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

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SOCIAL MEDIA AND TECHNOLOGY

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

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?

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

In other words… Engagement

2.0 = Communication Revolution
Creating & Sharing
Interactivity & Engagement
Collaboration & Crowds

Cellphone Use by US Adults

<table>
<thead>
<tr>
<th>Topic</th>
<th>Dec 2005</th>
<th>Dec 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless subscribers</td>
<td>208M</td>
<td>303M</td>
</tr>
<tr>
<td>Wireless penetration</td>
<td>69%</td>
<td>96%</td>
</tr>
<tr>
<td>Wireless only households</td>
<td>8%</td>
<td>27%</td>
</tr>
<tr>
<td>Minutes of use</td>
<td>1.5T</td>
<td>2.2T</td>
</tr>
<tr>
<td>Annual text messages</td>
<td>81B</td>
<td>2.1T</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th></th>
<th>Millennial</th>
<th>GenX</th>
<th>Younger Boomers</th>
<th>Older Boomers</th>
<th>Silent Gen.</th>
<th>GI Gen.</th>
<th>All adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(ages 18-34)</td>
<td>(35-49)</td>
<td>(50-64)</td>
<td>(65-74)</td>
<td>(75+)</td>
<td>(80+)</td>
<td>(all age groups)</td>
</tr>
<tr>
<td>Take a picture</td>
<td>91</td>
<td>87</td>
<td>77</td>
<td>69</td>
<td>50</td>
<td>16</td>
<td>76</td>
</tr>
<tr>
<td>Send or receive text messages</td>
<td>94</td>
<td>88</td>
<td>68</td>
<td>49</td>
<td>27</td>
<td>9</td>
<td>72</td>
</tr>
<tr>
<td>Access the internet</td>
<td>83</td>
<td>75</td>
<td>54</td>
<td>43</td>
<td>34</td>
<td>21</td>
<td>36</td>
</tr>
<tr>
<td>Play a game</td>
<td>57</td>
<td>57</td>
<td>25</td>
<td>15</td>
<td>12</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Record a video</td>
<td>57</td>
<td>49</td>
<td>28</td>
<td>17</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Send or receive email</td>
<td>52</td>
<td>35</td>
<td>26</td>
<td>14</td>
<td>7</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Play music</td>
<td>50</td>
<td>39</td>
<td>22</td>
<td>14</td>
<td>7</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Send or receive instant messages</td>
<td>46</td>
<td>35</td>
<td>22</td>
<td>15</td>
<td>13</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Pew Research Center’s Internet & American Life Project, April 23-May 30, 2010
Tracking survey, 1,413 adults 18 and older.

Mobile-Only Household Health

- Had five or more alcoholic drinks in one day in the past year: 17.2% vs. 37.7%
- Current smoker: 18.4% vs. 30.2%
- Flu shot in the past year: 35.7% vs. 19.2%
- Tested for HIV: 35.8% vs. 49.3%
- Was a usual place to go for medical care: 87.5% vs. 69.9%
- Failed to get medical care in the last year because of cost: 6.5% vs. 14.0%
- Currently uninsured: 13.6% vs. 78.3%

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

PUBLIC HEALTH 1.0

http://www.thisispublichealth.org/CampaignIdeas.html

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)
John Snow (1813-1858)

John Snow (1813-1858)

http://www.ph.ucla.edu/epi/snow/broadstreetpump.html

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

http://www.health.gov/phfunctions/public.htm

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

http://www.health.gov/phfunctions/public.htm
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
Public Health 2.0: Monitor Health

• Open-source data
• Data “mashups”
• Social media data mining

Global Public Health Intelligence Network

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

National Public Health Performance Standards Program, CDC

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
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

Public Health 2.0: Health Promotion

- User Generated Content
- Social media campaigns
- Gamification

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
Public Health 2.0: Networks & Partnerships

• Social networks for building coalitions and communities

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

Public Health 2.0: Laws & Policies

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

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
Public Health 2.0: Workforce

- Distance education
- Social networks for professionals
- Web 2.0 training and access at work

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

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

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
PUBLIC HEALTH 2.0 CONCLUSIONS

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

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
“John Snow 2.0”

Thank You!

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