Protecting Public Health in a Social Media World: Policy Responses to Online Threats
C Hanson, J Barrett, J West, M Barnes

Citation

Abstract
Context: Emerging and unique threats to health exist in the social media landscape and can be exhibited on agency-sponsored websites if not managed appropriately. Objective: The purpose of this study was to identify important elements of a social media policy for agencies as informed by existing policies in healthcare and government/nonprofit agencies. Design: A content analysis of 21 social media policies was conducted. Common provisions, guidelines, rules and obligations were identified using an open coding technique. Results: A total of 62% of policies included aspects of an internal social media policy while 52% included aspects of an external social media policy. Four thematic categories were identified for internal policies and five for external. Conclusions: Thematic categories exist for both internal and external social media policies that can provide public health agencies with a starting point for social media policy development.

INTRODUCTION
The first generation of the Internet required sophisticated computer skills in order to post information to static webpages for viewers to search and digest. This has given way to a new generation of Internet programs, generally referred to as social media, which allow lay members of the public to post information online. Today, the Internet is replete with highly accessible web sites that provide users with an easy and convenient way to communicate, collaborate, and share multimedia. These social media sites include but are not limited to blogs, microblogs (e.g., Twitter), social networking sites (e.g., Facebook), wikis (e.g., PBworks), and video sharing applications (e.g., Youtube).

According to the Pew Internet Project, 74% of American adults now use the Internet, and 61% use it to obtain health related information. As a result of statistics like these, many public health practitioners recognize social media’s promise for public health and have begun using these Internet programs for health communication purposes. For example, the Centers for Disease Control and Prevention (CDC) have promoted the use of social media as another channel for health communication and have implemented several ongoing social media campaigns. Many public health agencies (e.g., local and state health departments) are following suit and utilizing social media to reach the public with important health information that in some cases has helped influence decision making. Recognizing its potential for public health practice, CDC launched a new toolkit outlining best practices for creating a local social media strategy.

While social media has provided a new way for Internet users to communicate, share information, and learn, it has also created new avenues that can threaten public health.

SOCIAL MEDIA THREATS
Emerging and unique health threats exist in the social media landscape and can be realized on social media web sites sponsored by public health agencies if not managed appropriately. Threats may be in the form of cyber-bullying or solicitation where users specifically target other users online. The incidence of cyber-bullying has increased as social media usage has increased and often results in serious health outcomes, with many victims experiencing high levels of depression and low self-esteem. Studies have revealed that the prevalence rate of adolescents participating in cyber-bullying is as high as 36%. Other studies linked social media to risks involving exposure to harmful tobacco advertising and alcohol abuse. Additional research is needed that explores the public health impact of explicit content, suicide endorsements, online gambling and gaming,
as well as solicitation and predation.

While threats can be overt attempts to harm another user, they might also be less obvious or identifiable. For example, misinformation about health topics as well as conspiracy theories related to health behaviors have appeared on social media websites. A recent study of Human Papilloma Virus (HPV) vaccine conversations on Myspace showed that men were more likely to hold negative views about and spread negative information concerning the HPV vaccine while blogging. In their content analysis of 153 YouTube videos related to immunizations, Kellan et al. found that nearly one-third of the videos emphasized risk, advocated against, promoted distrust, or made allegations of conspiracy regarding immunizations. In addition, more and more users are turning to Wikipedia and other websites where users post health-related information. Little research has been done to assess the quality of this information except to show that it may be inferior to what could be found through reputable agencies (e.g., National Cancer Institute).

Threats such as these have important implications for public health agencies that desire to use social media as a way to reach priority populations with important health information. Many public health agencies such as state and local health departments are creating Facebook pages, YouTube channels, and Twitter accounts. Officials can work to avoid the iatrogenic effects of social media programming by carefully crafting policies for development and use. Failure to do so could provide some users with a medium to: (1) post hazardous content, (2) directly target other users with threats and solicitations, and (3) post misinformation related to health topics. In addition, failure to manage social media could provide victims of these threats with the rationale to pursue litigation against a public health agency.

As social media has empowered the lay public to join online conversations, public health practitioners have become more involved in using social media for health promotion purposes. Public health officials are challenged with managing the use of these technologies in at least two ways: a) when their own staff use social media applications on agency computers (internal), and b) their clients post information on agency sponsored social media sites (external). Agency sponsored pages might include a health department Facebook page, Twitter account, or YouTube channel. To avoid the challenges and threats associated with social media, many public health officials simply block access to social media applications on agency computers.

However, such broad stroke reactive policies may have deleterious professional repercussions. In light of the growing popularity of social media and its promise for public health promotion, administrators may manage these threats through carefully crafted social media policies. While several good social media policy examples exist, few public health administrators are aware of these options. In addition, public health agencies such as state and local health departments have been less responsive in developing policies compared to healthcare. The purpose of this study was to identify the important elements of social media policies as informed by a content analysis of existing policies in healthcare and governmental/nonprofit agencies.

**METHODS**

The sampling unit included social media policies as identified by the Social Media Governance Policy Database. This database was created in 2009 in order to provide leaders and managers with the tools necessary to implement effective social media efforts within their agencies. The database includes a total of 176 policies from a variety of industries. Within the database, policies are categorized as relating to advertising, public relations and marketing agencies; business products and services; consumer products and services; healthcare; and government or nonprofit.

A total of 21 social media policies from the healthcare category and government or nonprofit category were identified and included in this review. All policies in the healthcare category were included. Because of their closer alignment to public health, only policies from health-related agencies in the government or nonprofit category were included for review. For example, social media policies in the government or nonprofit category eliminated from the review included but were not limited to New York City, Harvard Law School, and the US Navy. No policy in the Social Media Governance Policy Database directly related to a state or local health department.

Each policy was reviewed twice in order that thematic categories could be generated and frequencies of common provisions and guidelines determined. The first review used an open coding technique to establish thematic categories by closely examining and comparing elements of the policies for similarities. This review involved careful reading of the text and identification of the common provisions and guidelines of each social media policy. Based on this review, researches then induced nine thematic areas to which
provisions and guidelines could be categorized.

Once thematic categories were identified, the text of each policy was read a second time in order that the number of common provisions and guidelines for each category could be determined. These data were captured by using Qualtrics, an online survey tool, and then downloaded to a spreadsheet for analysis. Frequencies of major thematic areas were computed using STATA statistical software.

RESULTS

This content analysis of social media policies clearly revealed two distinct categories of provisions and guidelines. These categories included provisions and guidelines for (1) internal staff use and (2) external client use of social media.

Of the policies reviewed, 62% included aspects of an internal social media policy while 52% included aspects of an external social media policy. Only 3 agencies had aspects of both internal and external social media policies.

Several major themes relative to internal (staff) provisions and guidelines were identified and included using social media for agency purposes; proprietary or client information; professional or respectful online behavior; and reference to existing laws, rules and obligations. Over one-half of the internal policies included reference that would preclude the disclosure of privileged agency information or the release of client or patient information through social media applications. Over one-third of the internal policies required staff to be respectful of colleagues, partners, clients/patients, and competitors through their online communications and to obtain permission from management prior to establishing any agency sponsored social media presence on an external social media platform. The complete list of thematic categories and descriptions for internal social media policies are included in Table 1.

<table>
<thead>
<tr>
<th>Thematic Category</th>
<th>No. (%)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Social Media for Agency Purposes</td>
<td>7 (33)</td>
<td>Obtain permission from management prior to establishing an agency sponsored presence on an external social media site</td>
</tr>
<tr>
<td>Proprietary or Client Information</td>
<td>11 (52)</td>
<td>Not disclose privileged information or releasing client or patient information</td>
</tr>
<tr>
<td>Professional and Respectful Online Behavior</td>
<td>9 (43)</td>
<td>Be respectful of colleagues, partners, clients/patients, competitors through online communications</td>
</tr>
<tr>
<td>Refer to Existing Laws, Rules and Obligations</td>
<td>6 (29)</td>
<td>Taking responsibility, restrictions on posting material that is obscene, defamatory, profane, libelous, threatening, harassing, abusive, hateful, embarrassing to another person or entity</td>
</tr>
<tr>
<td></td>
<td>6 (29)</td>
<td>Link or reference to social media use not interfering with work responsibilities</td>
</tr>
<tr>
<td></td>
<td>5 (24)</td>
<td>Link or reference to permission prior to posting copyrighted materials</td>
</tr>
<tr>
<td></td>
<td>4 (19)</td>
<td>Link or reference to existing communications policy</td>
</tr>
</tbody>
</table>

External policy provisions and guidelines pertained specifically to external clients and their use of agency sponsored social media applications. Over one-half (55%) of the external policies were available to clients through the actual social media outlet. That is, these external policies were posted most often on the social media outlet site (e.g., Facebook page) and not on the agency homepage. Only two of the external policies imposed minimum age restrictions for commenters.

Several major themes relative to external (client) use of agency sponsored social media were identified, including
agency oversight, online behavior, personal privacy, agency right to comments, and commenter responsibilities. Nearly half of the external policies included a statement regarding an agreement to not post unlawful, obscene, defamatory, threatening, harassing, abusive, slanderous, hateful, or embarrassing material on the agency sponsored social media site. In addition, over one-third of the external policies pertained to the agencies’ right to monitor or terminate client access to the agency-sponsored social media site and an agreement to not post “spam” or irrelevant/off-topic material. Thematic categories and descriptions for external social media policies are included in Table 2.

**Figure 2**
Table 2. External Policy Provisions and Guidelines (Clients) (N = 21)

<table>
<thead>
<tr>
<th>Thematic Category</th>
<th>No. (%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Oversight</td>
<td>6 (38)</td>
<td>Agency has the right to terminate client access to agency sponsored social media sites—particularly for the violation of policy/guidelines</td>
</tr>
<tr>
<td></td>
<td>7 (42)</td>
<td>Agency has the right to terminate client access to agency sponsored social media sites—particularly for the violation of policy/guidelines</td>
</tr>
<tr>
<td></td>
<td>3 (18)</td>
<td>Agency has the right to restrict client access to agency sponsored social media sites—particularly for the violation of policy/guidelines</td>
</tr>
<tr>
<td>Online Behavior</td>
<td>10 (48)</td>
<td>Agreeing to not post material (including links to material) that is unlawful, obscene, defamatory, threatening, harassing, abusive, slanderous, hateful, or embarrassing to any person or entity</td>
</tr>
<tr>
<td></td>
<td>8 (38)</td>
<td>Agreeing to not post material (including links to material) that solicits business or advertisements</td>
</tr>
<tr>
<td></td>
<td>6 (29)</td>
<td>Agreeing to not post material (including links to material) that infringes on the rights of a third party</td>
</tr>
<tr>
<td></td>
<td>5 (24)</td>
<td>Agreeing to not post material (including links to material) that is posted more than once or is considered “spam”</td>
</tr>
<tr>
<td></td>
<td>7 (34)</td>
<td>Agreeing to not post relevant or off-topic material (including links to material)</td>
</tr>
<tr>
<td></td>
<td>3 (14)</td>
<td>Agreeing to not post material (including links to material) that impersonates others</td>
</tr>
<tr>
<td>Personal Privacy</td>
<td>3 (14)</td>
<td>Avoid posting email, phone numbers</td>
</tr>
<tr>
<td></td>
<td>5 (24)</td>
<td>Avoid divulging personal information as a patient</td>
</tr>
<tr>
<td>Agency Right to Comments</td>
<td>4 (19)</td>
<td>Rights to publish or alter comments for agency purposes; Right to remove content</td>
</tr>
<tr>
<td></td>
<td>2 (10)</td>
<td>Right to reproduce for agency purposes</td>
</tr>
<tr>
<td>Commenter Responsibility</td>
<td>6 (29)</td>
<td>Rights to distribute for agency purposes; Right to edit/comment comments, particularly for the violation of the external policy</td>
</tr>
<tr>
<td></td>
<td>3 (14)</td>
<td>Statement indicating that by posting on the social media site the user is legally bound by the policy and that the policy of subject to revision any time</td>
</tr>
<tr>
<td></td>
<td>4 (19)</td>
<td>A disclaimer that the agency is held harmless from damages or liability associated with commenter content</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Healthcare and governmental/nonprofit agencies have
developed social media policies that can help inform the development of social media policies in public health agencies (e.g., local and state health departments). Using an online database of social media policies, this study identified the common elements of social media policies. These findings build upon results from previous research by expanding research to include a content analysis of external policies. From their research, Hrdinova and colleagues recommended that social media policies include eight elements: employee access, account management, acceptable use, employee conduct, content, security, legal issues, and citizen conduct. Seven of the recommendations from their research address internal staff while only one addresses external clients. Our study, however, revealed a very clear demarcation between internal social media policies that pertain to staff and external social media policies that pertain to clients.

**INTERNAL POLICY**

As described in this study, an internal social media use policy directed towards staff typically outlines the requirements for participation in agency hosted or non-agency hosted social media. These policies provide guidelines as to how staff should communicate and interact in a social media setting. Having an internal social media policy can provide public health officials with a tool necessary to manage the use of these technologies and minimize the potential for abuse. The goal is for staff to present themselves online in the same professional manner they would present themselves in person. Such policies may preclude staff from posting potentially offensive comments or from imparting health information that is not endorsed by their agency. Because of the nature of social media applications, there may be a tendency for staff to be more casual during electronic interactions.

The use of social media in the workplace has the capacity to increase collaboration among those who share a common goal; however, it can also lead to loss productivity as staff access sites, update profiles, add content, befriend and/or tweet. Agency social media policies should educate staff regarding professional worksite expectations, much in the same way agencies have historically encouraged staff to limit personal phone calls at work to avoid unnecessary distractions.

An earlier study conducted by Boudreaux on social media policies highlighted the importance of internal policies for staff that address: (1) the expectations and boundaries for personal use of the social media, and (2) guidelines of work-related use of social media. Our findings confirm the importance of such guidelines, but go further to recommend specific provisions as described by the thematic categories and descriptions in Table 1. Of particular note are guidelines specifically precluding the disclosure of privileged information or the release of client information while participating in social media. Violation of such a provision could easily jeopardize the offending agencies credibility. For example, a recent Twitter post by a physician simply referring to a patient’s height and weight created national attention regarding the appropriateness of sharing privileged information online.

**EXTERNAL POLICY**

While previous research of non-health-related social media policies has highlighted the importance of internal policies, this study also explored elements of external policies that pertain specifically to clients and their use of agency-sponsored social media applications. The provisions of an external policy can be an important step toward mitigating threats associated with social media use on agency-sponsored sites. Greater emphasis on external policy provisions compared to previous research may indicate that agencies are becoming more sensitive to potential threats. In addition, these external provisions provide clients with the understanding of agency oversight as well as their right to remove or use content for agency purposes. With growing social media threats such as cyberbullying, public health agencies should consider establishing clear external policies that govern participation and conduct on agency-sponsored social media sites.

The findings from this study should be interpreted based on the following limitations: first, the study included only those social media policies currently posted to the Social Media Governance Policy Database. Other health related agencies might have established policies that are not listed in this particular database. As social media policies become more prevalent, future research might explore policies beyond those posted to this online database by using Internet search engines to identify agency policies. Second, a content analysis is an important first step to better understanding how agencies are responding to social media threats. However, this study did not assess how policies directly influenced staff and consumer behavior. Future research might involve the collection of data from staff and consumers to explore their response to social media policies.
CONCLUSIONS

An agency response associated with addressing the public health threats of social media requires that officials recognize online threats as “real” and subsequently exercise managerial responsibilities to mitigate these threats. Awareness has been heightened as agencies face litigation due to improprieties on social media sites.23, 24

This study provides evidence of several key thematic categories that can help provide public health officials with a starting point for establishing internal and external social media policies. Internal policies focus on staff expectations and behavior while external policies focus on client expectations and behavior. While not every policy reviewed in the study had both internal and external policies, public health officials should discuss the value of both for their agency. As these policies are established, they should be prominently displayed for all users of the social media, especially on a webpage announcing the social media tools.

To initiate the policy making process, an internal policy making board can be created to develop and oversee social media use policies. This board can be responsible for the creation of both internal and external social media use policies for public health agencies as informed by the best practices outlined in this paper.

References

Author Information

Carl L. Hanson, Ph.D., MCHES
MPH Program Director, Associate Professor, Department of Health Science, Brigham Young University

James Barrett, B.S.
Department of Health Science, Brigham Young University

Joshua H. West, Ph.D.
Assistant Professor, Department of Health Science, Brigham Young University

Michael D. Barnes, Ph.D., MCHES
Department Chair, Professor, Department of Health Science, Brigham Young University