Toward a Common Agenda for the Public and Private Sectors to Advance Digital Health Communication

The widespread use of the Internet, smart phones, and other mobile digital devices has created a unique opportunity for public health.[1–3] Moreover, social media platforms and a wide and burgeoning range of available applications have demonstrated significant capacity to reach millions of people with health information and advice.[4,5] Despite growing evidence that supports the promise of digital communication in health promotion, there has been limited exchange and integration of data and information across the public and private sectors about how it can be maximized to improve public health.[6,7]

The inaugural Digital Health Promotion Executive Leadership Summit (for the summit's program, see Supplement, available in the online version of this article at http://www.ajph.org) was undertaken in an effort to showcase innovative case studies and discuss tangible opportunities for collaboration across the public and private sectors in applications of digital technology to improve public health. Convened in Washington, DC, June 5–6, 2018, the summit brought together 30 expert speakers and more than 75 national leaders from the academic, government, nonprofit, and technology sectors in the United States and other nations working in digital health communication to do the following:

1. discuss digital technology's role in addressing cutting-edge public health issues such as opioids, suicide, mental health, as well as its impact on children and adolescents;
2. explore case studies of successful uses of social media in public health interventions;
3. address issues related to digital health and confidentiality, patient protection, and data sharing; and
4. examine future directions for the use of digital technology to improve individual and population health.

The summit thus sought to establish a foundation for developing a common agenda to maximize both the opportunities and uses of digital technology for advancing the goals of public health. All summit participants received a draft common agenda before the meeting and were asked to reflect on the proposed recommended principles and related actions, based on the various presentations and panel discussions. The summit's closing session provided an open-ended opportunity for participants to comment on the draft common agenda and recommend changes, which were then taken under further consideration by the authors and writing group.

INTENDED AUDIENCES

This editorial, and the common agenda it reports, is intended for those who are engaged in the creation, dissemination, and study of digital health communication: researchers and academics in public health, behavioral medicine, health promotion, and health education; policymakers and decision-makers in government and nongovernmental entities; stakeholders in social media companies; and those in international organizations and other institutional authorities who have a stake in promoting the health of the public through digital information and communication technologies.

ASSERTIONS

In this section, we assert what we believe underlies and informs the common agenda, based on the existing contemporary scientific literature and summit presentations (for references, see the online Supplement). Although these assertions reflect the current literature on the state of understanding and applications of digital technology for health promotion, we recognize that the field is dynamic and will continue to advance and evolve, and thus recommend that these assertions be revisited periodically and revised accordingly.

- Health communication has been defined by the Centers for Disease Control and Prevention and the National Cancer Institute as the "the study and use of communication strategies to inform and influence individual decisions that enhance health" (http://bit.ly/2zV6jOk).
- Well-designed health communication can attenuate barriers and thus can improve health literacy and numeracy to empower individuals and populations—especially underserved and vulnerable audiences—for improved health decision-making and the promotion of health equity.
- Digital health communication encompasses information and programming made available by both the public and private sectors via Web-based platforms, social media, and mobile technologies, including cell phones, smart phones, and other personal devices, some of which have demonstrated a growing evidence base that supports their use for health promotion.
- The Internet and digital information are now frequently the first sources consulted by the public to obtain health information and for help with health-related questions or problems.
- The pace of collection, dissemination, and exchange of

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population-wide and personal health data is expected to exponentially increase in the future years through innovations and rapid advancements in new technologies and devices, population growth, research in personalized medicine, and growth and analysis of health information, and this portends that future generations will be increasingly reliant on technology and global connectedness.

- The digital divide in access to digital technology is decreasing, whereas the digital divide in access to socio-culturally relevant health information is increasing.
- Some digital technologies and applications have been demonstrated to contribute to the promotion of public health and effectively used in disease self-management, whereas the majority are yet to be fully tested and their credibility with different audiences may vary because of a complex array of factors.
- Most of humanity's data created through digital media have been collected in the past two decades, primarily through the Internet.
- Digital health communication projects and programs can be improved by further cross-sector coordination, collaboration, and research.

PRINCIPLES AND RELATED ACTIONS

We recommend that the academic, government, and technology sectors commit to the following common set of principles and related actions:

1. People should have access to health information that is timely, credible, and valid.
2. It is the responsibility of individuals and organizations that intentionally or unintentionally create and disseminate digital health communications to provide access to accurate health information.
3. Timely, credible, and valid data should be used to create evidence-based health communications.
4. Enhanced digital technologies are needed to reach at-risk populations with health information that is accessible, persuasive, relevant, and culturally and linguistically appropriate so as to be responsive to the socio-cultural context of communities.
5. Digital health information campaigns and programs should be formatively evaluated to measure reach and effectiveness. Additionally, individuals and organizations planning or conducting health communication initiatives or interventions should ensure that these initiatives are empirically supported and rigorously evaluated in a timely, responsive manner consistent with the rapid advances in digital technologies.
6. Individuals and organizations planning or conducting digital health communication initiatives or interventions have a responsibility to anticipate potential unintended consequences (i.e., misconceptions or missed vulnerabilities) that the provision of health information might create. Thus, existing and future digital communications should be evaluated for their unintended and intended health consequences, especially for marginalized, vulnerable, or at-risk populations.
7. Individuals and organizations conducting health communication initiatives should work to safeguard and ethically protect the privacy of personal data and information, consistent with all applicable US and international digital data privacy laws.
8. The academic, government, and technology industry sectors engaged in digital health communication should collaborate where possible to increase the reach and effectiveness of health communication information and programs.

SUPPORTING THE AGENDA

These recommended principles and related actions constitute an aspirational agenda that we believe can advance a spirit of partnership and commitment to digital health communication that has potential to contribute to improving public health and promoting health equity. Having reached consensus on this common set of principles and related actions for digital health communication, we urge the academic, government, and industry sectors engaged in digital health promotion to support this agenda and to take all necessary national and global actions that can fulfill its intended promise. AJPH

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Note. The views expressed in this editorial do not necessarily represent the views of the academic institutions, professional associations, industry entities, or government and nongovernmental agencies with which the authors and writing group are affiliated or were affiliated at the time and are not meant to imply any official endorsement of the principles and recommended actions.

CONFLICTS OF INTEREST

L. C. Abroms has stock in Welltok Inc. and receives royalties from the licensing of Text2Quit to Welltok Inc., which was not addressed as part of the Summit. The other authors declared no potential conflicts of interest with respect of the research, authorship, or publication of this editorial.

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Communications Recommendations for Sugar-Sweetened Beverage-Free Zones

Sugar-sweetened beverages (SSBs), which include soda, energy drinks, sweetened juices, and presweetened coffee drinks, are now recognized as a significant factor in overweight, obesity, hypertension, diabetes, heart disease, and cancer and contribute nearly half of all the added sugars in the US diet.[1] Internationally, more people now die from being overweight than from underweight.[2,3] Because of this crisis, health organizations such as the American Medical Association are increasingly endorsing "SSB-free zones" for hospitals, schools, and health centers, where these beverages cannot be sold or consumed on the premises.[4]

Recently, pediatricians at a community health center in the Bronx, New York, created an SSB-free policy because they were concerned about the numerous young children they witnessed consuming soda and other SSBs in their clinics. These physicians recognized that a complete institution-wide ban would help avoid the stigma that can occur when specific populations are targeted with health interventions.

Before the SSB-free zone was launched, my research team conducted focus groups with patients and staff to find out what people thought about banning soda and other SSBs from the building. Overall, they were supportive, but they had reservations about whether it would succeed. After all, declaring a health center or hospital SSB-free is not a simple task. One challenge is the reduced revenue from removing the vending machines. Another is the perception that the policy contradicts fundamental American values of free enterprise and freedom of choice. In this editorial, I discuss recommendations for overcoming these challenges based on our experience in the Bronx and what is already known about health communications in workplace settings.

Our four focus groups of 23 total participants included African American, African, Hispanic, Guyanese, South Asian, and White adults. We asked them about health, SSBs, and the prospect of an SSB-free zone within the health center. We also asked them to comment on the following four message frames arguing for reducing SSB consumption:

1. Soda contains much more sugar than you may realize.
2. Soda can lead to weight gain and make you overweight.
3. Soda is linked to diseases such as diabetes, heart disease, and cancer.
4. Beverage companies target their marketing at underserved communities.

All the patients we spoke with had low income, and nearly all were affected by chronic diseases. All the participants told us that they value health, quality of life, and longevity and being able to see their children and grandchildren grow older. Altogether, they were more interested in learning about what these products do to their bodies than what the companies were doing in their communities. When provided with information about the health effects of these products, they wanted to learn more.

THE NEW TOBACCO?

Soda as a public health threat is often compared with tobacco, which has been on the forefront of the public health agenda for decades. Much of the dialogue in our focus groups was analogous to discourse around tobacco. Many participants reported being regular soda drinkers, but some had recently quit. Others reported still "trying to quit." Some expressed difficulty breaking the habit while maintaining social connections.

However, with regard to communications, an important difference between soda and tobacco was seen in our study. Participants wanted more explanation about SSBs as a health issue. Many asked us, as moderators, very specific questions: Is brown soda less healthy than clear soda? Is ginger ale healthier than other soda? What are the differences between corn syrup, sugar, and fructose? People were curious about the healthfulness of so-called energy drinks.

Can you imagine a group of people today asking those kinds of questions about tobacco? It might have happened in the 1960s or 1970s, but thanks to years of public health initiatives, the harms of smoking are now well understood across the age

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