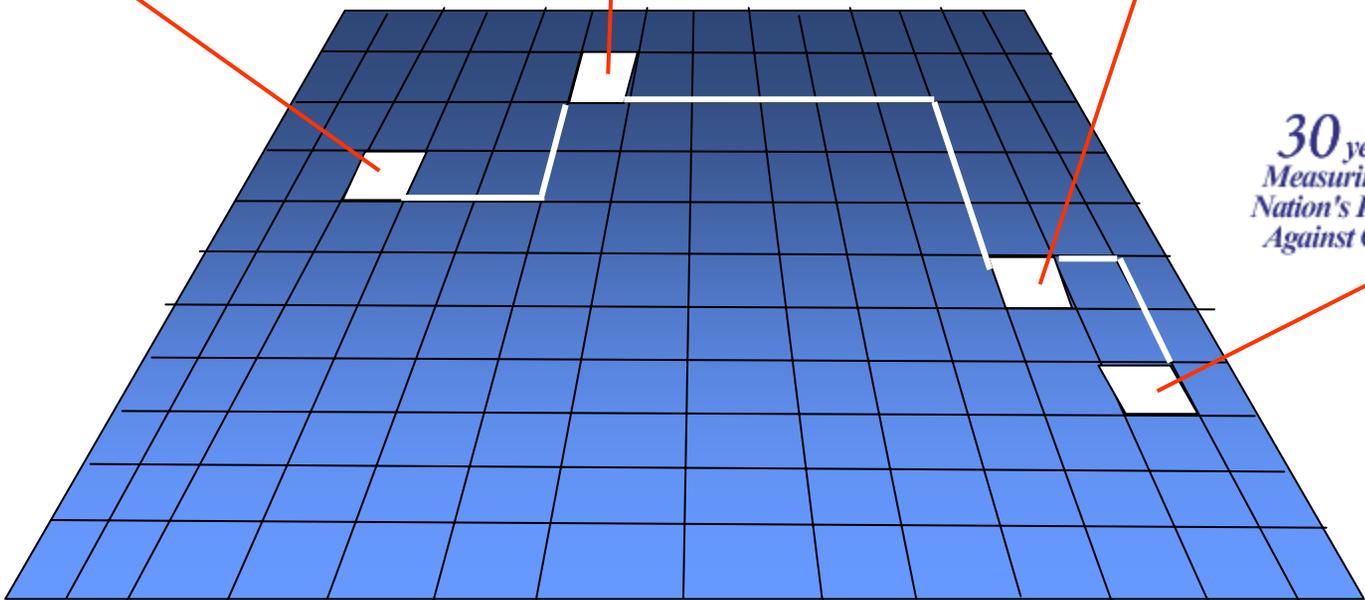
Goal: Use Informatics Approach to Enable "Big Science"

Health
Information
National
Trends
Survey

hints



*30 years of
Measuring Our
Nation's Progress
Against Cancer*

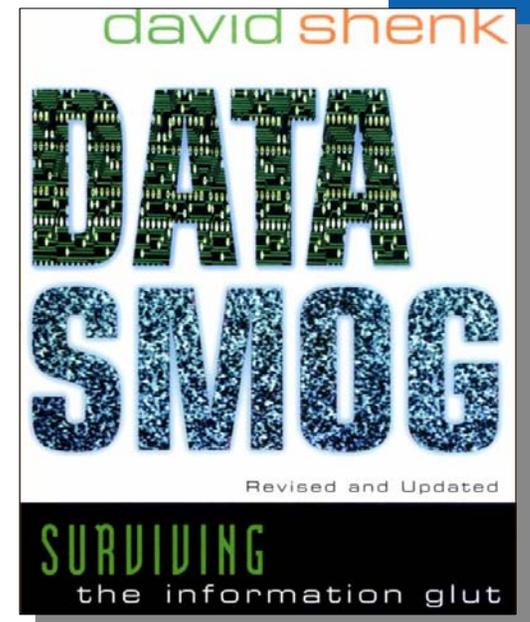


Dates to Remember

- Feb. 14, 2005: H2 in field
- Sept. 30, 2005: Data delivered to NCI
- Oct. 1, 2005: H3 development begins
- March 30, 2006: Public release H2
- May 1, 2006: H3 frozen



Have We Enabled Behavior?



Tell me how much you agree or disagree with the following statements

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
“It seems like almost everything causes cancer.”	11%	40%	31%	18%
“There’s not much people can do to lower their chances of getting cancer.”	6%	22%	36%	36%
“There are so many different recommendations about preventing cancer, it’s hard to know which ones to follow.”	36%	41%	15%	9%

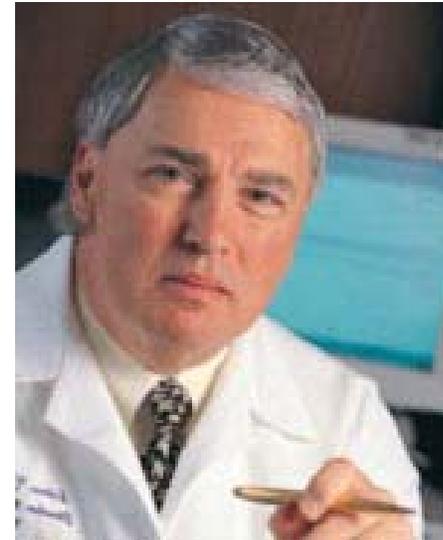


The NCI 2015 challenge goal: ... eliminate death and suffering due to cancer

“When I look into the eyes of a patient losing the battle with cancer, I say to myself, It doesn’t have to be this way.”

Dr. A.C. von Eschenbach, M.D.
Director, National Cancer Institute

The Nation’s Investment in Cancer Research (2003)



Health
Information
National
Trends
Survey

hints

For More Information:

<http://cancer.gov/hints>

hesseb@mail.nih.gov