Public Health 2.0:
Leveraging Social Media and
Technology for Better Health

Jay M. Bernhardt, PhD, MPH
Professor and Chair of Health Education and Behavior
Director, Center for Digital Health and Wellness
College of Health and Human Performance

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SOCIAL MEDIA AND TECHNOLOGY

http://www.wizmarketings.com/social-media-marketing/

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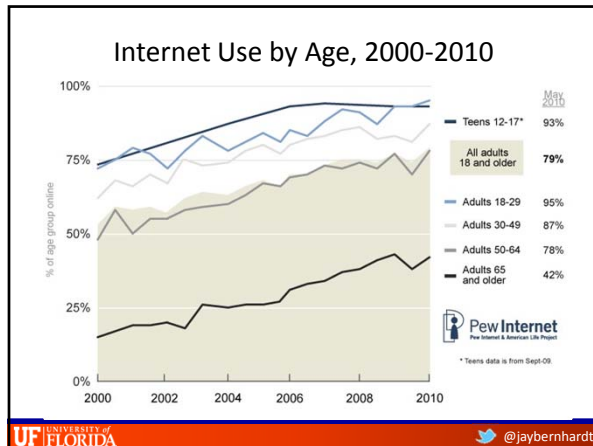

Are you 1.0 or 2.0?

- *Do you have an "old fashioned" cellphone?*
  - Do you text? How many times per day?
  - Have you browsed the mobile web?
- *Do you have a smartphone?*
  - Have you downloaded apps? Paid for apps?
- Do you have a tablet computer?
  - Have you brought it on trips instead of your laptop?
- *Do you use social networking sites?*
  - Facebook? Twitter? Aggregators like Tweetdeck?
- *Do you have a landline telephone?*

How Millennial Are You? http://pewresearch.org/millennials/

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Internet Use by Age, 2000-2010

Generational Differences in Online Activities

Social Media Use by Age, 2005-2010

Facebook's Mission:
Make the World More Open and Connected

In other words... Engagement

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2.0 = Communication Revolution

Creating & Sharing
Interactivity & Engagement
Collaboration & Crowds

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Broadband and Dial-up Adoption, 2000-1010

% of American adults who access the internet via dial-up or broadband, over time.

Source: Pew Internet & American Life Project surveys.

http://www.pewinternet.org/Reports/2010/Home-Broadband-2010/Summary-of-Findings.aspx

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Cellphone Use by US Adults

Topic	Dec 2005	Dec 2010
Wireless subscribers	208M	303M
Wireless penetration	69%	96%
Wireless only households	8%	27%
Minutes of use	1.5T	2.2T
Annual text messages	81B	2.1T

http://www.ctia.org/advocacy/research/index.cfm/AID/10378

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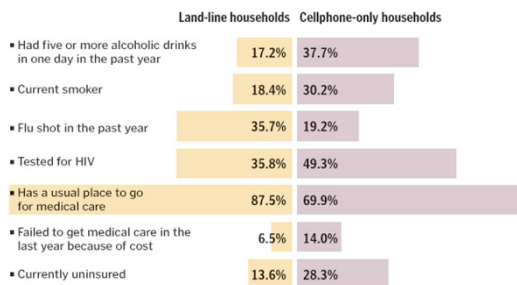Do you ever use your phone to... (% of cell phone users)

	Millennials (Ages 18-34)	Gen X (35-46)	Younger Boomers (47-56)	Older Boomers (57-65)	Silent Gen. (66-74)	G.I. Gen. (75+)	All adults (18+)
Take a picture	91	83	78	60	50	16	76
Send or receive text messages	94	83	68	49	27	9	72
Access the internet	63	42	25	15	17	2	38
Play a game	57	37	25	11	10	7	34
Record a video	57	39	23	11	7	4	34
Send or receive email	52	35	26	22	14	7	34
Play music	61	36	18	10	7	5	33
Send or receive instant messages	46	35	22	15	13	6	30

Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

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Mobile-Only Household Health

	Land-line households	Cellphone-only households
Had five or more alcoholic drinks in one day in the past year	17.2%	37.7%
Current smoker	18.4%	30.2%
Flu shot in the past year	35.7%	19.2%
Tested for HIV	35.8%	49.3%
Has a usual place to go for medical care	87.5%	69.9%
Failed to get medical care in the last year because of cost	6.5%	14.0%
Currently uninsured	13.6%	28.3%

SOURCE: Centers for Disease Control and Prevention | GRAPHIC: Patterson Clark, The Washington Post - January 12, 2009

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TAKE HOME MESSAGE:

**COMMUNITIES RANGE FROM 0.0 TO 1.0 TO 2.0
BUT 2.0 IS GROWING AND MOBILE CAN
HELP CROSS THE DIGITAL DIVIDE**

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PUBLIC HEALTH 1.0

http://www.thisispublichealth.org/Campaignideas.html
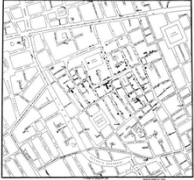
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Public Health Defined

- "The science and the art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts…"
  – Charles-Edward A. Winslow (1920)

- "What we, as a society, do collectively to assure the conditions for people to be healthy."
  – Institute of Medicine (1988)

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John Snow (1813-1858)

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21st Century Public Health

- Prevent epidemics and the spread of disease
- Protect against environmental hazards
- Prevent injuries and increase safety
- Promote and encourage healthy behaviors
- Respond to disasters and assist in recovery
- Assure quality & accessibility of health services

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Essential Services of Public Health

- Monitor health status
- Diagnose and investigate
- Inform, educate, and empower
- Mobilize community partnerships
- Develop policies and plans

- Enforce laws and regulations
- Link people to needed services / assure care
- Assure a competent workforce
- Evaluate health services
- System Management and Research

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Essential Services of Public Health

CDC

NPHPSP
National Public Health Performance Standards Program

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2.0

ESSENTIAL PUBLIC HEALTH SERVICES 2.0

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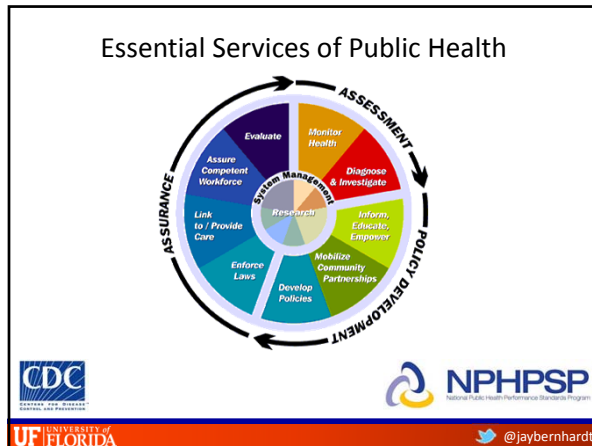
1. Monitor Health to Identify and Solve Community Health Problems

- Accurate, periodic assessment of the community's health status, including:
  – Identification of health risks
  – Attention to vital statistics and disparities
  – Identifications of assets and resources
- Population health registries

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Public Health 2.0: Monitor Health

- Open-source data
- Data "mashups"
- Social media data mining

Global
Public
Health
Intelligence
Network

Google

an Energy Mashup
ion from Data.gov and OpenEl.org
Milwaukee, Wisconsin
DATA.GOV
DISCOVER.
PARTICIPATE.
ENGAGE.

radian⁶

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2. Diagnose and Investigate Health Problems and Hazards in the Community

- Timely identification and investigation of health threats
- Availability of diagnostic services, including laboratory capacity
- Response plans to address major health threats

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Public Health 2.0: Diagnose & Investigate

- Mobile wireless data collection
- Public health informatics

http://www.braintrack.com/college-and-work-news/articles/stanford-issues-ipads-to-incoming-class-of-med-students-10080601

Conceptual Model
Public Health Grid

http://www.cphi.washington.edu/projects/gridcomputing.html

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3. Inform, Educate, and Empower People About Health Issues

- Initiatives using health education and communication sciences to:
  - Build knowledge and shape attitudes
  - Inform decision-making choice
  - Develop skills and behaviors for healthy living
- Health education and health promotion partnerships within the community to support healthy living
- Media advocacy and social marketing

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Public Health 2.0: Health Promotion

- User Generated Content
- Social media campaigns
- Gamification

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4. Mobilize Community Partnerships to Identify and Solve Health Problems

- Constituency development and identification of system partners and stakeholders
- Coalition development
- Formal and informal partnerships to promote health improvement

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Public Health 2.0: Networks & Partnerships

- Social networks for building coalitions and communities

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5. Develop Policies & Plans That Support Individual and Community Health Efforts

- Policy development to protect health and guide public health practice

6. Enforce Laws and Regulations That Protect Health and Ensure Safety

- Review, evaluation, advocacy, revision, education, and support of legal authority, laws, and regulations

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Public Health 2.0: Laws & Policies

- Engage and organize through social media
- Apps and GPS-based policy education
- Smart video capture

http://abcnews.go.com/OnCampus/story?id=7481546&page=1

http://nationalsecurityzone.org/site/tag/chicago/

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7. Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable

- Identifying populations with barriers to care
- Effective entry into a coordinated system of care
- Ongoing care management
- Culturally appropriate and targeted health information for at risk population groups
- Transportation and other enabling services

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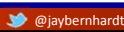
Public Health 2.0: Location Based Services

- Location based services
- Using mobile for hard to reach
- Tailored tracking and messages

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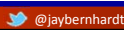
8. Assure a Competent Public and Personal Healthcare Workforce

- Assessment of public health & healthcare workforce
- Maintaining public health workforce standards
  - Efficient processes for licensing / credentialing requirements
  - Use of public health competencies
- Quality improvement and life-long learning
  - Leadership development
  - Cultural competence

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Public Health 2.0: Workforce

- Distance education
- Social networks for professionals
- Web 2.0 training <u>and</u> access at work

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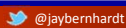
9. Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Health Services

10. Research for New Insights and Innovative Solutions to Health Problems

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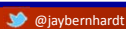
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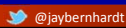
Public Health 2.0: Research & Evaluation

- Technology for data collection and mining
- QR codes and mobile for real-time feedback
- Online tools to speed translation/dissemination

http://www.kinesissurvey.com/demos/mobile-demo/

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PUBLIC HEALTH 2.0 CONCLUSIONS

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Advantages of Public Health 2.0 Programs

- Increased & Sustained Reach
- Deeper Audience Relevance, Involvement, and Engagement
- Scalable and Affordable Interventions
- Facilitates Measurement and Program Evaluation

text4baby

Like

foursquare

http://www.fastcompany.com/1603217/the-five-stages-of-foursquare-use

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Challenges to Public Health 2.0 Programs

- Understanding and access among target audiences and priority communities
  – *Mobile, voice, and youth access growing rapidly*
- Understanding and access among public health professionals and organizations
  – *IT security concerns must NOT inhibit progress!*
- Research and evaluation to determine and disseminate evidence-based best practices
  – *Innovation is not an excuse for bad methodology*

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"John Snow 2.0"

@jaybernhardt

Thank You!

jaybernhardt@ufl.edu
jaybernhardt.com
@jaybernhardt
dhcx.org
#dhcx

@jaybernhardt