

Actual versus Preferred Sources of Cancer Information: A Growing Disconnect in the U.S. Population

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Background

•The Health Information National Trends Survey (HINTS) was designed to support the National Cancer Institute's Extraordinary Opportunity in Cancer Communication initiative by providing a means to systematically evaluate the public's knowledge, attitudes, and behaviors relevant to health communication.

•In the past few decades, there has been an 'explosion' of available cancer-related information through various media, including the Internet.

•Use of HINTS data to understand public use, preferences, and experiences with cancer information seeking provides an evidence base for improving the development and implementation of health information technologies (HIT).

Study Goals

- Examine trends in the American public's:
 - use of and preference for sources of cancer information
 - experiences with cancer information seeking
 - trust in cancer information sources
- Discuss the use of national data in service of improving HIT.

Methods

Data were from the 2003 and 2005 Health Information National Trends Survey (HINTS). Analyses were conducted using SUDAAN: All data were weighted to provide representative estimates to the adult U.S. population.

Survey Items

Information Seeking: Have you ever looked for cancer information from any source?

Sources

Actual: The most recent time you looked for cancer information, where did you go?

Preferred: The next time you have a strong need to get information about cancer, where will you go?

Information Seeking Experience

Agreement with a series of items assessing experience with information seeking was assessed.

Results

•There was an **increase** from 2003 to 2005 in percentage of respondents who reported looking for cancer information (44.9% to 48.8%; $\Delta = 3.8$, $p < 0.01$)

Sociodemographic Characteristics: 2003 to 2005

(Counts & Weighted Percentages)	Demographics			
	HINTS 2003		HINTS 2005	
	N	%	N	%
Total	6369	100.00	5586	100.00
Sex				
Male	2521	48.08	1929	48.11
Female	3848	51.92	3657	51.89
Age				
18-34	1655	31.20	1037	24.93
35-49	1954	31.03	1490	28.55
50-64	1492	21.50	1522	25.26
65-79	943	12.85	1122	16.72
80+	299	3.41	397	4.54
Race/Ethnicity				
White, non-Hispanic	4276	71.76	4103	70.14
Black, non-Hispanic	716	10.49	438	10.28
Hispanic	764	11.71	496	12.82
Non-Hispanic Other	312	6.04	299	6.76
Income				
Less than \$25,000	1709	29.08	1307	25.25
\$25,000 to <\$50,000	1745	30.74	1217	26.30
\$50,000 to <\$75,000	955	17.44	924	21.16
\$75,000 or more	1214	22.75	1150	27.30
Education				
< High school	747	16.90	687	15.53
High school graduate	1828	31.99	1447	28.40
Some college	1637	26.83	1545	30.58
College graduate	1927	24.28	1696	25.49



Conclusions

Trends in Cancer Communication

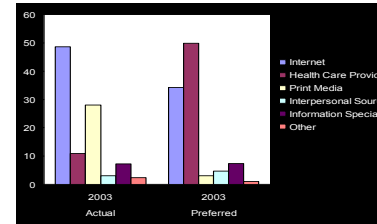
•Patterns of use, preference, and trust in information sources reveal increasing reliance on healthcare professionals for information and decreasing reliance on the Internet.

•These findings suggest a disconnect between HIT product development and nationally representative scientific research

Practice Implications

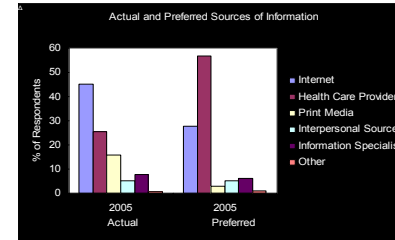
- HINTS provides a distinct set of measures spanning interdisciplinary areas relevant to cancer.
- HINTS data can be used by practitioners, researchers, HIT developers and policy makers in many disciplines and practice settings to understand how best to communicate health information in an environment of rapidly changing IT.

Cancer Information Seeking and Sources



Actual: Significant change ($p < .0001$) Healthcare Provider and Print Materials; Preferred: Significant change ($p < .0001$) Healthcare Provider and Internet.

- There was an **increase** from 2003 to 2005 in the percentage of respondents who preferred and sought information from a health care provider (49.5% to 59%, $\Delta = 5.5\%$, $p < .0001$; 10.9% to 23.5%, $\Delta = 12.7\%$, $p < .0001$).
- There was a **decrease** from 2003 to 2005 in the percentage of respondents who reported the Internet as their preferred source of cancer information (34.2% to 27.8%, $\Delta = 6.4\%$, $p < .0001$).
- In both 2003 and 2005, roughly 50% of all respondents reported the Internet to be their most recent source of cancer information.



Closing the Gap

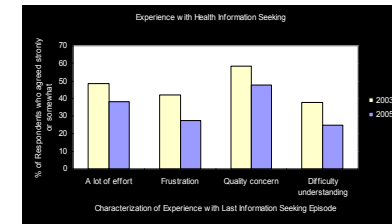
•Catalyze an ecosystem of evidenced-based technology research around health-care solutions; focus decidedly on the consumer- the person in their everyday life- not the IT enterprise.

•To resolve the "information gap" (access, quality, simplicity, organization, coordination, relevance), HIT and research organizations must collaborate. Scientific research should inform IT development, and IT development should inform research direction. HINTS data should be applied to health information technology design and development to affect population-level change and to improve the delivery of user-centered care.

Possible Next Steps

- Incorporate health care professionals and a standardized, scientifically driven ratings system into online health information delivery
 - Idea:** Personalized community cancer portals derived from one interactive, open source, research driven portal (i.e. Revolution Health).
 - Idea:** HIT search engine that organizes and surfaces health resources (both for public consumers and research professionals) based on a standardized, scientific "scoring" system (i.e. healthline.com)
- Combine health-focused, scientifically driven search engine with online, interactive health portal

Information Seeking Experiences



All changes significant ($p < .0001$)

- Data from 2003 and 2005 indicate concern over quality of health information; However, overall experiences in health information seeking appear to be improving.
- The percentage of respondents seeking cancer information on the Internet increased from 2003 to 2005, while ratings of experience with such information decreased.
- HINTS 2003 and 2005 data suggest that respondents increasingly distrust the Internet as a source of health information.
- Health care professionals far surpassed the Internet and all other media as the number one source of trusted health information.

