

Roadmap to the Disruptions

- Macroeconomics underpins health economics
- What's driving adoption of the Internet in health?
- The landscape of health, the Internet and social media
- What's trust got to do with it? Looking for people like me
- Obstacles enroute to Health Info Nirvana
- Opportunities for Advocates.



MAY 26, 2008



Is John McCain
Healthy Enough
To Be President?

How the Quake
Disaster Will
Change China



High School
Musicals Try
To Be Cool

TIME

Surviving the Lean Economy

How the next President can make America grow again

BY JUSTIN FOX

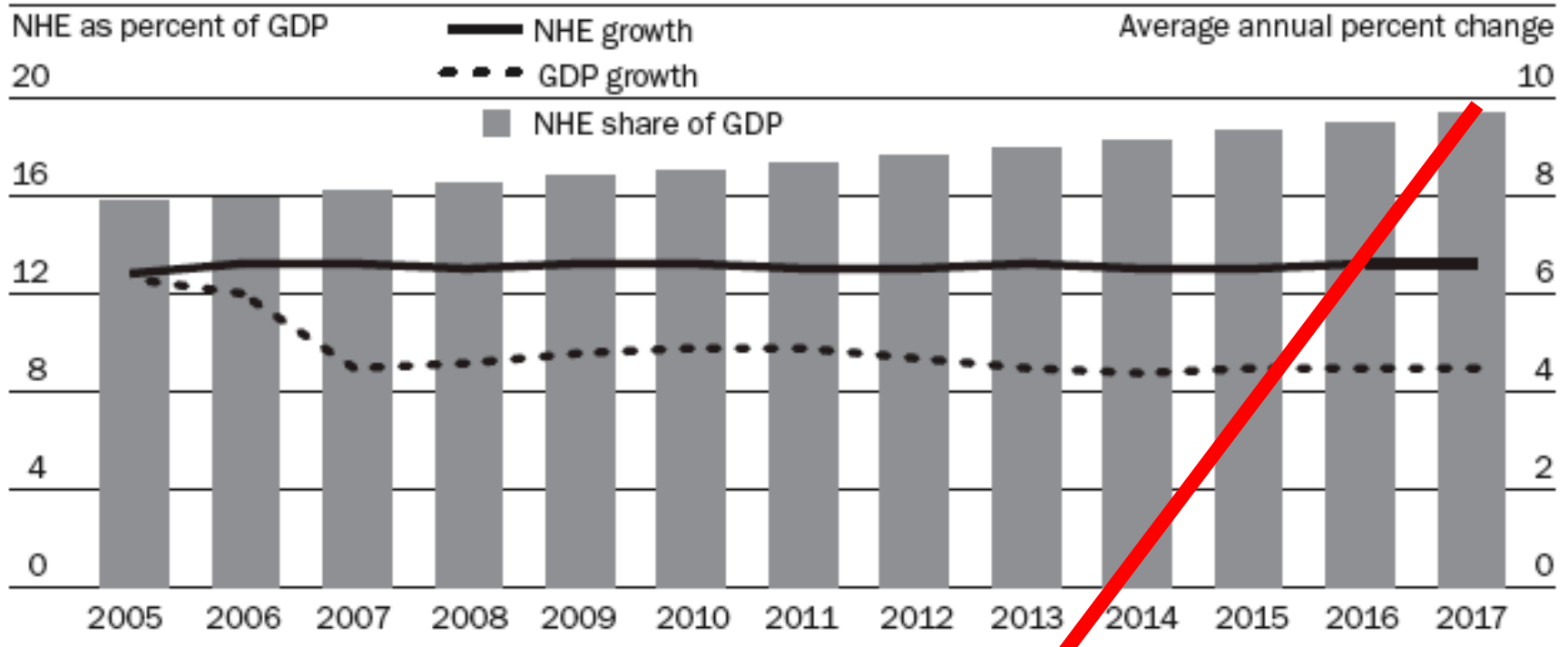


WWW.TIME.COM



EXHIBIT 3

National Health Expenditures (NHE) As A Share Of Gross Domestic Product (GDP) And Average Annual Growth In NHE Versus Growth In GDP, 2005-2017



SOURCE: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

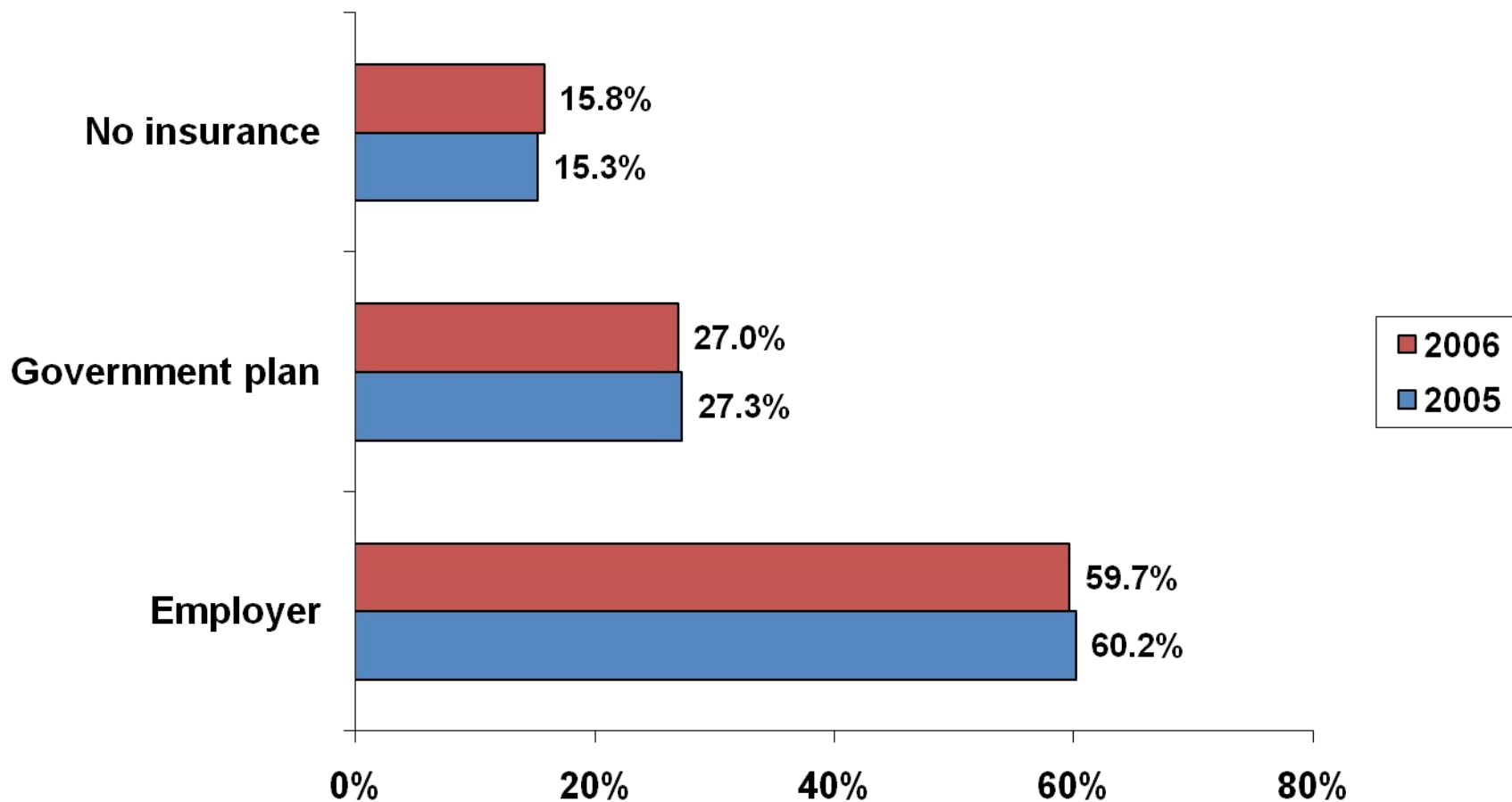
NOTES: The left axis (NHE share of GDP) relates to the gray-shaded bars. The right axis (percent change in GDP and NHE) relates to the two line graphs.

Health care = 20% of GDP by 2017



Most in U.S. Get Coverage Through an Employer, 2005-6

Percent of U.S. Population

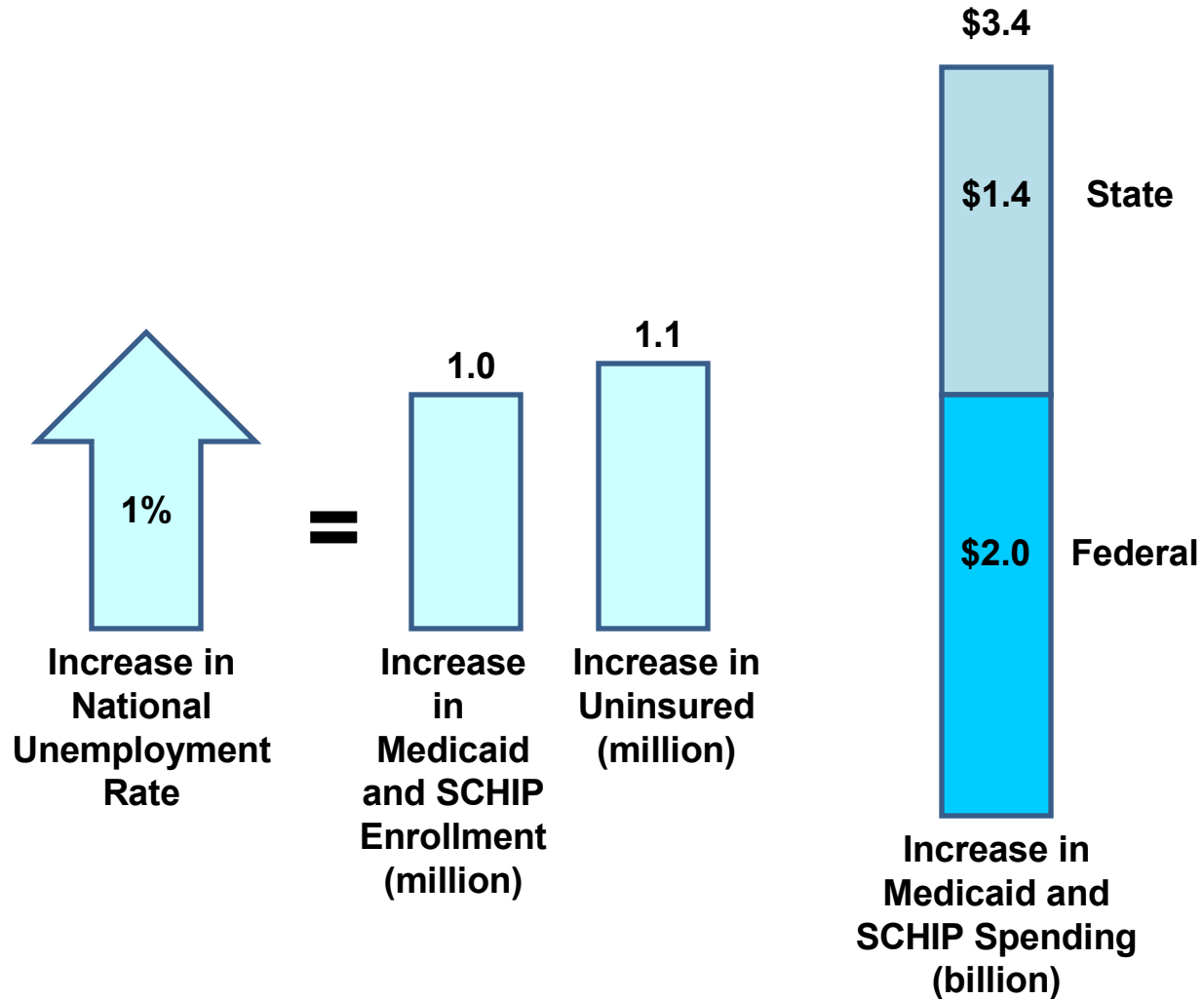


Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: US Census Bureau, Current Population Survey, 2006 and 2007 Annual Social and Economic Supplements.



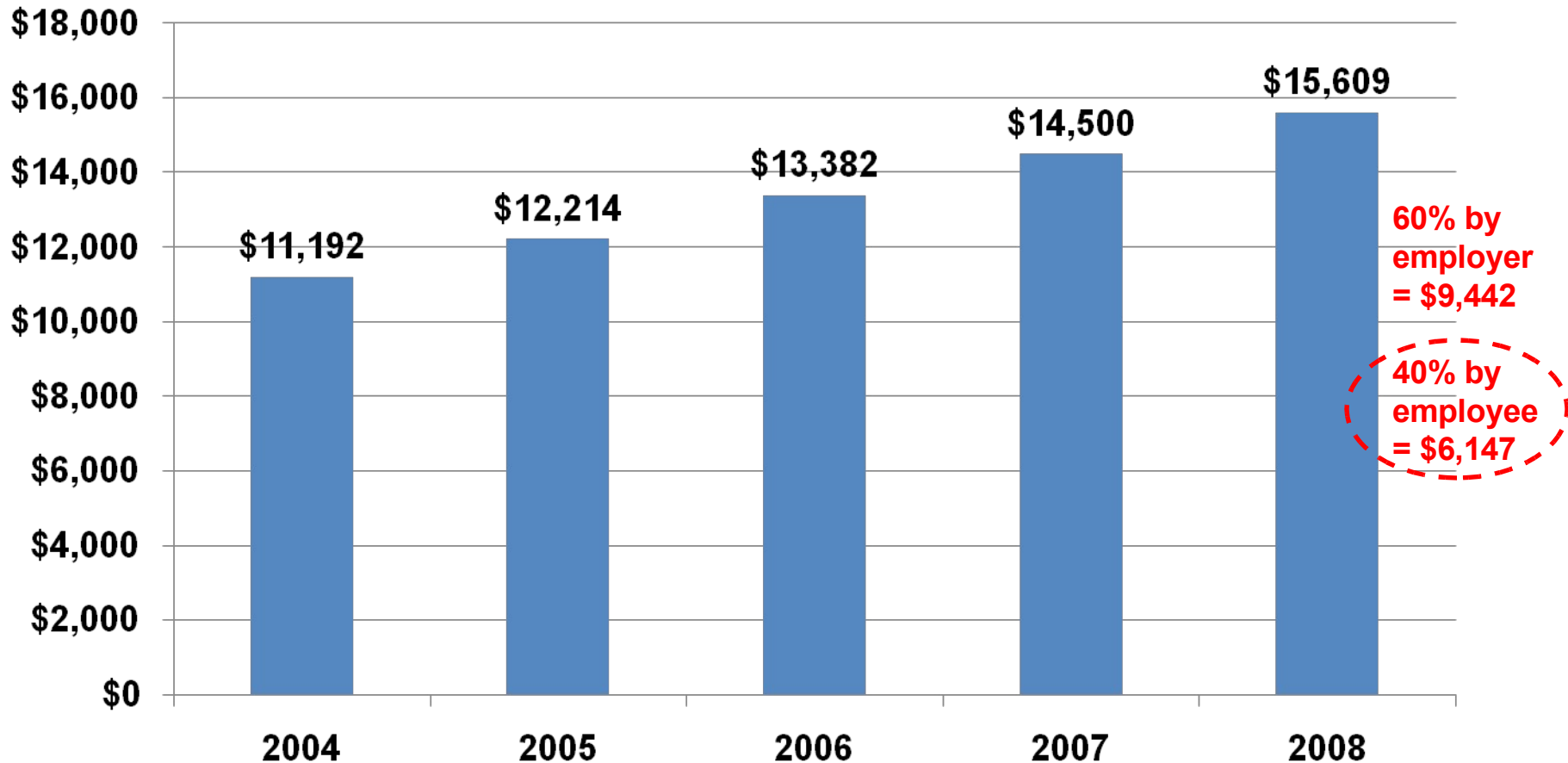
Unemployment's Impact on Uninsured and Medicaid



Source: *Medicaid, SCHIP and Economic Downturn: Policy Challenges and Policy Responses*, Kaiser Commission on Medicaid and the Uninsured, 4/28/2008



Medical Costs for a Family of Four Milliman Medical Index, 2004-2008

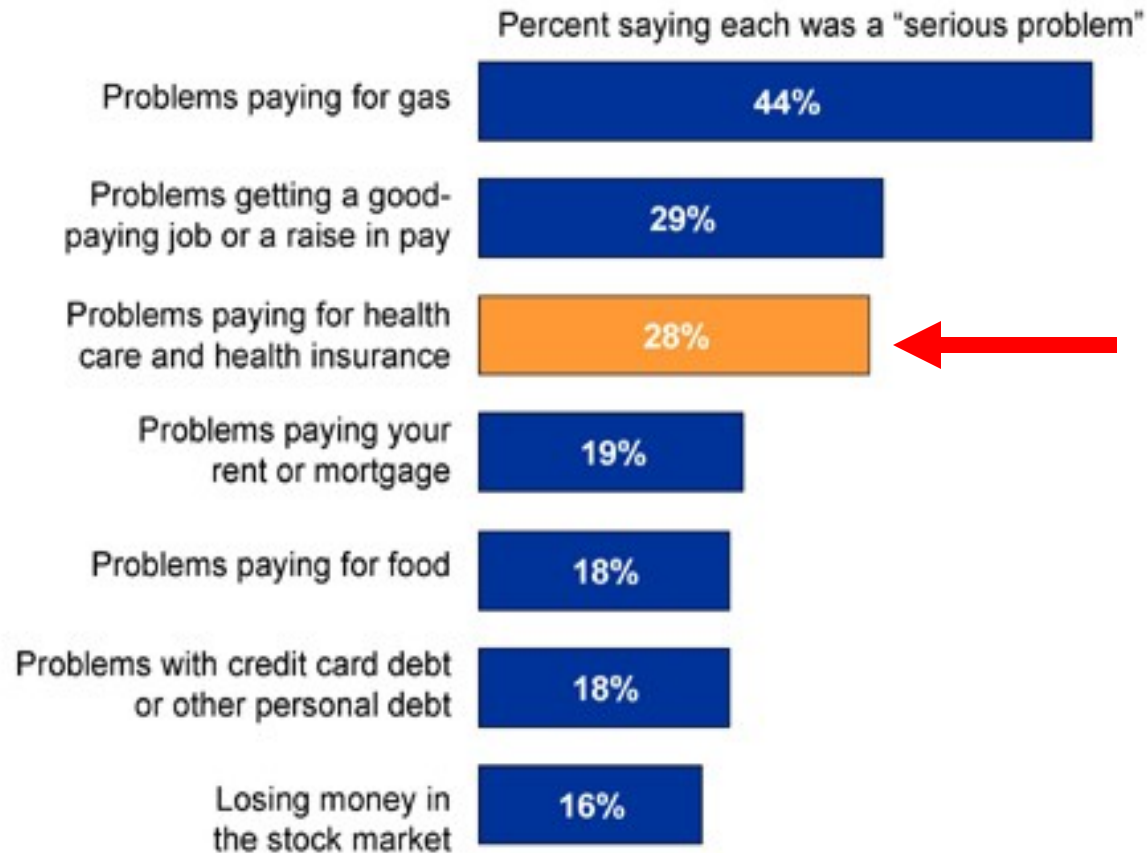


Source: Milliman Medical Index, 2004-2008



Problems Experienced as a Result of Changes in the Economy

As a result of recent changes in the economy, have you and your family experienced any of the following problems, or not? Was this a serious problem, or not?



Source: Kaiser Health Tracking Poll: Election 2008 (conducted April 3-13, 2008)



How the Economic Downturn Impacts Older Peoples' Spending Behavior, April 2008

Behavior	Yes	No	N/A
Found it more difficult to pay for essential items such as food, gas and medicine	66%	34%	<0.5%
Reduced the number of times you eat out	61%	36%	3%
Reduced spending on entertainment	60%	36%	3%
Found it more difficult to pay for utilities	53%	46%	1%
Postponed plans to travel	47%	49%	4%
Postponed a major purchase	46%	52%	3%
Stopped putting money into a 401(k), IRA or other retirement account	33%	53%	14%
Made changes to your home so you could live there longer	29%	65%	5%
Found it more difficult to pay your mortgage or rent	26%	54%	20%
Prematurely withdrew funds from 401(k), IRA, or other investments	23%	69%	8%
Postponed paying some bills	20%	80%	<0.5%
Found it more difficult to pay for education expenses	19%	35%	46%
Decided not to change jobs	19%	33%	47%
Increased the number of hours you work	18%	82%	5%
Postponed plans to retire	16%	42%	42%
Your spouse postponed plans to retire	16%	59%	24%
Moved to a smaller house or apartment	8%	86%	6%
You got a second job	8%	64%	28%



Source: AARP, *The Economic Slowdown's Impact on Middle-Aged and Older Americans*, May 2008

What's In and What's Out in Home Economics

What's In	What's Out
Saving	Borrowing
Cooking at home	Eating out
Fixing the old car	Buying new car
Staying at home	Foreign vacations
20% down	No down payment
Debit cards	Credit cards
Working past 65	Early retirement
Library	Bookstore
Tap water	Bottled water
Patching	Remodeling
Public park	Theme park
Eyeglasses	LASIK surgery
Poker night	Weekend in Vegas

Demand for elective health procedures -- see April 25 Health Populi on QualityHealth survey...



Source: Budget Savvy Magazine



The New Health Care Consumer



November 2004



Diabetes
FOR
DUMMIES

Alan L. Rubin, MD
Diabetes Specialist
University of California, San Diego

A Reference for the Rest of Us!

Heart Disease
FOR
DUMMIES

James M. Rippe, MD
Cardiologist
Boston University School of Medicine

A Reference for the Rest of Us!

High Blood Pressure
FOR
DUMMIES

Robert C. Malin, MD
Hypertension Specialist
University of California, San Diego

A Reference for the Rest of Us!

Stroke
FOR
DUMMIES

Robert C. Malin, MD
Stroke Specialist
University of California, San Diego

A Reference for the Rest of Us!

Controlling Cholesterol
FOR
DUMMIES

Robert C. Malin, MD
Cholesterol Specialist
University of California, San Diego

A Reference for the Rest of Us!

Asthma
FOR
DUMMIES

Richard J. Spring, MD
Asthma Specialist
University of California, San Diego

A Reference for the Rest of Us!

Bipolar Disorder
FOR
DUMMIES

Caroline Park, MD
Bipolar Disorder Specialist
University of California, San Diego

A Reference for the Rest of Us!

Depression
FOR
DUMMIES

Caroline Park, MD
Depression Specialist
University of California, San Diego

A Reference for the Rest of Us!

Prostate Cancer
FOR
DUMMIES

Richard J. Spring, MD
Prostate Cancer Specialist
University of California, San Diego

A Reference for the Rest of Us!

Fibromyalgia
FOR
DUMMIES

Richard J. Spring, MD
Fibromyalgia Specialist
University of California, San Diego

A Reference for the Rest of Us!

Breast Cancer
FOR
DUMMIES

Scott E. Hudis, MD
Breast Cancer Specialist
University of California, San Diego

A Reference for the Rest of Us!

Migraines
FOR
DUMMIES

Scott E. Hudis, MD
Migraine Specialist
University of California, San Diego

A Reference for the Rest of Us!

Vitamins
FOR
DUMMIES

Scott E. Hudis, MD
Vitamin Specialist
University of California, San Diego

A Reference for the Rest of Us!

Arthritis
FOR
DUMMIES

Scott E. Hudis, MD
Arthritis Specialist
University of California, San Diego

A Reference for the Rest of Us!

Back Pain Remedies
FOR
DUMMIES

Scott E. Hudis, MD
Back Pain Specialist
University of California, San Diego

A Reference for the Rest of Us!

Growing Demand for Transparency in U.S. Health Care

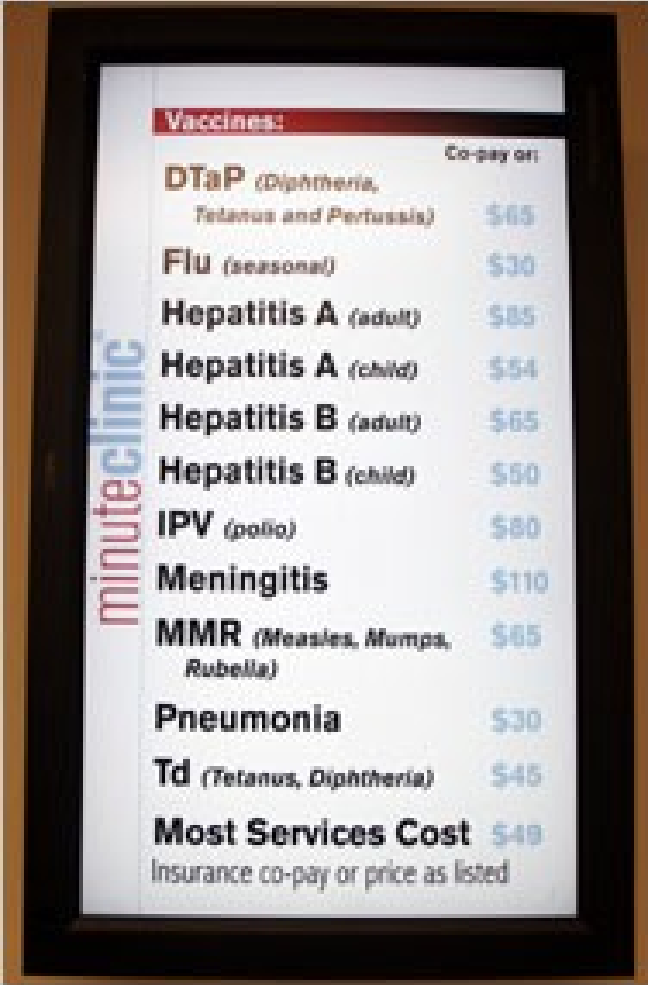
- Schumer (D-NY) establishes website for NY citizens comparing Rx prices
- AARP Watchdog Report (June 2004)
- Clinical Trial Registration - International Committee of Medical Journal Editors (9/16/04)
- Medicare Rx pricing website (9/16/04)
- DHHS Value-Driven Health Care
- Carol.com



Transparency: Better Care Lower Cost



Consumer Value in Health: MinuteClinic



Vaccines:	
	Co-pay on:
DTaP (Diphtheria, Tetanus and Pertussis)	\$65
Flu (seasonal)	\$30
Hepatitis A (adult)	\$85
Hepatitis A (child)	\$54
Hepatitis B (adult)	\$65
Hepatitis B (child)	\$50
IPV (polio)	\$80
Meningitis	\$110
MMR (Measles, Mumps, Rubella)	\$65
Pneumonia	\$30
Td (Tetanus, Diphtheria)	\$45
Most Services Cost	\$49
Insurance co-pay or price as listed	

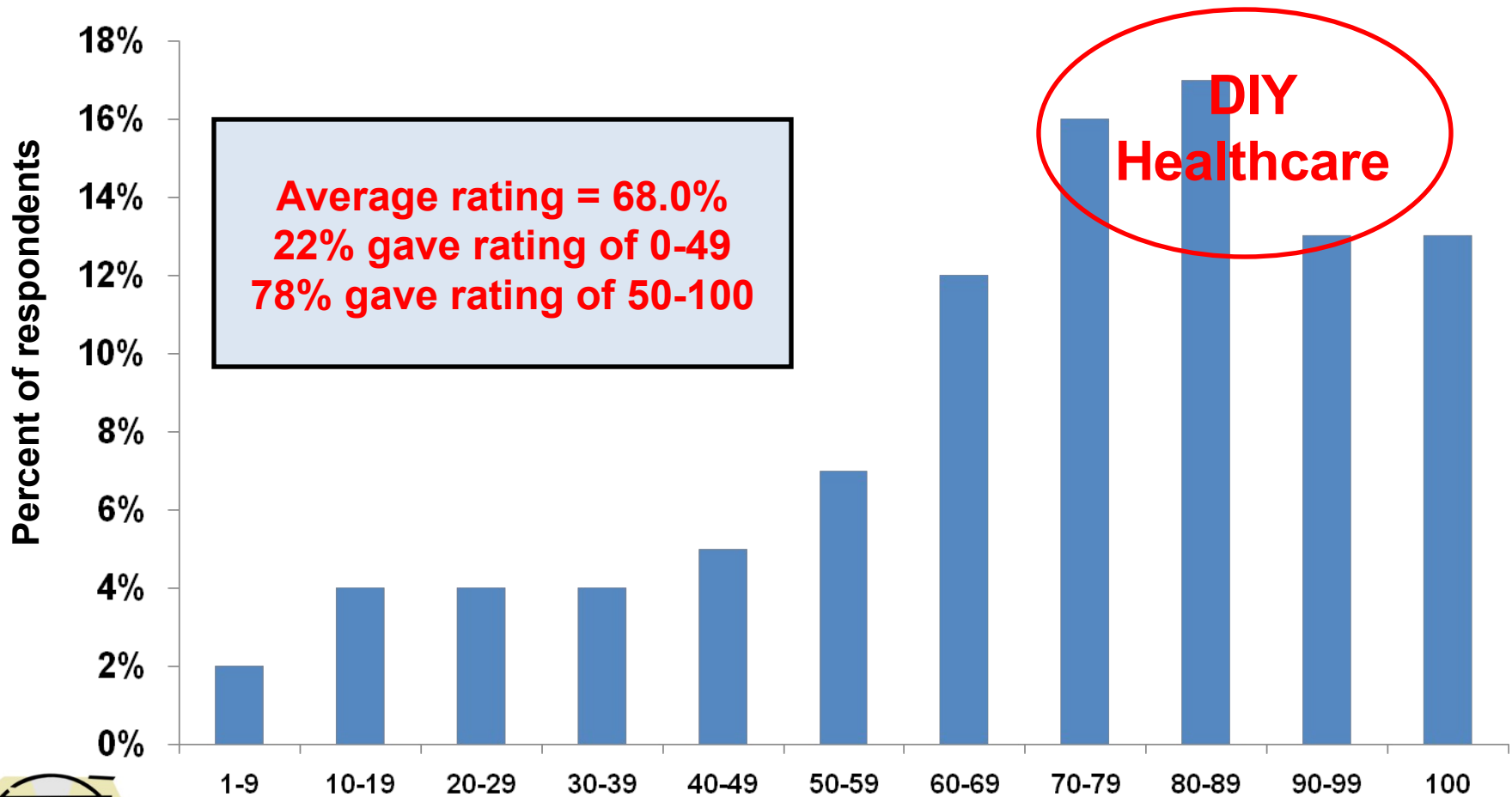


What's Driving Adoption of the Internet in Health?

- DIY and self-service
 - Transactions at self-service kiosks will triple by 2012 (\$1.7 trillion) including self-checkout systems, ticketing kiosks, check-in kiosks, food ordering, postal systems and other retail kiosks
- An online, 24x7 world for more people
- People project-manage travel, financial services, entertainment online
- More are in search of Travelocity and eTrade in health...



Preference for **Customizing** Insurance Product vs. Selecting from Pre-Packaged Options

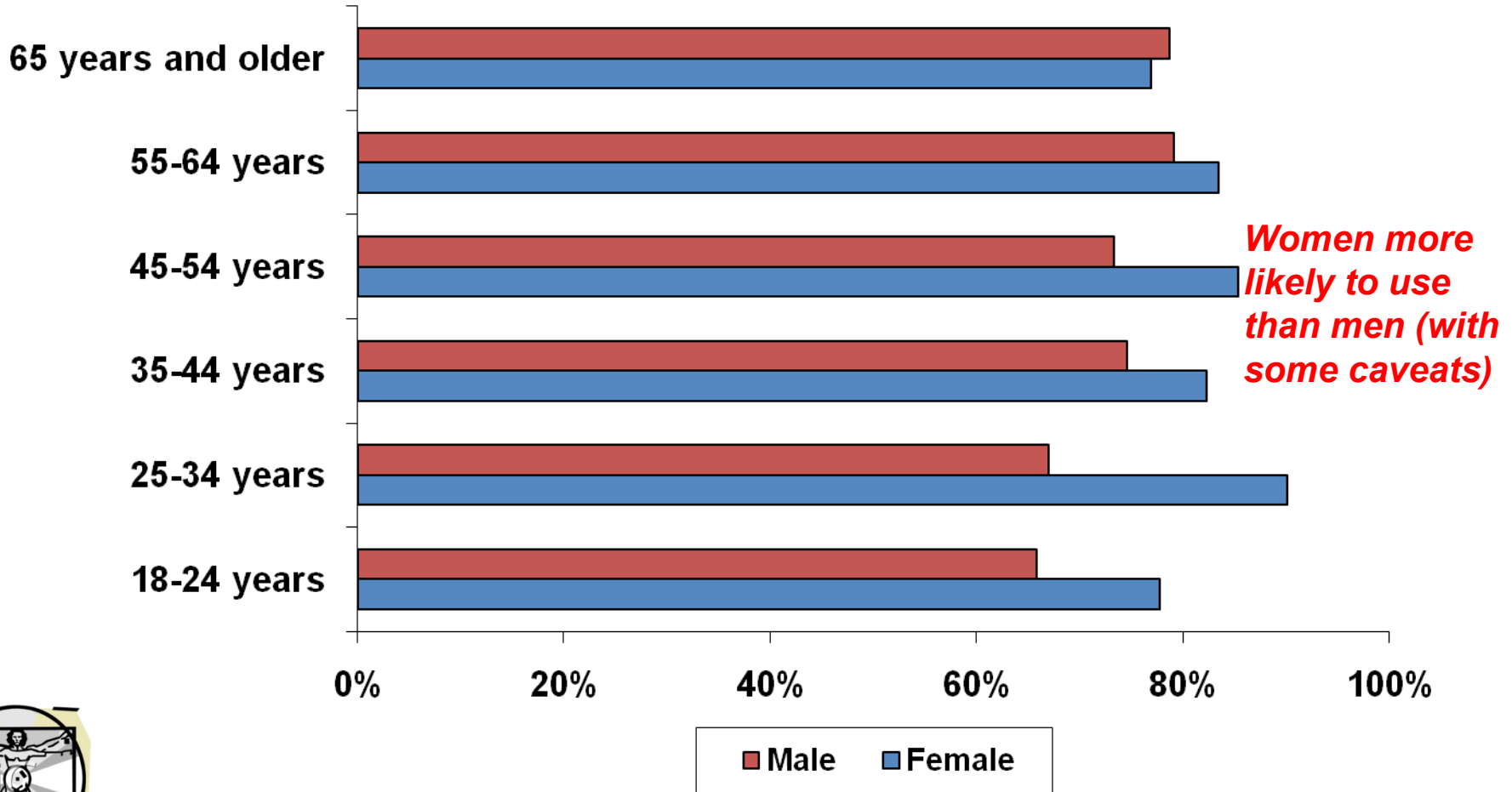


Source: 2008 Survey of Health Care Consumers, Deloitte LLP

The Intersection of Consumer Technology and Health

The Internet as Health Destination

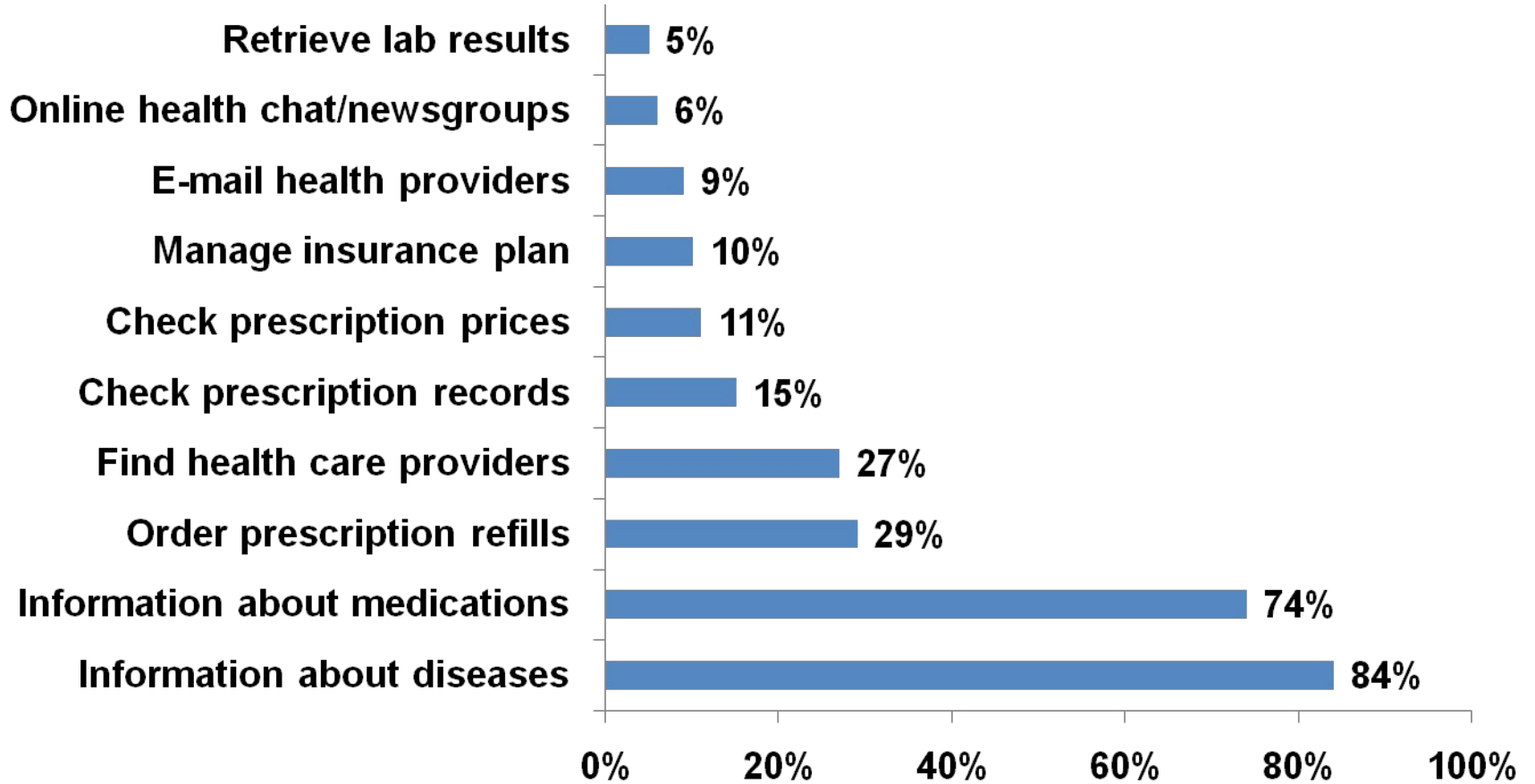
>75% of Americans use the Internet to gather health information



Source: *Online, the Doctor is Always In*, Burst Research, August 2007, n=3,749

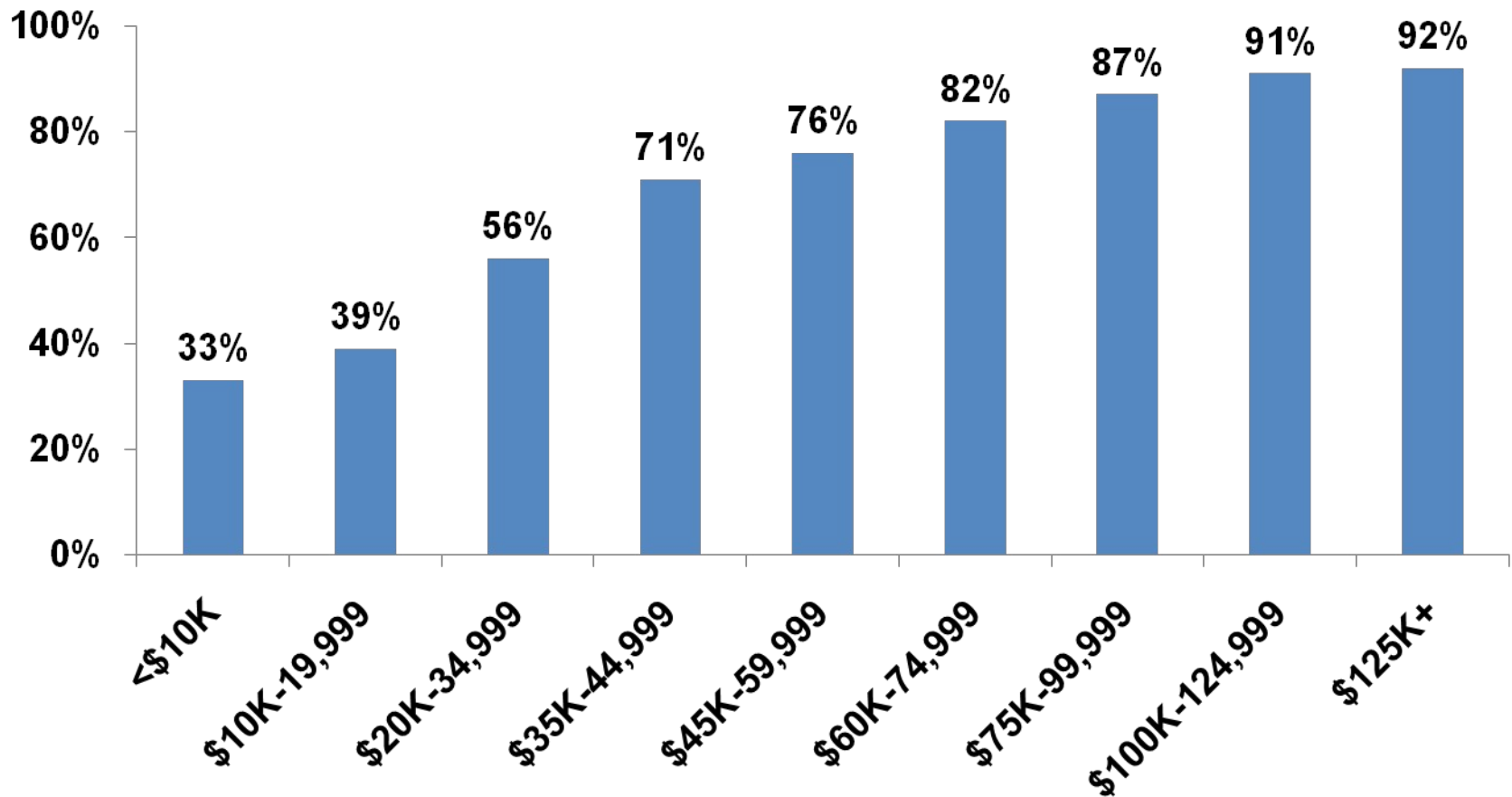


In Health, People Use Computers First to Learn About Diseases



Source: 2007 Pharmacy Satisfaction Digest, Boehringer Ingelheim Pharmaceuticals, Inc., Wilson Health Information

Most Households Own Computers, Except for Those With <\$20K/An

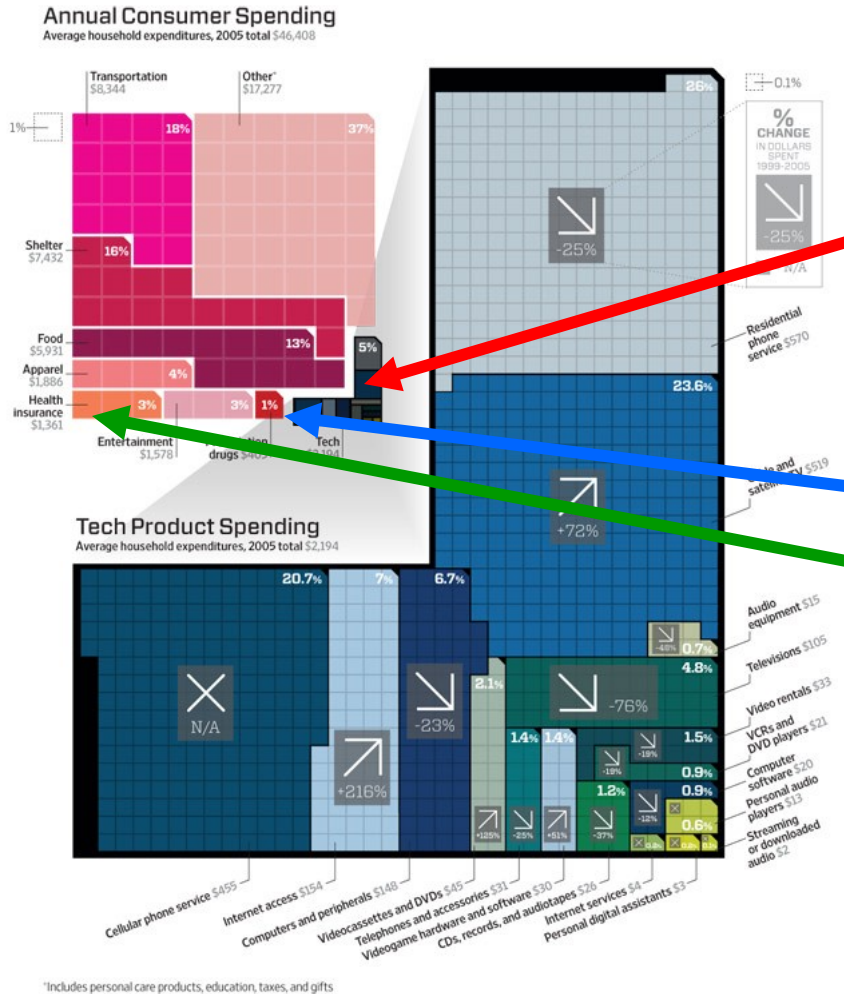


Opportunity: cell phones as health information conduits...

Source: 2007 Pharmacy Satisfaction Digest, Boehringer Ingelheim Pharmaceuticals, Inc., Wilson Health Information



Consumers Prioritize Technology Spending Above Health Care



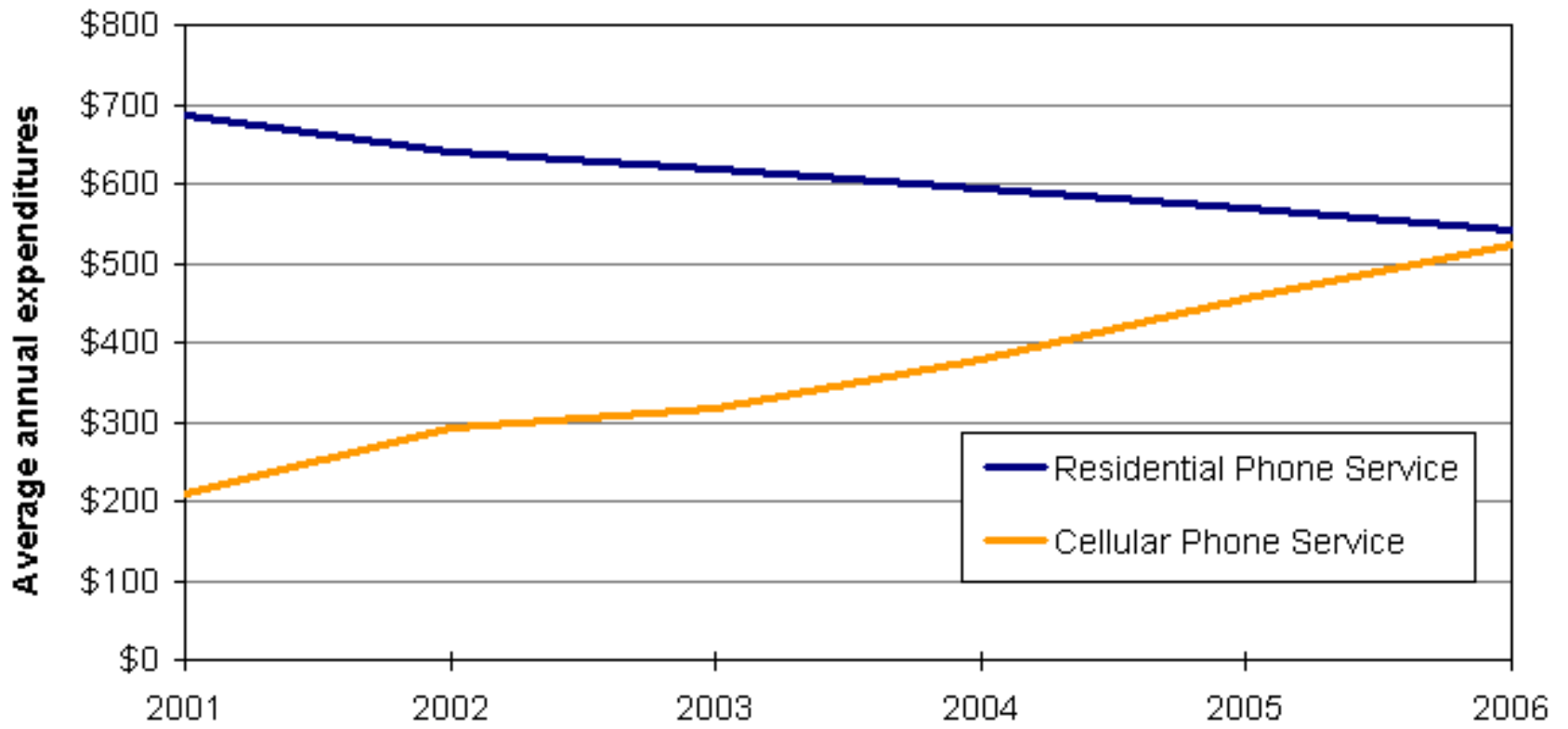
- American households spent 5% of household disposable income on technology – DVDs, CDs, MP3 players, cel phones
- Households allocated 3% of spending to health insurance, and 1% to Rx drugs
- Do consumers prefer spending \$20 on a new DVD versus a prescription drug co-payment?

*Includes personal care products, education, taxes, and gifts

Source: *Wired* magazine, *Technolust*, Issue 15:08, July 2007; *Health Populi* blog, September 12, 2007



Residential and cellular phone expenditures, 2001-2006



Source: Bureau of Labor Statistics, U.S. Department of Labor, <http://www.bls.gov/cex/cellphones.htm>



Surfing for Health

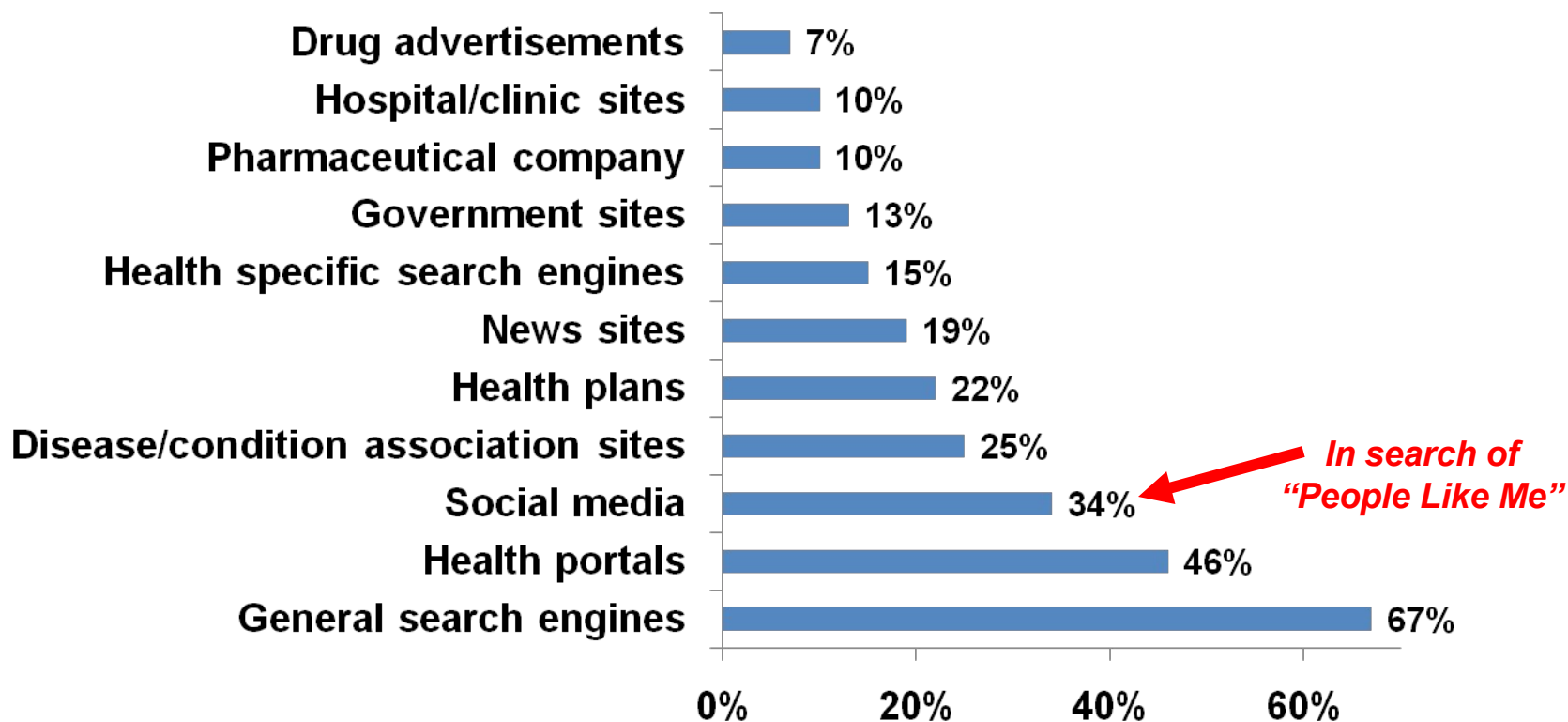
A California HealthCare Foundation survey found that 80% of the state's consumers used the Internet for health-related purposes.

Use	2004	2007
Find information on specific medical conditions or drugs	51%	56%
Find a physician in a health plan network	23%	32%
Review claims or obtain benefit information	19%	34%
Find ratings of physicians or other health professionals	19%	26%
Fill a prescription	9%	12%
Get advice from a doctor via e-mail	8%	13%
Make an appointment	N/A	13%
Purchase health insurance	N/A	10%

Source: "Just Looking: Consumer Use of the Internet to Manage Care," California HealthCare Foundation, May 2008, Harris Interactive survey of 1,007 adult Californians from Nov.-Dec. 2007.



Online Tools and Resources Used to Search Health Information



Source: iCrossing. *How America Searches: Health and Wellness*. January 2008.



Trust Media

Edelman and Intelliseek, Spring 2005

- “Trust has shifted from authority figures to ‘average people,’ like you.”
- The average person wants to engage and be engaged in conversations.
- Merriam-Webster designated “blog” as the most sought-after word of 2005 at its websites
- 20,000 new blogs created daily
- *Blogging is the latest manifestation of more messages to smaller numbers of people...*



Source: Trust “MEdia.” *Why the Average Person is Finally Getting Heard, The 1.0 Guide to the Blogosphere for Marketers & Company Stakeholders*, Edelman and Intelliseek, Spring 2005.

The Wisdom of Patients: Health Care Meets Online Social Media



*Download my white paper
published in April by
California HealthCare
Foundation at
www.chcf.org*

Some learnings...



Social Media Landscape

Interaction, Collaboration, Sharing Content



- Social media enables *interaction for the consumer and the community*
- The idea: the collective can have as much impact as any traditional media platform
- This is not new: the Internet was founded on message boards, chat rooms and peer to peer communication.
- What *is* new: social platforms are inspiring mass involvement.



Source: *Power to the People, Social Media Tracker, Universal McCann, Wave 3 survey*

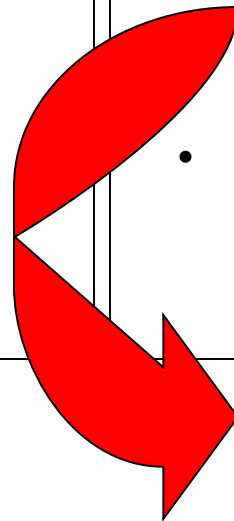
From Health 1.0 to Health 2.0

Health 1.0 (“Google”)

- **Provider and institution-centric and –controlled**
- **Lack of transparency**
- **Search**
- **No network effects**

Health 2.0 (“Facebook”)

- **Patient-centric**
- **User-controlled data**
- **Positive network effects: participation adds value**
- **Allows social networking through forums, communities, shared content**



***Strategic conversations
and less control over content!***

Source: THINK-Health



Examples of Health 2.0 Sites by Social Media Platform

Health 2.0 Platform	Examples
Wikis	Wikipedia, FluWiki, WiserWiki
Blogs	DiabetesMine, HealthMatters (Healthline), WebMD
Social networks	OrganizedWisdom, PatientsLikeMe, DailyStrength, SecondLife, Sermo, ReliefInSite, NursesRateDoctors.com, TheHealthCareScoop, MySpace, Facebook
Video-sharing	ICYou, YouTube
Online forums	Yahoo! Groups, Revolution Health Groups, Google Health Groups, Groups@AOL, About.com Groups, iVillage Total Health Talk About It
Podcasts	Healthedia, CDC, iTunes



Source: THINK-Health

The Health Care Scoop

Health Opinions Meet Social Media in Minnesota

- Among the first epinions.com-style websites in health care
- "Patient reviews from people like you"
- Early phase of implementation found comments ranging from a difficult blood draw episode to cancer care (from the simple to the acute)
- A pioneer in the emerging consumer health info transparency movement.



**BlueCross BlueShield
of Minnesota**



Source: Health Populi, 17 December 2008



Health Care



*Decide to be healthy.*SM



Vitals.com

The screenshot shows the Vitals.com website in an Internet Explorer browser window. The browser's address bar displays "http://www.vitals.com/". The page features a navigation bar with links for "home", "check up on your doctor", "find a doctor", "rate a doctor", and a "login" section for "consumer / physician". A central illustration of a doctor in scrubs is positioned on the left. To the right, the main heading reads "Let us help you make one of the most important decisions of your life." Below this, there are two primary sections: "check up on your doctor" and "help me find a doctor". The "check up on your doctor" section includes a form with a "doctor's name" field (with a tooltip that says "Free Doctor Reviews & Ratings"), a "location" field, and a "check up now" button. The "help me find a doctor" section contains two buttons: "help me find one" and "who should I see?". At the bottom of the page, there are links for "about us", "faq", "contact us", "privacy", "terms of use", "site map", and "search by ailment". The browser's taskbar at the bottom shows several open applications, including "Inbox - Micro...", "Palm Desktop", "7 Internet Expl...", "3 Microsoft Of...", and "8 Microsoft Of...". The system clock indicates the time is 10:08 AM.





© Betty Crocker

“Cooks in a hurry just add meat to Slow Cooker Helper, new from Betty Crocker and General Mills.”



The Health Literacy Challenge

- Not lack of access, but lack of understanding medical information.
- 90 million at risk in U.S.
- Research suggests that people with low literacy:
 - Make more medication or treatment errors
 - Are less able to follow treatments
 - Lack the skills needed to negotiate the health care system
 - Are at a higher risk for hospitalization than people with adequate literacy skills.



Plain
Language

Health Plan Illiteracy

Most Insured US Workers Do Not Understand Basic Consumer Health Plan Language

- Gaps between consumers' perceived and actual abilities to make informed choices and to actively participate in their health care decisions
- 61% of employees surveyed considered their general understanding of health care benefits terminology to be very good
- However, only one-in-seven workers (15%) had a very strong understanding of key terms
 - 9 out of 10 workers can define “co-payment”
 - 50% can identify a flexible spending account (FSA) or a health reimbursement account (HRA)
 - 56% cannot correctly identify a Health Savings Account (HSA).
- Most don't plan for future health care costs.



Source: Abt Associates study for Fidelity Research Institute, April 2007

SILICON VALLEY
TIME TO EXPENSE
THOSE OPTIONS (P. 75)

THE ECONOMY HIGH
PRODUCTIVITY: HOW
SUSTAINABLE? (P. 32)

AOL GLIMMERS OF
A MUCH BRIGHTER
FUTURE (P. 40)

The McGraw-Hill Companies

BusinessWeek

Nov 10, 2008

www.businessweek.com



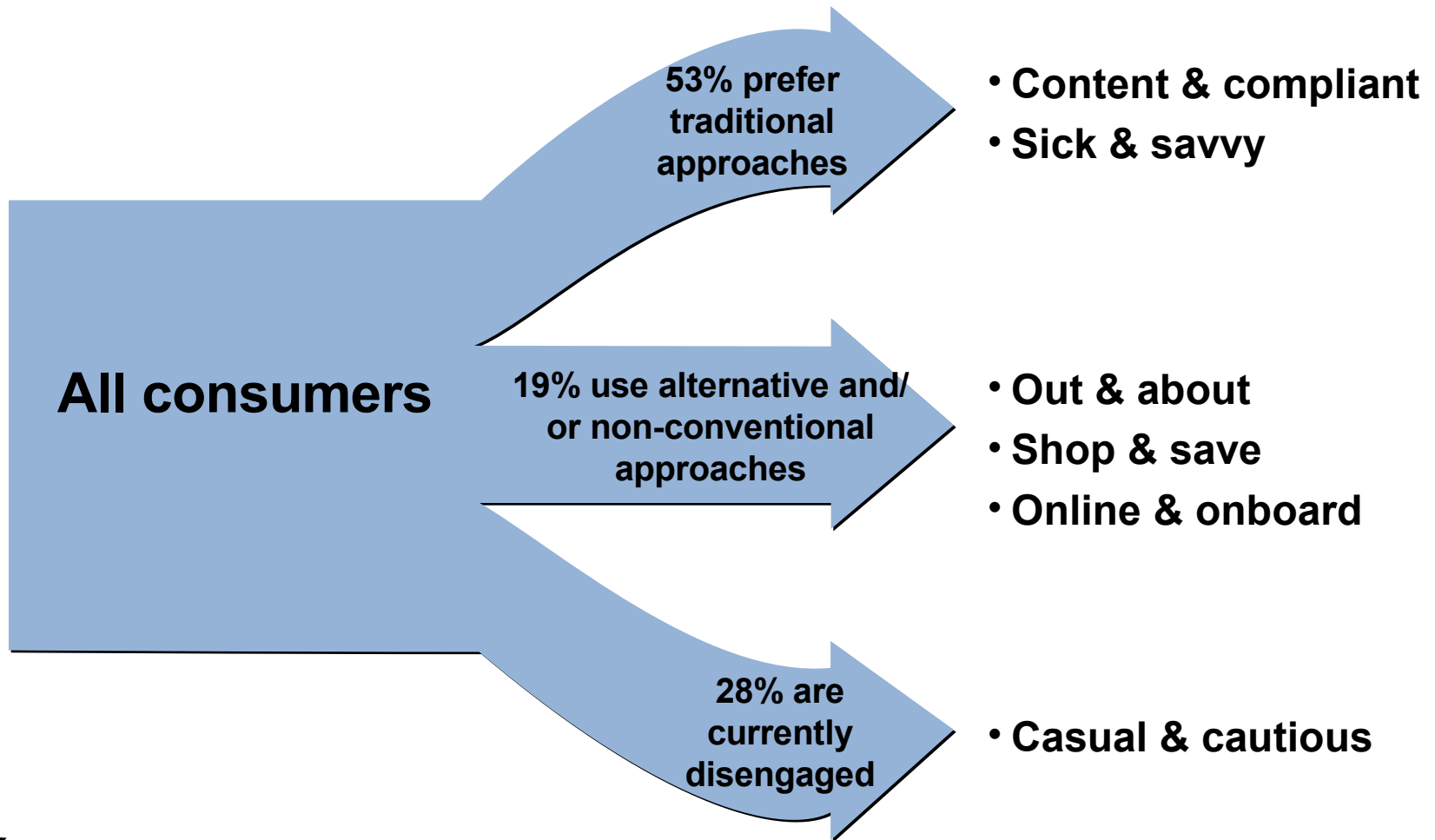
THE VANISHING MASS MARKET

New technology. Product
proliferation. Fragmented media.
Get ready: It's a whole new world.

SPECIAL REPORT BY ANTHONY BLANCO (P. 60)



Consumers' Preference for Different Types of Health Services Can Drive Segmentation



Source: 2008 Survey of Health Care Consumers, Deloitte LLP

Gordian's Generational Group Approach to Health Care Coaching Preferences

Consumers can choose method of engagement: phone, direct mail, secure email, online, online communities

Generational Group	Preferences
Seniors, Age 65+	May spent > time online than teenagers "Expert-created and expert-approved"
Boomers	Difficult to incentivize for health coaching Information security and privacy
Gen X	Overall trust medical community 24/7 mobile phone Stylish, fun, cutting edge of technology: looking for interactive, readily available info
Gen Y (Millenials)	Impatient, crave positive feedback and validation Penchant for social networking and communities online



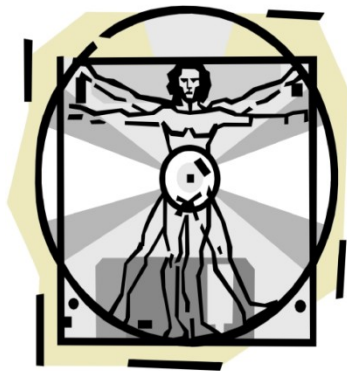
Source: "From Seniors to Gen Y, Healthcare Preferences Vary," Gordian Health Solutions Reports, Gordian Health Solutions Inc., Press Release, May 10, 2008

2008 Considerations and Opportunities

- **Engage with consumers based on *their* values.** What's in the mind of the consumer? Preferred media? Effective messaging? Think like P&G.
- **Have some fun.** Provide engaging info, tools, games.
 - Look into RWJF's Games for Health program
 - Learn about Second Life.
- **Consider...the economic impact on personal health decisions**
 - Recognize impact of "401(h) effect." It's the consumer's cash
 - Co-pays often drive compliance and persistence.
- **Get real about health literacy.** Be consumer-centric. Engage new media where appropriate.



Source: *THINK-Health*



Jane Sarasohn-Kahn, MA (Econ.), MHSA
Health Economist and Management Consultant
THINK-Health
610.933.5727 v
jane@think-health.com
www.think-health.com
www.healthpopuli.com Blog

