

# CONSUMER HEALTH INFORMATION PREFERENCE SURVEY OF CALIFORNIA INTERNET USERS

Traditionally, the healthcare industry has made minimal investments in information technology, but recently at least three factors have combined to challenge this way of doing things. The first centers on managed care and its need to monitor both services and costs. The second involves employers', payers' and consumers' escalating demands for reliable quality and outcomes information; and the third concerns efforts to move services from inpatient to outpatient settings. Together, these factors are making it necessary to move more health-related data and information more efficiently to more diverse healthcare settings. Many discussions, articles and studies focus on how these demands for information are affecting different players in the healthcare arena (physicians, health plans, employers), but much less is being done to collect consumers' points of view. This study begins to fill that gap. It is different from most Internet users' surveys because it was not conducted online but through a random survey of California households.

The Advisory Board to the National Health Foundation's Center for Health Information Technology designed a survey concerning the views of Californians' with access to the Internet about health and health care information. It addresses several different issues:

- Whether and where Californians with Internet access seek health information;
- Which sources they find useful and easy to use and which they trust and distrust;
- What health information they want and which health information sources will impact their behaviors; and
- How they feel about integrating Internet use into their health care.

Data were collected by MIS International of Cerritos, California from households throughout the state using telephone surveys during August 1998. A total of 1003 interviews were conducted in English and Spanish with individuals 18 years old or older from a randomly generated sample of residences. Of these households, 407 (40%) had access to the Internet. The maximum sampling error for percentages based on this sample (n=407) is +/-5% at the 95% confidence level.

Nationally, about 29% of households have access to the Internet; in California 40% have access. Although California demographics are somewhat different from national data, they are similar to those from other states with high rates of Internet access (Texas, Florida, New York). Thus looking at California can provide information about future trends in other parts of the country.

This survey confirms much of what we know intuitively about Californians and their relationship to the Internet and health information. It also suggests that the Internet holds great promise as a channel through which health and health behaviors can be influenced and illuminates several challenges to be overcome if electronic communication and information dissemination are to be fully integrated into healthcare. The challenges center on consumers' deep-seated concerns about Internet privacy and confidentiality and the need for health educators to become smarter about how interactive health information systems can influence behaviors.

## SUMMARY OF FINDINGS

*A majority of Californians with Internet access report that their physicians and healthcare providers give them the most useful health information and are the sources most likely to be consulted and the most trusted.*

- Regardless of age, gender, ethnicity, race, where they live and annual income, a majority of Californians with Internet access report that their physicians and healthcare providers are the most useful sources of health information (53%), the sources they would most likely consult (64%), and the sources they most trust (77%).

Sources	Most useful in past year		Most likely to consult in future		Most trusted	
	N=223		N=407		N=407	
	#	%	#	%	#	%
Physician & healthcare providers	118	53	257	63	304	77
Family member	13	6	34	8	27	7
Friend	8	4	7	2	6	2
Telephone advice line (1-800#)	10	4	6	2	1	0
Employee assistance program	20	9	6	2	0	0
Newspaper articles	5	2	0	0	0	0
Special health and medicine advice book	15	7	34	8	20	5
Magazine or journal articles	10	4	7	2	13	3
Internet	24	11	53	13	22	6
Health fair	0	0	3	1	0	0

*Although Californians with Internet access report their physicians and healthcare providers are the best sources for health information, gender, ethnicity/race and annual income appear to influence which secondary sources they also consult.*

- Women are more likely to also have consulted newspaper articles (37% compared with 24% of men) and telephone advice lines (16% compared with 7% of men). Asian/Pacific Islanders (30%) and Hispanics (22%) are more likely than African Americans (7%) and Whites (6%) to also obtain information from health fairs. Those with annual incomes between \$50,000 and \$100,000 are more likely to obtain information from the Internet (48% compared with 34% for those earning less than \$50,000/year and 32% for those earning over \$100,000).

*Although Californians with Internet access report their physicians and healthcare providers are the best sources for health information, few of them report they are the easiest sources to use.*

- Over half (56%) of Californians with Internet access report seeking health information during the past year (37% of them through the Internet). Among those who seek health information, 36% report that physicians and healthcare providers are the easiest sources to use, 15% report the Internet is the easiest to use and 12% report special health and medicine advice books are easiest to use. Combining the easiest and second easiest sources to use shows a similar pattern. Physicians and healthcare providers are the easiest to use (55%) and the Internet (24%) remains the second easiest. Those with annual incomes under \$50,000 are less likely (4%) than the other groups (18% for \$50,000-\$100,000 and 17% for over \$100,000) to find special health and medical advice books easiest to use; they are more likely (14%) than other income groups (5% and 3% respectively) to find family members the easiest sources for health information.

*Reports on trusting and distrusting the Internet are complicated.*

- A small proportion (5%) of Californians with Internet access report they would most trust the Internet as a source of health information. Only 6% of those who use the Internet every day or several times a week report they would most trust it as a source. When asked which sources they do not trust, the Internet ranked fourth (12%) after friends (24%), newspaper articles (21%), magazine or journal articles (13%), along with telephone advice lines (12%). Among frequent users, 8% report they do not trust the Internet.

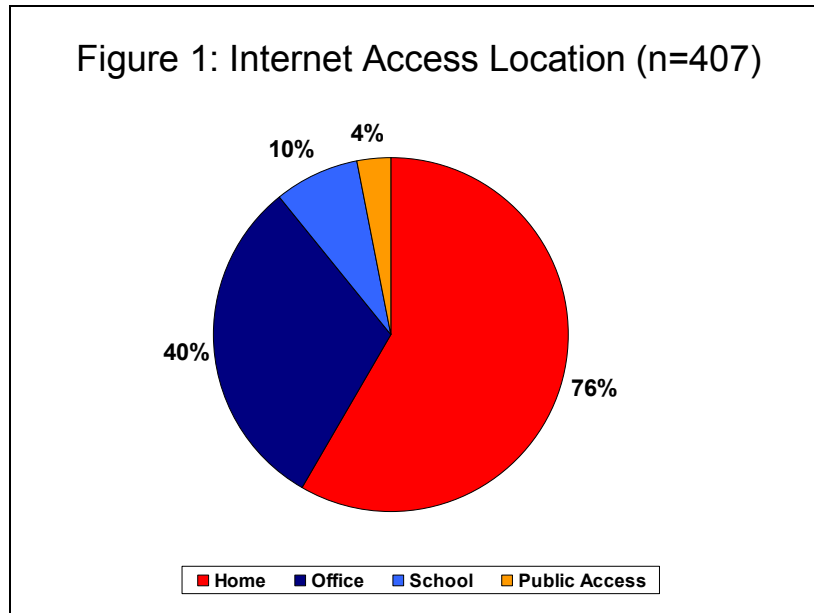
None of those with access to the Internet think the information they get from it will impact their behaviors.

- A majority of respondents (52%) report that information from physicians and healthcare providers will most likely impact their behaviors. Only 2% report that Internet information would impact their behaviors. Age does appear to affect which other sources of information are thought to impact behaviors; those 60+ are more likely to respond to information from physicians and healthcare providers (79% compared with 47%-66% for other age groups); and the 18-24 year olds are more likely to respond to information from family members (28% compared with 9-12% for other age groups).

Source	Total		Age							
	#	%	18-24		25-44		45-60		60+	
#			%	#	%	#	%	#	%	#
Physician & healthcare providers	212	52	24	47	92	50	68	66	27	79
Family member	47	12	14	28	20	11	9	9	4	12
Friend	15	4	1	2	11	6	2	2	0	0
Telephone advice line (1-800#)	2	0	0	0	2	1	0	0	0	0
Employee assistance program	3	1	1	2	2	1	0	0	0	0
Newspaper articles	12	3	2	4	6	3	3	3	1	3
Special health and medicine advice book	20	5	1	2	15	8	3	3	1	3
Magazine or journal articles	56	14	6	12	33	18	16	16	1	3
Internet	6	2	2	4	2	1	2	2	0	0
Health fair	0	0	0	0	0	0	0	0	0	

While most access the Internet from their homes, different age, ethnic/racial and income groups are also more likely to access it from other locations.

- Over three-quarters (76%) access the Internet from their homes, 41% from their offices, 10% from schools and 4% from public access locations (e.g., libraries). Whites (80%) and those living in the suburbs (82%) are most likely and African Americans (50%) and those living in large urban areas (68%) least likely to access the Internet from their homes. Those 25-44 (48%) and 45-60 (45%) years old are more likely and those with annual incomes under \$50,000 (26%) are least likely to access it from their offices. The 18-24 year olds (30%) and African Americans (20%) are most likely, and those with annual incomes between \$50,000-\$100,000 (6%) are least likely, to access it through schools.



*Frequency of Internet use correlates with where access derives, gender and age of user.*

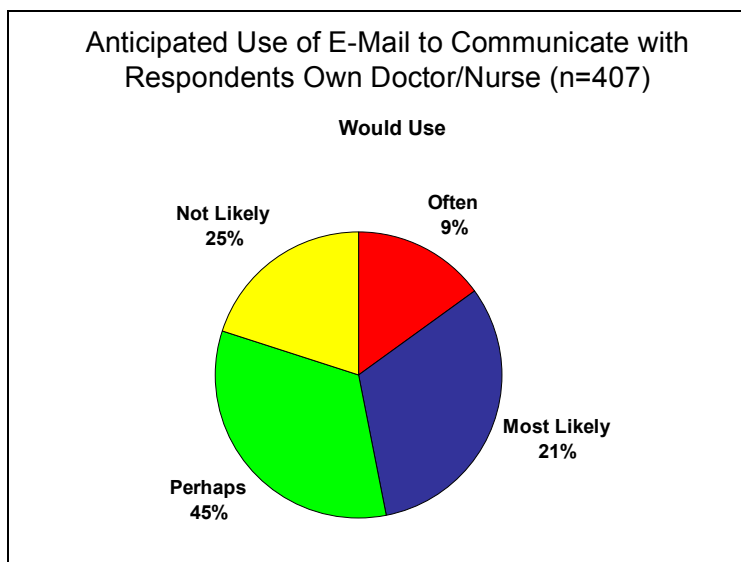
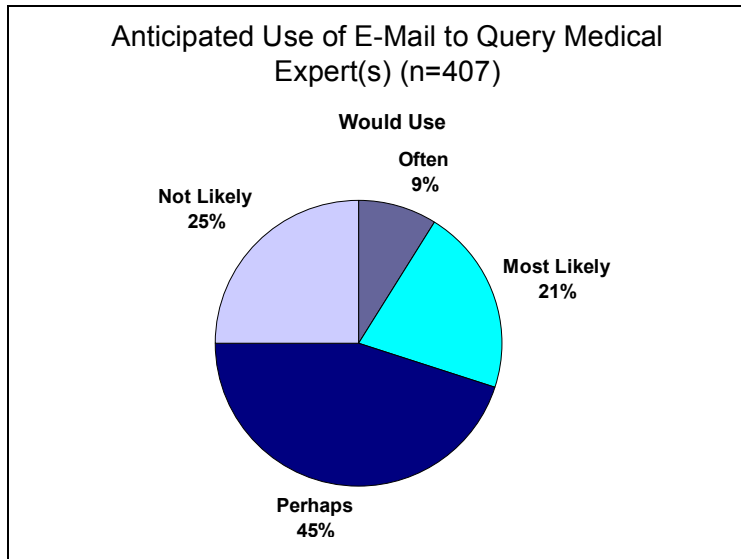
- Those who access the Internet from their homes (47%) and from schools (46%) are more likely to go online everyday. Men (52%) are more likely to go online everyday than women (33%), and those living in the suburbs (44%) and rural areas (45%) are more likely than those living in large urban areas (37%) to go online everyday.

*Women want health information, but men go online more frequently.*

- Women are more likely to have sought health information for themselves or for their families during the past year (62% versus 49% of men), and they are more likely to use newspaper articles (37% versus 24%) and telephone advice lines (16% versus 7%) to find this information. They are also more likely to want information about alternative medical treatments (74% versus 60%). However, women are less likely to go online everyday and when they do search the Internet for health information they are less satisfied than men with their searches (10% of women "very satisfied" and 6% "not satisfied" compared with 16% of men "very satisfied" and 0.6% "not satisfied").

*Not all Internet users want to exchange e-mails with medical professionals or with their own doctors.*

- Only 30% report they would anticipate "often" using, or would "most likely" use, the ability to exchange e-mails with medical professionals. This proportion increased to 46% when asked how often they would use the ability to e-mail their own doctors or nurses. Suburbanites (51%) are more reticent, being most likely to report that they would "perhaps" use a service to communicate with a medical professional, and those 60 plus (51%) are most likely to report that they would not use it. Frequent users are more likely to report that they would "often" or "most likely" use both services.

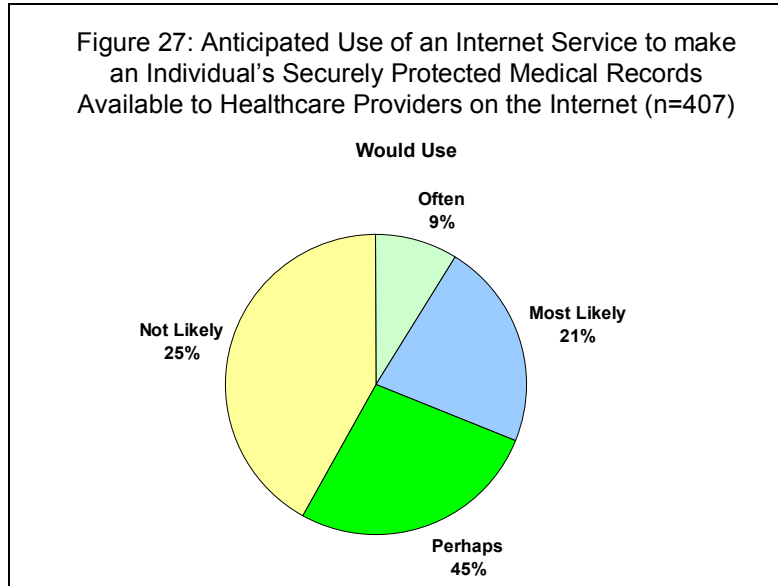


*Different groups are differently interested in using the Internet to refill prescriptions or to schedule doctors appointments.*

- Almost half of all respondents (49%) report that they anticipate "often" using, or would "most likely" use, these services. Women (23%) are more likely than men (13%) to anticipate using them "often." Whites (21%) are more likely to anticipate using them "often," and African Americans (50%) are more likely to report they would "most likely" use them. Those 60 plus (64%) and those with annual incomes of under \$50,000 (41%) are "not likely" to use them.

*Less than one-third would use a service making their securely protected medical records available to their healthcare providers (including emergency room doctors) via the Internet.*

- Only 9% anticipated "often" using such a service, and 40% report that they are "not likely" to use it. There are no significant differences in willingness to use this service based on gender, age, ethnicity/race, annual income, where they are living (urban, suburban or rural areas), or frequency online.



*Concerns about privacy and confidentiality are major stumbling blocks to using electronic medical records.*

- Only 14 percent report they would not have any concerns about the privacy and confidentiality of medical records on the Internet. One quarter (25%) report that they would never agree to having their medical information available via the Internet even with security safeguards. Men (19%) are more likely than women (9%) to report having no concerns, and women (28%) are more likely than men (21%) to report that they would never agree to having an electronic medical record. Those living in rural areas are most likely (26%), and those living in the suburbs least likely (10%) to report not having any concerns.