

Health and Disease Management Outside the Clinic Doors: There's an app for that!

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The Learning Healthcare System: 2010 and
Beyond

Institute of Medicine

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Objectives

- Review context of care for providers and patients
- Review challenges of providing care outside of the office visit
- Share promising information technology approaches to help patients access information and care
- Discuss policy implications and strategies for spread



“...not a creature was stirring...”

(Now, save the doctor going out on a call.)

You remember how it starts—then beloved old Christmas poem:
*“Twas the night before Christmas,
 when all through the house
 Not a creature was stirring, not even a mouse.”*

Well, that isn't always true for the doctor. Sometimes there's just no one at all for him—even on Christmas Eve. Instead of heat, there's... December or July... night or day... his or her... no matter when you call, he comes!

According to a recent nationwide survey:

MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE

YOUR "T-ZONE" WILL TELL YOU...

T for Taste...
T for Throat...

that's your proving ground for any cigarette. See if Camels don't suit your "T-Zone" to a "T."

© 1954 American Tobacco Company, New York, N.Y.



• Not a single branch of medicine was overlooked in this nationwide survey made by three leading independent research organizations. To 113,597 doctors from Canada to Mexico, from the Atlantic to the Pacific went the query—*What cigarette do you smoke, Doctor?*

The brand named most was Camel.

Like anyone else, a doctor smokes for pleasure. He appreciates rich, full flavor and cool mildness just as any other smoker. If you don't happen to be a Camel smoker now, try Camels. Let your "T-Zone" give you the answer.

Camels





This website wants to run the following add-on: 'QuickTime' from 'Apple Inc.'. If you trust the website and the add-on and want to allow it to run, click here...

like + iPod

Rock and Run

Rock the Gym

Stay in Sync

Buy Now

Stay in Sync

Connect

Cool down, sync up, and see how far you've come. Just as seamlessly as it syncs your music, your iPod nano, iPod touch, or iPhone 3GS also syncs your runs and workouts. Just connect your iPod or iPhone 3GS to your Mac or PC, and iTunes automatically sends your workout data to nikeplus.com. There you'll see every run and every workout you've completed. You can track your progress, set goals, connect with other runners, and challenge friends. Or if you're using the new built-in Pedometer on iPod nano, sync it to your computer to keep track of your daily steps and help meet your fitness goals.



Environmental Challenges and Trends

- Decreasing numbers of primary care physicians: 100K shortage projected for 2025
- Accreditation incentives to provide better care coordination, beyond the clinical visit (NCQA Patient Centered Medical Home)
- Consumer trends of personalized medicine
- Aging of the population with growing chronic medical conditions
- Increasing racial/ethnic diversity of the US population

Approaches to Care Management

- Patient Electronic Health Record Portals
- Web-based support groups and blogs
- eVisits



NEWLY DIAGNOSED?



PATIENT CENTERED CARE



SELF MANAGEMENT TOOLS



SHARED CARE PLAN



Newly Diagnosed?
 Enter here to learn more about your condition, find out what to do next, and to gather the tools to become the most important member in your health care team.

Patient Centered Care
 The patient centered model is based on ten assumptions that try to take into account all the needs of the patient. Patient centered care subscribes to the belief that the patient has strengths, values and experiences that are important in the healthcare experience and relationships.

Self Management Tools
 Enter here to learn how to keep yourself as healthy as possible, and minimize your risk of further health problems and unwanted visits to the hospital.

Shared Care Plan
 The Shared Care Plan is a secure web-based, patient-owned tool that lets patients share up to date information with their Care Teams to help manage their chronic conditions and promote the flow of information between the patient and care team members.



Home **March 2010** **Foot Health Month!** **Nutrition Month!**

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In the Spotlight



Talk With Your Healthcare Provider

MARCH 2010

When you visit your healthcare provider, you may find they have many patients to see. As a result, your visit may be shorter than you might like. Do not despair! There are ways to make the most of every visit. You and your healthcare provider can come away from each visit feeling more satisfied. One way to improve your visit is for you to come prepared. Another way to improve your visit is to speak up. Be involved in your healthcare and do things to make your visits helpful. [Read More »](#)

Healthy Eating for Diabetics



Healthy eating starts by using the plate method to ensure a balanced meal. You can add low starch vegetables. You can eat more fiber. You can control the amount

How to Prevent Diabetic Foot Problems



If you are a diabetic, it is important to practice good foot care. Did you know that diabetes is a leading cause of foot problems?

- [Prescription Refill](#)
- [Emergency Contacts](#)
- [Providers & Physicians](#)
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- [Military Health History](#)
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- [VA Honors Veterans](#)

Virtual Tour
Get a peek at the many

Member Login

User ID:

Password:

Login

[Forgot User ID?](#)
[Forgot Password?](#)
 First time My HealthVet user?
Register today!
REGISTER

New Health Partnerships Demonstration: Fargo Health Center

- Federally Qualified Health Center in Fargo, ND
- 70% of patients on Medicare/Medicaid or uninsured
- Diabetes as target
- Sharing of information with providers
- Wanted to learn from peers
- Started a blog that providers could access
- Patient and provider satisfaction re: ability to share questions and information



Español

- Home
- Patients
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- Health Plans
- Employers



RelayHealth In The News

Electronic Visits with Doctors on the Rise
ABC affiliate KGO-TV San Francisco, CA

Online Health Calls
NBC Today Show

The Doctor Will Text You Now
The Wall Street Journal

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[Find Your Doctor](#)

[Sign In](#)

User ID

Password

[Sign In](#)

Remember my User ID

[Forgot your User ID or Password?](#)

Patients

RelayHealth is a secure, private way to communicate with your doctor online. Take care of non-urgent healthcare matters—quickly and easily. You can even save money by doing an online consultation. [Learn how . . .](#)



Providers

Free up phone lines, increase patient satisfaction
[More . . .](#)

Health Plans

Increase member satisfaction, boost sales
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News

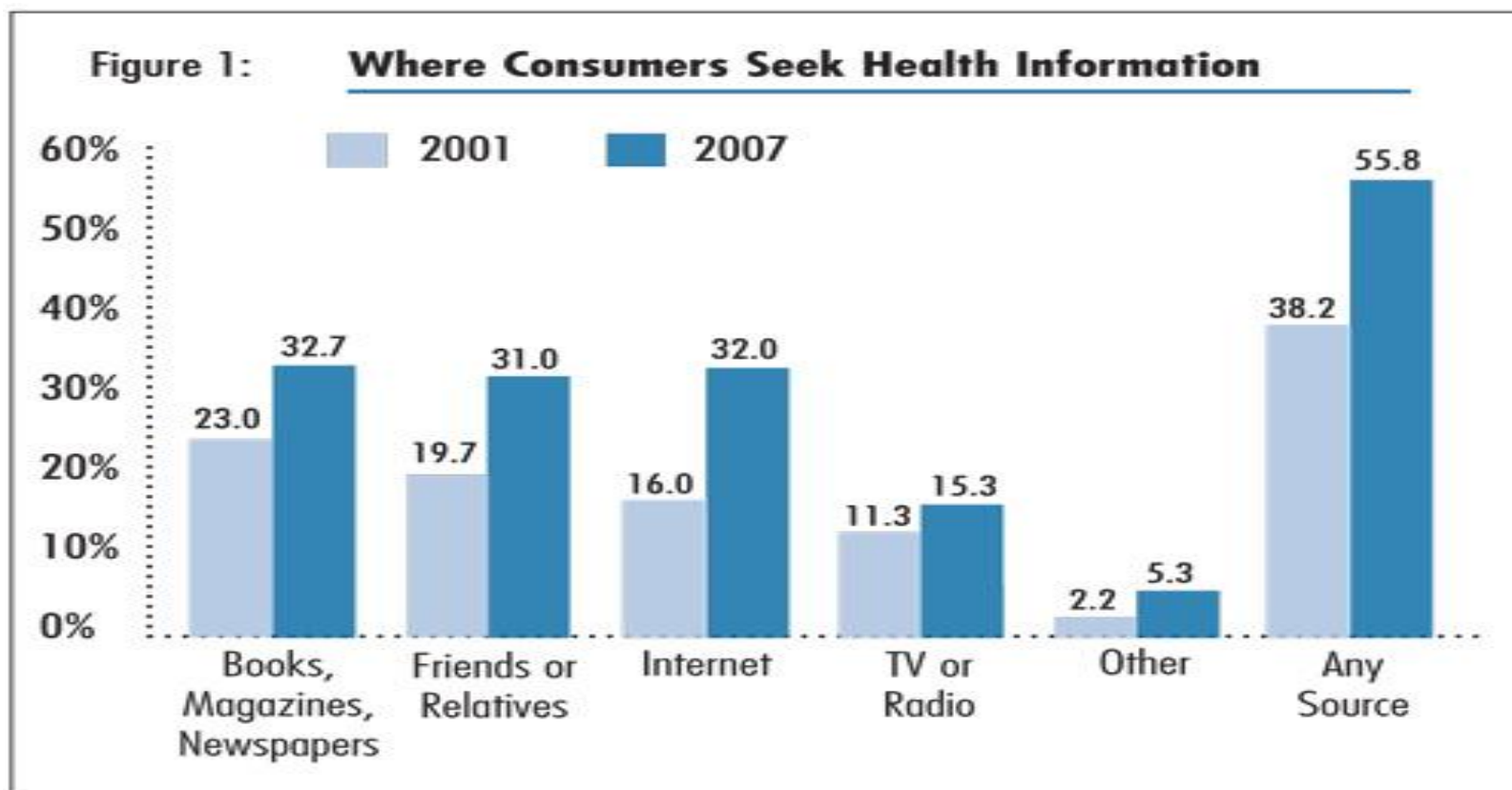
3/1/2010 - RelayHealth and NXT Demonstrate Data Exchange on NHIN at Spartanburg Regional Healthcare System

Relay Health Evaluation

- Sponsored by Blue Shield Foundation of California
- Encounter period June 2000-May 2002 for 5,727 patients
- Studied impact of clinically structured secure online communication
- Outcomes: healthcare costs, patient satisfaction and physician satisfaction
- Reduction in office-based claims costs ($p < .01$) and total claims costs ($p < .05$)
- Physicians findings: easy to use (72%), satisfying (53) and preferable for non-urgent care (53%)
- Patient finding: 50% less like to miss work, 45% less like to report a doctor's visit, 36% less likely to telephone doctor's office

Challenges to Adoption

- Social acceptability
- Digital divide in poor communities
- Penetration of the Electronic Health Record
- Reimbursement



All 2001-2007 differences are statistically significant at $p < .05$.

Note: Categories are not mutually exclusive; respondents could select multiple categories.

Sources: HSC 2001 Community Tracking Study Household Survey and HSC 2007 Health Tracking Household Survey



Tu, Ha T, and Genna R. Cohen, *Striking Jump in Consumers Seeking Health Care Information*, Tracking Report No. 20, Center for Studying Health System Change, Washington, D.C. (August 2008).

Where do Americans go for health information

- 86% of all adults ask a health professional, such as a doctor.
- 68% of all adults ask a friend or family member.
- 57% of all adults use the internet.
- 54% use books or other printed reference material.
- 33% contact their insurance provider.
- 5% use another source not mentioned in the list.

**Lee, CJ. Does the Internet Displace Health Professionals?
Journal of Health Communication, July 2008**

Digital Divide

- 2009: 79% whites vs. 67% of blacks vs. 80% of Latinos use Internet
- Latinos w annual incomes <\$30K increased 17 percentage points from 2006 to 2008
- Wireless handheld Internet use higher for Blacks and Latinos than whites (48%, 47%, 28%)

Pew Internet and American Life Project
www.pewinternet.org

Penetration of Electronic Health Records

- 2007-2008 survey
- 17% of ambulatory practices have EHR's
- 26% planned to purchase within next 2 years
- Upfront costs burdensome for smaller practices
- Need to study impact of stimulus package funding for FQHC's

DesRoches, CM, et.al, Electronic Health Records in Ambulatory Care, The New England Journal of Medicine, July 2008

Reimbursement for eVisits

- Revision of Current Procedural and Terminology (CPT) Codes in 2008
- Allows for coding with CPT 99444
- Requirement of one billing per episode of care over a seven day period
- Includes follow-up activities email including: pharmacy, ordering imaging and lab services

To the Future...

- Growing trend of use of health technology to support people with chronic illnesses
- Patients see the Internet as a good source of information, but trust their doctors
- Shortage of primary care physicians, patient expectations of availability and reimbursement will stimulate future growth of health information technology interventions

Supplementary Table 1:	Adult Consumers' Information Seeking About Personal Health Concerns, 2001 and 2007 (Regression-Adjusted)¹					
	All Adults					
	Sought Information From Any Source		Sought Information From Multiple Sources		Sought Information From the Internet	
	2001	2007	2001	2007	2001	2007
All Adults	38.8%	55.1%*	21.7%	34.6%*	16.3%	31.7%*
Chronic Conditions						
None (R)	33.5	49.6*	18.2	29.8*	13.8	28.3*
One	43.3#	59.6*#	24.2#	38.8*#	19.3#	34.7*#
Two or More	49.1#	66.0*#	29.3#	43.7*#	13.9#	27.7*#
Sex						
Female (R)	42.9	60.0*	25.2	39.3*	18.6	35.4*
Male	34.4#	49.9*#	17.9#	29.5*#	13.9#	27.7*#
Age Group						
18-34 (R)	43.0	57.9*	24.0	35.6*	20.0	36.3*
35-49	41.2#	56.4*	23.9	36.8*	19.6	36.1*
50-64	36.1#	54.5*#	20.4#	35.1*	13.6#	29.2*#
65 and Older	31.1#	48.4*#	16.0#	28.3*#	7.0#	17.6*#
Education						
No High School Diploma	26.3#	41.7*#	12.7#	21.6*#	4.5#	10.3*#
High School Diploma	33.0#	48.4*#	16.7#	28.8*#	10.2#	24.1*#
Some College	41.4#	59.7*#	23.8#	38.3*#	18.5#	36.1*#
College Degree	49.4#	64.7*#	29.8#	43.6*#	24.7#	44.2*#
Graduate Education (R)	55.2	72.2*	35.0	51.3*	29.0	52.3*
Family Income						
Below 200% of Poverty	37.3#	52.9*#	19.9#	34.3*	12.7#	28.6*#
200-399%	38.0#	55.2*	21.6#	33.6*	15.7#	30.7*#
400-599%	40.3	56.2*	22.5	35.7*	17.2#	33.9*
600% or More (R)	40.3	57.0*	23.0	35.3*	18.7	33.6*
Race/Ethnicity						
White (R)	38.8	55.6*	21.7	34.8*	17.3	33.2*
African American	37.9	55.5*	19.9#	35.9*	12.3#	26.7*#
Hispanic	39.5	49.4*#	22.8	30.5*#	13.5#	26.1*#
Other	39.2	62.2*#	24.2#	38.9*	16.1	31.6*

¹ Estimates are adjusted means derived from a multivariate model that controls for differences in personal characteristics, including age, sex, race/ethnicity, education, income, chronic conditions, health status and health insurance type. For unadjusted means, see Supplementary Table 3.

* Significantly different from 2001 at p<.05.

Significantly different from the reference group (R) at p<.05.

Sources: HSC 2001 Community Tracking Study Household Survey and HSC 2007 Health Tracking Household Survey



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