CHAPTER 1

Introduction to Public Health Communication

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LEARNING OBJECTIVES

By the end of this chapter, the reader will be able to:

- Provide a definition of and rationale for public health communication.
- Describe *Healthy People 2020* objectives for health communication.
- Explain how communication fits into the ecological model of public health and supports other public health objectives.
- Describe new developments in health communication.
- Identify competencies in health communication defined by the Council on Linkages between Academia and Public Health Practice.
- Identify government agencies that serve as research incubators in health communication.
- Describe the job of a professional health communicator as defined by the National Public Health Information Coalition.

▶ Introduction

Public health communication is an interdisciplinary field of scholarship and practice that uses everything we know about communication to improve health among individuals and populations. A public health communication practitioner may specialize in health education and promotion, risk communication, or media relations; concentrate on research in communication, behavioral or social science, or digital technology; follow a path that includes teaching, writing, art, entertainment, or rhetoric; or be the biggest digital or data-crunching nerd you know. Such a professional might have a background in journalism, mass communication, health education, a bench science, healthcare delivery, advertising, or marketing. The diversity of expertise that flows into health communication makes it one of the richest, most creative fields of study and practice. Just as "it

takes a village to raise a child," so it takes an inter-disciplinary team to communicate effectively about health with the public.

▶ The Fundamentals

Communication

Communication in and of itself is an extremely complex field with centuries of study. The National Communication Association (NCA), a scholarly professional organization, defines the *discipline* of **communication** as focusing "on how people use messages to generate meanings within and across various contexts, and is the discipline that studies all forms, modes, media, and consequences of communication through humanistic, social scientific, and aesthetic inquiry."[a] With many models proposed over the years, the **transactional model of communication**, derived from the burgeoning psychological and information theories of the 1960s and 70s, has stood the test of time. As Barnlund emphasized in his original exposition of the model, communication " … is not a reaction to something, nor an interaction with something, but a transaction in which man invents and attributes meaning to realize his purposes."[1] To simplify greatly, this meaning is generated by a process of encoding and decoding. A communicator encodes (e.g., puts thoughts into words and gestures), then transmits the message via a channel (e.g., speaking, email, text message) to the other communicator(s), who then decodes the message (e.g., take*s* the words and applies meaning to them). The message may be degraded by noise (e.g., any physical, psychological, or physiological distraction or interference), preventing the message from being completely received or fully understood as the sender intended.

This description covers two-thirds of a communication transaction, which ends with comprehension. Ultimately, though, the recipient's *response* is the way we know that a message has been understood as intended. If the response fits our expectations, we believe our communication was successful. Unfortunately, according to the great Finnish communication scholar Osmo A. Wiio, "Communication usually fails, except by accident."[b] Most of the science of health communication exists to reduce this failure rate.

A clear line once separated what worked best in interpersonal communication versus mass communication, but in recent years digital technologies have permanently abolished this distinction. We can, and often do, think of "an audience of one," and concomitantly have conversations with many of these single-person audiences (see **BOX 1-1**).

The responses we seek are conditioned by our social and cultural context, the choice of medium, and what we are trying to accomplish. In health communication, we usually seek to promote a behavior change, or a change in a behavioral antecedent, such as knowledge or attitude.

Public Health

There are numerous definitions of "health," but all include a concept of individual physical and mental well-being that is sustained throughout the full life-course, from prenatal development and birth, until what is considered a timely death. Public health is concerned with promoting the conditions that give everyone the chance to have a healthy life. According to the U.S. government's Department of Health and Human Services (HHS), everyone should be able to "[a]ttain high quality, longer lives free of preventable disease, disability, injury, and premature death."[c] The key U.S. government strategy for promoting, planning, and assessing public health activities is known as ***Healthy People 2020*** **(HP 2020)**; it measures progress in population health through large trends, such as increased life expectancy and decreased chronic disease prevalence. HP 2020 contains 26 **Leading Health Indicators** that represent significant threats to public health related to disparities in access, social factors, and physical environments, as well as specified objectives for other areas of public health. **BOX 1-2** discusses the development of objectives in health communication and information technology (IT).

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a. NCA (https://www.natcom.org/discipline).

b. Wiio's laws are communication-specific versions of Murphy's laws—for example, "If a message can be interpreted in several ways, it will be interpreted in a manner that maximizes the damage." More can be found at http://www.cs.tut.fi/~jkorpela/wiio.html#who.

c. HP 2020 overarching goal 1 (http://www.healthypeople.gov/2020/About-Healthy-People).

d. See http://www.cdc.gov/mmwr/mmwr_nd/ for *MMWR* summaries.

BOX 1-1 Audience of One, Conversations with Many

Audience of One

"Audience of one" is neither a rock group nor a religious ideal, but rather the data- and social media–enabled phenomenon of being able to understand and communicate with an individual as if that person were the only one who matters. This idea comes from the metaphor of being in a theater and feeling as if the performer is speaking or singing directly to you. (Listen to Roberta Flack's classic song, "Killing Me Softly with His Song.") With sufficient background data and a grasp of context, communicators can tailor messages and media so that each recipient feels as if a personal message were received.

Conversations with Many

Most of us grew up with the idea that a conversation was something you shared with one, or at most, a few individuals. Conversations allow for candid expressions about our thoughts and feelings. In the marketing world, "word of mouth" was the strongest endorsement for a product, as people were more likely to listen to the opinions of friends and family than to the claims made by advertisers. Now, in a world awash with Twitter, blogs, and more immediate social media, we can share with multitudes the thoughts we used to share only with our friends. Corporations use call centers, crowd-sourced Twitter analysis and responses, and more impersonal means to manage the interactive demands of conversational media. However, many professional health communicators, due to other work demands, find it difficult to keep up their end of the conversation.

BOX 1-2 *Healthy People 2020* Objectives: National Priorities in Health Communication and Health Information Technology

Healthy People is a participatory, federally led process for creating national health goals and objectives that reflects available evidence and stakeholders' views on the most important issues in public health. Although the governing body of *Healthy People 2020* is made up of federal agencies, the goals and objectives are developed through collaboration with organizations and individuals in all sectors of society. All objectives for the next decade must be supported by data collected at the end of the previous decade. The U.S. Department of Health and Human Services (HHS) tracks these data over time to establish progress and collaborates with stakeholders to generate multiple, collective actions at different levels—local, state, and national—that improve the public's health. The *Healthy People 2020* objectives, launched in 2010, are based on a determinants of health framework for understanding and addressing the main causes of illness, disability, and premature death.

   Healthy People 2020, and *Healthy People 2010* before it, identified objectives for communication and health information technology. In HP 2010, HHS recognized health communication as a distinct, cross-cutting topic area and included two objectives for Internet access and the quality of health websites. The inclusion of health communication objectives in 2010 confirmed the importance of communication as an intellectual framework, a scientific endeavor, and a set of processes and interventions for health improvement in public health policy making. The topic area expanded in the HP 2020 program to include more objectives for both health communication and health information technology. The added health information technology objectives attest to the increasing importance of digital health as useful not only for clinical and administrative purposes, but also for consumer and patient engagement and provider–patient communication.

   The priorities for the HP 2020 health communication and health information technology objectives emerged from a series of meetings and online discussions, as well as from public comments. The objectives identify communication and information technology activities that can be measured during a decade and available data sources. Ideally, an objective's data source should remain consistent from one decade to the next to allow for longer time trend analyses. More practically, different data sources may have to be used depending on funding availability, new priorities for data collection, and changes in the frequency of data collection. The topics covered in the HP 2020 objectives include health literacy, provider–patient communication, consumer and patient use of digital health resources, health information technology access and diffusion, and the use of social marketing for public health communication. The objectives' full text and most recent data, as well as relevant literature and interventions, are available at www.healthypeople.gov.

BOX 1-2 *Healthy People 2020* Objectives: National Priorities in Health Communication and Health Information Technology   *(continued)*

The importance of health communication and health information technology for achieving national health goals will continue to increase as more people use digital technologies to search for health information, track and manage health behaviors and indicators, and engage with health services and providers in a more interactive way. The *Healthy People* objectives will continue to evolve for 2030 and reflect the changing environment and contribution of communication and information technologies to health outcomes.

How Are We Doing?

Each health communication and health information technology objective included in the *Healthy People* framework has baseline data, one or more data updates during the decade, and an end-of-decade target. Here, we highlight three of the objectives, including their baseline numbers, updates, and targets. The latest data are available from www.healthypeople.gov.

- *Health literacy objective*: Increase the proportion of persons who report that their healthcare provider always gives them easy-to-understand instructions about what to do to take care of their illness or health condition.
  - 2011 baseline: 64.1%
  - 2020 target: 70.5%
- *People's use of electronic personal health management tools objective*: Increase the proportion of persons who use the Internet to keep track of personal health information, such as care received, test results, or upcoming medical appointments.
  - 2007 baseline: 14.3%
  - 2014 update: 28.1%
  - 2020 target: 15.7% [Exceeded target; need to revise]
- *Crisis and emergency risk messages that demonstrate best practices objective*: Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that explain what is known about the threat to human health.
  - 2010–2011 baseline: 83.5% of messages
  - 2020 target: 88.9%

Cynthia Bauer, CDC.

The Ecological Model

Inherent in the HP 2020 framework is the **ecological model** of public health (**FIGURE 1-1**). According to Fielding, Teutsch, and Breslow, the ecological model

> emphasizes the importance of the social and physical environments that strongly shape patterns of disease and injury as well as our responses to them over the entire life cycle, providing a broader conceptualization of important determinants of health not easily identifiable or rectifiable within the medical model. Healthy communities, which are defined by having the capacity to allow each individual to be healthy, must address all these components.[2]

Determinants of Health

As suggested by the goals of HP 2020, much public health effort is directed toward creating healthy communities. High-risk environments—such as those with more pollution, fewer green spaces, fewer outlets for
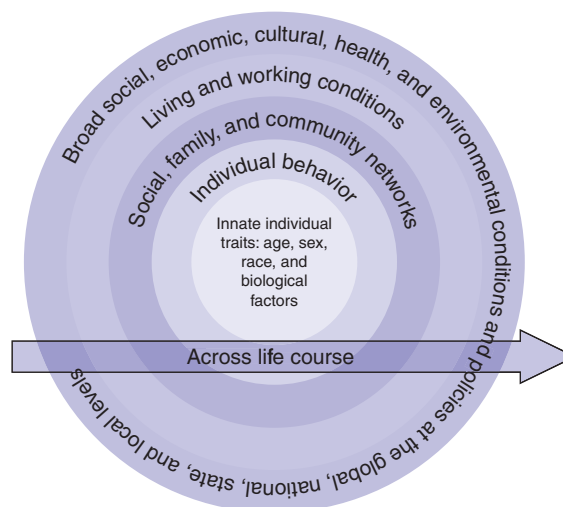

FIGURE 1-1 An ecological model.

Modified from U.S. Department of Health and Human Services, Advisory Committee for HP 2020.

healthy food, more traffic, or more crime—are considered to place an unfair burden on the people living in them. Tremendous human and material resources are required to produce clean air, water, and food;

keep infectious diseases at bay; ensure environmental and worksite safety; and provide affordable health care to all. Our gains in life expectancy in the United States are almost exclusively due to advances in public health on these fronts. While many public health achievements alter our physical world (e.g., reduction in the amounts of environmental lead, fluoridation of drinking water), the majority now rely on societal and individual adoption of recommended behaviors. Some of the disparities that persist in public health are due to lingering inequities in the distribution of resources along social—and often geographic—borders. Others, however, are due to low uptake of healthy behaviors.

In their 2014 working paper, Stewart and Cutler summarize the impact of six behaviors that the U.S. government has tracked in relation to changes in life expectancy (LE) and quality-adjusted life expectancy (QALE) from 1960 to 2010.[3] Overall LE increased by 6.9 years during this period. As shown in **FIGURE 1-2**, the authors estimate that reductions in cigarette smoking and motor vehicle fatalities contributed nearly 2 of these years. At the same time, these gains were partially offset by the negative effect of rising rates of obesity and accidental drug overdoses.

At the population level, we could add even more years to our lifespan if we could only behave in a healthy manner. Data from the Behavioral Risk Factor Surveillance Survey (BRFSS) show that, for example, only 13% of people sampled had the recommended consumption of fruit intake, and 9% had the recommended consumption of vegetables in 2013.[4] These puny rates were found despite the U.S. government's decades-long program promoting "Five a Day" as the minimum number of servings of fruits and vegetables to be consumed each day. For many reasons, it takes a lot of time, and more than just a friendly reminder, to get most people to adopt a new behavior that they find difficult to follow.

Health Communication as a Lever in the Population Health Model

Population health addresses a number of individual health behaviors. Communication is a key public health tool to affect these behaviors. This point was emphasized by Robert Hornik in his 2014 keynote address to a National Academy of Sciences workshop on "Communicating to Advance the Public's Health." According to Hornik:

> Health communication should focus not on population outcomes (such as increased life expectancy) or on categories of behaviors (such as limiting environmental toxins, reducing exposure to tobacco smoke, and safer sex), but rather on individual behaviors.[5]

His examples of using communication to encourage healthy behavior include influencing people to test for radon gas in their homes to reduce environmental toxicity, convincing policy makers to outlaw smoking in public places to reduce population exposure to tobacco toxins, and persuading people to use condoms to reduce sexually transmitted disease.

It is important to note that Hornik includes policy and advocacy as forms of health communication that change behavior—in this case, the behavior of legislators and politicians. This brings health communication in line with the ecological model for public
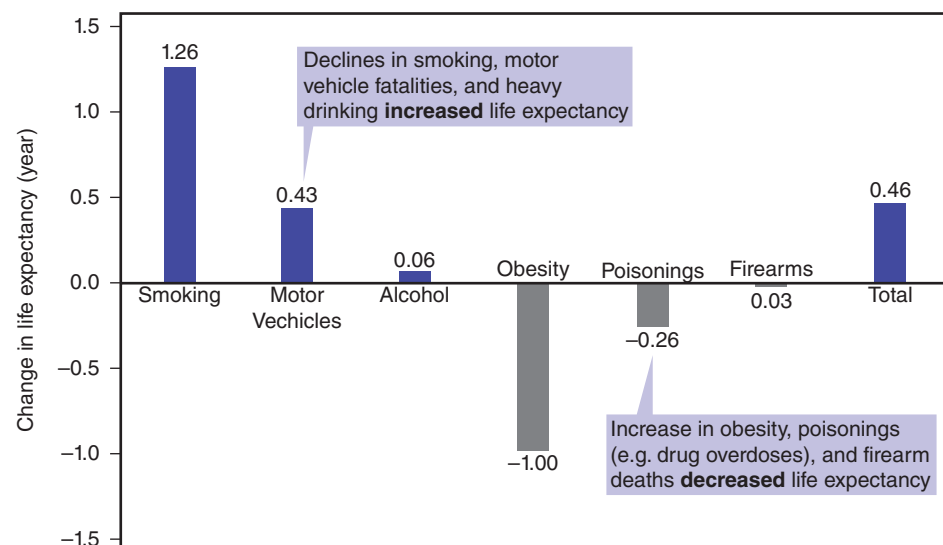
FIGURE 1-2 The impact of behavioral changes on life expectancy, 1960–2010.

health, which favors societal change, and systemic, or "upstream" intervention. **Upstream interventions** are directed at the source of a problem, at the broadest or earliest point of entry. **Downstream interventions** attempt to modify conditions for individuals at the narrowest or latest point of entry.

Health communication alone cannot change some systemic determinants of poor health, such as oil spills, poor social environments, limited health-care resources, or poverty. But even though health communicators are not all-powerful, their responsibilities run deeper than we might think. If those who need critical information to protect their health are not seeking or receiving it, understanding it, or being moved to action, we can use health communication to influence these behaviors. If the policy makers who determine national, state, and local laws, regulations, and public services have not received crucial information or been moved to action, we can use policy communication and advocacy to promote changes in public policy. The ecological approach to public health communication requires that all factors affecting a particular health condition be explored, and in particular that an effort to change the upstream factors accompany efforts to help individuals improve their own health outcomes downstream. This is an ethical and professional principle that many practitioners embrace, even though their ability to conduct upstream advocacy may be constrained by political forces or regulations.

▶ What's Old and What's New in Health Communication

The Foundation

The main activities of scientific public health communication have not changed significantly in the past few decades. They begin and end with health outcomes data in the following cycle:

- Collect and analyze epidemiological data (e.g., National Health and Nutrition Examination Survey, cancer and notifiable disease registries, local statistics) to identify health problems (e.g., childhood obesity, tobacco-related deaths).
- Identify the causes of health problems as well as their behavioral/environmental antecedents. Use local surveys, state surveys (e.g., Behavioral Risk

Factor Surveillance System BRFSS[e]), or national surveys (e.g., Health Information National Trends Survey [HINTS[f]]). Use qualitative research to utilize an existing, or develop a new, strong scientific theory to test in a larger sample.

- Develop communication strategies to modify behavior, behavioral antecedents, or policies for improved environmental conditions (**BOX 1-3**).
- Determine which communication strategies are effective at changing behavior, antecedents, or regulations or programs to improve environmental conditions (**BOX 1-4**).
- Repeat the process, as necessary, until goals are achieved.
- Set up maintenance programs.

How Do We Determine the Effectiveness of Health Communication Interventions?

Then: Hierarchies and Funnels

Health communication has often relied on what McGuire called a **hierarchy of effects** (HOE) to measure the impact of a health communication intervention. It is difficult to say who originated this approach because it was developed in stages. Advertising started using what was called the "attraction–interest–decision–action" model (attributed to Philadelphian E. St. Elmo Lewis) more than 100 years ago, in the early 1900s. In 1961, Lavidge (a marketer) and Steiner

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BOX 1-3   Behavioral Determinants

According to Robert Hornik, "The process of developing a population health initiative should begin with investigating the hypothesized determinants of the targeted behavior … If you are trying to influence a behavior in a particular population, then the focus needs to be on what influences them, not what influences you" (pp. 3–4). He points out that telling people to eat more fresh produce will not help them change their behavior if no fresh produce is available to them. A better strategy in this case would be to communicate with producers and consumers to improve supply and stimulate demand.

IOM (Institute of Medicine). Communicating to advance the public's health: Workshop summary. Published March 17, 2015. NAS: Prepublication proof. March 17, 2015 http://iom.nationalacademies.org/Reports/2015/Communicate-to-Advance-Publics-Health.aspx. pp. 3–4.

BOX 1-4 Broad and Persistent Communication Required to Produce Changes in Health Behavior

Even when population health improvement communication campaigns have promising messages for the target audience, they often fail because they do not have an effective strategy for obtaining the needed exposure strategy. …. The most significant changes in public health behaviors have been associated not with one-time communication efforts, but rather with multifaceted, "all but the kitchen sink" campaigns by multiple entities over long periods of time. (p. 4)

IOM (Institute of Medicine). Communicating to advance the public's health: Workshop summary. Published March 17, 2015. NAS: Prepublication proof. March 17, 2015 http://iom.nationalacademies.org/Reports/2015/Communicate-to-Advance-Publics-Health.aspx. p. 4.

(a psychologist) expanded this model by identifying six steps that a potential customer takes, moving through the cognitive[g] domains of awareness and knowledge, the affective[h] domains of liking and preference, and the decision-to-action "conative" domains of conviction and purchase. Lavidge and Steiner suggested potential advertising vehicles (e.g., skywriting and jingles to create awareness, status and glamour appeals to create preferences, point-of-purchase cues to create desire to purchase) and market research tools appropriate to each step.[6]

In 1984, McGuire further expanded the model and adapted it to public health campaigns, along with the classic communication transfer from source to receiver. The lower effects in the HOE include exposure, attention, interest, and comprehension. By comparison, the higher-order set of effects includes acquisition of skills, changes in attitude, short-term retention of information, long-term retention of information, decision making, one-time performance of a behavior, reinforcement of the behavior, and maintenance of the behavior indefinitely through complex life changes.[7]

Neither the stepwise nature of these effects nor the relative difficulty of producing them has been the subject of definitive research. However, in practice, many communication programs realized their resources were sufficient only to attain the lower-level effects in the HOE. Often there was insufficient exposure to the messages to produce any higher-order effects; in

turn, and unsurprisingly, none of these more desirable effects occurred. Post hoc analysis of these failed communication campaigns has given the HOE considerable credibility. It is worth noting that HOE preceded several of the individual change theories that are now popular in health communication.

Marketing experts modeled the process for group change in the form of a funnel. People at the wide end of the funnel might become aware of a specific product or brand. As the funnel narrowed, fewer dropped through to consider purchasing the offering, fewer still purchased it, and a very few would remain loyal to the brand or even extol its virtues to others. From an individual perspective, the potential customer would consider many brands and narrow down the choices until purchase. Marketing programs count on very large audiences at the awareness creation stage to make this process profitable, which explains why most well-known commercial brands invest heavily in mass-media advertising.

Now: The Customer Journey and Touchpoints

Public health communication professionals have embraced most of the new technology, media, and methods available to their commercial advertising counterparts. Where they might lag slightly behind is in visualization of the "customer" and in mounting multidimensional efforts to engage customers through a time and space journey toward adoption of a health-promoting behavior.
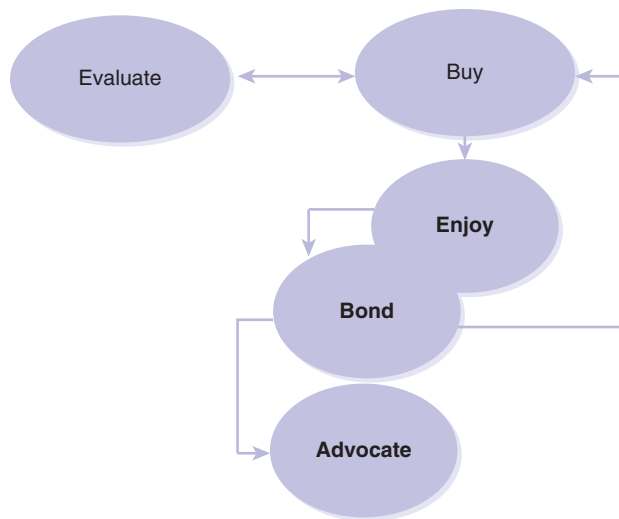
David Court and others writing for *the McKinsey Quarterly*[8] in 2009 coined the term **customer journey** to describe the conversion of the marketing "funnel" into a series of recurrent orbits that a customer enters when considering, evaluating, advocating for, or purchasing a specific product (**FIGURE 1-3**). The order in which these steps are listed here is intentional. According to David Edelman,[i] "The Internet has upended how consumers engage with brands. … [T]hey connect with myriad brands—through new media channels beyond the manufacturer's and the retailer's control or even knowledge … [T]hey often expand … the pool before narrowing it. After purchase these consumers may remain aggressively engaged, publicly promoting or assailing the products … collaborating in the brand's development, and challenging and shaping their meaning."[9] In other words,

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g. How you think.
h. How you feel.
i. https://hbr.org/2010/12/branding-in-the-digital-age-youre-spending-your-money-in-all-the-wrong-places. Accessed July 19, 2015.

FIGURE 1-3 The customer decision journey.

Based on Edelman DC. Branding in the digital age: You're spending your money in all the wrong places. Harvard Business Review. https://hbr.org/2010/12/branding-in-the-digital-age-youre-spending-your-money-in-all-the-wrong-places. Accessed July 19, 2015.

even though the funnel offered some whirls, it was still a one-way process from awareness to purchase and possibly loyalty. The customer journey, in contrast, includes those consumers who become brand advocates even before they purchase a product, as well as many who bond with a brand and promote it, and others who become publicly disparaging after the purchase of a product or service.

The standard parts of a customer journey include a form of engagement, information, guidance, and support (**BOX 1-5**). Identifying the best way to deliver these encounters requires "customer journey mapping." Today, organizations use various forms of media and outreach to accomplish each specific form of contact. We will come back to customer journey mapping in our discussion of formative research.

▶ Public Health Communication as a Career

A wealth of new strategies, media, and tools have enriched health communication in recent years. In addition, there are numerous ways to acquire training and many places to apply these skills. In the private sector, "medical communication" agencies conduct user research and develop branding and customer experience strategies, along with many media extensions. A background in pharmaceutical marketing or health care combined with health communication or public relations skills can lead to a position in such a firm. Many of the same firms, as well as other types of companies, tend to hire graduates of advanced degree programs to work on government-related programs and activities. Not surprisingly, then, a wide range of communication positions are found within

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BOX 1-5 Simplified Customer Journey and Touchpoints

M. Engelberg ResearchWorks, Inc.

There are equal parts hype and confusion around creating a world-class customer experience. Start by getting the customer journey right. We designed this three-step process, part of our *CustomerFirst* Framework, to show you how.

1. *Understand the customer journey*. Observe customers as they deal with their challenges and engage with your product and company. Listen to what they want and need. Gain a rich understanding of the problems customers face, their workflow needs and limitations, what they find frustrating and motivating, how they really want their experience to be, and what turns them off.
2. *Map the customer journey*. List all the interactions or "touchpoints" between you and your customers. Visually sequence these touchpoints across three stages—before, during, and after using your product. Color-code key touchpoints to signify which are hotspots that need troubleshooting, which are opportunities for you to provide greater value, and which can differentiate you from competition.
3. *Improve the customer journey*. Set objectives for what you want customers to think, feel, and do (i.e., experience) at each significant touchpoint. For example, when researching product options, you might want customers to think your product is easiest to use, to feel confident in their assessment, and to contact a sales representative. Use these objectives to drive how you optimize the customer journey at each touchpoint.

Once you get the customer journey right, then work backward to design the technology that is needed to bring it to life. Then it is not just your product, but the whole customer experience that sets you apart.

Courtesy of Moshe Engelberg, ResearchWorks, Inc.

government agencies (the public sector). Increasingly, these positions require special public health communication competencies.

Entry-Level Competencies in Public Health Communication

The role of communication in public health is derived from the "Essential Public Health Services" identified by the **Centers for Disease Control and Prevention (CDC)** (**FIGURE 1-4**). Health communication supports several of the services, but is essential to address the need to "[i]nform, educate, and empower people about health issues."

When developing guidelines for hiring communication experts, public-sector organizations are likely to refer to the "Core Competencies for Public Health Professionals: Communication Skills" adopted in June 2014 by the Council on Linkages Between Academia and Public Health Practice. **TABLE 1-1** lists the entry-level (Tier 1) expectations for these competencies.
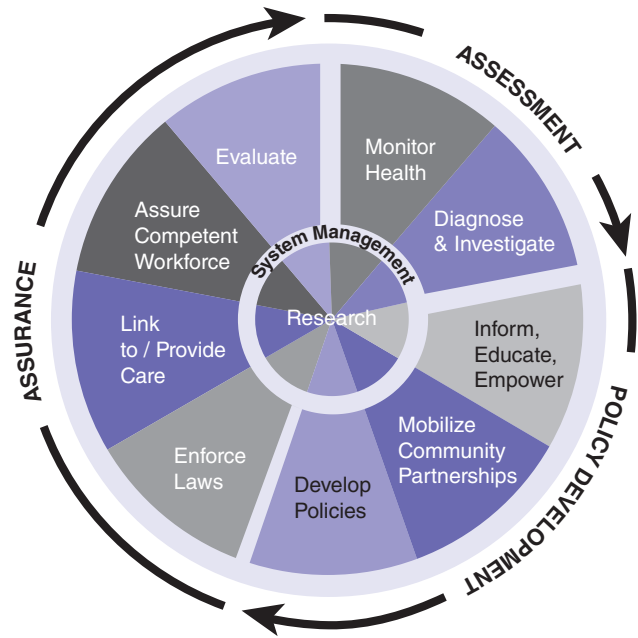

FIGURE 1-4 Ten essential public health services.

The Public Health System and the 10 Essential Public Health Services. Centers for Disease Control and Prevention Web site. http://www.cdc.gov/nphpsp/essentialservices.html. Accessed July 19, 2015.

TABLE 1-1 Council on Linkages' Core Competencies in Communication, 2014

Communication Skills		
Tier 1	*Tier 2*	*Tier 3*
3A1. Identifies the literacy of populations served (e.g., ability to obtain, interpret, and use health and other information; social media literacy)	3B1. Assesses the literacy of populations served (e.g., ability to obtain, interpret, and use health and other information; social media literacy)	3C1. Ensures that the literacy of populations served (e.g., ability to obtain, interpret, and use health and other information; social media literacy) is reflected in the organization's policies, programs, and services
3A2. Communicates in writing and orally with linguistic and cultural proficiency (e.g., using age-appropriate materials, incorporating images)	3B2. Communicates in writing and orally with linguistic and cultural proficiency (e.g., using age-appropriate materials, incorporating images)	3C2. Communicates in writing and orally with linguistic and cultural proficiency (e.g., using age-appropriate materials, incorporating images)
3A3. Solicits input from individuals and organizations (e.g., chambers of commerce, religious organizations, schools, social service organizations, hospitals, government, community-based organizations, various populations served) for improving the health of a community	3B3. Solicits input from individuals and organizations (e.g., chambers of commerce, religious organizations, schools, social service organizations, hospitals, government, community-based organizations, various populations served) for improving the health of a community	3C3. Ensures that the organization seeks input from other organizations and individuals (e.g., chambers of commerce, religious organizations, schools, social service organizations, hospitals, government, community-based organizations, various populations served) for improving the health of a community

(continues)

TABLE 1-1 Council on Linkages' Core Competencies in Communication, 2014		*(continued)*
Communication Skills		
Tier 1	*Tier 2*	*Tier 3*
3A4. Suggests approaches for disseminating public health data and information (e.g., social media, newspapers, newsletters, journals, town hall meetings, libraries, neighborhood gatherings)	3B4. Selects approaches for disseminating public health data and information (e.g., social media, newspapers, newsletters, journals, town hall meetings, libraries, neighborhood gatherings)	3C4. Evaluates approaches for disseminating public health data and information (e.g., social media, newspapers, newsletters, journals, town hall meetings, libraries, neighborhood gatherings)
3A5. Conveys data and information to professionals and the public using a variety of approaches (e.g., reports, presentations, email, letters)	3B5. Conveys data and information to professionals and the public using a variety of approaches (e.g., reports, presentations, email, letters, press releases)	3C5. Conveys data and information to professionals and the public using a variety of approaches (e.g., reports, presentations, email, letters, testimony, press interviews)
3A6. Communicates information to influence behavior and improve health (e.g., uses social marketing methods, considers behavioral theories such as the Health Belief Model or Stages of Change Model)	3B6. Communicates information to influence behavior and improve health (e.g., uses social marketing methods, considers behavioral theories such as the Health Belief Model or Stages of Change Model)	3C6. Evaluates strategies for communicating information to influence behavior and improve health (e.g., uses social marketing methods, considers behavioral theories such as the Health Belief Model or Stages of Change Model)
3A7. Facilitates communication among individuals, groups, and organizations	3B7. Facilitates communication among individuals, groups, and organizations	3C7. Facilitates communication among individuals, groups, and organizations
3A8. Describes the roles of governmental public health, health care, and other partners in improving the health of a community	3B8. Communicates the roles of governmental public health, health care, and other partners in improving the health of a community	3C8. Communicates the roles of governmental public health, health care, and other partners in improving the health of a community

The Council on Linkages Between Academia and Public Health Practice. Core Competencies for Public Health Professionals. http://www.phf.org/corecompetencies. Accessed July 15, 2015.

To prepare graduates for careers in health communication, most master's and doctoral degrees in public health will use the **competency** models developed by the **Association of Schools of Public Health (ASPH)** in 2012. These competencies appear in **TABLE 1-2**.

Credentialing in Health Communication

While a number of graduate-level degree programs in health communication exist, there is no single credentialing organization for such professionals. Neither academic programs nor individuals are credentialed based on their academic training in health communication. The National Commission for Health Education Credentialing (NCHEC) awards the Certified Health Education Specialist (CHES) credential to individuals who meet required academic preparation qualifications and successfully pass a competency-based exam. Continuing education (through the Society for Public Health Education [SOPHE] and other providers) is required to maintain certification. The Master CHES (M/CHES) credential requires both advanced coursework and professional experience. Health education and health communication overlap in many areas, and

TABLE 1-2 Competencies in Advocacy and Communication Expected of Graduates from Master's and Doctoral-Level Programs in Public Health

Core Competency Area		DrPH Competency		MPH Competency
All		(Subsumed in A2)	F1	Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.
		(Subsumed in B8.)	F5	Apply legal and ethical principles to the use of information technology and resources in public health settings.
			F7	Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities.
Advocacy	A1	Present positions on health issues, law, and policy.		(Subsumed in F7 to a lesser degree.)
	A2	Influence health policy and program decision-making based on scientific evidence, stakeholder input, and public opinion data.	F10	Use informatics and communication methods to advocate for community public health programs and policies.
	A3	Utilize consensus-building, negotiation, and conflict avoidance and resolution techniques.		(Subsumed in F7 to a lesser degree.)
	A4	Analyze the impact of legislation, judicial opinions, regulations, and policies on population health.	F8	Use information technology to access, evaluate, and interpret public health data.
	A5	Establish goals, timelines, funding alternatives, and strategies for influencing policy initiatives.		(Subsumed in F6 more generally.)
	A6	Design action plans for building public and political support for programs and policies.		(Subsumed in F10 more generally.)
	A7	Develop evidence-based strategies for changing health law and policy	F9	Use informatics methods and resources as strategic tools to promote public health

(continues)

TABLE 1-2 Competencies in Advocacy and Communication Expected of Graduates from Master's and Doctoral-Level Programs in Public Health *(continued)*				
Core Competency Area		**DrPH Competency**		**MPH Competency**
Communication	B1	Discuss the interrelationships between health communication and marketing.		(Subsumed in F4.)
	B2	Explain communication program proposals and evaluations to lay, professional, and policy audiences.		(Subsumed in F6.)
	B3	Employ evidence-based communication program models for disseminating research and evaluation outcomes.	F4	Apply theory- and strategy-based communication principles across different settings and audiences.
	B4	Guide and organization in setting communication goals, objectives, and priorities.		
	B5	Create informational and persuasive communications.	F6	Collaborate with communication and informatics specialists in the process of design, implementation, and evaluation of public health programs.
	B6	Integrate health literacy concepts in all communication and marketing initiatives.	F2	Describe how societal, organizational, and individual factors influence and are influenced by public health communications.
	B7	Develop formative and outcome evaluation plans for communication and marketing efforts.		(Subsumed in F6.)
	B8	Prepare dissemination plans for communication programs and evaluations.		
	B9	Propose recommendations for improving communication processes.	F3	Discuss the influences of social, organizational and individual factors on the use of information technology by end users.

Association of Schools and Programs of Public Health.

the M/CHES is worth keeping in mind while selecting coursework in health communication.

For practicing professionals, the **National Public Health Information Coalition (NPHIC)** has created a credentialing process based on an extensive portfolio review. NPHIC awards a "Certified Communicator in Public Health" credential to public health communicators whose portfolios pass a qualifying examination. This organization conducted an extensive job analysis prior to creating its credentialing scheme.

BOX 1-6 provides more information on the NPHIC and its certification process.

Organizations That Serve as Health Communication Incubators

The following paragraphs are replete with acronyms that belong to the *lingua franca* of the public health and health communication communities. Now is a good time to begin to recognize and use them. At

the national level, the U.S. Department of Health and Human Services (HHS) has long led efforts to research and disseminate evidence-based practice in health communication through its Office of Disease Prevention and Health Promotion (ODPHP)[j] and its primary public-facing agencies: the National Cancer Institute (NCI)[k] of the National Institutes of Health (NIH), the CDC, and the Agency for Health Research Quality (AHRQ).[l] In addition to ODPHP and CDC, the Office of the National Coordinator (ONC) for health

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BOX 1-6 National Public Health Information Coalition

Kristine A. Smith, MA, CCPH
Credentialing Program Manager, National Public Health Information Coalition

Job Analysis: Professional Health Communicator

The National Public Health Information Coalition (NPHIC) is a CDC-affiliate organization whose members represent a variety of public health communication specialties, including public information and public affairs, risk communication, health promotion and marketing, community relations, social media, and communications research and evaluation. As part of its Certified Communicator in Public Health (CCPH) credentialing program, NPHIC has developed a job analysis delineating five core competencies and seven related skill sets that are necessary to effectively shape, spread or understand the impact of a public health message.

The CCPH core competencies are:

1. *Communicate with a range of stakeholders and populations by using resources, techniques, and technologies* (messages, messengers, and means). Inherent in this competency is how well an individual can communicate health messages to both internal and external publics while making clear distinctions among stakeholders, partners, and audiences.
2. *Apply interpersonal skills in communication with public health colleagues, partners, and the public.* This competency advances the idea that small-group communication is often an appropriate and effective public health communication channel and that successful communication requires persuasion skills.
3. *Influence individuals and communities by using media, community resources and social marketing techniques.* This competency supports a multichannel, multivehicle approach to public health communication that calls for use of traditional and new media along with community relations and adaptation of the "Five Ps" principle (product, price, place, people, promotion) of social marketing to allow audiences to receive, understand, and act upon a health message.
4. *Provide communication advice to public health leadership* recognizes that health communicators can play an important role in advancing public health policy if given a "seat at the table" among decision makers. While many health communicators may not have this opportunity, it is important to be able to foment and present a strong argument for strategies and tactics that the communicator believes will be essential to the overall efficacy of a health message, campaign, or policy initiative.
5. *Demonstrate proficiency in written communication.* At whatever audience level, the ability to choose the right words, employ economy of language, and use correct punctuation, grammar, and appropriate writing style is essential. Shortcomings in this area will quickly confuse or derail your message.

In addition to having these core competencies, candidates hoping to earn the CCPH credential must be expert in two skill set areas, and have a working knowledge of the others. There are seven skill sets: media relations, social media, health marketing, cross-cultural communication, risk communication, communications research and evaluation, and integrated skills, which encompass knowledge of CDC initiatives such as *Healthy People* goals and Winnable Battles and public health law and ethics issues, among others.

Courtesy of Smith KA, Credentialing Program Manager, NPHIC.

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j. http://www.health.gov/communication/
k. http://cancercontrol.cancer.gov/brp/hcirb/index.html
l. http://www.ahrq.gov/cpi/centers/ockt/index.html

information technology (HIT)[m] leads the working group responsible for setting goals and objectives in health communication and health IT. Other agencies within HHS, such as the Food and Drug Administration (FDA),[n] the National Institute for Environmental Health (at NIH),[o] and the Substance Abuse and Mental Health Services Administration (SAMHSA),[p] as well as the U.S. Department of Agriculture (USDA)[q] have contributed much to the health communication evidence base and continue to fund positions, research, and consumer-focused programs.

The National Academy of Sciences Institute of Medicine (NAS/IOM) has been recently reorganized as the National Academies of Science, Engineering, and Medicine: National Academy of Medicine.[r] A nongovernmental entity dependent on donor support, the NAM (previously IOM) has supported numerous workshops and efforts to develop consensus reports that have helped define or shape health communication, health literacy, and related areas.

The U.S. Agency for International Development (USAID),[s] which falls under the State Department, is a global leader in using social marketing and health communication in countries where infectious disease, lack of safe and effective birth control, low educational levels, and extreme poverty contribute significantly to poor population health. USAID funds numerous health communication projects that are executed by consortia of university partners and contracted agencies that may be branches of commercial advertising and marketing companies, or not-for-profit agencies, or non-profit entities, such as CARE,[t] Heifer International,[u] Save the Children,[v] and World Vision,[w] to mention

only a few. USAID collaborates closely with the World Health Organization (WHO),[x] UNICEF,[y] the World Bank,[z] and bilateral partners (e.g., the Canadian International Development Association,[aa] the United Kingdom's Department for International Development).[ab] All of these organizations and others have contributed extensively to what we know about health communication interventions outside of the United States.

In the healthcare communication arena, the European Association for Communication in Healthcare (EACH)[ac] and its U.S. counterpart, the American Academy for Communication in Healthcare (AACH),[ad] have been setting a research and training agenda for the past several years in patient–provider communication. And the newly formed Society for Health Communication[ae] will soon bring members belonging to the health communication sub-chapters of APHA (Public Health Education and Promotion[af]), the National Communication Association (NCA), the International Communication Association (ICA),[ag] the Society for Public Health Education (SOPHE), and anyone else wishing to join, into one virtual community to share resources, promote the field, and develop competency guidelines.

▶ Conclusion: The Scope of Health Communication

Although health communicators tend to think otherwise, most Americans do not walk around thinking about health, much less "health behavior." While we sometimes say that the number of tobacco-related

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m. http://www.healthit.gov/newsroom/about-onc

n. http://www.fda.gov/aboutfda/centersoffices/officeofmedicalproductsandtobacco/cdrh/ucm115786.htm

o. http://www.niehs.nih.gov/health/index.cfm

p. http://www.samhsa.gov/health-information-technology/samhsas-efforts

q. http://www.usda.gov/wps/portal/usda/usdahome

r. http://nam.edu/

s. http://www.usaid.gov/

t. http://www.care.org/work

u. http://www.heifer.org/ending-hunger/our-impact/index.html#sharing-knowledge

v. http://www.savethechildren.org/site/c.8rKLIXMGIpI4E/b.6146357/k.2755/What_We_Do.htm

w. http://www.worldvision.org/our-impact/health

x. http://www.who.int/about/agenda/en/

y. http://www.unicef.org/cbsc/

z. World Bank, Capacity Development Resource Center: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTCDRC/0,,menuPK:64169181~pagePK:64169192~piPK:64169180~theSitePK:489952,00.html

aa. http://www.international.gc.ca/international/index.aspx?lang=eng#

ab. https://www.gov.uk/government/organisations/department-for-international-development/about

ac. http://www.each.eu/tag/health-communication/

ad. http://www.aachonline.org/dnn/default.aspx

ae. http://www.SocietyForHealthCommunication.org

af. http://www.apha.org/apha-communities/member-sections/public-health-education-and-health-promotion

ag. http://www.icahdq.org/

deaths on a daily basis is like two jumbo jets colliding, it is only when a plane actually crashes that anyone pays attention. Thus, part of the challenge of health communication is getting audience members to notice that we are speaking to them. There are so many media outlets, and so many messages, that health communicators need to use precise tools to "cut through the clutter." This same lesson applies to individuals and decisions makers who are setting policy.

Beyond indifference, health communicators need to contend with outright rejection or dismissal of the information that they are providing. It sometimes takes a measles outbreak at a California theme park to remind Americans that their unvaccinated children do not have "herd immunity" and can get communicable diseases. Indeed, polio, which had once been nearly eliminated from the planet, has resurged in Nigeria, Pakistan, and Afghanistan due to political upheaval preventing mass immunization of the populations in those countries. Our challenge is to maintain the public's trust in evidence-based information and dispel myths or conspiracy theories. We need to remember that the arrival of even one patient with Ebola to a U.S. hospital can lead to panic. Being able to communicate effectively with the public in real or potential crises or emergencies requires special skills and techniques.

Finally, well-honed skills are required to communicate effectively with an individual who wants information to deal with a personal health issue. Providers can use empathy and other interpersonal communication skills to strengthen the impact of their persuasion and adherence messages. Helping patients understand decision-making tools or instructions also requires familiarity with best practices and guidelines in health literacy and related areas.

We recognize five key health communication areas that must be addressed by professionals working in this realm:

- Communicating to inform the public and create trust in evidence
- Communicating to motivate and encourage individuals to change behavior
- Communicating with decision makers to affect policy
- Communicating about precautions and risk during emergencies
- Communicating with individuals in healthcare settings

Other key topics related to health communication include evaluation, cancer communication, and examples from international settings.

Wrap-Up

Chapter Questions

1. Using the transactional model of communication, describe the process of message exchange among communicators.
2. What is the goal of communication, and which factors affect the responses we seek?
3. How have new developments in technology influenced the HP 2010 and HP 2020 priorities and objectives in health communication and health information technology?
4. What are the implications of failing to consider the ecological model when shaping the interventions that health communicators consider and choose?
5. How can focusing health communication, policy, and advocacy efforts on individual behaviors influence the health of populations?
6. Given that health communication is an exceedingly interdisciplinary field, what is the importance of having competencies and credentialing for professional health communicators?

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