Slide 1: Health Communication Practice and Web 2.0: Addressing Health Disparities

Linda Fleisher, Ph.D., M.P.H.
Assistant Vice President, Office of Health Communications & Health Disparities
Fox Chase Cancer Center, Philadelphia, PA

Slide 2: Collaborators

Sarah Bass, M.P.H., Ph.D.
Temple University

Rachel Slamon, B.S.
J. Robert Black, M.D.
Fox Chase Cancer Center

Kevin Durr
Not Sold Separately

Slide 3: Populations at Risk

- Age
- Disability
- Education
- Ethnicity
- Geographic location
- Gender
- Income
- Race

Slide 4: Kaiser Permanente Disparities Framework

Image of series of rings, from the center out: Individual, Interpersonal, Organizations, Community/Environment, Society/Public Policy

- Complexities
- Issues and solutions at many levels
- Where can Web 2.0 impact?

Slide 5: Health Communication Practice

Goals

- Increase awareness, knowledge, and skills
- Increase access and utilization of services
- Increase self-efficacy and social support
- Improved outcomes

Principles

• Know the audience and problem
• Involve the audience
• Use appropriate channels of communication
• Develop messages that are understandable and facilitate integration and empowerment

The communicator, the audience, the message, and the medium are all critical success factors that need to be considered.

Slide 6: Health Literacy

• More than 43% of Americans—or 9 million adults—have basic or below basic health literacy skills
• Average reading level for U.S. adults is at or below 8th grade
• Adults who do not have health literacy skills are:
  o Less likely to understand their health issues, engage in preventive behaviors, and comply with self-management
  o More likely to have more frequent hospitalizations

Slide 7: Web 2.0

• Provides opportunities for:
  o Social affiliation (i.e., connectiveness)
  o Participation (i.e., “being” online vs. “going” online)
  o Self-expression in a digital environment
  o Access to tools
• Can function as:
  o An application platform
  o Generator of content
  o Mechanism for dissemination (e.g., using mobile technology to deliver health messages)

Slide 8: The Promise and the Caution

Questions: What are the opportunities of Web 2.0 from the health professional and patient perspective? How does the Web 2.0 help us to reach underserved or underrepresented groups? How do we integrate Web 2.0 with other online tools to ensure comprehensive, culturally appropriate and evidence based information to activate and inform patients?

Two images show the characteristics and issues for individuals using Web 2.0 and individuals who are not using Web 2.0.

Image for Using Web 2.0:

Populations:

- Racial Minorities
- Ethnic Minorities
- Rural Populations
- Older Adults

HC Issues:

- Health Literacy
- Language
- Cultural Competency
- Health/Disease Knowledge Base
- Computer Facility
- Evidence base
- Informed Decision Making

Image for Not Using Web 2.0

Health Disparate Populations:

- Online
- Not Online

**Slide 9: Use of the Internet**

- Almost 1 in 5 adults choose not to use the Internet (relevance, usability, and cost)
- 87% of households making $75k annually had broadband when compared with 45% of those making $40k or less
- African Americans and Latinos have lower rates of broadband
- Non-Internet users are more likely to be ethnic minorities, older, less educated, less healthy, more distressed, and to have a cancer history
- 62% of adults living with one or more chronic disease go online for health information

**Slide 10: What Are We Doing Online?**

- There are significant differences in Internet usage between Americans who have chronic medical conditions and those who do not

Online Activity for People with No Chronic Conditions:

- 39* use social network site
- 34* read some else's blog

Online Activity for People With 1+ Chronic Conditions:

- 25 use social network site
- 28 read some else’s blog

Online Activity for People With 2+ Chronic Conditions:

- 19 use social network site
- 26 read some else’s blog

*Statistically significant difference.

**Slide 11: Use of Web 2.0**

- Among Internet users, 27% use at least one form of social media¹:
  - Social media (23%)
  - Blogging (7%)
  - Online support groups (5%)
- Those with poorer self-reported health status had higher rates of using online support groups¹
- Usage decreased with age; nonwhites had higher usage¹
- 19% of adults who go online are Twitter users.² Of these:
  - 26% are African American
  - 19% are white

**Slide 12: Use of Web 2.0 for Health: Are We Helping?**

- Many adults living with one or more chronic medical conditions say they are not helped by the health information they find online

Of Adults Without Chronic Conditions:

- 11% found the helpfulness of online information to be “major”
- 22% found the helpfulness of online information to be “moderate”
- 12% found the helpfulness of online information to be “minor”
- 48% found the helpfulness of online information to be “no help”
- 8% found the helpfulness of online information to be “unsure/no response”

Of Adults With 1+ Chronic Conditions:

- 9% found the helpfulness of online information to be “major”
- 15% found the helpfulness of online information to be “moderate”
- 8% found the helpfulness of online information to be “minor”
- 59% found the helpfulness of online information to be “no help”
- 9% found the helpfulness of online information to be “unsure/no response”

Slide 13: Use of Mobile Phones

- 4 billion mobile phone subscribers worldwide in 2008
- 23% of Americans report accessing the Internet via their mobile phone, a 67% increase from 2007
- Mobile technology being used to promote health and prevent disease
- mHealth—includes text messaging, video messaging, voice calling, and Internet connectivity
- Potential for behavior change, smoking cessation and maintenance, and diabetic monitoring
- Users—mostly women, African-Americans, Hispanics, Southerners, and teens
- African-American and English-speaking Latinos are more likely to use their phones to access the Web, play games, watch videos, and use social networking sites

Slide 14: Potential of Web 2.0

- Connect to others with similar issues
- Spark new knowledge or interest
- Provide referrals
- Create social support and improve self-efficacy through sharing of experience
- Focus on specific populations
- Emergence of spokespeople from specific populations and communities
- Serve as an access point for providers and programmers to reach underserved populations

Slide 15: Challenges of Web 2.0

- Who is the expert and what are the methods to evaluate expertise?
- Disjointed communities—connections by chance rather than strategy
- New issues regarding information overload
- Although social support is an important component, content is also critical in treatment and management of complex diseases. How do we ensure (or not) the accuracy, balance, and understandability of the content?
- Does it improve access to the “best” choices?
- Can we measure the impact?
- Does it present a comprehensive view or a slice of perspective?
- How do we connect Web 2.0 tools to other online resources and off-line resources?
- What are the barriers to participation (e.g., access to online tools, language, literacy, foundational knowledge) among underserved communities?

Slide 16: Examples

- Blogs for specific populations
- Web sites to connect to providers
- Cell phone messages for low-income pregnant women
- Web-based interventions (e.g., Healing Choices, Colorectal Cancer Screening Kiosk)

• Blogs for professionals assisting populations

Slide 17: Health Literacy – SMOG Readability Formula

• The New York Times Health and Wellness Blog
  http://well.blogs.nytimes.com/
  o Post #1 – 12.7
  o Post #2 – 13.1
  o Post #3 – 10.8

Slide 18: My Fight with Breast Cancer Blog

http://fighting-breast-cancer.com

• Post #1 – 9.4
• Post #2 – 10.8

Slide 19: SaludToday Blog

http://www.saludtoday.com/blog

• Hosted by the Institute for Health Promotion Research at the University of Texas Health Science Center in San Antonio
  o Intended to improve Latino health
  o Not written in Spanish
• Includes:
  o blog
  o Videos
  o Twitter (1.042 followers)
  o Facebook (183 "Like" it)

Slide 20: Corazon Hispano

http://www.corazonhispano.blogspot.com/

• Cardiovascular health blog hosted by a physician
• Communicates about health topics of interest to Latinos through:
  o The blog
  o E-mail responses to inquiries
  o TV guest appearances
  o Proposals to the media
  o Twitter
  o Facebook

Slide 21: Text Messaging for Pregnant Smokers

• Provide text messages through provided cell phones
• Theory driven messages written in plain language
• User testing of messages
• Challenges – power of message; cultural differences

**Slide 22: Healing Choices Decision Support***

• Virtual guide
• Web-log usage analysis indicates that men with more limited literacy more likely to use video-based content
• Limited use of values-clarification section

*Supported by a program project grant (2P01CA057586-09A2) from the National Cancer Institute to the University of Colorado, the Fox Chase Cancer Center, and the University of California at Los Angeles for the Cancer Information Service Research Consortium.

**Slide 23: Colorectal Cancer Screening Decision Aid**


• Touch screen
• Written at a 6th grade level
• Video testimonials

**Slide 24: Blogs for Rural America**

[http://www.cfra.org/blog](http://www.cfra.org/blog)

• Hosted by the Center for Rural Affairs in Lyons, Nebraska
• Seeks to establish strong rural communities
  - Blog
  - Videos
  - RSS feed

**Slide 25: Pennsylvania Patient Navigator Network-Blog**

• Professional Network
  - Registered users
  - Blog: [http://pubweb.fccc.edu/panavnet/](http://pubweb.fccc.edu/panavnet/)
  - Twitter: @PA_Nav_Net
  - Facebook

**Slide 26: Untitled**

Image of Pathways to Recovery After Breast Cancer Treatment Web site

Slide 27: Recruiting to Research

- CIS Research Consortium*
  - Three e-mail blasts
  - 89% of projected goal reached for recruitment
  - High completion followup rates for this group
- Army of Women http://www.armyofwomen.org/
  - More than 330,000 women volunteers
  - High-risk breast cancer patients partner with researchers

Supported by a program project grant (2P01CA057586-09A2) from the National Cancer Institute to the University of Colorado, the Fox Chase Cancer Center, and the University of California at Los Angeles for the Cancer Information Service (CIS) Research Consortium.

Slide 28: Programmatic

- Connecting to others – identifying credible voices from communities
- Connect Web 2.0 to online resources (e.g., Healing Choices, CRC software)
- YouTube series on specific conditions
- Communication preferences (e.g., video and touch screen for low literacy – how to integrate into Web 2.0 technologies)
- Create mobile apps from existing evidence-based material
- Helping consumers evaluate information for bias (e.g., website reviews, Health On the Net Foundation)
- Toolboxes for bloggers – health literacy, evidence-based content, health disparities, cultural competency

Slide 29: Research

- Opportunities
  - Recruitment to research – Army of Women
  - Develop salient and powerful messages – literacy, language, culturally competent
  - Use social networking as a tool and platform to reach underserved communities and involve them in design
  - Use of mobile devices to deliver and facilitate participation
- Things To Consider
  - How to modify research designs
  - What is a realistic outcome
  - How is usage of these technologies different from other online resources?

Slide 30: Final Thoughts

- Great opportunity, but more questions than answers
- Educator’s perspective

More integration – evidence-based interventions and social media – in the end, chronic disease is complex and need to activate patients

- Health literacy and cultural competency

Researcher’s perspective

- Who is participating, especially from underserved communities? Are they using these technologies differently?
- How does the use of these technologies impact their sense of empowerment?
- How can we involve the community to understand their perspectives and what is needed to enhance the impact of Web 2.0 on health disparities?
- What does it take to integrate these technologies, and does it lead to a more empowered patient? And are there differences among those populations with more health disparities?