Cambridge Elements

Health Communication

Institutional Health Communication in the Information Age

Sara Rubinelli

ISSN 2754-1045 (online)

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Cambridge Elements

Elements in Health Communication
edited by
Louise Cummings
York St John University

INSTITUTIONAL HEALTH COMMUNICATION IN THE INFORMATION AGE

Sara Rubinelli
University of Lucerne

CAMBRIDGE UNIVERSITY PRESS

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India

Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781009572019

DOI: 10.1017/9781009379984

© Sara Rubinelli 2026

This publication is in copyright. Subject to statutory exception and to the provisions
of relevant collective licensing agreements, with the exception of the Creative
Commons version the link for which is provided below, no reproduction of any part may
take place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009379984 under
a Creative Commons Open Access license CC-BY-NC-ND 4.0 which permits re-use,
distribution and reproduction in any medium for non-commercial purposes providing
appropriate credit to the original work is given. You may not distribute derivative
works without permission. To view a copy of this license, visit https://creativecom
mons.org/licenses/by-nc-nd/4.0

When citing this work, please include a reference to the DOI 10.1017/9781009379984

First published 2026

A catalogue record for this publication is available from the British Library

*A Cataloging-in-Publication data record for this Element is available from
the Library of Congress*

ISBN 978-1-009-57201-9 Hardback
ISBN 978-1-009-38000-3 Paperback
ISSN 2754-1045 (online)
ISSN 2754-1037 (print)

Cambridge University Press & Assessment has no responsibility for the persistence
or accuracy of URLs for external or third-party internet websites referred to in this
publication and does not guarantee that any content on such websites is, or will remain,
accurate or appropriate.

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1°, 28003
Madrid, Spain, or email eugpsr@cambridge.org

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the
Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Institutional Health Communication in the Information Age

Elements in Health Communication

DOI: 10.1017/9781009379984
First published online: May 2026

Sara Rubinelli
University of Lucerne

Author for correspondence: Sara Rubinelli, sara.rubinelli@unilu.ch

Abstract: This Element offers a critical exploration of institutional health communication in an era marked by information overload and uneven content quality. It examines how health institutions can navigate the challenges of false, misleading, and poor-quality health information while preserving public trust and scientific integrity. Drawing from disciplines such as health communication, behavioral science, media studies, and rhetoric, this Element promotes participatory models, transparent messaging, and critical health literacy. Through a series of thematic sections and practical examples, it addresses the role of science, politics, media, and digital influencers in shaping public understanding. Designed as both a conceptual guide and a strategic toolkit, this Element aims to support institutions in fostering informed, engaged, and resilient communities through communication that is clear, ethical, and responsive to the complexities of today's health discourse. This title is also available as Open Access on Cambridge Core.

Keywords: health communication, institutional communication, quality health information, persuasive communication, science communication

© Sara Rubinelli 2026

ISBNs: 9781009572019 (HB), 9781009380003 (PB), 9781009379984 (OC)
ISSNs: 2754-1045 (online), 2754-1037 (print)

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Contents

	Introduction	1
1	The Bases of Institutional Communication and the Challenges of Poor-Quality Information	3
2	Science and Institutional Communication	11
3	The Dialogue between Politicians and Health Institutions	22
4	Trust in Health Institutions	31
5	Health Institutions and the Traditional Mass Media in Public Health Communication	41
6	The World of Influencers	49
7	The Bases of Effective Health Message Design	60
	Concluding Remarks	70
	References	72
	Funding for Open Access	94
	Statement on AI Use	95

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Introduction

In an era where the flow of information is both boundless and instantaneous, institutional health communication faces an extraordinary challenge. The overwhelming circulation of health content, ranging from rigorous scientific insights to false, misleading, and overall poor-quality information, has thrust health institutions into a pivotal role. They are tasked not only with disseminating credible, evidence-based messages but also with safeguarding public trust and fostering resilience. This Element addresses these pressing demands and provides a roadmap for empowering institutions to craft communication practices that are as scientifically robust as they are socially transformative.

The term *institutional* in this context encompasses the spectrum of public communication efforts by traditional healthcare settings – such as hospitals, clinics, rehabilitation centers, and nursing homes – as well as broader health organizations, including government agencies, nonprofit groups, research institutions, and international bodies. While health institutions focus on direct medical care and patient support, health organizations engage in activities such as policymaking, health promotion, disease prevention, and research. These entities often collaborate to address health challenges at local, national, and global levels. For clarity and brevity, the term *health institutions* will be used throughout this Element to represent both, while recognizing their distinct yet complementary roles.

The rationale for this work stems from the critical need to navigate the complexities of contemporary communication landscapes while preserving the integrity, relevance, and trustworthiness of health messaging. It integrates perspectives from multiple disciplines, including health communication, behavioral sciences, social marketing, political science, media studies, and rhetorical theory. Central to its framework is the promotion of participatory communication models that actively engage individuals and communities. These models emphasize collaboration, enhance public health and scientific literacy, and empower autonomous, informed decision-making.

This Element is structured around seven interconnected sections, each addressing a critical aspect of institutional health communication. It opens with a discussion on the role of health institutions in confronting the rise of poor-quality health information and in balancing transparency, accuracy, and public trust while shifting from top-down messaging to participatory approaches (Section 1). Section 2 explores how institutions can translate complex scientific knowledge into accessible and actionable messages, overcoming barriers such as uncertainty, cognitive bias, and fragmented attention. The intersection of politics and public health is addressed in Section 3, which

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

unpacks the tensions between scientific priorities and political agendas, and the impact of distorted or strategically framed health narratives. Section 4 centers on trust, examining how institutions can build and sustain credibility through transparency, consistency, and meaningful engagement.

Traditional mass media, which continue to shape public health discourse, are analyzed in Section 5, with a focus on aligning institutional communication priorities with media dynamics while safeguarding message integrity. Section 6 turns to the digital world, examining the influence of online creators and the dual potential they hold to amplify evidence-based content or, conversely, spread misleading or manipulative messages. The final section, Section 7, synthesizes classical rhetorical principles with insights from behavioral science and social marketing, offering a strategic framework for designing compelling and effective health messages for diverse audiences and media environments.

Each section is enriched with fictionalized examples based on real-world practices. These serve two essential purposes: to avoid singling out or judging specific institutions or individuals, and to illustrate the diverse and often complex origins of poor-quality information, which may emerge from political agendas, digital influencers, or even within the professional health community. Each section concludes with a practical table that summarizes key strategies and offers guidance for real-world implementation.

Overall, this Element contributes to bridging the gap between academic inquiry and practical application by addressing the nuanced challenges of institutional health communication. The hope, and indeed the dream, is that it may serve not only as a guide but also as an inspiration for building informed, discerning, and resilient communities capable of engaging critically with modern health discourse and making sound decisions in an age of information excess.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

1 The Bases of Institutional Communication and the Challenges of Poor-Quality Information

1.1 Overview

In contexts of uncertainty and poor-quality information, the path to effective institutional health communication lies in transparency, participation, and the respectful exchange of knowledge. It's a dialogue, not a monologue, that empowers individuals and communities alike.

This section examines the fundamental principles of institutional health communication and the challenges it faces in the modern era, particularly in the flood of both accurate and misleading health information that is overwhelming people today.

1.2 Goals of Institutional Health Communication

Health institutions undertake health communication for multiple purposes, each serving a distinct role in improving public health outcomes. These can be grouped into four broad categories.

(1) Informing and educating

Health institutions *inform and educate the public*. They act as reservoirs of knowledge, providing essential information on diseases, prevention, and treatment. They promote health literacy (Schulz, 2012; Parker and Ratzan, 2019), address determinants of behavior, and encourage healthier living (Laverack, 2017; Rubinelli and Diviani, 2020). Extensive literature illustrates how they design and evaluate campaigns and interventions (Naidoo and Wills, 2009; Bartholomew Eldredge et al., 2016).

They *disseminate scientific knowledge*. Institutions communicate research findings, innovations, and best practices through conferences, publications, websites, media, and social platforms, fostering evidence-based approaches (Funkhouser and Maccoby, 1971; Wilson et al., 2017; Turon et al., 2023).

(2) Managing crises and risks

Health institutions *act in crisis communication and risk management*. In emergencies, outbreaks, or disasters, institutions function as central information hubs. Risk communication literature, particularly on COVID-19, underscores this role (Glik, 2007; Lundgren and McMakin, 2018; Kim and Kreps, 2020; Loss et al., 2021). They clarify preventive measures, outline risks, and guide the public in seeking care and complying with protocols (Kim and Kreps, 2020; Zhang, Li, and Chen, 2020; Bolsewicz, 2024).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

(3) Shaping policy and practice

Health institutions *advocate for policy changes.* Drawing on expertise, institutions issue evidence-based recommendations to influence health policy and regulation. Through strategic communication, they aim to bridge research and practice, ensuring decisions are informed by the best evidence (Hubinette et al., 2017; Townsend et al., 2023; Bode et al., 2024).

They *enhance patient–provider interactions.* Hospitals and health organizations train professionals in communication to strengthen person-centered care and shared decision-making, ultimately improving healthcare delivery (Spagnoletti et al., 2009; Bylund et al., 2011; Shahnazi et al., 2021; Mahdiabadi et al., 2023).

(4) Promoting equity and collaboration

Health institutions address health disparities and promote equity. They reach marginalized and underserved groups to reduce barriers and ensure fair access to health information and services (Freimuth and Quinn, 2004; Schiavo, 2015; Thornton et al., 2016).

They *engage with public communities.* By fostering dialogue and seeking input, institutions empower communities to participate in shaping health systems (Scutchfield, Hall, and Ireson, 2006; Cyril et al., 2015; Schiavo, 2015; Adebisi, Rabe, and Lucero-Prisno III, 2021). Community engagement is a core theme in public health (Cyril et al., 2015; Glanz, Rimer, and Viswanath, 2015).

They *engage in interdisciplinary and transdisciplinary efforts.* Institutions foster collaboration across health disciplines and beyond – medicine, nursing, psychology, economics, sociology, and environmental science – to address chronic diseases and inequities. Communication enables inclusive dialogue and co-created strategies (Flowers, Mertens, and Mulhall, 2000; Vyt, 2008; Singh et al., 2018).

1.3 The Content Basis of Institutional Communication

As analyzed in *Evidence-Based Public Health* (Brownson et al., 2018), health institutions rely heavily on scientific evidence as the foundation of their communication. Scientific evidence, with both philosophical and empirical dimensions (Taper and Lele, 2010), is generated through rigorous methods such as clinical trials, epidemiological studies, and systematic reviews. A key institutional responsibility is to keep pace with research and innovation, integrating emerging findings into communication on medical technologies, treatments, and public health interventions. Evidence provides the basis for informing the public about efficacy, safety, and benefits, and institutions also reason analogically on prior knowledge (Cummings, 2014b). Evidence-based practice, understood as reliance

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

on the best available science (Glasziou and Longbottom, 1999; Brownson et al., 2018), remains the cornerstone of credible communication, maximizing health outcomes while minimizing harm (Killoran and Kelly, 2009).

Yet communication extends beyond pure science. Institutions also draw on expert consensus statements and guidelines (Shekelle et al., 1999; Bourrée, Michel, and Salmi, 2008), which distil scientific knowledge into actionable advice. By integrating such recommendations, they provide guidance relevant to both professionals and the public. Public health data and statistics are another pillar, offering authoritative perspectives on disease trends, risk factors, and the need for preventive measures (Friis and Sellers, 2020). Risk assessments and modeling add further depth, especially in emergencies: mathematical models quantify risks and project outcomes, helping shape protective behaviors when communicated effectively (Southall et al., 2023).

Complexities emerge, however, when discussing "evidence-based knowledge." Data availability and quality often remain contested, creating uncertainty about which sources should guide interventions (Loon and Bal, 2014). Tailoring evidence to populations is another challenge: while research yields generalized findings, implementation requires contextualization to local determinants and cultures. As McHugh et al. (2023) note, evidence must be adapted to specific contexts to be effective. Ethical issues add further layers: balancing individual rights and public health goals is particularly salient given persistent health disparities. This debate, framed by Anand, Peter, and Sen (2004) and revived during COVID-19 (Lukmanova and Sotkina, 2022), underscores the need to integrate equity and social determinants into evidence-based strategies.

Finally, evidence does not operate in a political vacuum. Policymaking is shaped by stakeholder interests and power dynamics, raising debates about which evidence is prioritized and how it is translated into action. These tensions at the intersection of health and politics will be explored further in Section 3.

1.4 The Approach: From Top-Down Authority to Interactive Engagement

At this juncture, it is crucial to address a pivotal point. Despite their reliance on evidence-based information, institutional communication is not – and should not be – top-down. There are many reasons for this, not least because health institutions cannot compel people to follow advice. Furthermore, a top-down approach often lacks persuasiveness. This phenomenon has been extensively addressed by Thomas Tufte, who calls for a "participatory" approach (Tufte and Mefalopulos, 2009), and has been noted by other main authors in the field (Arkin, 2009; Schiavo, 2013).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

In the past, health institutions' communication predominantly followed a top-down approach, where information flowed primarily in one direction, from the institution to the public in what Neuhauser and Kreps (Neuhauser and Kreps, 2003a) call the "one-size-fits-all" format. This traditional model emphasizes the authority and expertise of the institutions, assuming that the public would passively receive and comply with the provided information. With the advent of the internet and social media, individuals have become active seekers and generators of health information. People now have access to a vast array of health-related content, ranging from credible sources to misleading or inaccurate information. Often, people now seek out information that aligns with their values, beliefs, and personal experiences and are more likely to trust peer recommendations and online communities (Neuhauser and Kreps, 2003b; Kreps and Neuhauser, 2010). For instance, during the COVID-19 pandemic, people turned to various online platforms and social media for information and support, engaging in conversations, sharing personal experiences, and seeking advice from peers (Dahiya et al., 2021). Clearly, traditional top-down approaches struggled to effectively reach and engage with the public in this dynamic environment.

Another reason for the ineffectiveness of the top-down approach is the complexity of health information. Institutional health communication often relies on scientific evidence and technical language, which can be challenging for the public to understand and apply to their daily lives. This information gap between institutions and the public can create a barrier to informed decision-making. Individuals may feel overwhelmed or disconnected from the information presented, which can lead to confusion and mistrust. For example, when communicating about treatment options for a specific condition, institutions may focus on delivering scientific evidence and technical details. However, patients and the general public may require clear explanations, practical examples, and personalized guidance to comprehend and apply the information effectively. This information gap can sometimes create an environment where people seek simplified and easily understandable explanations, potentially leaving room for the emergence of low-quality information and misconceptions. This is one of the reasons why, as the literature shows, good scientific communication and dissemination are fundamental (Grene, Cleary, and Marcus-Quinn, 2017; National Academy of Medicine, 2017; Wilson et al., 2017).

Today, health institutions increasingly recognize the need for two-way communication, actively involving the public in decision-making processes. This shift emphasizes participatory approaches, shared decision-making, and the co-creation of health messages. Rather than simply transmitting information in a one-directional manner, institutions are now aware of the importance of listening to the public, addressing their concerns, and involving them in shaping

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

health policies, programs, and research. This dialogic approach values the public's input, acknowledging their autonomy and agency, and fostering greater engagement in managing their own health and well-being (Palmer-Wackerly et al., 2014; Cyril et al., 2015; Gonah, 2020).

1.5 Shared Decision-Making

This evolution, rooted in the shift from top-down authority to interactive engagement, is particularly visible in healthcare communication, where interactions between healthcare providers and patients increasingly rely on dialogue rather than unilateral authority. The participatory approach, which is becoming the standard for institutional health communication, is mirrored in the changing dynamics of the patient–provider relationship.

With the rise of consumerism and the movement toward patient empowerment, Shared Decision-Making (SDM) has emerged as the gold standard in healthcare. It represents a collaborative process in which healthcare professionals and patients work together to make informed choices that reflect the patient's values, preferences, and individual needs. Notably, Sandman and Munthe (2009) explore various models of SDM within the broader context of patient autonomy. At its core, the SDM process involves a mutual exchange of information regarding treatment options, including associated risks and benefits, enabling both parties to deliberate and reach a decision together. In this model, patients are not passive recipients of medical advice but active participants who contribute their knowledge and preferences, while healthcare providers offer their expertise to guide the decision-making process. SDM is characterized by mutual respect, open communication, and a partnership that recognizes the patient's autonomy and expertise in their own health. This collaborative approach has gained prominence as healthcare increasingly values patient-centered care, emphasizing that decisions should be made jointly, reflecting both the best available evidence and the individual patient's personal circumstances and values (Edwards and Elwyn, 2009; Elwyn et al., 2012; Bomhof-Roordink et al., 2019).

Extending the concept beyond the patient–provider relationship, shared decision-making can also refer to a collaborative process in which health institutions and organizations actively involve the public in decision-making processes that shape health policies, programs, and research. This type of dialogue requires several key elements, as discussed in the following.

First, *information transparency*: Health institutions must ensure transparency by providing accurate, accessible, and comprehensible information about policies, procedures, and available options. Although it is challenging because maintaining information updates requires significant effort, investments in

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

ensuring that the public receives the best information empower individuals to make informed decisions and actively participate in the public health arena (Lee and Li, 2021; Kerr et al., 2022; de Barra and Brown, 2023).

Second, as introduced earlier, *engagement and participation*: Institutions need to create opportunities for public engagement and participation, encouraging individuals to provide feedback, express their needs and preferences, and contribute to decision-making processes. This may involve soliciting input through surveys, focus groups, public forums, or social media channels, or interviewing individuals in advisory boards or committees. Institutions can establish effective communication channels that enable bidirectional dialogue between the public and decision-makers. As seen during the COVID-19 pandemic, this involves leveraging various mediums such as online platforms, social media, public meetings, and interactive discussions (Kim et al., 2022; Nan et al., 2022).

Third, as also introduced earlier, *collaboration and partnership*: Institutions can benefit from actively seeking collaborations and partnerships with community organizations, advocacy groups, and individuals to collectively address health challenges, co-create solutions, and ensure diverse perspectives are considered. Indeed, intersectoral collaboration is key to successfully acting in public health (Townsend et al., 2023).

Overall, shared decision-making requires providing individuals with the necessary support and resources to participate actively. This may include educational materials, decision aids, access to relevant data, and guidance to facilitate understanding and informed decision-making.

In today's environment, as well represented in the self-determination theory (Deci and Ryan, 2008), the principles of autonomy and self-determination must underpin any strategic thinking regarding institutional communication by health institutions and organizations. The recognition of individuals' rights to make decisions about their own health is paramount. It is, thus, essential to provide people with the best available information, empowering them to make informed choices that align with their values and preferences (Rubinelli et al., 2022, 2023).

However, as discussed below, for this participatory approach to be effective, health institutions must also confront the rising challenges presented by the digital landscape, which can undermine informed decision-making (see, especially, Schulz and Nakamoto, 2024).

1.6 Confronting the Challenge of Poor-Quality Health Information in the Digital Age

Building on the need for transparent and participatory communication in shared decision-making, poor-quality health information is a central concern. In

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

today's digital landscape, health institutions must navigate an environment saturated with false, misleading, and suboptimal health content. This challenge arises not only in crises but also in contexts marked by uncertainty, fear, and information overload – conditions that fuel the spread of inaccurate or deceptive material that is difficult to counter (Zhou and Shen, 2025).

The term *infodemic* gained prominence during COVID-19 to describe the overabundance of information – both accurate and false – that made it difficult to identify trustworthy sources. Closely related are *misinformation* (unintentional spread of inaccuracies) and *disinformation* (deliberate falsehoods with malicious intent). Other concepts include *fake news*, or fabricated content presented as journalism, and *conspiracy theories*, which attribute events to hidden plots without evidence (Rubinelli et al., 2020; Briand et al., 2021; Purnat, Nguyen, and Briand, 2023). Ensuring high-quality information is now a priority across health communication and public health, in both theory and practice (Ratzan et al., 2025).

Several factors explain why people believe and propagate misleading health information. Uncertainty heightens the desire for clarity, making individuals receptive to alternative narratives, even if lacking credibility (Beauvais, 2022). Fear and anxiety can impair critical thinking, prompting reliance on simplistic explanations. Cognitive biases such as confirmation bias (favoring information consistent with preexisting beliefs) and availability bias (relying on readily available information) reinforce acceptance of suboptimal claims (French, Storey, and Wallace, 2023a).

The digital landscape, with its algorithms and echo chambers, further amplifies poor-quality information (Diaz Ruiz and Nilsson, 2023). Social media platforms and search engines often prioritize sensational content, creating bubbles that perpetuate confirmation bias. Moreover, deliberate "bad actors" exploit divisions, fears, and biases with sophisticated strategies to spread false narratives, complicating individuals' ability to assess quality (French, Storey, and Wallace, 2023b; Rubinelli, 2025a).

The abundance of often contradictory health information also challenges institutional communication. Easy access to alternative narratives, particularly for chronic or difficult-to-manage conditions, draws individuals to nonevidence-based sources. The persuasive appeal of suboptimal information lies in its framing: it offers immediate answers that resonate with confusion, fears, and skepticism (Tandoc, 2021; Peng, Lim, and Meng, 2023). Such narratives may appear more attractive than evidence-based guidelines, especially when risks seem minimal or behaviors run counter to public health recommendations. Effective institutional communication must therefore prioritize transparency, engagement, and evidence-based information to counter poor-quality content, foster trust, and support shared

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

decision-making. At its core, this requires the rigorous use of scientific knowledge – a foundation explored in the Section on the role of science in institutional health communication (see Table 1).

Key takeaways

Table 1 Foundations of institutional health communication

#	Strategies	Action steps	Expected outcome
1	Integrate health communication into core missions.	Embed health communication within the mission statements and strategic objectives.	Alignment of institutional activities with health promotion goals.
2	Empower through effective information dissemination.	Implement evidence-based practices for clear and accessible health information dissemination.	Individuals and populations are supported to make informed health decisions.
3	Embrace interactive and participatory communication.	Transition to bidirectional communication. Engage in active listening, shared decision-making, and cocreate health messages.	Enhanced trust and health literacy through collaboration and inclusive dialogue.
4	Navigate the information environment with strategic vigilance.	Acknowledge the challenge of low-quality information. Develop interventions to counteract it.	Reduced impact of suboptimal health information through targeted educational campaigns.
5	Strategize for impactful health communication.	Formulate and execute a strategic plan using a mix of communication platforms tailored to diverse audiences. Continuously assess effectiveness.	Effective reach and engagement with audiences.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

2 Science and Institutional Communication

2.1 Overview

Science communication is a moral obligation, ensuring that scientific knowledge reaches those who can benefit from it the most.

This Section examines the crucial relationship between science and institutional communication, highlighting the fundamental role of health institutions in making scientific knowledge accessible and credible.

2.2 Science as a Technical Field

As established in classical epistemology (Copi, Cohen, McMahon, 2016), science is the systematic pursuit of knowledge through observation, experimentation, and analysis. It involves the accumulation of evidence, the formulation of theories, and the ongoing effort to understand natural and social phenomena. In health, scientific research underpins interventions, treatments, and policies that can significantly improve public outcomes. Section 1 has shown that health institutions function as intermediaries, translating complex concepts into accessible language, disseminating accurate information, and promoting health literacy (National Academies of Medicine, 2017).

The relationship between science and institutional communication is multifaceted: institutions rely on science to inform their messages, but their framing and language also shape how science is perceived by the public. Communicating science, however, faces barriers, including its intrinsic complexity, the rapid spread of information via digital platforms, and the circulation of misleading content. A key challenge lies in the technical nature of science, with its specialized methods, terminology, and discourse. Understanding or contributing meaningfully to it requires years of training. This complexity extends even within the scientific community itself (Rubinelli, Schulz, and Nakamoto, 2009). Increasing specialization creates silos: scientists from different fields may struggle to understand each other's methods, theories, and language. Quantitative researchers, focused on objectivity and measurement, may find qualitative approaches difficult to grasp, while qualitative scholars, emphasizing context and lived experience, may struggle with abstract statistical models.

As Kagan (2009) notes, this reflects deeper epistemological divergences about what constitutes valid knowledge and how it should be interpreted. Quantitative scholars may question the generalizability of qualitative findings, while qualitative scholars may argue that quantitative methods overlook human complexity. These internal debates, although vital for science, are especially difficult to communicate to lay audiences.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

2.3 Communicating Scientific Results

2.3.1 Accuracy and Simplicity

The challenge of communicating scientific results in health institutions is a delicate act of balancing accuracy with simplicity, a task made all the more complex by the technical nature of science itself. This technicality, which is essential for precision within the scientific community, can create barriers to public understanding. Thus, when health institutions endeavor to communicate scientific findings, they must make this specialized knowledge accessible to a broader audience without compromising the integrity of the information (Grundmann and Cavaillé, 2000; Hanafiah, 2018). The process of translating scientific jargon and complex concepts requires a careful blend of expertise in both science and communication, ensuring that the essence of the research is preserved while the language used is clear and relatable. Recent research by Fick, Rudolph, and Hendriks (2025) highlights the complexity of this task: while avoiding jargon can enhance comprehension and foster trust by increasing perceptions of the communicator's integrity and benevolence, it may also unintentionally lead to audience overconfidence, underscoring the double-edged nature of simplification in science communication.

Consider the example of communicating a new research finding about a medical treatment. A well-crafted message that takes into account important characteristics of scientific information might read like the following:

> New research conducted by leading experts in the field highlights the potential benefits of treatment X in managing condition Y. The study, involving a large and well-designed sample, indicates that treatment X may improve [specific outcomes]. However, it is important to note that further research is needed to validate these findings and understand the long-term effects. We encourage you to consult with healthcare professionals, who can provide personalised guidance based on your unique circumstances.

This message begins by establishing the credibility of the research, noting the expertise involved and the robustness of the study design. The potential benefits of the treatment are outlined in layperson's terms, making the information accessible without oversimplifying it. The message also responsibly acknowledges the need for further research and encourages consultation with healthcare professionals, providing a balanced and nuanced view of the findings.

In contrast, an oversimplified message might read as follows:

> New study proves treatment X works! Get it now!

At first glance, these counterexamples might seem banal; however, this apparent simplicity reflects their real-world nature. Such oversimplified

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

messages are commonly encountered and fail to convey the nuances of the research. They imply a certainty that may not be warranted and omit crucial information about the study's context and limitations.

Similarly, in the examples in the next section, the counter-messages might appear simplistic or obvious, but this underscores the very issue being addressed.

2.3.2 Uncertainty and Conflicting Evidence

As seen in Section 1, health institutions often face the challenge of communicating scientific findings marked by uncertainty and sometimes conflicting evidence. Science inherently embraces uncertainty as part of discovery: knowledge is dynamic, refined through observation, experimentation, and analysis (Loon and Bal, 2014). In Popper's terms, science involves systematic inquiry into the unknown, with discoveries that reshape existing understandings (Popper, 2005). Communicating this helps the public see uncertainty not as a flaw but as an integral feature of science.

Yet humans tend to be intolerant of uncertainty, which can generate anxiety and confusion (Gu et al., 2020). Institutions must therefore acknowledge uncertainty openly and honestly (Cummings, 2015; Sopory et al., 2019). For example:

> The latest research suggests a potential link between lifestyle factor X and health condition Y. Although these findings are significant, science is ongoing and uncertainties remain. Additional studies are needed. We understand uncertainty can be unsettling, and we are committed to keeping you informed as new information emerges.

This reassures by acknowledging both uncertainty and its emotional impact. In contrast:

> Lifestyle factor X causes health condition Y! Take action now!

Such oversimplification hides uncertainty and risks misleading audiences.

Health institutions also face challenges when communicating conflicting evidence. For lay audiences, scientific disagreement may be misinterpreted as a lack of knowledge. Media talk shows often exacerbate this by presenting opposing voices for entertainment, amplifying fringe views, and creating false equivalency. This fosters polarization (Williams et al., 2023) and public skepticism (Hiam, Dorling, and McKee, 2023).

Institutions must explain that conflicting evidence is part of science's self-correcting process. For example:

> Studies on treatment A for condition B have shown mixed results. Some suggest benefits, others limited effects. We know this may be confusing.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

> Please consult healthcare professionals who can consider your circumstances and the latest evidence.

Or:

> Recent studies challenge earlier views on diet and health. Although results may seem contradictory, science evolves through new findings. We are committed to sharing the latest evidence, even when it conflicts with established knowledge, to support your well-being.

These examples both acknowledge conflict and reassure through transparency. By contrast:

> Treatment A is the best choice for managing condition B!

This oversimplifies and may prompt poor decisions. Similarly:

> New study challenges everything we knew about diet and health! Ignore previous recommendations!

This sensationalizes conflict, creates confusion, and erodes trust.

Such situations are easily exploited by conspiracy theorists and disinformation actors, who use scientific disagreement to sow doubt, spread falsehoods, and undermine trust in credible institutions (Lewandowsky et al., 2012, 2020).

2.3.3 Rapidly Evolving Nature

The quick pace of scientific advancements complicates the communication of accurate and simplified information. This is particularly true in the health-related fields, where new studies, technological advances, and shifting scientific consensus can frequently update and revise people's understanding of health issues. Health institutions must constantly monitor the latest scientific findings, re-evaluate their communication strategies, and adjust their messages to reflect the most current information. For example, consider the evolving guidelines during the COVID-19 pandemic, where initial recommendations regarding mask usage and social distancing were updated as new information emerged about virus transmission. Sources of confusion have been reported in the literature (Yong, 2020; Overton et al., 2021). Another example is the field of nutrition, as explained by Feinman (Feinman, 2019), who covers how evolving research has led to changes in dietary guidelines over time, reflecting new understandings of how certain foods affect health.

To avoid confusion, health institutions could form specialized teams, each dedicated to scouring the latest scientific publications and findings. These teams could ensure the institution remains at the forefront of research, integrating

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

cutting-edge insights into their communication. Simultaneously, the institution itself should strengthen its bonds with the scientific community, fostering collaborations with researchers and institutions and gaining early access to emerging studies and trends in health science. This symbiotic relationship would provide a beneficial two-way street of information and resources.

The effort to do this is not minimal because, to recognize the dynamic nature of information, the institutions must adopt agile communication strategies. Health institutions can craft flexible plans and be ready to adapt to new findings at a moment's notice. Websites, informational materials, and public advisories should be continuously updated, ensuring the public receives the most current information. This means a planned and implemented investment in communication to strengthen and benefit public health literacy (Caeiros et al., 2024). Parallel to these efforts, institutions could embark on a mission to enhance public education and invest in initiatives aimed at improving scientific literacy among the general population (Rubinelli et al., 2022). This approach not only arms the public with the knowledge to understand complex health information, but it also prepares them to adapt to changes in health guidelines.

2.4 The Role of Scientists

A special focus within this context is on the following question: How can scientists augment the efforts of health institutions in disseminating robust and high-quality information? This query beckons an exploration into the complex dynamics between the scientific community and public communication channels.

As in the past (Bik and Goldstein, 2013), a reluctance among many scientists to use social media for scientific discourse persists due to several concerns. First, there is the challenge of condensing complex scientific principles into concise posts without oversimplifying them, which can lead to misunderstandings. Social media's informal nature also poses a risk of misinterpreting scientific information because these platforms are not typically designed for detailed, nuanced discussions. Scientists might worry that the subtleties and complexities of scientific research might be lost in this format, leading to an erosion of the depth and accuracy that science requires. In essence, the challenge lies in maintaining scientific integrity in an environment geared toward brevity and simplicity. Another aspect of scientists' hesitation toward using social media for scientific dissemination is the nature and time constraints associated with their work. Many scientists do not see themselves as online influencers and might lack the inclination or skills to engage audiences in these platforms (Ho, Looi, and Goh, 2020; Rose, Markowitz, and Brossard, 2020).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

There is, however, a social "responsibility" for scientists to engage in public communication (Loroño-Leturiondo and Davies, 2018). Society now engages in science within the public arena, necessitating a shift in the scientific community's approach. Scientists must ponder their role in this dialogue, understanding that their responsibilities extend beyond the laboratory to the broader societal context. This shift requires scientists to not only be rigorous researchers but also effective communicators, bridging the gap between complex scientific knowledge and the societal discourse. Recent evidence suggests that how scientists present themselves on social media significantly affects public perceptions: scientists are generally seen as more authentic and qualified than influencers, especially when they engage in professional rather than personal self-disclosure (Zhang and Lu, 2023). Such findings underscore the importance of strategic communication in building trust, encouraging engagement, and fostering informed parasocial relationships. This transformation is crucial in meeting the needs of a society that actively discusses and scrutinizes scientific developments and that needs to be guided on how to do this effectively.

Clearly, the complexity of their message must be carefully woven, ensuring it remains clear while retaining the integrity of scientific truth. This is why empowerment in communication is increasingly a key skill for scientists (Bettencourt-Dias, 2007; Schiebel et al., 2021). There are also guides to assist scientists in the use of social media (Bowater and Yeoman, 2012; Heemstra, 2020), and scientists are called to develop standards for their online presence (Pagoto and Nebeker, 2019).

Scientists might consider alternative avenues to social media. Engaging in public dialogues, crafting articles tailored for a lay audience, or participating in interviews offer platforms where scientific rigor need not be compromised for the sake of accessibility. For instance, a virologist penning a thought-provoking piece in a widely-read magazine and elucidating the nuances of a novel virus strain or an epidemiologist leading an interactive webinar to demystify the latest developments in vaccine research can give a main contribution to lay audiences' knowledge. Indeed, these efforts not only disseminate knowledge but also foster a culture of informed discussion. In concert with health institutions, scientists can forge a symbiotic relationship. Such a collaborative approach, eschewing the brevity of social media for more substantial forms of engagement, promises to enhance the efficacy of public health communication.

2.5 People's Barriers toward the Content of Scientific Information

In scientific communication, a major barrier arises when evidence conflicts with personal behaviors. Institutions often communicate results that highlight the

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

harmful nature of enjoyable or ingrained activities such as smoking, sugary diets, or sedentary lifestyles. This creates a tension between acknowledging evidence and continuing behaviors that provide gratification or cultural belonging. The literature on this challenge is extensive, spanning psychology, sociology, public health, and behavioral economics (Laverack, 2017; Sheeran, Klein, and Rothman, 2017; Rubinelli and Diviani, 2020). As key texts illustrate (Rollnick, Mason, and Butler, 2010; Glanz, Rimer, and Viswanath, 2015), behaviors that are culturally rooted and pleasurable are particularly resistant to change, as they involve motivation, self-discipline, social influence, and emotion.

When scientific communication is unclear or uncertain, individuals often seek more definitive answers outside institutional channels, where pseudoscience can appear appealing despite lacking evidence (Shermer, 2002). This is compounded by cognitive biases that distort how people process institutional messages (Rubinelli, Diviani, and Fiordelli, 2020b). As shown in seminal work (Gilovich, Griffin, and Kahneman, 2002; Kahneman, 2011), biases act as filters that shape interpretation based on beliefs or perceptions rather than evidence. Confirmation bias leads individuals to favor information supporting preexisting views (Meppelink et al., 2019), while the Dunning–Kruger effect leads those with limited knowledge to overestimate their understanding (Canady and Larzo, 2023). The availability heuristic prioritizes vivid or recent reports over robust studies (Botzen et al., 2022). Anchoring bias gives undue weight to initial, often optimistic, claims about new treatments (Ludolph and Schulz, 2018). The bandwagon effect aligns people with perceived group norms, even when these contradict health advisories – for example, when groups collectively dismiss mask use as harmful (Lechanoine and Gangi, 2020). Indeed, Lechanoine and Gangi (2020) describe a "pandemic of biases" shaping COVID-19 decision-making.

These challenges are intensified when health communication is politicized. Political instrumentalization of science exacerbates biases, dividing audiences along ideological lines (Gligorić et al., 2025). Health guidelines may thus be accepted or rejected not on evidence but on political loyalty. In such cases, scientific facts risk being overshadowed by political beliefs, undermining institutional credibility and public trust – a theme addressed in the next section.

2.6 Pseudoscience

An examination of cognitive biases and the politicization of health information reveals that these factors can significantly distort the public's perception and acceptance of scientific data. This intricate interplay of personal beliefs, social conformity, and political leanings sets the stage for the emergence and appeal of pseudoscience.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

As Scott Lilienfeld and colleagues (Lilienfeld, Lynn, and Ammirati, 2015) and Brian Hughes (Hughes, 2017), among others, show, pseudoscience often masquerades as legitimate science, captivating audiences through a blend of superficial plausibility and appealing narratives. Pseudoscience thrives by exploiting cognitive biases and filling gaps in scientific understanding with seemingly straightforward answers. Pseudoscience often lacks adherence to the scientific method, which is evident in practices like astrology, which claims to predict personality or life events based on celestial bodies without empirical testing. It frequently relies on anecdotal evidence, similar to some alternative medicine practices that promote cures based on individual success stories rather than controlled studies, and typically eschews peer review and reproducibility, as seen in the promotion of certain diets or health products that have not been rigorously tested or replicated in scientific studies. Indeed, it often involves sensationalism and emotional appeal, akin to the exaggerated claims about the efficacy of certain supplements, which are marketed with compelling personal testimonies rather than scientific evidence (Rubinelli et al., 2022).

There are a lot of important publications about the problems and risks of pseudoscience, but here, it is important to notice that the promoters of pseudoscience are often masterful communicators who are adept at crafting messages that are both engaging and convincing. They excel in simplifying complex ideas into digestible, relatable content, making it more accessible than the often complex and technical language used in scientific discourse. For instance, a pseudoscientific diet plan might be presented with compelling before-and-after photos and easy-to-understand guidelines as opposed to a scientifically backed diet that comes with detailed research studies and statistical data, which can be overwhelming for the average person. The book by Massimo Pigliucci (Pigliucci, 2010) well illustrates some dynamics of the presentation of pseudoscience, as does Melinda Moyer (Moyer, 2019), who illustrates why people believe in this type of health information considering how it is communicated.

Additionally, these communicators often utilize emotional storytelling and personal anecdotes, which can be more persuasive to the general public than empirical evidence. An example of this is the use of personal testimonials in promoting alternative medicine, where individual success stories are highlighted over clinical trial results. This emotional and narrative-driven approach resonates deeply with human psychology because people are naturally drawn to stories and personal experiences rather than abstract data or complex scientific principles. By leveraging these communication techniques, promoters of pseudoscience create a persuasive appeal that can overshadow the lack of scientific validity in their claims, making their messages compelling to a wide audience.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

2.7 Investment of Health Institutions in Strengthening People's (Digital) Health and Scientific Literacy

Following from the analysis made above, in today's intricate communication landscape, health institutions are confronted with the urgent need to enhance public health, scientific, and digital literacy. This task is not merely an educational challenge but a foundational investment in fostering a society capable of navigating the pervasive threats of misleading health information, pseudoscience, and politicized health narratives. While health information may often appear accessible due to simplified communication formats, it remains inherently technical, requiring different layers of expertise to be correctly interpreted and applied. The issue of health literacy is therefore far from marginal – and not because people lack intelligence, but because understanding health information is comparable to learning a complex skill, like playing a musical instrument or interpreting a foreign language. It demands sustained education, guided practice, and contextual understanding. In a world where health information is increasingly democratized and widely disseminated, this presents a significant challenge: ensuring that accessibility does not come at the cost of comprehension or accuracy. The ability to discern credible information, interpret complex data, and make informed decisions is paramount for empowering individuals to actively engage in their own health management and in broader public health initiatives (Rubinelli et al., 2021; Fiordelli et al., 2023). Achieving this goal requires a multifaceted and programmatic approach.

Health institutions must champion initiatives that go beyond imparting knowledge to cultivating critical thinking skills and resilience against biases. Community-based educational programs can play a vital role, offering workshops and resources to help individuals scrutinize health information, understand scientific methodology, and recognize the hallmarks of evidence-based practices (Rubinelli et al., 2022). Digital health literacy, in particular, must be prioritized. As the internet and social media have become primary sources of health information, the public must be equipped with the skills to evaluate the credibility of online content, identify manipulative tactics, and navigate the digital environment responsibly. Schools are indispensable in this effort, serving as incubators for the next generation of critical thinkers. However, integrating health, scientific, and digital literacy into existing curricula demands substantial reform. This integration requires collaboration between health institutions, educational authorities, and curriculum developers to design interdisciplinary programs that seamlessly weave these competencies into the academic fabric. Such programs must be both context-sensitive and inclusive, recognizing the diverse needs and cultural backgrounds of learners.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Despite the promise of these initiatives, significant challenges remain. Resource constraints often limit the scope and reach of literacy programs, with urgent health crises frequently overshadowing the long-term value of education. Furthermore, some sensationalist tendencies of mass media and the politicization of health information can undermine these efforts, eroding trust in institutional messages and complicating public engagement. Partnerships with media outlets, NGOs, and community leaders can amplify accurate messaging while addressing systemic barriers to health literacy. As highlighted by the World Health Organization's competency framework for managing poor-quality information (World Health Organization, 2021; Rubinelli, Purnat et al., 2022), health institutions must adopt a proactive stance.

As shown in the next section, health institutions do not operate in isolation; their messages, policies, and public engagement are often influenced – sometimes constrained – by political agendas and governance structures (see Table 2).

Key takeaways

Table 2 Bridging science and public understanding

#	Strategies	Action steps	Expected outcome
1	Strive for accuracy and simplicity.	Craft communication materials that prioritize clarity while maintaining the precision of the scientific data.	Enhanced public comprehension of complex scientific information.
2	Acknowledge uncertainty and conflicting evidence.	Transparently communicate the limits of current scientific understanding and the presence of scientific debate.	Increased public trust through honest portrayal of scientific knowledge.
3	Engage with scientists and stimulate	Build partnerships with scientific	More opportunities for the lay public to

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Table 2 (cont.)

#	Strategies	Action steps	Expected outcome
	investment in scientific communication.	experts and allocate resources toward improving communication channels.	engage with scientists who are working on the creation and identification of the best evidence.
4	Consider individuals' cognitive biases toward scientific information.	Design messages that account for common biases and misconceptions by using behavioral insights.	Improved reception and internalization of scientific messages by the public.
5	Invest in strengthening critical health literacy and scientific literacy.	Develop programs aimed at enhancing the public's ability to critically assess health information.	A lay public who has more instruments to understand and evaluate health information.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

3 The Dialogue between Politicians and Health Institutions

3.1 Overview

The power of politics can either be a force for positive change or a hindrance to public health progress. It is the responsibility of everyone to ensure it serves the greater good.

This section examines the complex dynamics between politicians and health institutions, highlighting their interdependence and the challenges of aligning political priorities with public health goals.

3.2 The Relationship between Public Health and Politics

Understanding the complex relationship between health institutions and politics is of the utmost importance in today's world. The practice of public health within these institutions is intricately linked to the dynamics of politics, making it essential to comprehend and navigate this relationship effectively. On the one hand, the main role of health institutions is to promote and safeguard the health, functioning, and well-being of populations. Politics, on the other hand, involves the processes and activities associated with governance, decision-making, and policy formulation. Political systems shape the social, economic, and environmental contexts in which health institutions operate. Political actors, such as government officials and policymakers, have the authority to make decisions that impact healthcare policies, resource allocation, and regulatory frameworks (see, for instance, Levitt, 2020).

Health institutions and politics are deeply interconnected, influencing each other in critical ways (Baggott, 2010; Turnock, 2012). Political decisions shape the operations of health institutions, while health outcomes should inform political priorities. Both share a commitment to public well-being: health institutions focus on delivering care and addressing public health issues, while politics governs work across multiple sectors, including healthcare.

Key differences lie in their mandates and decision-making processes. Health institutions operate within evidence-based frameworks, relying on scientific research and expertise, whereas political decisions can be shaped by ideology, public opinion, economic factors, and electoral dynamics (Greer et al., 2017; Field, 2024). Accountability also differs: health institutions answer to regulatory bodies and the public for service quality, while politicians are accountable through elections and democratic mechanisms (Borrell et al., 2007). Moreover, health institutions often address immediate needs, whereas political processes prioritize long-term societal goals and are influenced by election cycles.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

3.3 The Prevention Power of Politics

A pivotal aspect of the interaction between politics and public health is that political strategies and policies can prevent specific outcomes or issues in society. Politics has a main power in preventing negative (health) outcomes in the sense that public health issues, whether they be disease outbreaks, environmental hazards, or social determinants of health, are inextricably linked to political factors. Thus, the prevention or solutions to these challenges often require political strategies, policies, and actions (Navarro et al., 2006; Borrell et al., 2007; Toth, 2013).

At its core, this type of prevention works by harnessing the influence of political systems to create conditions that promote health, prevent diseases, and enhance overall well-being. Indeed, as shown, for instance, in the framework of the *World Health Organization's Classification of Health, Functioning, and Disability*, health and functioning cannot be effectively addressed through biomedical or individual-focused interventions alone (WHO, 2001; Üstün et al., 2003). In the literature on health inequalities, Graham and Kelly (Graham and Kelly, 2004) show how the roots of many public health disparities lie within the broader social, economic, and environmental contexts in which people live. This emphasizes the need for comprehensive, systemic, and population-level interventions that target the underlying causes of health inequities and strive for health equity (World Health, 2008).

As a driving force behind decision-making, politics plays a pivotal role in shaping these social determinants of health. Political choices influence the allocation of resources, the design of policies, and the distribution of power, factors that significantly impact population health outcomes. The ecological models of health behavior (Glanz, Rimer, and Viswanath, 2015) show how policies related to education, housing, transportation, and employment can directly affect health behaviors, access to healthcare, and overall well-being. Moreover, political actors possess the authority to implement regulatory frameworks and public health interventions that promote preventive measures; they can enact legislation, allocate funding, and coordinate multisectoral collaborations to tackle health challenges on a population-wide scale. Political leaders also bear the responsibility of setting agendas, raising awareness, and engaging in public discourse to prioritize and advocate for preventive approaches to public health (Health and Organization, 2008; Kickbusch and Gleicher, 2012; Frenk and Moon, 2013; Greer et al., 2017).

Crucially, public health crises, such as the COVID-19 pandemic, can serve as pivotal moments for political leaders to prioritize preventive measures and enact substantive change. These crises heighten public awareness and demand

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

for action, creating an environment that fosters political will for preventive interventions. Furthermore, political prevention fosters multisectoral collaborations and partnerships; it encourages engagement with a diverse array of stakeholders, including government agencies, nonprofit organizations, private sector entities, and community groups. This collaborative approach allows for the pooling of resources, expertise, and influence, enabling a comprehensive addressing of public health challenges. However, as will be illustrated below, implementing political prevention can be a formidable challenge because there are certain key factors that can create tensions between politicians and health institutions.

3.4 Instances of Disagreement

The COVID-19 pandemic has highlighted the tension between political decision-making and scientific guidance from health institutions. During this global health crisis, a divergence emerged: Although health experts grounded their recommendations in scientific research, advocating for measures like widespread testing, social distancing, and mask mandates, political leaders often are moved by other factors, including public sentiment and political, pragmatic considerations, and economic parameters (Cairney and Wellstead, 2021). These discrepancies arose from a complex interplay of factors, reflecting a primary challenge in balancing public health priorities and political considerations.

First, political considerations and priorities play a role as leaders face the challenge of balancing public health concerns with other competing interests such as economic stability and public sentiment (Greer et al., 2017; Kavanagh and Singh, 2020). There have been scenarios in which a country experienced a resurgence of COVID-19, and public health officials, relying on scientific data and models, recommended maintaining strict lockdown measures to control the spread of the disease. However, the political leaders of the country were facing pressure from various groups, including business owners, workers who were losing income, and segments of the public who were frustrated with the restrictions. In this situation, the political leaders decided to prioritize economic concerns and public sentiment over strict public health guidelines. They argued that the economic damage caused by prolonged lockdowns was too severe and that the mental and financial well-being of the citizens was equally important as their physical health. As a result, they could opt to reopen businesses, relax social distancing rules, and ease other restrictions more quickly than what the public health officials recommended (Bambra et al., 2020; Crabu et al., 2021; Flores et al., 2022; Koch and Durodié, 2022). This decision leads to a conflict between the political leaders and public health officials. The health experts

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

warned that easing restrictions prematurely could lead to a spike in infections, overwhelming the healthcare system and potentially causing more deaths. Meanwhile, political leaders argued that their approach was balanced and necessary to prevent economic collapse and societal unrest.

Differing risk perceptions and tolerance levels between political leaders and health institutions can also lead to discord. Again, during the COVID-19 pandemic, some political leaders often publicly downplayed the severity of the virus, comparing it to less serious illnesses and suggesting it would soon pass without having a major impact. This attitude aligned with a broader strategy to avoid economic downturn and public panic. As a result, the leaders and some regional administrators advocated for relatively relaxed restrictions, pushing for the early reopening of businesses and schools and showing reluctance toward enforcing mask mandates and social distancing (van Holm et al., 2020; Tung, Chang, and Lin, 2022). Political ideologies also impact the spread of conspiracy theories and vice versa (Havey, 2020; Sutton and Douglas, 2020; Zoran et al., 2021). Contrastingly, the national health institutions and public health took a more cautious approach: They emphasized the seriousness of the pandemic based on evolving scientific data. Their recommendations included prolonged lockdowns, social distancing measures, widespread mask usage, and, later, a strong push for vaccination.

The discord between these two approaches became evident in several ways. When the health institutions released detailed guidelines for safely reopening the economy, there were reports of these being sidelined or modified by political leaders for being too stringent. Additionally, at times, the political leadership publicly contradicted the advice of health experts, including promoting unverified treatments and downplaying the necessity of scientifically backed preventive measures (de Swielande, 2020; Rutledge, 2020; Andrews, 2021; Blitt, 2021; Brenner, 2021; Marzi and Sessa, 2021). Clearly, public opinion and electoral considerations further contribute to disagreements. Political leaders are accountable to public sentiment, and during election cycles, their decision-making may be influenced by the preferences of their constituents (see, for instance, Zanotti and Meléndez, 2022).

3.5 A Chaotic Information Environment

A chaotic health information landscape complicates the relationship between health institutions and political entities. While institutions aim to disseminate accurate, science-based information, the space is often crowded with unverified or deliberately misleading messages (Brenner, 2021). Political leaders may exploit this by downplaying crises for economic stability, spreading unverified optimism for political gain, or amplifying false claims to undermine rivals. Such

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

practices fragment public response, align health beliefs with political identities, and hinder cohesive public health strategies.

Politicians also face the dilemma of which experts to endorse. Conflicting scientific views – for example, between strict lockdowns and lenient approaches – become entangled with political agendas, economic concerns, and stakeholder interests. Business owners prioritize recovery, healthcare professionals patient safety, educators continuity of learning, scientists rigorous standards, and community leaders social cohesion.

Four additional sources of mismatch are notable. First, jurisdictional differences between national, regional, and local authorities create inconsistent policies. For example, a central government may call for nationwide lockdowns, while regional leaders advocate tailored measures, producing confusion and noncompliance. Second, cultural factors shape both public and political responses. In societies valuing individual freedom, lockdowns and mandates face resistance, while collectivist cultures show higher compliance (Laverack, 2017). Trust in institutions also varies: some cultures accept scientific authority, while others are more receptive to unsupported claims due to skepticism of government or medicine. Leaders often tailor messages to these expectations, which can lead to misleading communication. Third, scientific uncertainty and evolving knowledge (as noted in Section 2) create tension between health institutions updating recommendations and political leaders preferring stable messaging. Fourth, disagreements at the international level exacerbate fragmentation. Competing interests around vaccine distribution, travel restrictions, and pandemic strategies reflect geopolitical considerations, producing patchwork responses that weaken global coordination and the credibility of health institutions.

These dynamics show how political agendas, cultural expectations, and geopolitical rivalries entangle with science, undermining the unified, evidence-based communication needed for effective health policy.

3.6 Politics, Fallacies, and Suboptimal Health Information

While politics can mobilize resources and shape health systems, it can also generate problematic communication practices. This section examines fallacious reasoning and questionable persuasion in political discourse. Political rhetoric is often not outright false but lacks empirical grounding, as seen during COVID-19 when leaders promoted narratives misaligned with science. Politics thus became a breeding ground for suboptimal information with consequences for public perception and policy.

One motivation is *political expediency*: leaders seeking popularity or power may use unsupported claims or fallacies to sway opinion or deflect

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

responsibility (Barsamian and Chomsky, 2001; Davis, 2010). *Ideological bias* also drives the promotion of claims that fit political convictions rather than evidence (Bennett and Livingston, 2020; Lopez-Garcia et al., 2021). A further factor is *image management*: statements crafted to project competence or maintain confidence, even if inaccurate, add to the spread of poor-quality information (Lees-Marshment, 2024).

Argumentation theory highlights how *fallacies* become tools of political rhetoric (Jason, 1989; Zurloni and Anolli, 2013; Zhou, 2018; Hamblin, 2022). Cummings (2020) showed how analyzing good versus bad arguments helps explain responses to health communication, and later argued that even fallacies may sometimes support reasoning under uncertainty (Cummings, 2024). Yet, fallacies can be more persuasive than evidence-based arguments, especially when promoted by trusted leaders, thereby influencing public decision-making (Rubinelli et al., 2021).

Examples from the COVID-19 pandemic illustrate their impact. The false analogy compared COVID-19 to the flu, minimizing its severity despite differences in transmission, mortality, and treatment (Bump, 2020). The *appeal to emotion* was widespread, as leaders invoked fear, anger, or sympathy to resist lockdowns or frame narratives of enemies and victims (Manfredi-Sánchez, Amado-Suárez, and Waisbord, 2021; Widmann, 2022; Campolongo, Scanni, and Tarditi, 2025). The *cherry-picking of data* presented selective statistics, downplaying severity or emphasizing economic costs (Hansson, 2017; Wigley, 2023; Marinho and Billig, 2024). The *false-cause fallacy* linked COVID-19 to 5 G or conspiracy plots, exploiting public fears (Gerli, 2021). The *appeal to authority* appeared when political figures relied on their own status or non-expert endorsements, such as promoting untested drugs like hydroxychloroquine (Madanay, McDevitt, and Ubel, 2022), or endorsing conspiracy theories about engineered viruses and global plots (Marzi and Sessa, 2021; León, López-Goñi, and Salaverría, 2022).

As these cases show, fallacious reasoning, while persuasive, distorts scientific reality, undermines institutional credibility, and risks harmful public health behaviors.

3.7 Political Language That Divides

Following the analysis of various types of suboptimal information propagated by political leaders in previous sections, this section explores how the divisive rhetoric used by political figures can also exacerbate public health challenges.

Political rhetoric is beautifully illustrated in the book *Divisive Discourse* by Joseph Zompetti (Zompetti, 2015). To summarize some prominent aspects, divisive political rhetoric, which is characterized by language and messaging that intentionally fosters division and polarization, can have significant

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

repercussions, especially in the context of public health messaging. It is often employed when discussing sensitive topics or issues that have the potential to create strong emotions or polarized opinions within society. It is designed to appeal to a specific audience or reinforce preexisting beliefs and attitudes. This type of rhetoric may involve framing complex issues in a simplistic, black-and-white manner, using derogatory language to describe certain groups or individuals, or employing fear-based messaging to create divisions.

To give a couple of examples of how divisive rhetoric can work, imagine the two scenarios below. During a contentious debate on vaccine policies, a prominent political figure took the stage. With a flair for dramatics, they sharply divided the issue into black-and-white terms. "Vaccines," they proclaimed, "are either our saviours or our worst nightmare." This is an oversimplification, ignoring the layers of scientific research and nuanced understanding, polarizing the audience into extreme positions. In another instance, amid a rising wave of a new infectious disease, a leader can use their platform not just to inform but to incite fear. They can spin tales, subtly pointing fingers at specific ethnic groups, painting them as the carriers of this plague. This fear-mongering not only creates a chasm of distrust and bias in society but also detracts from the genuine public health efforts needed to combat the disease. Thus, divisive language during the pandemic has disproportionately affected marginalized communities. When political figures use terms that target specific regions or groups about COVID-19, it can fuel xenophobia and discrimination (e.g., "The China virus"). This stigmatization not only reinforces harmful stereotypes but also impedes efforts to address the unique health needs of these communities. This, in turn, can result in disparities in testing, access to healthcare, and access to support systems (Roberto, Johnson, and Rauhaus, 2020; Bhanot et al., 2021; Koller et al., 2021).

The consequences of divisive political rhetoric extend, of course, beyond the COVID-19 pandemic, impacting debates on various public health issues. In discussions related to mental health, substance abuse, and other critical topics, divisive language can perpetuate stigma and hinder the development of effective prevention and treatment strategies. Here, the review of Sickel et al. (Sickel, Seacat, and Nabors, 2014) on mental health is valuable. For instance, in the realm of mental health, the use of divisive language by political figures can stigmatize individuals struggling with psychological well-being. Referring to mental health challenges as a mere "weakness" or suggesting that individuals can "snap out of it" implies a lack of understanding of the complexity of mental health issues. Such rhetoric can create a culture of shame and discourage those in need from seeking help, leading to untreated mental health conditions and potential crises. In the context of substance abuse, divisive language can hinder efforts to combat addiction effectively. Labeling individuals with substance use disorders as

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

"junkies" or "criminals" perpetuates harmful stereotypes and further marginalizes those who are affected. Such language can also contribute to the criminalization of addiction rather than a public health approach, limiting access to treatment and support services and exacerbating the substance abuse epidemic.

The use of derogatory terms or framing complex health issues in a simplistic, divisive manner contributes to a culture of shame, discouraging individuals from seeking help. Political leaders who engage in such language may inadvertently hinder funding for essential programs and reinforce misconceptions, thereby worsening existing health crises (Bhanot et al., 2021; Schneider et al., 2021). Last but not least, when repeated and amplified, especially in times of crisis, such rhetoric can evolve into hate speech, severely undermining social cohesion. (UNESCO, 2023).

3.8 Some Moral and Ethical Questions

Navigating the ethical landscape surrounding the dissemination of suboptimal health information by politicians presents a complex set of challenges and considerations. Indeed, the issue of whether politicians disseminate suboptimal health information intentionally or unintentionally is a complex and challenging one. It is difficult to definitively determine politicians' motivations, and this is outside the scope of the present work. However, what matters here is the problem linked to the dissemination of fallacious and unsupported health information and how to address it. There are clear questions that further research and analysis would need to explore, and that can be presented at the end of this section to prompt further thinking and research, as follows:

Responsibility and accountability: To what extent are political leaders responsible and accountable for the spread of poor-quality health information? How can they ethically navigate their duty to address falsehoods and suboptimal health information in an effective manner?

Transparency: How transparent are politicians about the sources of their information and their decision-making processes? How does transparency influence the public's trust in their leadership?

Resisting manipulation: To what extent do political leaders resist the temptation to present misleading health information for personal or political gain? How can they demonstrate ethical integrity in information provision?

Building trust and fostering critical thinking: How do leaders navigate the challenge of overcoming resistance to evidence-based information, particularly when unsupported health claims align with existing beliefs or partisan narratives? What strategies can and should they employ to build trust and foster critical thinking within their communities?

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

The answers to these ethical questions can ultimately contribute to responsible and ethical political leadership in the realm of public health. Overall, political leaders have a profound influence on public perception, and their commitment to transparency, accountability, and ethical communication can either reinforce or erode trust in health institutions. This brings to the next critical dimension: trust. As the focus of the next section, trust serves as the foundation for effective health communication, shaping public confidence in health institutions, policies, and professionals (see Table 3).

Key takeaways

Table 3 Bridging politics and institutional health communication

#	Key strategies	Action steps	Expected outcome
1	Leverage political influence for public health.	Develop policies that prioritize health outcomes and invest in public health infrastructure.	Improved population health and preparedness for public health emergencies.
2	Align political and health objectives.	Ensure political decisions are informed by evidence-based health research.	Healthier societies with decisions that reflect public health best practices.
3	Foster cooperation between sectors.	Facilitate regular communication and collaborative platforms between sectors.	A unified response to health crises and a consistent message to the public.
4	Promote ethical health communication.	Promote transparency and accountability in health-related communications.	Increased public trust in health information and improve information quality.
5	Combat low-quality information effectively.	Collaborate across political and health institutions and invest in public education that strengthens media and health literacy.	A more informed public capable of discerning accurate health information.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

4 Trust in Health Institutions

4.1 Overview

In the healthcare landscape, trust is paramount, linking the expertise of professionals to the well-being of the community.

This section examines the critical role of trust in the relationship between health institutions and the public, highlighting its importance as a cornerstone of effective healthcare systems, public health campaigns, and community well-being.

4.2 Conceptualizing Trust

Trust is the foundation of any successful relationship, fostering cooperation, credibility, and confidence. In health, it is not abstract but a vital asset underpinning effective healthcare systems, public health initiatives, and individual well-being. Trust in institutions is based not on blind acceptance but on the belief that they possess the expertise and dedication to protect health, act as reliable sources of information, and provide life-saving interventions (Gilson, 2006; Rădoi and Lupu, 2017).

In the digital age, this trust faces challenges. Health institutions encounter skepticism, misinformation, and dissatisfaction, particularly online. Resistance to vaccination programs (Raffini and Penalva-Verdú, 2022; Bory et al., 2023), debates on lockdowns and masks (Al-Ramahi, Elnoshokaty, and El-Gayar, 2021; Erdemandi and Leach, 2021), promotion of alternative therapies (Sobo, 2021), and concerns about pharmaceutical influence have all eroded confidence. Privacy breaches and politicization of health decisions further undermine institutional credibility (Hsu, 2020).

Trust is dynamic, shaped by interactions, experiences, and perceptions (Falcone et al., 2020; Gilles et al., 2022; Skirbekk, Magelssen, and Conradsen, 2023). It is context-dependent and fragile: breaches can rapidly erode it, but sincere efforts can rebuild confidence (Cummings, 2014a; Purnat, Nguyen, and Briand, 2023). Key dimensions include competence, integrity, benevolence, and reliability (Gilson, 2006). Importantly, trust is reciprocal – institutions must demonstrate trustworthiness, while individuals must be willing to extend trust.

The importance of trust spans multiple relationships. For patients, it underpins reliance on accurate diagnoses, effective treatments, and compassionate care. For the public, it ensures confidence in prevention campaigns, evidence-based guidelines, and crisis responses. In research collaborations, trust in the ethics and expertise of universities, pharmaceutical companies, and partners is essential. Philanthropic support depends on confidence that resources are used ethically. Collaboration with government agencies requires mutual trust to

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

ensure effective campaigns, disaster preparedness, and policy development. Finally, partnerships with insurance providers demand trust in fair financial practices to guarantee patient access to care.

4.3 Eroding Trust

Trust between the general public and health institutions is a delicate thread woven from a complex tapestry of actions and perceptions. The credibility of health institutions is finely attuned to their ability to deliver on promises, demonstrate ethical practices, and act in the best interests of patients and the public. It is a dynamic balance, one where trust is neither given nor taken for granted but is instead nurtured through a commitment to honesty, competence, and empathy. In this intricate dance, health institutions hold the responsibility of preserving and reinforcing trust, recognizing that the fragility of this bond demands unwavering dedication to the well-being of those they serve.

As discussed in previous sections, however, the proliferation of poor-quality health information poses a significant threat to trust in health institutions. The dissemination of false or misleading information can engender confusion, sow doubt, and cultivate public skepticism regarding health recommendations. Furthermore, inconsistency in health messaging has the capacity to weaken trust (for a general overview, see Bhutto, 2024). When health institutions provide contradictory or conflicting information, the public may become uncertain about what to believe, fostering a sense of distrust and uncertainty (Purnat, Nguyen, and Briand, 2023). In addition to these challenges, a lack of transparency in decision-making processes, data sharing, and communication can nurture suspicion and corrode trust in health institutions. When the public perceives a dearth of openness, questions regarding the motives behind certain health initiatives may arise (Rubinelli et al., 2022). The way health institutions handle crises, such as disease outbreaks or public health emergencies, can have a profound impact on trust. A sluggish or inadequate response, mixed messaging, or perceived mismanagement can lead to public dissatisfaction and a reduction in trust.

Failing to involve the public in decision-making and ignoring community perspectives can cause alienation and reduce trust. Communities may feel disconnected and excluded from health initiatives that directly impact them. Additionally, when health institutions are seen as being influenced by political interests rather than evidence-based practices, trust can deteriorate. Public health decisions should focus on the well-being of the population rather than political gains to maintain and strengthen public trust.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

4.4 Building Strong Connections between Health Institutions and Communities

Considering the above, transparency is a key element in building trust (Spalluto et al., 2020). Health institutions that communicate openly and honestly with the public, sharing both successes and challenges, are more likely to gain credibility. Providing clear and understandable information about health risks, interventions, and uncertainties creates an environment of trust where individuals feel empowered to make informed health decisions. Additionally, health organizations that demonstrate a high level of competence and expertise are more likely to earn the public's trust (Eiser et al., 2009). This involves showcasing a strong track record of successful health interventions, using evidence-based practices, and engaging with reputable experts in the field. Trust is also linked to consistency (Cantarutti and Pothos, 2023). Indeed, health organizations that deliver consistent information and follow through on their commitments are perceived as reliable sources of health information and support.

In the age of interactivity, showing empathy and understanding of the community's concerns and needs builds trust between health institutions and the public (Purnat, Nguyen, and Briand, 2023). This includes actively listening to community feedback, recognizing cultural and individual differences, and integrating community perspectives into health interventions. For example, a health organization that conducts community focus groups and surveys to better understand the specific health needs and cultural contexts of a diverse community demonstrates empathy and dedication to addressing their unique concerns.

Similarly, involving the public in the decision-making process creates a sense of ownership and investment in health initiatives and in community engagement, especially with vulnerable populations (Gilmore et al., 2020; Wieland, Doubeni, and Sia, 2020). Collaborative approaches that engage communities in the design and implementation of health interventions are more likely to be embraced and supported by the public. For example, a health organization that partners with community leaders, local organizations, and stakeholders in codesigning health campaigns tailored to the community's preferences and needs fosters trust through shared decision-making.

In general, as illustrated by Purnat et al. (Purnat, Nguyen, and Briand, 2023), there are several actions that institutions can take to strengthen ties with communities. Collaborative initiatives are vital for fostering effective community engagement in healthcare. By working with various stakeholders within the community, healthcare providers can create more impactful and sustainable health programs. Establishing community health committees composed of

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

healthcare professionals, community leaders, local NGO representatives, and community members can help identify pressing health issues, plan targeted interventions, and monitor progress. This is a key strategy to ensure that health initiatives meet the community's needs and foster a sense of ownership among members. Partnering with local schools and educational institutions to incorporate health education into their curricula is also crucial for educating children and young adults about important health topics such as nutrition, hygiene, mental health, and disease prevention. The creation of mobile health clinics to provide accessible healthcare services – including screenings, vaccinations, and basic medical care – for those with limited access can enhance the impact of institutional efforts. Additionally, organizing health fairs in collaboration with local businesses, religious organizations, and relevant stakeholders offers a platform for healthcare providers to engage directly with the community while raising awareness of various health issues and services. As discussed in the next section, collaboration with traditional mass media is also essential in all these efforts.

4.5 The Impact of Healthcare Professionals on Public Trust in Health Institutions

4.5.1 Poor-Quality Information by Health Professionals

In exploring trust within health institutions, a crucial aspect that can sometimes influence trust in unexpected ways is the role of healthcare professionals themselves. While they are generally seen as trusted sources of medical information and guidance, their actions and endorsements can occasionally undermine trust in health institutions. In 2021, the American Medical Association implemented policies to address poor-quality health information from professionals and specifically highlighted the risks of damaging the credibility of trusted health sources for patients and the public. There is substantial evidence on this issue, especially evident in the rise of medical influencers and practitioners who use their expertise to promote views or practices that may contradict established medical evidence or lack solid support (Coleman, 2022; Rubin, 2022; Sule et al., 2023). The sections below examine the complex ways healthcare professionals, including influencers and practitioners, can shape public perception and trust in health institutions. These sections explore the factors that contribute to these situations, their potential impacts on public trust, and the challenges they create in the healthcare landscape. Although healthcare professionals are central to shaping health-related discussions, their actions and endorsements are not beyond scrutiny, particularly in the digital age where information spreads quickly and widely. Analyzing these complexities reveals that trust in health institutions depends not

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

only on external factors but also on internal influences within the healthcare community. By examining instances in which healthcare professionals (whether inadvertently or not) contribute to the erosion of trust, valuable insights can be gained into how a stronger and more resilient foundation of trust between health institutions and the public might be built.

4.5.2 Contributing Factors

Constant advancements and growing knowledge typically characterize medicine and healthcare. Consequently, healthcare professionals may have diverse viewpoints on certain medical topics or treatment options. These differences can appear in public discussions, such as debates among healthcare workers about how effective a particular treatment is. While these debates are a natural part of scientific progress, they can sometimes cause uncertainty and confusion among patients and the public, potentially eroding trust in health institutions. For example, conflicting opinions about using a specific medication can make patients unsure about which advice to follow.

Healthcare professionals are, first and foremost, individuals with their own beliefs and values. Sometimes, these personal convictions can conflict with established medical guidelines or evidence-based practices. When healthcare professionals openly support treatments or practices without scientific backing, it can cause confusion and mistrust among the public. For example, a healthcare provider promoting unproven alternative therapies may weaken trust in the evidence-based treatments recommended by health organizations. Here is the question, as posed by Grimes and Greenhalgh (2024), regarding the need for regulatory bodies to limit and take action. Healthcare professionals, including medical influencers, can reach a vast online audience through various media platforms. Although this can be a powerful tool for disseminating accurate information and raising health awareness, it also provides a platform for the amplification of nonevidence-based views or controversial medical practices. Moreover, media outlets often feature healthcare professionals expressing unconventional views or advocating for treatments that challenge established medical norms, as this is often attractive to their audience.

Additionally, healthcare professionals, like many others, might not be immune to the allure of success, visibility, and an expanding online following. The chance to reach and connect with a broad audience has become an increasingly tempting opportunity. Some healthcare professionals, like many individuals, can be inspired or motivated by the desire for success and a growing online presence. Those seeking recognition and visibility may find social media particularly appealing. One notable aspect in this context is the appeal of

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

unconventional views and alternative content. This type of content can spark discussions, stimulate curiosity, and attract greater engagement compared with traditional health information. In their effort to grow their online presence and followers, healthcare professionals may realize that their expertise goes beyond simply sharing traditional health information. Their diverse experiences and knowledge enable them to explore various related topics. This may include examining alternative therapies, discussing health-related controversies, sharing personal stories, or advocating for holistic well-being – topics that often generate significant public interest.

4.6 When Health Professionals' Communication Can Erode Trust in Institutions

There are several key instances where health professionals' communication might inadvertently or intentionally erode trust in institutions that promote information contrary to evidence (Gobo and Sena, 2022). Below, some hypotheses are presented that have been inspired by real examples easily found on social media.

Healthcare professionals may selectively cite scientific studies or research to support their views while ignoring a broader body of evidence that contradicts their stance. For instance, in the areas of nutrition and dietetics, a healthcare professional who advocates for a specific diet may cherry-pick studies that seem to support the diet's effectiveness in weight loss; they emphasize small, short-term studies that show some positive results. However, they conveniently overlook larger, long-term studies that reveal the diet's negative effects on overall health, including potential nutrient deficiencies and increased risks of heart disease. For example, restricted carbohydrate diets often marketed in popular books and websites can have health consequences (Janowska et al., 2022).

The echo chamber effect on social media platforms can strengthen existing beliefs and hinder critical thinking. When healthcare professionals mainly interact with like-minded individuals or groups, this can lead to the spread of unverified or biased information, further damaging trust. For example, a group of chiropractors creates an online community on social media. They share and discuss alternative treatments for various health conditions, often emphasizing the benefits of spinal manipulation for many ailments. Within this community, members eagerly support and validate each other's posts, promoting chiropractic care as a cure-all for all health problems.

Despite the lack of solid scientific evidence supporting many of these claims, the echo chamber effect within the group can strengthen their beliefs (Jiang et al., 2021). Group members rarely engage with opposing viewpoints or critical

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

discussions about the limitations and potential risks of chiropractic practices. As a result, they keep spreading unverified or biased information about the effectiveness and safety of their treatments. This insular online environment reinforces their existing beliefs, discourages critical thinking, and maintains a one-sided narrative. When the public encounters content from this group, they may be exposed to a skewed perspective that does not align with established medical evidence. It is also easy for people to express opinions based solely on authority, without citing relevant literature or considering supporting evidence. This can have a significant impact, especially when individuals trust experts' judgments because of their professional credentials (Labinaz, 2023). However, there is a need to differentiate between expertise in a specific field and broader healthcare knowledge (see, e.g., the case of Italy in Rovetta and Castaldo, 2021).

4.7 Hero or Misguided: The Dilemma of Discredited Health Professionals

In recent years, a notable phenomenon has emerged in which, after facing disciplinary actions or bans by official bodies, some health professionals portray themselves as heroes or victims to their followers. These professionals often claim that their punitive measures result from speaking the truth or challenging established scientific norms rather than from professional misconduct or an intention to manipulate people (Milhazes-Cunha and Oliveira, 2023). One common scenario involves health professionals advocating for treatments or cures that are not supported by mainstream science or are outright disproven. For example, a doctor might promote a particular drug or natural remedy as a cure for a serious illness, despite a lack of scientific evidence or evidence to the contrary.

When regulatory bodies step in to prevent potential harm to patients, these professionals may claim that they are being persecuted for challenging the pharmaceutical industry or conventional medical wisdom. Another notable example is the case of health professionals who take an antivaccination stance. Despite overwhelming scientific consensus on the safety and efficacy of vaccines, some practitioners have spread fake information about vaccines, leading to public health concerns (Grimes and Greenhalgh, 2024). When medical boards or health organizations act against them, they often present themselves as martyrs, fighting against what they portray as the corrupt or misguided medical establishment. Some health professionals might misinterpret or deliberately misrepresent scientific research to support their claims. When their interpretations are challenged or debunked by peers or regulatory bodies, they may frame these rebuttals as a suppression of innovative thinking or an attack

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

on their integrity rather than as part of the normal scientific process of peer review and critique. This narrative of being a hero or victim appeals to certain segments of the public, especially those who are skeptical of mainstream medicine or who believe in alternative health practices.

4.8 Counteracting Poor-Quality Information by Health Professionals

There is one important point to emphasize again. Healthcare professionals with many years of education and clinical experience can develop individual perspectives on medical practices and treatments. This variety of views is a natural and valuable part of scientific discussion, as it can lead to innovative approaches and critical reviews of existing practices. Such differences in opinions may arise due to personal experiences, interpretations of new evidence, or theoretical disagreements with prevailing medical norms. It is common for experienced practitioners to hold certain opinions that may not fully align with established evidence-based guidelines. This becomes problematic when these personal views – rather than encouraging constructive analysis and dialogue within scientific and professional communities – are directly shared with the public and turn disagreement into a way to gain followers. The challenge becomes greater when healthcare professionals use their authority and credibility to influence public opinion, often bypassing peer-reviewed scientific discussion.

How can institutions deal with this? Here, the approach varies significantly depending on whether these professionals operate in private practice or are part of larger healthcare institutions. For health professionals in their practice, the responsibility primarily falls on regulatory bodies and licensing authorities. These organizations play a crucial role in monitoring and ensuring that practitioners adhere to standards; they have the authority to conduct investigations, impose sanctions, or even revoke licenses in cases of serious misconduct. However, their reach is often limited to formal professional conduct, and they may struggle to control what practitioners say or promote outside of their clinical practice. In these scenarios, professional associations also play a vital role. They can offer guidance, education, and peer review mechanisms to encourage adherence to best practices. They can also exert peer pressure and provide platforms for professional discourse, which can help in realigning errant practitioners with established medical norms.

The situation is markedly different in healthcare institutions, such as hospitals or clinics. These entities have more direct control and oversight over their staff and can enforce strict policies regarding patient care and the dissemination of information. If a staff member is found to be promoting

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

fake or misleading information, the institution can take immediate disciplinary action, which may include retraining, suspension, or termination of employment. These institutions also have a responsibility to provide ongoing education and training to their staff, ensuring that they are up to date with the latest medical research and practices. Moreover, healthcare institutions often have dedicated ethics committees or boards that can evaluate complex cases, ensuring that decisions are not just administratively sound but also ethically justified. These bodies can serve as forums for discussing and resolving conflicts related to medical health information. The existence of ethical guidelines for health professionals is a crucial foundation for ensuring responsible and accurate health communication. These guidelines typically emphasize the importance of providing evidence-based information, maintaining patient confidentiality, respecting patient autonomy, and avoiding conflicts of interest. They serve as a blueprint for maintaining the integrity and trustworthiness of the medical profession.

The challenge of countering communication that not only impacts public trust but can also cause real harm to people requires ongoing and concerted efforts beyond existing guidelines (see, for instance, Saver, 2023 and 2024). Although the guidelines can lay the groundwork, their effectiveness in the digital age is increasingly being tested. Regulatory bodies must actively monitor health communication by professionals, particularly in public and digital spaces. This involves not just checking for adherence to guidelines, but also for the potential impact of the information shared. Some boards in various parts of the world have started to focus on this, as mentioned earlier, such as the American Medical Association. However, more action is, of course, needed: Enforcement mechanisms should be robust and responsive, with clear consequences for spreading fake or misleading information (Baron and Ejnes, 2022). At the same time, reinforcing public trust cannot rely solely on regulation; it also requires strategic and effective communication. While social media has amplified both credible and misleading voices, traditional mass media – television, radio, and newspapers – remain a powerful tool for shaping public health narratives. These platforms continue to play a crucial role in disseminating timely, accurate, and evidence-based information to broad audiences, including those less engaged with digital media. However, as shown in the next section, the priorities of health institutions and mass media often diverge, with the latter favoring immediacy and engagement over depth and scientific accuracy (see Table 4).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Key takeaways

Table 4 Strengthening public trust

#	Key strategies	Action steps	Expected outcome
1	Foster trust in health institutions.	– Promote transparency and open communication. – Share success stories and the rationale behind health recommendations.	Enhanced public confidence in health institutions, leading to greater adherence to public health guidelines.
2	Mitigate low-quality information through healthcare professional advocacy.	– Train healthcare professionals to effectively communicate evidence-based information online. – Develop partnerships with healthcare influencers to promote accurate health messages.	Empowered healthcare professionals acting as credible sources of information, reducing the impact of misinformation on public health perceptions.
3	Leveraging healthcare professionals as credible sources.	– Encourage healthcare professionals to engage in public discourse responsibly. – Provide platforms for healthcare professionals to share evidence-based information.	Strengthened public trust in healthcare professionals, mitigating the impact of disinformation.
4	Addressing the influence of nonaligned healthcare professionals.	– Establish clear guidelines for healthcare communication. – Engage in dialogue with healthcare professionals to align messaging.	Alignment of healthcare messaging across platforms, reducing confusion and skepticism among the public.
5	Building resilience against erosion of trust.	– Implement continuous education on the importance of evidence-based communication. – Develop strategies to rebuild trust following incidents of misinformation.	Enhanced ability of health institutions to maintain and restore trust, ensuring ongoing public engagement and cooperation.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

5 Health Institutions and the Traditional Mass Media in Public Health Communication

5.1 Overview

In the nuanced interplay between traditional media and healthcare communication, health institutions must harness the dual forces of rigorous scientific evidence and compelling narratives. By doing so, they not only illuminate the path to informed public engagement but also embrace the enduring legacy of the media's role in shaping societal perceptions of health.

This section shifts focus to the role of traditional mass media – such as television, radio, and newspapers – in shaping public health communication.

5.2 Traditional Mass Media

For health institutions, engaging with the media is critical. Mass media outlets possess the unique capability to rapidly reach a vast and diverse audience. They also have the unique ability to engage with audiences that are less active on digital platforms, thereby bridging informational gaps within the wider population. By collaborating with the media, health institutions can amplify their messages and recommendations, thereby increasing the chances of effectively disseminating crucial health information. Thus, for instance, there is rich literature on the potential of television for public health communication (Burzyńska, Binkowska-Bury, and Januszewicz, 2015; Catalan-Matamoros and Peñafiel-Saiz, 2019; Gollust, Fowler, and Niederdeppe, 2019). Especially during health emergencies, such as disease outbreaks or natural disasters, the media serve as a crucial channel for timely communication, enabling health institutions to provide real-time updates, safety instructions, and guidance to the affected population (Anwar et al., 2020). They are a powerful tool for raising awareness about health issues, preventive measures, and public health campaigns, contributing to enhanced public knowledge and awareness on a larger scale. This is why the media have the potential to influence public behavior and encourage positive health practices. Being featured in reputable media outlets adds credibility to the information provided by health institutions, validating their expertise and authority, which, in turn, can strengthen public trust in the information being shared. Here, they can act as a platform for institutions to engage directly with the public through interviews, expert opinions, and interactive sessions, allowing, for instance, for health professionals to address public concerns, clarify misconceptions, and provide valuable insights.

The integration of traditional media into health communication strategies is, however, not without challenges (Reynosa Navarro et al., 2021). As shown below, a key issue is the differing definitions of "newsworthiness" between

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

health institutions and traditional media outlets, as well as the different agendas that health institutions and mass media can have. These divergences often center around the alignment of health messages with media priorities, which can significantly differ from the health-centered perspective of institutions.

5.3 Newsworthiness

The concept of "newsworthiness" plays a crucial role in shaping the information landscape, which is defined in the online Oxford Dictionary as "the extent to which some event, occurrence, statement, or observation has the potential to become news." The concept determines what becomes a headline and what remains in the shadows. Newsworthiness is defined by a set of criteria that influence whether a story is reported and how it is presented to the public (Zoch, 2014). Clearly, these criteria can vary significantly between different types of organizations, particularly between mass media and health institutions.

The mass media's approach to newsworthiness encompasses several key elements that profoundly shape health reporting. This has been documented in several case studies in different nations that analyze how certain information is presented as "news" to the public (Usher, 2018; Prosser, 2021; Shahid, 2022; Blanco-Herrero et al., 2025). *Immediacy*, a core principle in the media, plays a crucial role in the rapid dissemination of health information, particularly during urgent events like pandemics. Although immediate reporting is essential for public awareness and safety, it can sometimes prioritize speed over in-depth analysis, potentially resulting in superficial coverage that lacks context and nuance. *Sensationalism*, another characteristic of newsworthiness, aims to capture audience attention by provoking strong emotional reactions. In health reporting, sensationalism can manifest as an exaggeration of health risks or the efficacy of treatments. This exaggeration may distort the public's perception and understanding of health issues, leading to unwarranted fears or unrealistic expectations. *Conflict-driven narratives*, which are often prevalent in media coverage of healthcare policies or vaccine skepticism, are designed to engage audiences through polarizing debates and disputes, as occurred in the public disagreement of experts during the COVID-19 pandemic (Labinaz, 2023). Although such narratives capture attention, they can oversimplify complex health matters. For instance, media coverage that emphasizes conflicts between pro- and antivaccine groups may fail to provide a nuanced understanding of the benefits and risks associated with vaccination.

In addition to these aspects, the concept of newsworthiness in the media extends to other dimensions, including the preference for dramatic stories and narratives that involve famous individuals. The category "famous people" encompasses celebrities from the entertainment industry, public figures such as

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

politicians and government officials, influential business leaders, renowned scientists and researchers, dedicated activists and advocates, prominent sports figures, popular influencers and social media personalities, and even historical figures of significance. Media outlets often find narratives involving these individuals to be newsworthy because their actions, achievements, health-related matters, or societal impact hold substantial interest for the public and align with the media's quest for engaging stories. In general, human-interest stories, which often spotlight individual health experiences, add a relatable dimension to health reporting but can inadvertently neglect wider public health contexts.

Overall, the interplay of these various aspects of newsworthiness can significantly impact health reporting, influencing the tone, depth, and accuracy of media coverage on health-related topics. This media lens, which is effective in garnering public interest, challenges accuracy and balance in health reporting; it underscores the necessity for health institutions to engage critically with media processes and strive for communications that counterbalance sensationalism with scientific accuracy and depth.

On the contrary, health institutions' approach to newsworthiness significantly contrasts with the mass media's sensationalist strategy. As presented in Section 2, health institutions' focus centers on public health impact and scientific accuracy, prioritizing content that educates and informs. This approach emphasizes the dissemination of reliable, evidence-based information, which includes advancements in medical research, critical health policy updates, and crucial public health advisories.

Again, as discussed in Section 1, health institutions aim to enhance public understanding and promote positive health behaviors. Their strategy involves a nuanced presentation of health issues that are often characterized by in-depth analysis and contextualization. This approach allows them to address complex health topics, such as epidemiological trends, the efficacy of new treatments, or the implications of health policy changes, providing the public with comprehensive insights. The main reference work in health communication, particularly in risk communication, provides guidance on disseminating health information effectively (Thornton et al., 2016; Kreps, 2021; Thompson and Schulz, 2021; Qiu and Chu, 2019). In stark contrast to the media's focus on immediacy, health institutions place a premium on factual depth and the educational value of their communications (Schiavo, 2013). This focus is aligned with the tenets of health literacy, which emphasize the importance of enabling individuals to access, understand, and use health-related information to make informed decisions (Ishikawa and Kiuchi, 2010; Baker, Wolf, and Davis, 2011; Connelly and Speer, 2017). Through this lens, health institutions craft messages that are not only informative but also actionable, thereby significantly contributing to public health outcomes.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

The academic discourse surrounding this dichotomy emphasizes the importance for health institutions to effectively manage these contrasting approaches. Striking a balance between the immediacy and attractiveness of mass media and the depth and accuracy of health communication is essential. Health institutions must craft strategies that make their messages engaging for mass media audiences without sacrificing their scientific integrity and educational objectives. Otherwise, information problems can occur.

For instance, a health institution publishes an in-depth report on a new vaccine's efficacy. The mass media, favoring immediate impact, focus on a minor side effect, stripping away the nuanced context. This can result in heightened public anxiety and reluctance toward the vaccine, overshadowing the institution's efforts to highlight the vaccine's benefits. In another instance, a health institution cautiously reports a small outbreak of a new disease. The mass media, however, escalates the narrative, drawing premature parallels to past pandemics. This sensationalized portrayal can trigger unnecessary public panic, warping the institution's balanced communication. Furthermore, when a health institution endorses a policy for clearer sugar content labeling, the media spotlights the ensuing clash between health authorities and food manufacturers. This shift in focus from health benefits to regulatory debates might skew public understanding and acceptance of the policy. When a nutritional study's findings are released, the media's oversimplification, exemplified by sensational headlines like "Superfoods that prevent cancer," can lead to public misconceptions, ignoring the study's intricate conclusions.

5.4 Strategic Alignment: Mass Media Priorities in Health Communication

To effectively align their communication strategies with the priorities of mass media while ensuring the accuracy and educational value of their content, health institutions can adopt various strategic approaches. There are several guidelines on how to interact with the mass media to present scientific information. For instance, the book by Richard Hayes and Daniel Grossman (Hayes and Grossman, 2006), as well as the guide "How to get comfortable talking with the media" by Helen Santoro for the American Psychological Association (2022), provides important strategies for institutional health communication. These strategies are designed not only to enhance the appeal of health messages within the media landscape but also to uphold the integrity and informative nature of the content being disseminated. Specifically, these strategies include a few key points, as discussed below:

Human interest framing is a strategic approach to enhance the accessibility and relatability of complex medical data. This method involves sharing patient

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

stories and transforming impersonal medical statistics into engaging narratives. An exemplary case would be portraying an individual's journey with diabetes, offering insights into daily life challenges and the impact of treatment. This personalization of medical information forges a connection with the audience, presenting health conditions through the lens of real-life experiences. Such stories resonate emotionally and personally with audiences, significantly improving engagement and information retention. Moreover, as seen earlier, human interest stories hold appeal for the media because of their compelling nature and ability to evoke emotional responses. These narratives cater to the media's objective of presenting content that deeply resonates with audiences, often resulting in higher engagement levels. When health institutions share such patient experiences, they provide the media with stories that are not only informative but also human and relatable.

Timely hooks are essential for gaining media traction with health messages. By aligning health campaigns with current events or significant dates, health institutions can capitalize on the public's existing focus, thereby enhancing the relevance and impact of their messages. For instance, a mental health institution launching a campaign during Mental Health Awareness Month can effectively tap into heightened public interest in mental health topics at that time. This strategic timing ensures that the campaign is not only timely but also aligns with a period when the audience is more receptive to the message, significantly increasing its potential reach and influence.

To boost the appeal of their messages to the media, health institutions can transform *complex health data into more media-friendly formats,* such as press releases, infographics, or short videos. This approach involves simplifying detailed medical research into visually engaging, easy-to-understand content; it aligns with the media's preference for quick, digestible information, ensuring greater accessibility and interest. By taking this approach, health institutions can communicate more effectively in the fast-paced media environment, balancing deep informational content with the need for concise, engaging material. For example, a detailed study on heart disease prevention could be summarized into an eye-catching infographic that highlights key facts and statistics, making it more likely for media outlets to share.

Providing media outlets with *access to health experts* for interviews or Q&A sessions is a valuable strategy for health organizations. This method ensures accurate information is shared, adding depth and authority to media reports. Direct interactions with experts give the audience credible insights, boosting the trustworthiness of the information. For example, a health organization could arrange for a leading epidemiologist to discuss new findings on a health talk

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

show, thereby directly communicating complex medical insights to the public in an accessible and authoritative way.

Finally, j*oint educational efforts* between health organizations and media outlets are an effective way to blend educational goals with a wide audience. These partnerships enable the broad and engaging distribution of health information. For instance, a joint campaign about the benefits of vaccination could utilize the media's large reach, ensuring accurate and compelling delivery of crucial health messages to a diverse audience.

Concretely, crafting effective press releases for health institutions involves a detailed and strategic approach that can be summarized in the following steps:

First, *identify the core message* by defining the key message clearly. It should be newsworthy and relevant, aligning with the institution's broader goals. For example, if the focus is on a new health study, the core message could revolve around its unique findings and implications for public health.

Second, *determine the target demographic for the message*. For a pediatric health update, for instance, the content should be tailored to parents, educators, and pediatricians.

Third, *craft a compelling headline* that can grab attention while summarizing the press release's essence. For instance, "New paediatric study offers new insights into . . .."

In addition, *the body of the press release* should be straightforward, addressing the key aspects of who, what, when, where, why, and how while being devoid of technical jargon. Statistics and quotes from health experts could add credibility. In addition, it is always important to highlight any warning people should pay attention to, for example, to discuss with their doctors and provide detailed contact information for further inquiries, ensuring it is easy for media personnel to reach out.

Importantly, health institutions should prioritize thorough *review and approval of their communications before sharing them* through mass media channels, recognizing the critical importance of this process for several key reasons. Maintaining accuracy and credibility is essential, with health institutions carefully ensuring that press releases and other information are accurate, evidence-based, and aligned with established medical guidelines. Deviating from these standards, such as spreading false or misleading information, can damage public trust and potentially cause health risks. Additionally, the review process acts as a safeguard for complying with legal and ethical standards. It enables health institutions to meticulously examine materials to ensure adherence to regulations and to protect patient confidentiality, thereby reducing legal risks. Consistent messaging is also vital, helping to prevent contradictions or mixed messages in their communication efforts. Overall,

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

the rigorous review and approval procedures play a crucial role in protecting and maintaining the institution's reputation. Equally important is the commitment to transparency about uncertainty. When evidence is still developing or data is incomplete, health institutions should avoid creating an illusion of certainty. Acknowledging what is known and what remains uncertain strengthens institutional integrity and builds public trust. Clear and responsible communication of uncertainty promotes informed engagement rather than confusion and fosters a culture of openness and resilience in public health discussions.

One last aspect to highlight: Leveraging traditional media to influence social media. The interconnected nature of traditional and social media offers a strategic opportunity for health institutions to amplify their communication impact. Traditional media, with its established credibility and broad reach, often serves as a primary source of information that influences discussions and trends on social media platforms. For instance, news segments or articles on health topics frequently spark conversations and sharing on platforms such as Facebook or Instagram, extending the reach of public health messages.

Targeting traditional media as part of a broader strategy can help shape the narratives that dominate social media (see, for instance, Al Quran, 2022). When health institutions ensure that accurate, evidence-based information is featured in traditional media, it creates a foundation for these narratives to be echoed and disseminated across digital platforms. For example, a televised interview with a health expert discussing vaccine efficacy can trigger widespread sharing and discussion online, countering misinformation and reinforcing public trust. Moreover, the symbiotic relationship between these media forms highlights the potential to engage different audience segments effectively. As mentioned at the beginning of this section, traditional media often reaches demographics less active on social media, while the viral nature of social media content ensures that key messages from traditional outlets can penetrate diverse online communities. By aligning communication strategies across both mediums, health institutions can enhance message consistency and broaden their influence.

All in all, while traditional media still play a key role in setting agendas, they are increasingly interwoven with digital platforms and social media dynamics. In this interconnected ecosystem, media narratives often find new life through shares, comments, and reinterpretations by a new generation of communicators presented in the next section: The influencers (see Table 5).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Key takeaways

Table 5 Enhancing public communication through traditional mass media

#	Key strategy	Action steps	Expected outcome
1	Partnering with mass media.	– Establish partnerships with traditional mass media outlets to leverage their extensive reach. – Tailor communications to meet the media's interests and formats.	Broad dissemination of health messages across diverse audiences, ensuring crucial information reaches the wider public.
2	Understanding news value.	– Craft health messages by considering newsworthiness factors, such as timeliness, impact, and relevance, to ensure alignment with media priorities.	Increased likelihood of health messages being picked up by the media, leading to wider coverage and audience reach.
3	Utilizing timely hooks.	– Align health campaigns with current events or significant dates to enhance relevance and impact.	Increased visibility and impact of health messages during periods of heightened public interest.
4	Providing expert access to the media.	– Offer health experts for interviews or Q&A sessions to ensure accurate dissemination of information with depth and authority.	Increased trustworthiness and credibility of health information shared with the public.
5	Collaborative educational campaigns.	– Engage in partnerships with media outlets for educational campaigns, combining health institutions' educational goals with the media's reach.	Accurate and engaging delivery of health messages, leading to informed and healthier public behaviors and perceptions.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

6 The World of Influencers

6.1 Overview

The path of communication is illuminated by the charisma of these digital era storytellers, yet is shadowed by divergences from evidence-based guidance. Embracing the art of engagement, health institutions must weave the rigor of science with the allure of narrative, crafting a harmony of authenticity and accuracy. In this delicate balance lies the power to transform public health landscapes.

This section explores the powerful role of influencers in shaping public health communication, focusing on the persuasive techniques they employ and the potential risks of manipulation.

6.2 Crafting Compelling Narratives in the Digital Age

Who is an influencer? The term refers to an individual who leverages social media platforms to shape public opinions, behaviors, and trends by engaging with a substantial online audience. These individuals often establish themselves as trusted voices in their areas of focus, ranging from health and wellness to lifestyle and advocacy (Kaňková, Binder, and Matthes, 2024a; Rubinelli, 2025b).

Today, influencers have become modern-day storytellers (Borchers, 2021). They possess a unique set of skills that can capture and hold the interests of their vast online audiences. These persuasive communication techniques, which are reminiscent of the captivating artistry seen in TED Talks (Gallo, 2014), have created a new home in the dynamic realm of social media. There, influencers' communication is adapted, amplified, and personalized to engage and inspire in the blink of an eye. As explained elsewhere (Rubinelli et al., 2023), there are specific persuasive techniques in public speaking that influencers implement, presented below.

Storytelling: Influencers often kick off their content with a story, a tale of personal growth, transformation, or relatable everyday experiences. For instance, a fitness influencer might share her journey of weight loss, highlighting not just the physical changes but also her emotional transformation. This narrative resonates deeply with her audience, fostering a powerful connection based on shared aspirations for self-improvement (Abidin, 2015).

Emotional appeal: Emotions play a significant role in online content. Influencers skillfully tap into emotions such as humor, empathy, or awe to craft messages that strike a chord with their audience (Rubinelli, 2025b).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Take, for example, a mental health advocate who shares her struggles with anxiety, offering hope and support to others facing similar challenges.

Clarity and simplicity: In the online world, clarity is crucial. Communication by influencers excels at simplifying complex ideas, avoiding jargon, and ensuring that their content remains accessible to a broad audience. Consider a nutrition influencer who breaks down the science of a balanced diet into plain language, empowering followers to make healthier food choices.

Visuals: Visuals are paramount in effectively conveying messages. Indeed, online narratives are often accompanied by images, videos, and graphics to breathe life into their narratives. For instance, a skincare influencer demonstrating the step-by-step application of skincare products through visually appealing video tutorials can make the content more engaging and easy to grasp.

Passion and enthusiasm: Authenticity is the heart of online influence (Abidin, 2015). The pages of the most followed influencers convey genuine passion and enthusiasm for their subjects, inspiring and motivating their audience. Think of a sustainability influencer whose zeal for eco-friendly living sparks enthusiasm among followers to adopt more sustainable practices.

Structure: Influencers often follow a well-defined structure in their content, guiding their audience through introductions, key points, and memorable conclusions. Imagine a parenting influencer offering organized tips on managing children's screen time, hence making what could be challenging information logical and digestible.

Interactivity: Engaging the audience is a must. Thus, influencers create a sense of community and participation through interactive elements such as polls, questions, or weekly challenges. Think of a fitness influencer who hosts engaging workout challenges, encouraging followers to join in and share their progress (Abidin, 2015).

This is close to their *Call to action:* Influencers often conclude their content with a call to action, motivating their audience to take specific steps or make positive changes. For instance, a climate change activist can convince followers to sign petitions, attend environmental events, and make eco-conscious choices.

Mastering these techniques is difficult but not impossible. Today, there are tons of material on public speaking, and it is easy to study the style of influencers who have amassed significant followings across various social media platforms (Borchers, 2021). However, although the fundamental communication strategies remain consistent, the way in which influencers apply them can significantly vary. As shown below, communication by influencers might become a problem for health institutions.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

6.3 Partnering with Influencers?

There is evidence that partnering with social media influencers can bring significant value to health institutions in their efforts to communicate with and promote public health (Lutkenhaus, Jansz, and Bouman, 2019; Nguyen Zarndt, Guo, and Benoza, 2023). Influencers have established themselves as trusted voices among their followers, and their ability to reach and engage diverse audiences is a valuable asset. By collaborating with influencers, health institutions can leverage influencers' reach, relatability, and authenticity to amplify important health messages. Influencers can also make health information more accessible and engaging with a wide range of demographics. Moreover, such partnerships can help health institutions tap into the latest trends and communication strategies, staying relevant and responsive in the ever-evolving digital landscape (Kostygina et al., 2020).

Yet when health institutions contemplate partnering with social media influencers, several key considerations are instrumental to a fruitful collaboration. First, it is about finding a harmonious match in terms of relevance and alignment. The chosen influencer should resonate with the institution's mission and goals. Their content and audience should be pertinent to the health topic at hand. Imagine an influencer specializing in fitness and wellness aligning with a campaign on physical health – their expertise and audience are perfectly in sync with the institution's objectives (Albalawi and Sixsmith, 2017; Pourkarim et al., 2023).

Credibility and trustworthiness stand as the key pillars in this partnership. Institutions must delve into the influencer's history, assessing their track record for accuracy and reliability. It is not just about their words, but their actions and reputation over time. Consider an influencer known for their evidence-based approach to health information: they can become a beacon of reliability in a context where lots of suboptimal health information often plays a role.

Understanding the influencer's audience demographics is key. The age, gender, location, and interests of their followers should align with the target demographic of the health message. This is akin to choosing the right messenger for the right audience. Engagement and reach, while often misconstrued as mere numbers, tell a deeper story. A vast following is impressive, but the true measure lies in how actively followers tend to interact and respond. An influencer with a smaller but highly engaged audience can sometimes be more effective than one with a larger, passive following. Clearly, ethical standards are nonnegotiable. The influencer must uphold transparency, especially in disclosing partnerships and potential conflicts of interest. This commitment to ethics not only builds trust, but it also sets a standard for content integrity.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

It follows that, when health institutions consider partnering with social media influencers, a strategic and thoughtful approach is crucial for successful collaboration. This starts with an in-depth review of the influencer's content quality, consistency, and messaging style. It is essential that their content not only aligns with the tone and style of the health message but also resonates with the intended audience.

Next, there is a need for a clear understanding and agreement on message alignment. It involves discussing and ensuring that the influencer comprehends the accuracy and evidence-based nature of the health information being conveyed. The goal is to maintain the integrity and accuracy of the health message. Understanding and adhering to legal and regulatory requirements is also paramount. This includes ensuring that the influencer's content, as mentioned above, complies with the advertising and disclosure regulations relevant to the region.

Setting clear goals and key performance indicators is another critical step. It is about defining what success looks like and how it will be measured. This could range from the number of engagements to the quality of audience interactions. This also involves implementing robust monitoring and evaluation mechanisms. Indeed, regular assessments to ensure that the influencer's content remains aligned with the institution's goals and values are crucial for maintaining the integrity and effectiveness of the partnership.

Finally, an often-overlooked challenge lies in the question: *Do influencers actually want to partner with health institutions*? For many public figures (such as actors, athletes, or lifestyle icons), the decision to endorse institutional messages can be fraught with risk. Aligning with public health institutions may expose them to political backlash or alienate segments of their audience who are skeptical of official narratives. In a digital ecosystem that rewards popularity and engagement, taking a clear stance on sensitive health issues can lead to unfollows, negative comments, or reputational tension. This can create a dilemma for influencers whose success is deeply tied to maintaining broad appeal. As a result, even those personally committed to public health may hesitate to formalize partnerships, unless institutions can offer both content support and strategic protection for navigating potential reputational risks.

6.4 Mismatches

Although influencers can be valuable allies in promoting public health messages, a significant challenge arises when some influencers actively oppose or contradict the recommendations and information provided by health institutions (Figueiredo et al., 2022; Woolley, 2022; Kaňková et al., 2024b). These influencers, who can

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

be seen as a kind of alternative health advocates, employ various techniques to gain visibility and attract many followers who question or reject established health guidance. Understanding these techniques is crucial for health institutions seeking to effectively address the ensuing communication dilemmas.

First, influencers opposing health institutions often create emotionally charged content designed to resonate with their target audience's fears, anxieties, or frustrations. They may share personal anecdotes or stories that evoke strong emotional responses, making it challenging for followers to remain impartial. Thus, for instance, consider the following scenario:

> *An antivaccine influencer may share a heart-wrenching story of a child who allegedly suffered adverse effects from a vaccine, playing on parental fears and emotions*.

Some influencers propagate conspiracy theories related to health institutions, suggesting hidden agendas or ulterior motives behind their recommendations. This tactic preys on skepticism and fosters mistrust, as in the following:

> *An influencer may claim that health institutions are colluding with pharmaceutical companies to conceal harmful vaccine side effects for financial gain*.

In addition, there are influencers who often provide alternative explanations or solutions to health issues, positioning themselves as the arbiters of unorthodox but purportedly superior approaches to well-being. For instance, consider the following:

> *An alternative health advocate might promote natural remedies and holistic therapies as alternatives to conventional medical treatments*.

Similarly, they may selectively present scientific studies or data that appear to support their viewpoints while ignoring a vast body of evidence. This cherry-picking of information creates a distorted perception of scientific consensus. For instance, consider the following:

> *An influencer might highlight a single study with inconclusive results as evidence against the safety of vaccines, disregarding numerous comprehensive studies confirming their safety.*

Paradoxically, there are influencers who develop a cult-like following by positioning themselves as the sole bearers of "hidden truths." They create an aura of authority and exclusivity, encouraging followers to rely solely on their guidance. For instance, consider the following:

> *An influencer may refer to themselves as the* "*only source of unfiltered health information*" *in a certain field and urge followers to distrust mainstream sources.*

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Very often, this type of influencer exploits concerns about freedom of speech and censorship to galvanize support. They claim that health institutions and social media platforms suppress dissenting voices with messages that, for instance, frame any action taken by social media platforms to limit the spread of misleading health information as an attack on free speech. Finally, they can oppose health institutions by fostering communities and supporting networks that align with their ideologies. This sense of belonging can be a powerful motivator for followers because they find affirmation and validation within these groups. Thus, for instance, antivaccine influencers often create closed online communities where followers can share experiences, reinforce beliefs, and offer support.

Understanding the techniques employed by these influencers is essential for health institutions seeking to counteract poor-quality information and strengthen the trust of their target audience. Indeed, recognizing the emotional appeal, alternative narratives and persuasive tactics used by these influencers enables health institutions to craft more effective and empathetic communication strategies (Rubinelli, 2025b).

6.5 Behind Manipulation

Influencers, just like any other communicator, have a range of motivations and intentions when sharing information on social media platforms. Although some genuinely aim to educate, inform, or entertain their audience in a responsible way, others may have different objectives. In some instances, influencers may prioritize sensationalism, virality, or personal gain over the accuracy of the information they disseminate (Powell and Pring, 2024).

As mentioned earlier, manipulation is a reality in the realm of many health influencers. This could involve spreading unfounded health claims, promoting pseudoscientific remedies, or distorting facts to align with their own beliefs or agendas (MacDonald and Brianna, 2023; Field-Springer et al., 2024). This type of low-quality information becomes manipulated when it involves influencing the perceptions, behaviors, or decisions of the audience through cunning or deceptive tactics for personal gain. Influencers may employ various psychological techniques to achieve this, such as appealing to emotions, exploiting cognitive biases, or creating a false sense of urgency. For example, an influencer using emotionally charged language to persuade their followers to purchase a particular product with exaggerated or unfounded benefits is practicing manipulation.

Detailed Wikipedia pages about some influencers, among other sources, or fact-checking platforms may meticulously document their history of dubious claims and the harmful narratives they have perpetuated. These tools are of

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

value for guiding readers (Porter and Wood, 2021). However, despite such efforts to highlight their lack of credibility, some of the influencers often continue to attract and maintain a substantial following. This is part of the phenomenon known as the "continued influenced effect" (Lewandowsky et al., 2012).

The resilience of people who continue to maintain large audiences despite the low quality of their communication can be perplexing, but, again, it is rooted in their skillful ability to forge emotional connections with their audience. In fact, a paradoxical effect can occur, where the more institutional sources criticize the actions of certain influencers, the more these influencers are followed by individuals skeptical of institutions (Lewandowsky et al., 2012). This counterintuitive phenomenon is often exacerbated by influencers who are adept at leveraging such criticism to their advantage. They can frame institutional condemnation as a validation of their credibility or as an expression of alternative, contrarian viewpoints, thereby attracting an audience that distrusts traditional authority figures (Zollo et al., 2017). Moreover, the communities formed around such characters serve as echo chambers in which dissenting voices are muted, and contrary information is met with skepticism or dismissal. Within these digital enclaves, followers find validation of their beliefs and become further entrenched in their allegiance to the influencer. The sense of belonging and shared identity within these communities reinforces trust in the influencer's messages, regardless of their factual accuracy.

Understanding the dynamics at play in the digital landscape is essential for health institutions. The challenge lies not only in debunking false claims but also in addressing the underlying emotional and social factors that sustain the influence of such individuals within their dedicated communities.

6.6 Should Health Institutions Respond?

In the intricate landscape of health communication, the decision of how and when health institutions should respond to contradictory messages is laden with complexities. The topic of when to answer and how is beautifully addressed by Vraga et al. (2023). What follows below is a synthesis of some key aspects.

Consider a scenario where an influencer with a vast audience begins advocating for a do-it-yourself treatment for a serious illness devoid of any scientific backing. This situation is not merely a case of differing opinions, but it represents a tangible risk to public health. The influencer's substantial reach and persuasive power can lead to widespread adoption of ineffective – or even

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

harmful – practices among their followers. In these instances, health institutions have not just an opportunity but a responsibility to intervene.

Clearly, it is fundamental to identify the potential impact of distorted health information (Vraga et al., 2023). This process begins with meticulous monitoring of social media trends. By scrutinizing the ebbs and flows of conversations on these platforms, institutions can identify emerging narratives and track the reach of potentially misleading health information. In the next step, they can ponder the possible consequences of suboptimal health information: Could it lead to harmful health behaviors? Might it disrupt ongoing public health efforts or instigate unwarranted panic? This careful consideration is essential to gauge the severity of certain information's potential effects. Simultaneously, health institutions can turn to a council of wisdom, consulting medical experts, epidemiologists, and public health professionals. These experts can dissect the accuracy of the information and unravel the potential health risks tied to it, offering a scientific lens through which the content can be evaluated.

Understanding the audience is another key aspect. Delving into who is consuming and sharing suboptimal information helps in understanding their vulnerability. Are specific groups more susceptible to certain types of information not in line with recommendations? This audience analysis is pivotal in shaping the institution's response. Here, historical precedents can serve as valuable guides. Past incidents where similar low-quality information resulted in public harm offer crucial insights and can help predict the potential outcomes of current scenarios. Finally, legal and ethical considerations are meticulously examined. Do the misleading messages violate any laws or regulations? What are the ethical obligations of the institution in this context? This legal and ethical review ensures that the response is not only effective but also aligns with societal standards and expectations.

In answering the question "when to respond?", determining the timing of a response is crucial. Health institutions should consider that, if unsupported claims are spreading rapidly and can cause immediate harm, a swift response is essential to counteract its impact. For instance, an influencer starts a social media campaign promoting a dangerous dietary trend that could lead to health risks. Given the rapid spread of this trend and its potential harm, health institutions should respond swiftly to provide accurate information and warnings. Of course, staying silent is an option for health institutions. Indeed, for health institutions, choosing to stay silent can sometimes be a strategic response to certain health-related claims, particularly when what is in question is absurd or only believed by a marginal segment of the population.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

In general, health institutions must also be mindful of the potential risks associated with their responses. These risks include at least three main problems:

First, *amplification*: When health institutions respond to influencers who have big audiences, there is a risk of inadvertently amplifying false claims by drawing more attention to them. It is crucial to carefully consider the potential for this effect when deciding whether to respond (National Academies of Sciences, Engineering, and Medicine, 2022). For example, if a health institution responds to a small, relatively unknown influencer who has made false claims about a particular medical treatment, the response might draw more attention to the influencer's message, inadvertently amplifying it. This phenomenon is akin to the "Streisand effect," where an attempt to suppress information can lead to greater publicity (Broniatowski, Dredze, and Ayers, 2021; Innes and Innes, 2023).

Second, the *backfire effect*: Responses to unsupported claims may not always achieve their intended outcome and can sometimes backfire. In some cases, attempts to correct false information can actually entrench individuals' existing beliefs, leading to what psychologists refer to as the "backfire effect." Health institutions should carefully craft their responses to minimize this risk. For instance, when a health institution responds to an influencer promoting false claims on vaccines, some of the influencer's followers may become more committed to their antivaccine beliefs, despite the institution's efforts to correct the information (Lewandowsky et al., 2012, 2020).

Third, *resource allocation*: Responding to every suboptimal health claim in the online world is impossible, and, even in small scenarios, resource-intensive. This was very much stressed, for instance, in all important work by the World Health Organization on how to manage low-quality information during the COVID-19 pandemic (Calleja et al., 2021; Organization, 2021; Rubinelli, Purnat et al., 2022)

Overall, it is critical to address emotional concerns and engage with empathy (Vraga et al., 2023). Acknowledging and addressing the concerns of those exposed to false information, empathizing with their worries, and providing emotional support alongside the correction of facts is essential. Similarly, it is important to approach interactions, even with hostile or confrontational individuals, with empathy and respect to avoid making the divide bigger. Maintaining professionalism and resisting getting drawn into personal conflicts or heated arguments is strategic communication.

Indeed, it is well known that social media platforms can also be breeding grounds for anger, hostility, and heated exchanges (Chuai and Zhao, 2020; Horner et al., 2021). One of the reasons for this phenomenon is the anonymity and detachment that online interactions provide. When

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

individuals communicate through screens rather than face-to-face, they may feel less inhibited and more inclined to express anger and frustration openly. Moreover, the nature of social media algorithms and user engagement often rewards sensational or controversial content. Posts that evoke strong emotions, including anger, tend to receive more likes, comments, and shares, increasing their visibility on users' feeds. As a result, some users may deliberately craft provocative content to garner attention or promote their viewpoints, further fuelling heated discussions and negative interactions.

In addition to these factors, what could be defined as the "outrage culture" has become prevalent on social media. This refers to a tendency for online communities to quickly amplify anger and outrage over various issues, often in response to news events, public figures' actions or even seemingly innocuous posts (Middaugh, 2019; Serrano-Puche, 2021). When one post sparks anger, it can lead to a cascade of comments and replies, each more incensed than the last, creating a cycle of escalating anger and hostility. The forms that anger and hostility take on social media can vary widely; these may include personal attacks, name-calling, and derogatory comments aimed at individuals or groups. It can also manifest as "cancel culture," where individuals are collectively criticized and shamed for their actions or statements, sometimes resulting in real-world consequences such as job loss or social ostracization.

When individuals associated with health institutions, especially prominent figures like the Director-General of the World Health Organization (WHO), come under attack or criticism on social media, it is crucial for these institutions to respond with tact and professionalism. The first rule is to stay composed and avoid reacting emotionally. Quick, emotional responses can exacerbate conflicts and further harm an institution's reputation. In addition, it is important to determine if the criticisms arise from misunderstandings, personal attacks based on false beliefs, or legitimate concerns. This evaluation helps tailor an appropriate response. In sum, the concerns must be addressed with empathy by crafting a factual, respectful, and professional response that directly addresses the points raised in the criticism while avoiding personal attacks or defensive language (see Table 6).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Table 6 Influencers and health communication

#	Key strategies	Action steps	Expected outcome
1	Master the communication style of influencers.	– Study popular influencers' content to understand their engagement techniques. – Train health communication teams accordingly.	– Improved ability to craft messages that resonate with the target audience. – Increased engagement and trust with the public.
2	Consider partnering with aligned influencers.	– Identify influencers who share the institution's values and have a significant following. – Engage in collaborations for content creation.	– Extended reach to broader and more diverse audiences. – Enhanced credibility and message amplification through trusted voices.
3	Monitor and evaluate the quality of the information spread by the most persuasive influencers in a field.	– Use social media monitoring tools to track the spread of misinformation. – Analyze the impact of influential figures on misinformation spread.	– Timely identification of misinformation trends and sources. – Strategic responses to misinformation based on its impact and reach.
4	Develop a communication strategy including if and when to answer to disinformation by influencers and how.	– Establish guidelines for responding to misinformation. – Decide on criteria for when a public response is necessary. – Train staff on best practices for public engagement.	– Reduced risk of unintentionally amplifying misinformation. – Clear, consistent, and effective counter-messaging to misinformation.
5	Actively manage institutional social media channels by allocating appropriate finances for populating them and interacting with the public.	– Budget for social media management tools and staff. – Develop content calendars and engagement strategies. – Monitor and respond to public comments and inquiries.	– Enhanced presence and visibility on social media. – Improved public trust and engagement through regular updates and interactions. – Dissemination of accurate information.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

7 The Bases of Effective Health Message Design

7.1 Overview

Even the most brilliant ideas, if poorly expressed, risk falling flat like seeds scattered on barren soil. Today, more than ever, their impact depends on the ability to reach people clearly, engage with them, and take root in their understanding.

Merging insight from the classical and modern traditions, this section offers general insights and practical guidance on health message design that relate to the themes covered earlier.

7.2 Some Lessons from Classical Rhetoric

In the realm of persuasive communication, the *Rhetoric* of Aristotle, the Greek philosopher who first conceptualized the art of persuasion, may seem an unlikely or even outdated reference in today's fast-paced and digitally dominated communication landscape. Yet, his classical principles remain a cornerstone, illuminating timeless strategies for influence through spoken and written word.

Aristotle posited that effective persuasion hinges on three pivotal elements: *ethos*, *logos*, and *pathos* (Rubinelli, 2009, 2018). These elements are more necessary than ever in contemporary health communication, where trust, clarity, and emotional resonance are critical to breaking through the noise. *Ethos* pertains to the credibility and ethical character of the speaker, underscoring the importance of trustworthiness and authority in the eyes of the audience. For health institutions, establishing a strong ethos means demonstrating not only scientific competence but also a genuine commitment to the community's well-being. *Logos*, the backbone of effective communication, revolves around presenting data and arguments with clarity, logic, and coherence. This entails distilling complex health information into accessible, actionable insights that empower individuals to make informed decisions. Finally, *pathos* speaks to the emotional connection between the communicator and the audience, tapping into feelings such as hope, fear, or solidarity to motivate health-positive behaviors.

Similarly, Cicero, the Roman rhetorician and philosopher, offers lessons that resonate powerfully with contemporary health communication. He outlined five processes of effective communication, three of which are particularly relevant today: *inventio* (discovery), *dispositio* (arrangement), and *elocutio* (style) (Kennedy, 2009; Rubinelli, 2009). Inventio involves the discovery or identification of the right content to speak or write about a certain topic. In the context of health institutions, this means, for instance, harnessing public health data and understanding the information needs and values, knowledge, attitudes, and beliefs of the target audience. Dispositio concerns arranging and structuring content in a logical and

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

coherent flow. Health communication benefits greatly from this process, ensuring complex topics are broken down and delivered in a way that leads audiences to clear, actionable conclusions. *Elocutio* is where the art of communication truly shines. Beyond accuracy and informativeness, the way a message is expressed, its rhetorical style and flavor, influences its impact. As mentioned in many previous sections, health institutions must embrace storytelling, metaphors, and rhetorical devices to create messages that are not only clear but also compelling and relatable. This is particularly important in an era where attention spans are short and audiences are inundated with competing information.

7.3 The Framework of Social Marketing for Behavior Change

The field known as "social marketing" bridges the gap between timeless rhetorical principles and the demands of modern public health communication, offering a structured framework for achieving measurable behavior change. While classical concepts like ethos, logos, and pathos guide the *how* of persuasion, social marketing emphasizes the *who*, *what*, and *where* – ensuring messages are tailored, impactful, and delivered through the most effective channels. In institutional health communication, social marketing is not only about raising awareness but also about inspiring action that fosters healthier behaviors and improves community well-being (see, for instance, Lee and Kotler, 2019).

At its core, social marketing serves a dual purpose. First, it informs by creating awareness about critical health issues, such as risks, preventive measures, or available services. These messages provide individuals with the knowledge to make informed decisions. For instance, an awareness campaign about the importance of hand hygiene during a health crisis could outline best practices and their role in preventing disease transmission. Second, social marketing motivates action by designing campaigns that address specific behaviors. Behavior-change messages delve deeper, targeting beliefs, motivations, and barriers. A campaign to reduce smoking among teenagers, for example, might highlight the health risks of smoking, address social pressures, and offer strategies to resist those pressures, empowering adolescents to make healthier choices.

7.3.1 Message Design and Testing

The effectiveness of social marketing lies in its systematic approach to message design, which involves several key steps, among which the most important reported in traditional texts on social marketing (Lee and Kotler, 2019) are the following.

Audience segmentation is a step in designing effective health communication that involves dividing the general population into distinct subgroups based on characteristics such as age, gender, socioeconomic status, behaviors, cultural

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

background, or health status. The goal is to ensure that communication efforts are not generic but targeted. For example, messaging about vaping risks may be directed specifically at teenagers; campaigns about preventive health screenings may focus on middle-aged adults; and flu vaccination initiatives may be tailored to older adults. To guide this process, it is essential to draw on established theories of behavior change, see Section 7.4, which help identify the psychological or contextual factors that need to be targeted. These theories offer a structured lens to determine whether a message should focus, for instance, on increasing perceived benefits, reducing perceived barriers, enhancing self-efficacy, or reshaping social norms.

Messages are then crafted to be culturally sensitive, relatable, and visually engaging. The language, tone, and format must align with the preferences of the target audience, be it visually rich social media posts for younger demographics or detailed brochures for older populations.

Channel selection: Choosing the appropriate communication channels is essential for effectively reaching the target audience. Digital platforms like Instagram or TikTok might be ideal for engaging younger audiences, while traditional media such as radio and print may be more effective for reaching rural or older demographics.

Pre-testing messages: Before full-scale implementation, pre-testing ensures that messages resonate with the target audience. Methods such as focus groups, pilot campaigns, and cognitive testing help evaluate clarity, relevance, and potential effectiveness (e.g., Lapka et al., 2008). Feedback from this phase allows institutions to refine and optimize messages, improving their likelihood of success.

Post-campaign evaluation is essential for assessing the actual impact of a health communication intervention. It allows institutions to determine whether the campaign achieved its intended outcomes within the target audience. This phase typically involves collecting and analyzing data through surveys, interviews, web analytics, or health service usage statistics. Evaluating both intended and unintended effects provides valuable insights into what worked, what didn't, and why.

7.3.2 The 7Cs of Communication

When speaking about the form and expression of certain content, the 7Cs of communication – *clarity*, *conciseness*, *concreteness*, *correctness*, *coherence*, *completeness*, and *courtesy* – offer another set of foundational principles that can greatly enhance the efficacy of health communication strategies. These elements, codified by John Baird and Jim Stull (1992), contribute to the overall form of health messages, and they are described in what follows.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Clarity is achieved by using simple language and avoiding jargon, making the health information accessible to all. For instance, instead of saying "hypertension," "high blood pressure." This approach is important to talk to a broad audience, irrespective of their medical knowledge.

Conciseness, while maintaining the integrity of the message, means delivering information succinctly. In a health advisory about pandemic safety, for example, saying "Wear masks, maintain distance, and sanitize hands regularly" communicates essential actions without overwhelming the audience with details.

Concreteness strengthens the message by providing specific examples or actionable steps that the audience can follow. Telling people to "Eat a diet high in fruits and vegetables to reduce the risk of chronic diseases" gives clear direction on how to improve their health.

Correctness is crucial in maintaining the trust of the audience. It entails ensuring that health communication is factual, up-to-date, and evidence-based. For example, updating guidelines as new research becomes available on a virus ensures that the public receives accurate and current health advice.

Coherence ties the message together, ensuring that all parts of the communication are logically connected. In a campaign promoting vaccination, coherence means that messaging from various channels – social media, press releases, and public service announcements – should consistently support the benefits and safety of vaccines.

Completeness requires that all necessary information be included in the message, leaving no crucial questions unanswered. A health alert about an outbreak, including symptoms, prevention strategies, and what to do if one is sick, provides a comprehensive guide for the public.

Courtesy, the final C, involves respecting the audience's perspectives and feelings. Addressing vaccine hesitancy with empathy and understanding, rather than dismissal, encourages open dialogue and builds trust between health institutions and the public.

7.4 Insights for Precision Messaging

Building on the foundational principles of classical rhetoric and the structured, audience-centered strategies of social marketing, behavioral and cognitive sciences provide additional essential tools for refining health communication. As explained in Rubinelli et al. (2020), there are important behavior models that instruct on how to design and tailor health-related messages. Below, there is a short introduction of the four most know.

The *Health Belief Model* (HBM) is foundational for addressing individuals' perceptions of health risks and the benefits of taking action. Messages based on

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

the HBM target four key constructs: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. For example, a vaccination campaign could highlight susceptibility ("Without vaccination, you are X times more likely to contract this illness"), emphasize severity ("This disease can lead to long-term complications"), and underscore the benefits ("Vaccines protect you and your loved ones from serious illness"). To address barriers, the campaign could reassure audiences with evidence-backed information about side effects.

The *Theory of Planned Behavior* (TPB) complements the HBM by focusing on the roles of attitudes, subjective norms, and perceived behavioral control in shaping intentions. Effective messages under TPB aim to influence attitudes positively (e.g., "Quitting smoking improves your health and boosts your energy"), leverage social norms to encourage behavior (e.g., "The majority of adults in your community are choosing to quit smoking"), and address barriers by enhancing self-efficacy. For instance, providing access to support groups or practical quitting strategies can help audiences feel confident in their ability to change.

The *Transtheoretical Model*, also known as the *stages of change model*, is particularly valuable for tailoring messages to individuals based on their readiness for action. Messages can be customized for different stages, from raising awareness of risks for those in the precontemplation stage to offering actionable steps for those in the preparation stage. For example, a sedentary individual might receive a message that raises awareness about the dangers of inactivity, while someone preparing to exercise could be encouraged to "Start with a 15-minute walk each day and gradually increase your activity."

Understanding how people perceive and respond to risks is the next critical step for designing effective health messages. The *Extended Parallel Process Model* provides a valuable framework by balancing perceived threat and efficacy. Health messages should credibly articulate risks (e.g., "Exposure to secondhand smoke significantly increases the risk of lung cancer") while simultaneously empowering individuals with actionable solutions (e.g., "Protect your family by making your home smoke-free today"). By addressing both threat and efficacy, this approach can ensure that audiences understand the seriousness of the issue while feeling confident in their ability to take appropriate action.

7.5 Framing: Shaping Perceptions Through Messaging

The next concept that requires consideration is "framing" in health message design. Framing involves the selection of certain aspects of reality and making them more salient in a communicating text in such a way that they promote a particular problem definition, causal interpretation, moral evaluation, and/or

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

treatment recommendation (see, for instance, Updegraff and Rothman, 2013). Framing is a powerful tool that shapes how information is perceived and understood by the public (Salovey and Wegener, 2003). It's not just about what is communicated, but how it is communicated, influencing the audience's attitudes and behaviors toward health issues.

For instance, framing a health issue through a loss perspective ("If you don't vaccinate, you are at risk of serious illness") versus a gain perspective ("Vaccination protects you from serious illness") can lead to different responses from the public. Similarly, framing messages around collective benefits ("Our community is safer when we all vaccinate") versus individual benefits can alter the appeal of health behaviors. Specifically, gain-framed messages, such as "By getting vaccinated, you're taking a proactive step toward protecting yourself and your loved ones from severe illness," focus on the benefits of taking action. This can be contrasted with addressing barriers, as seen in messages like, "Even if you're concerned about vaccine side effects, the benefits of vaccination far outweigh the minor discomforts, protecting you from severe disease."

Positive emotional framing can be illustrated by campaigns that encourage healthy behaviors with hopeful messages, like "Join the millions who have quit smoking and breathe easier, feeling the pride of a healthier life." Conversely, negative emotions should be used carefully; for instance, a campaign might state, "Ignoring the flu vaccine puts you and your loved ones at risk," which uses fear to emphasize the importance of vaccination without causing panic. Thus, as Luise Cummings illustrated (2012), the use of threats and fear appeals arguments is valuable for public health messages. Framing around social norms can also be effective, as seen in campaigns like, "9 out of 10 people in our community wear masks to protect each other. Join them and show you care." This message leverages the influence of perceived social behavior to encourage conformity to health-positive actions.

While framing offers a powerful tool for health communication, its application is not without pitfalls. For instance, overly simplistic or emotionally charged messages might be misconstrued as manipulative, such as a campaign overstating the immediate benefits of a new health supplement without adequate evidence, which could lead to public skepticism. Moreover, the diversity of audiences means that a one-size-fits-all approach to framing may not work. A campaign that effectively motivates one demographic through the use of community-focused messages, like "Our town is healthier when we all get vaccinated," may not resonate in the same way with a younger audience that values individuality and might respond better to messages emphasizing personal freedom and choice, such as "Take control of your health by getting vaccinated."

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

7.6 Crisis Communication Frameworks

Finally, public health emergencies require effective risk communication strategies to guide public behavior, minimize harm, and build trust. The literature and guidelines on risk communication are extensive. Here, it is important to highlight some examples of established frameworks of risk communication to illustrate what they involve, but also to discuss some overall limitations that need to be addressed to improve institutional communication. Specifically, below is a brief description of the Centers for Disease Control and Prevention's *Crisis and Emergency Risk Communication (CERC) model*, the US Environmental Protection Agency's *Strategic and Effective Risk Communication (SALT) framework*, and the Food and Drug Administration's (FDA) *Evidence-Based Risk Communication Approach*.

The CERC model (Center for Disease Control and Prevention, 2018) emphasizes six core principles – Be First, Be Right, Be Credible, Express Empathy, Promote Action, and Show Respect – which guide health institutions in navigating the phases of crisis communication: Preparation, Initial, Maintenance, and Resolution. CERC is particularly strong in its emphasis on empathy and trust-building, making it effective for addressing public fears and fostering compliance during emergencies.

The SALT framework (US Environmental Protection Agency, 2021) extends the principles of risk communication through its Strategy, Action, Learning, and Tools approach. SALT prioritizes proactive planning, continuous evaluation, and iterative learning. While CERC focuses heavily on immediate and clear messaging during crises, SALT adds a reflective component to ensure long-term improvements in communication strategies. It places particular emphasis on understanding audience-specific factors, such as cultural norms, literacy levels, and trust dynamics, making it a highly adaptable tool.

The FDA's Evidence-Based Risk Communication approach (Fischhoff, Brewer, and Downs, 2011) further complements these frameworks by grounding communication efforts in rigorous scientific evidence. This model emphasizes tailoring messages to specific audiences and using narratives to engage the public and persuasion techniques. It excels in balancing the presentation of risks and benefits, ensuring the public is well-informed to make decisions, such as during food recalls or medical emergencies.

In the rapidly evolving field of crisis communication, these frameworks and models provide invaluable foundations for managing public health emergencies. They provide a structured approach, offering step-by-step processes that ensure consistency and coherence in messaging across diverse crises. Yet, these frameworks face significant challenges in today's fast-paced, digitally fragmented communication landscape. The spread of information poses a direct threat to their

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

effectiveness. There is little time for the careful planning of health messages, as communication needs to be fast to overcome the viral nature of digital content and algorithm amplification. Social media's dominance has further splintered audiences into micro-communities, each with unique needs and perspectives, making it difficult to tailor messages. Additionally, there is still a focus on one-way communication in these frameworks that leaves a gap in addressing the demand for interactivity.

Health institutions must think beyond traditional campaigns and launch dynamic, immersive initiatives to enhance digital health literacy. To foster meaningful two-way communication, health institutions should develop conversational ecosystems that actively engage the public. This could include AI-driven chatbots for real-time interaction, virtual town halls, and user-driven feedback loops. Such ecosystems allow audiences to voice concerns, share insights, and feel heard, turning passive information recipients into active participants in the communication process.

As explained in Section 6, collaborating with influencers requires more than ad hoc partnerships. Institutions should establish long-term alliances with diverse, credible influencers, training them to effectively communicate evidence-based messages. A decentralized approach to communication can enhance trust by leveraging voices already embedded within communities. Leveraging predictive analytics, institutions can identify trends and harmful information outbreaks before they gain traction. This could involve proactive messaging, deploying preemptive content tailored to counter emerging narratives, and reducing the reactive burden during crises. On a practical level, all this emphasizes the need to establish dedicated, multidisciplinary task forces that bring together experts from fields such as communication, technology and data science, behavioral psychology, and community engagement. These teams can function as rapid-response units, monitoring social media, collaborating with influencers, and creating adaptable, audience-focused messages.

7.7 A Note on Technological Innovation

Technology and innovation have revolutionized institutional health communication, offering unprecedented tools to expand the reach, relevance, and impact of health messages. These advancements (ranging from Artificial Intelligence (AI) and big data analytics to Virtual Reality (VR) and gamification) are reshaping how health institutions engage with diverse audiences in an increasingly complex communication landscape.

Among the most disruptive developments is the rise of generative AI tools such as ChatGPT, which are transforming how individuals access, process, and interact with health information. These large language models can support institutional communication by answering health-related queries, summarizing complex data,

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

drafting educational content, and even simulating patient–provider interactions (Kahambing, 2023; Li and Guenier, 2024). More broadly, AI-powered chatbots exemplify how technology can streamline communication, delivering evidence-based responses in real time, whether addressing public concerns during health crises or offering personalized behavioral guidance. Similarly, mobile health (mHealth) apps integrate tailored insights with behavior change strategies, empowering individuals to adopt healthier lifestyles. Wearable technologies, such as fitness trackers and smartwatches, support proactive health management by offering immediate feedback on physical activity, sleep, and other health metrics. Gamification, too, holds significant promise, using interactive and immersive experiences to engage users and enhance health literacy (see, for instance, Tesi et al., 2023).

Emerging technological trends suggest an increasingly personalized and interactive future. Predictive analytics and machine learning enable institutions to anticipate public health trends and intervene proactively. Virtual reality and Augmented Reality are revolutionizing health education and training, from immersive simulations for first responders to virtual health fairs in underserved communities. Blockchain technology promises to improve transparency and trust in data sharing, while telehealth continues to bridge geographic and economic barriers, expanding access to healthcare for remote and vulnerable populations (see, for instance, Attaran, 2022).

Clearly, as these tools evolve, health institutions must invest not only in their adoption but also in ethical frameworks, interdisciplinary governance, and media literacy initiatives to ensure that innovation enhances, and not undermines, public trust and equitable access to reliable health communication. However, the integration of technology into health communication is not without challenges.

First, the application of these innovations must go beyond novelty; their use must be purposeful, evidence-based, and equitable. Without careful planning, there is a risk of perpetuating or exacerbating health inequities. For example, populations with limited access to high-speed internet or digital devices may be excluded from the benefits of digital health initiatives. Bridging the digital divide through investments in affordable technology, digital literacy programs, and infrastructural improvements is critical to ensuring inclusivity. Data privacy and ethical concerns also loom large. AI and predictive analytics often rely on vast amounts of sensitive health data, raising issues of confidentiality and security. Institutions must implement robust data governance frameworks, comply with privacy regulations, and maintain transparency about how data is collected, stored, and utilized. Moreover, algorithmic bias poses a significant risk. Without careful oversight, AI systems may replicate societal inequities, resulting in biased or unfair communication practices that disproportionately

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

impact vulnerable populations. Low-quality information further complicates the digital landscape. Social media algorithms can amplify false information, often outpacing corrections or evidence-based messaging. To counter these dynamics, health institutions must adopt agile and adaptive strategies, such as real-time monitoring, collaboration with trusted community voices, and leveraging AI to detect and debunk misinformation before it spreads.

As mentioned above, AI, including the large language models, holds undeniable potential. Yet these tools do not replace human judgment, knowledge, or ethical reasoning. Messages generated by AI are only as valuable as the expertise guiding them. Without human insight, they risk being generic, inappropriate, or even harmful. The success of any technological intervention in health communication ultimately depends on the minds that shape its use. In moving toward the ethical dimensions of institutional communication, one principle remains fundamental: technology should serve humanity. It must be embedded within human-centered frameworks that prioritize empathy, accountability, and equity. Even the most advanced tools can only enhance, not substitute, the deliberate, reflective, and relational work of responsible health communication (see Table 7).

Key takeaways

Table 7 Effective health message design

#	Key strategies	Actions steps	Expected outcomes
1	Integrate classical and behavioral science foundations into message design.	– Apply Aristotle's ethos, logos, and pathos. – Use Cicero's structure and style. – Integrate behavior models (to address readiness and motivation).	– Messages that are credible, emotionally resonant, and aligned with behavioral drivers, increasing likelihood of positive health actions.
2	Structure health campaigns using social marketing logic.	– Segment audiences, gather insights, tailor messages and materials, choose appropriate	– Health messages that are audience-specific, behaviorally relevant, and strategically

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Table 7 (cont.)

#	Key strategies	Actions steps	Expected outcomes
		dissemination channels, and pretest content.	delivered across appropriate platforms.
3	Apply the 7Cs and framing to enhance clarity and impact.	– Ensure messages are clear, concise, correct, coherent, complete, and courteous. – Use gain/loss framing, emotional tone, or social norms to align with audience perspectives.	– Stronger message coherence, reduced misinterpretation, and improved receptivity among different audience groups.
4	Harness technology and innovation responsibly.	– Utilize AI, mHealth, VR/AR, social media, and gamification. – Address the digital divide, ensure inclusive access, and mitigate algorithmic bias.	– Expanded reach, tailored engagement, and enhanced health literacy through ethical and inclusive digital tools.
5	Strengthen ethical response and crisis adaptability.	– Implement established frameworks for risk communication. – Promote meta-awareness and counter misinformation. – Uphold transparency, privacy, and responsiveness.	– Trustworthy, adaptable communication strategies that protect public trust and support informed decision-making in emergencies.

Concluding Remarks

In the noise and velocity of today's information age, institutional health communication must be more than functional: it must be human. It must speak not only to the mind but also to the uncertainty, hope, and dignity that shape the human experience of health. This work has outlined the challenges and

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

responsibilities faced by health institutions, offering a vision that is not only grounded in scientific evidence but also in ethical integrity and relational awareness. Health communication is not simply the transmission of facts; it is the delicate art of building trust in a fragmented world, of preserving clarity amid confusion, and of fostering dialogue where division often prevails. The tools used, the voices elevated, the policies supported, and the narratives crafted all contribute to shaping how people come to understand and care for themselves and others.

The hope, and indeed the dream, is that these reflections might serve not only as a guide but as a call: a call for institutions to speak with transparency, for scientists to embrace responsibility in the public sphere, for communicators to engage with expertise and humility, and for communities to be acknowledged as partners, not audiences, in the creation of health meaning. Communication is not an accessory to care. It is already a form of care. In a time when truth is contested and trust is vulnerable, communicating well is not just a strategic choice; it is an ethical imperative.

The solutions are within reach. Many of them are well-articulated, from fostering collaboration between politics and health institutions to strengthening literacy, transparency, and inclusive dialogue. Yet their implementation remains challenging – often hindered not by lack of knowledge, but by fragmented systems, competing agendas, and the complexity of real-world governance. To move from knowing to doing will require courage, patience, and above all, shared commitment.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

References

Abidin, C. (2015). Communicative intimacies: Influencers and perceived interconnectedness. https://scholarsbank.uoregon.edu/xmlui/handle/1794/26365 (Accessed: March 5, 2024).

Adebisi, Y. A., Rabe, A., and Lucero-Prisno, D. E. III (2021). Risk communication and community engagement strategies for COVID-19 in 13 African countries. *Health Promotion Perspectives*, 11(2), 137–47.

Albalawi, Y. and Sixsmith, J. (2017). Identifying Twitter influencer profiles for health promotion in Saudi Arabia. *Health Promotion International*, 32(3), 456–63.

Al-Quran, M. W. M. (2022). Traditional media versus social media: Challenges and opportunities. *Technium Science*, 4(1), 145–60.

Al-Ramahi, M., Elnoshokaty, A., El-Gayar, O. et al. (2021). Public discourse against masks in the COVID-19 era: Infodemiology study of Twitter data. *JMIR Public Health and Surveillance*, 7(4), e26780.

American Psychological Association. (2022, April). *How to get comfortable talking with the media. Monitor on psychology.* https://www.apa.org/monitor/2022/04/career-talking-media.

Anand, S., Peter, F., and Sen, A. (2004). *Public health, ethics, and equity.* Oxford: Oxford University Press.

Andrews, L. (2021). Mortality, blame avoidance and the state constructing Boris Johnson's exit strategy. In K. Smith, P. Clarke, N. Tilley, and R. Williams, eds., *Power, media and the COVID-19 pandemic: Framing public discourse*. Abingdon: Routledge, 220–234.

Anwar, A., Malik, M., Raees, V., and Anwar, A. (2020). Role of mass media and public health communications in the COVID-19 pandemic. *Cureus* [Preprint]. https://doi.org/10.7759/cureus.10453 (Accessed: August 6, 2025).

Blanco-Herrero, David, Toni G. L. A. van der Meer, and Bas van den Putte. (2025). Role adoption and decision making: How Dutch journalists dealt with misinformation during the Covid-19 pandemic. *Journalism Practice*, 0(0), 1–19.

Arkin, E. B. (2009). *Making health communication programs work*. Rev. ed. Springfield, VA: DIANE.

Attaran, M. (2022). Blockchain technology in healthcare: Challenges and opportunities. *International Journal of Healthcare Management*, 15(1), 70–83.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Baclic, O., Tunis, M., Young, K., et al. (2020). Challenges and opportunities for public health made possible by advances in natural language processing. *Canada Communicable Disease Report*, 46(6), 161–8.

Baggott, R. (2010). *Public health: Policy and politics*. London: Bloomsbury.

Baird, J. and Stull, J. (1992). *The seven C's of communication*. Englewood Cliffs, NJ: Prentice Hall.

Baker, K. A. C., Wolf, M. S., and Davis, T. C. (2011). Integrating health literacy in health communication. In T. L. Thompson, R. Parrott, and J. F. Nussbaum, eds., *The Routledge handbook of health communication*. 2nd ed. New York: Routledge, 306–19.

Bambra, C., Riordan R., Ford J., Matthews F. (2020). The COVID-19 pandemic and health inequalities. *Journal of Epidemiology and Community Health*, 74(11), 964–8.

Baron, R. J. and Ejnes, Y. D. (2022). Physicians spreading misinformation on social media – Do right and wrong answers still exist in medicine? *New England Journal of Medicine*, 387(1), 1–3.

de Barra, M. and Brown, R. C. H. (2023). Public-health communication should be more transparent. *Nature Human Behaviour*, 7(5), 662–4.

Barsamian, D. and Chomsky, N. (2001). *Propaganda and the public mind: Conversations with Noam Chomsky.* London: Pluto Press.

Bartholomew Eldredge, L. K., Markham, C. M., Ruiter, R. A. C., Fernández, M. E., Kok, G., & Parcel, G. S. (2016). *Planning health promotion programs: an Intervention Mapping approach* (4 ed.). Jossey-Bass Inc.

Bashingwa, J. J. H., Mohan, D., Chamberlain, S., et al. (2023). Can we design the next generation of digital health communication programs by leveraging the power of artificial intelligence to segment target audiences, bolster impact and deliver differentiated services? A machine learning analysis of survey data from rural India. *BMJ Open*, 13(3), e063354.

Bauer, M. W. and Glăveanu, V. P. (2011). Communication as rhetoric and argumentation. In D. Hook, B. Franks, and M. W. Bauer, eds., *The social psychology of communication*. London: Palgrave Macmillan, 209–28.

Beauvais, C. (2022). Fake news: Why do we believe it? *Joint Bone Spine*, 89(4), 105371.

Bennett, W. L. and Livingston, S. (2020). *The disinformation age: Politics, technology, and disruptive communication in the United States*. Cambridge: Cambridge University Press.

Bettencourt-Dias, M. (2007). Training scientists in communication skills. In M. Claessens, ed., *Communicating European research 2005*. Dordrecht: Springer Netherlands, 71–7.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Bhanot, D., Singh T., Verma S. K., Sharad S. (2021). Stigma and discrimination during COVID-19 pandemic. *Frontiers in Public Health*, 8, 577018.

Bhutto, F. (2024). Trust in public institutions: Causes of decline and ways to restore it. *Research Consortium Archive*, 2(3), 123–31.

Bik, H. M. and Goldstein, M. C. (2013). An introduction to social media for scientists. *PLOS Biology*, 11(4), e1001535.

Blitt, R. C. (2021). Human rights and disinformation under the Trump administration: The Commission on Unalienable Rights. *Saint Louis University Law Journal*, 66, 1–51.

Bode, S. M., Anwar, E., Best, D. L., Patel, M., Beers, L. S., Kaczorowski, J. M., Solomon, B. S., Chamberlain, L. J. (2024). Pediatric advocacy: Advancement in academic institutions. *Pediatric Research*, 95, 1–4.

Bolsewicz, K. T., Thompson K, Murray P, et al. (2024). Implementing recommended COVID-19 public health measures in the era of living with COVID-19: Experiences of residential aged care facility managers in New South Wales, Australia. *Australasian Journal on Ageing*, 43(3), 463–73.

Bomhof-Roordink, H., Gärtner, F. R., Stiggelbout, A. M., Pieterse, A.H. (2019). Key components of shared decision making models: A systematic review. *BMJ Open*, 9(12), e031763.

Borchers, N. S. (2021). Social media influencers in strategic communication: A conceptual framework for strategic social media influencer communication. In N. S. Borchers and F. Enke, eds., *Social media influencers in strategic communication*. New York: Routledge, 7–23.

Borrell, C., Espelt, A., Rodríguez-Sanz, M., Navarro, V. (2007). Politics and health. *Journal of Epidemiology and Community Health*, 61, 658–9.

Bory, P., Giardullo, P., Tosoni, S., Turrini, V. (2023). "We will multiply the fires of resistance": The catalysts of dissent against institutional science and their interplay with refused knowledge communities. *Public Understanding of Science*, 32(1), 2–19.

Botzen, W. J. W., Duijndam, S. J., Robinson, P. J., van Beukering, P. (2022). Behavioral biases and heuristics in perceptions of COVID-19 risks and prevention decisions. *Risk Analysis*, 42(12), 2671–90.

Bourrée, F., Michel, P., and Salmi, L. R. (2008). Consensus methods: Review of original methods and their main alternatives used in public health. *Revue d'Épidémiologie et de Santé Publique*, 56(6), e13–e21.

Bowater, L. and Yeoman, K. (2012). *Science communication: A practical guide for scientists*. Chichester: John Wiley & Sons.

Brenner, I. (2021). Disinformation, disease, and Donald Trump. *International Journal of Applied Psychoanalytic Studies*, 18(2), 232–41.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Briand, S. C., Cinelli, M., Nguyen, T., et al. (2021). Infodemics: A new challenge for public health. *Cell*, 184(25), 6010–14.

Broniatowski, D. A., Dredze, M., and Ayers, J. W. (2021). "First do no harm": Effective communication about COVID-19 vaccines. *American Journal of Public Health*, 111(6), 1055–7.

Brownson, Ross C., Anjali D., Deshpande, Kathleen, N. (2018). *Evidence-based public health*. 4th ed. New York: Oxford University Press.

Bump, P. (2020). Trump again downplays coronavirus by comparing it to the seasonal flu. It's not a fair comparison. www.washingtonpost.com/politics/2020/03/24/trump-again-downplays-coronavirus-by-comparing-it-seasonal-flu-its-not-fair-comparison/ (Accessed: August 6, 2025).

Burzyńska, J., Binkowska-Bury, M., and Januszewicz, P. (2015). Television as a source of information on health and illness – review of benefits and problems. *Progress in Health Sciences*, 5(2), 174–84.

Bylund, C. L., Brown, R. F., Bialer, P. A., Levin, T. T., Lubrano di Ciccone, B., & Kissane, D. W. (2011). Developing and implementing an advanced communication training program in oncology at a comprehensive cancer center. *Journal of Cancer Education*, 26(4), 604–11.

Caeiros, P., Ferreira, P. P., Chen-Xu, J., Francisco, R., and Telo de Arriaga, M. (2024). From health communication to health literacy: A comprehensive analysis of relevance and strategies. *Portuguese Journal of Public Health*, 42(2), 159–64.

Cairney, P. and Wellstead, A. (2021). COVID-19: Effective policymaking depends on trust in experts, politicians, and the public. *Policy Design and Practice*, 4(1), 1–14.

Calleja, N., AbdAllah, A., Abad, N., et al. (2021). A public health research agenda for managing infodemics: Methods and results of the first WHO infodemiology conference. *JMIR Infodemiology*, 1(1), e30979.

Campolongo, F., Scanni, F. M., and Tarditi, V. (2025). The pandemic crisis narrated by the populist radical right parties: The cases of the Lega per Salvini and the Rassemblement National. *International Communication Gazette*, 87(2), 101–25.

Canady, B. E. and Larzo, M. (2023). Overconfidence in managing health concerns: The Dunning–Kruger effect and health literacy. *Journal of Clinical Psychology in Medical Settings*, 30(2), 460–8.

Cantarutti, S. and Pothos, E. M. (2023). Trust during COVID-19: Which factors matter most? *Psychology, Health & Medicine*, 28(8), 2389–402.

Catalan-Matamoros, D. and Peñafiel-Saiz, C. (2019). How is communication of vaccines in traditional media: A systematic review. *Perspectives in Public Health*, 139(1), 34–43.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Centers for Disease Control and Prevention (U.S.) (2018). *Crisis and emergency risk communication: Introduction (2018 update)*. Atlanta, GA: CDC. www.cdc.gov/cerc/media/pdfs/CERC_Introduction.pdf (Accessed: August 6, 2025).

Chuai, Y. and Zhao, J. (2020). Anger makes fake news viral online. *arXiv*. https://doi.org/10.48550/arXiv.2004.10399 (Accessed: August 6, 2025).

Coleman, C. H. (2022). Physicians who disseminate medical mis/disinformation: Testing the constitutional limits on professional disciplinary action. *First Amendment Law Review*, 20, 113–54.

Connelly, R. A. and Speer, M. E. (2017). Health literacy and health communication. In R. A. Connelly and T. Turner, eds., *Health literacy and child health outcomes: Promoting effective health communication strategies to improve quality of care*. Cham: Springer International, 1–13.

Crabu, S., Giardullo, P., Sciandra, A., & Neresini, F. (2021). Politics overwhelms science in the COVID-19 pandemic: Evidence from the whole coverage of the Italian quality newspapers. *PLOS ONE*, 16(5), e0252034.

Cummings, L. (2012). Scaring the public: Fear appeal arguments in public health reasoning. *Informal Logic*, 32(1), 25–50.

Cummings, L. (2014a). The "trust" heuristic: Arguments from authority in public health. *Health Communication*, 29(10), 1043–56.

Cummings, L. (2014b). Analogical reasoning in public health. *Journal of Argumentation in Context*, 3(2), 169–97.

Cummings, L. (2015). *Reasoning and public health: New ways of coping with uncertainty*. Cham: Springer International.

Cummings, L. (2020). Good and bad reasoning about COVID-19. *Informal Logic*, 40(4), 521–44.

Cummings, L. (2024). *Protecting the public's health during novel infectious disease outbreaks*. Cambridge: Cambridge University Press.

Cyril, S., Smith, B. J., Possamai-Inesedy, A., & Renzaho, A. M. (2015). Exploring the role of community engagement in improving the health of disadvantaged populations: A systematic review. *Global Health Action*, 8(1), 29842.

Dahiya, S. et al. (2021). Lessons from Internet use and performance during COVID-19, *Journal of Information Policy*, 11, 202–21.

Davis, A. (2010). *Political communication and social theory*. London: Routledge.

Deci, E. L. and Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology / Psychologie canadienne*, 49(3), 182–5.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Diaz Ruiz, C. and Nilsson, T. (2023). Disinformation and echo chambers: How disinformation circulates on social media through identity-driven controversies. *Journal of Public Policy & Marketing*, 42(1), 18–35.

Edwards, A. and Elwyn, G. (2009). *Shared decision-making in health care: Achieving evidence-based patient choice*. Oxford: Oxford University Press.

Eiser, J. R., Stafford, T., Henneberry, J., & Catney, P. (2009). "Trust me, I'm a scientist (not a developer)": Perceived expertise and motives as predictors of trust in assessment of risk from contaminated land. *Risk Analysis*, 29(2), 288–97.

Elwyn, G., Frosch, D., Thomson, R., et al. (2012). Shared decision making: A model for clinical practice. *Journal of General Internal Medicine*, 27(10), 1361–7.

Erdemandi, M. and Leach, J. (2021). "Masks don't work": Ideology associations and the geospatial propagation of COVID-19 disinformation on Twitter. Rochester, NY: SSRN.

Eysenbach, G. (2002). Infodemiology: The epidemiology of (mis)information. *The American Journal of Medicine*, 113(9), 763–5.

Eysenbach, G. (2020). How to fight an infodemic: The four pillars of infodemic management. *Journal of Medical Internet Research*, 22(6), e21820.

Falcone, R., Colì, E., Felletti, S., et al. (2020). All we need is trust: How the COVID-19 outbreak reconfigured trust in Italian public institutions. *Frontiers in Psychology*, 11, 561747.

Feinman, R. D. (2019). *Nutrition in crisis: Flawed studies, misleading advice, and the real science of human metabolism*. White River Junction, VT: Chelsea Green.

Fick, J., Rudolph, L., and Hendriks, F. (2025). Jargon avoidance in the public communication of science: Single- or double-edged sword for information evaluation? *Learning and Instruction*, 98, 102121.

Field, M. (2024). RFK Jr.'s presidential ambitions may have fallen short, but his anti-vax beliefs are winning in many statehouses. *Bulletin of the Atomic Scientists*, 80(5), 302–7.

Field-Springer, K., Striley, K., Byerly, J., et al. (2024). "Are you vaccinated? Yeah, I'm immunized": A risk orders theory analysis of celebrity COVID-19 mis/disinformation. *Journal of Communication in Healthcare*, 0(0), 1–11.

Figueiredo, E. B. L. De, Eluana Rodrigues, Roberta Pontes, Karina Oliveira, Marcela Oliveira, Juliana, Souza, Lilian (2022). Disinformation influencers in the Spanish flu and COVID-19 pandemics: A documentary study. *Revista Brasileira de Educação Médica*, 46, e078.

Fiordelli, M., Diviani, N., Farina, R., Pellicini, P., Ghirimoldi, A., & Rubinelli, S. (2023). Strengthening adolescents' critical health literacy and

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

scientific literacy to tackle mis- and dis-information: A feasibility study in Switzerland. *Frontiers in Public Health*, 11, 1183838.

Fischhoff, B., Brewer, N. T., and Downs, J. S., eds. (2011). *Communicating risks and benefits: An evidence-based user's guide*. Washington, DC: Government Printing Office.

Flores, A., Cole, J. C., Dickert, S., et al. (2022). Politicians polarize and experts depolarize public support for COVID-19 management policies across countries. *Proceedings of the National Academy of Sciences*, 119(3), e2117543119.

Flowers, N., Mertens, S. B., and Mulhall, P. F. (2000). What makes interdisciplinary teams effective? *Middle School Journal* 31(4), 53–6.

Freimuth, V. S. and Quinn, S. C. (2004). The contributions of health communication to eliminating health disparities. *American Journal of Public Health*, 94(12), 2053–5.

French, A., Storey, V. C., and Wallace, L. (2023a). A typology of disinformation intentionality and impact. *Information Systems Journal*, Online ahead of print, December 20.

French, A. M., Storey, V. C., and Wallace, L. (2023b). The impact of cognitive biases on the believability of fake news. *European Journal of Information Systems*, 34(5), 1–22.

Frenk, J. and Moon, S. (2013). Governance challenges in global health. *New England Journal of Medicine*, 368(10), 936–42.

Friis, R. H. and Sellers, T. (2020). *Epidemiology for public health practice*. 6th ed. Burlington, MA: Jones & Bartlett Learning.

Funkhouser, G. R. and Maccoby, N. (1971). Communicating specialized science information to a lay audience. *Journal of Communication*, 21(1), 58–71.

Gallo, C. (2014). *Talk like TED: The 9 public speaking secrets of the world's top minds*. London: Pan Macmillan.

Gerli, P. (2021). Municipal 5G bans during the COVID-19 pandemic: The case of Italy. *Digital Policy, Regulation and Governance*, 23(6), 553–73. https://doi.org/10.1108/DPRG-07-2020-0091 (Accessed: August 6, 2025).

Gilles, I., Le Pogam, M. A., Perriraz, M., et al. (2022). Trust in institutions and the COVID-19 threat: A cross-sectional study on the public perception of official recommendations and of othering in Switzerland. *International Journal of Public Health*, 66, 1604223.

Gilmore, B., Ndejjo, R., Tchetchia, A., et al. (2020). Community engagement for COVID-19 prevention and control: A rapid evidence synthesis. *BMJ Global Health*, 5(10), e003188.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Gilovich, T., Griffin, D., and Kahneman, D., eds. (2002). *Heuristics and biases: The psychology of intuitive judgment*. Cambridge: Cambridge University Press.

Gilson, L. (2006). Trust in health care: Theoretical perspectives and research needs. *Journal of Health Organization and Management*, 20(5), 359–75.

Glanz, K., Rimer, B. K., and Viswanath, K. (2015). *Health behavior: Theory, research, and practice*. 5th ed. San Francisco: John Wiley & Sons.

Glasziou, P. and Longbottom, H. (1999). Evidence-based public health practice. *Australian and New Zealand Journal of Public Health*, 23(4), 436–40.

Gligorić, V., van Kleef, G. A., and Rutjens, B. T. (2025). Political ideology and trust in scientists in the USA. *Nature Human Behaviour* 9(7), 1501–12. https://doi.org/10.1038/s41562-025-02147-z (Accessed: August 5, 2025).

Glik, D. C. (2007). Risk communication for public health emergencies. *Annual Review of Public Health*, 28(1), 33–54.

Gobo, G. and Sena, B. (2022). Questioning and disputing vaccination policies: Scientists and experts in the Italian public debate. *Bulletin of Science, Technology & Society*, 42(1–2), 25–38.

Gollust, S. E., Fowler, E. F., and Niederdeppe, J. (2019). Television news coverage of public health issues and implications for public health policy and practice. *Annual Review of Public Health*, 40(1), 167–85.

Gonah, L. (2020). Key considerations for successful risk communication and community engagement (RCCE) programmes during COVID-19 pandemic and other public health emergencies. *Annals of Global Health*, 86(1), 146.

Graham, H. and Kelly, M. P. (2004). Health Development Agency. *Health Inequalities* [Preprint].

Graham, H., and Kelly, M. P. (2004). *Health inequalities: concepts, frameworks and policy*. London: Health Development Agency.

Greer, S. L., Bekker, M., de Leeuw, E., et al. (2017). Policy, politics and public health. *European Journal of Public Health*, 27(suppl_4), 40–3.

Grene, M., Cleary, Y., and Marcus-Quinn, A. (2017). Use of plain-language guidelines to promote health literacy. *IEEE Transactions on Professional Communication*, 60(4), 384–400.

Grimes, D. R. and Greenhalgh, T. (2024). Vaccine disinformation from medical professionals – A case for action from regulatory bodies? *Journal of Evaluation in Clinical Practice*, 30(4), 632–7.

Grundmann, R. and Cavaillé, J.-P. (2000). Simplicity in science and its publics. *Science as Culture*, 9(3), 353–89.

Gu, Y., Gu, S., Lei, Y., and Li, H. (2020). From uncertainty to anxiety: How uncertainty fuels anxiety in a process mediated by intolerance of uncertainty. *Neural Plasticity*, 2020, 8866386.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Hamblin, C. L. (2022). *Fallacies*. Concord, CA: Advanced Reasoning Forum.

Hanafiah, K. M. (2018). Communicating science: A shared responsibility. *The Malaysian Journal of Medical Sciences: MJMS*, 25(5), 1–5.

Hansson, S. O. (2017). Science denial as a form of pseudoscience. *Studies in History and Philosophy of Science Part A*, 63, 39–47.

Havey, N. F. (2020). Partisan public health: How does political ideology influence support for COVID-19 related mis/disinformation? *Journal of Computational Social Science*, 3(2), 319–42.

Hayes, R. and Grossman, D. (2006). *A scientist's guide to talking with the media: Practical advice from the Union of Concerned Scientists*. New Brunswick, NJ: Rutgers University Press.

Heemstra, J. M. (2020). A scientist's guide to social media. *ACS Central Science*, 6(1), 1–5.

Hiam, L., Dorling, D., and McKee, M. (2023). When experts disagree: Interviews with public health experts on health outcomes in the UK 2010–2020. *Public Health*, 214, 96–105.

Ho, S. S., Looi, J., and Goh, T. J. (2020). Scientists as public communicators: Individual- and institutional-level motivations and barriers for public communication in Singapore. *Asian Journal of Communication*, 30(2), 155–78.

van Holm, E. J., Monaghan, J., Shahar, D. C., Messina, J. P., Surprenant, C. (2020). The impact of political ideology on concern and behavior during COVID-19. Rochester, NY: SSRN.

Horner, C. G., Galletta, D., Crawford, J., Shirsat, A. (2021). Emotions: The unexplored fuel of fake news on social media. *Journal of Management Information Systems*, 38(4), 1039–66.

Hsu, S.-L. (2020). Anti-science ideology. *University of Miami Law Review*, 75, 405–54.

Hubinette, M., Dobson, S., Scott, I., & Sherbino, J. (2017). Health advocacy. *Medical Teacher*, 39(2), 128–35.

Hughes, B. (2017). *Rethinking psychology: Good science, bad science, pseudoscience*. London: Bloomsbury.

Innes, H. and Innes, M. (2023). De-platforming disinformation: Conspiracy theories and their control. *Information, Communication & Society*, 26(6), 1262–80.

Ishikawa, H. and Kiuchi, T. (2010). Health literacy and health communication. *BioPsychoSocial Medicine*, 4(1), 18.

Janowska, M., Rogacka, K., Pyrak, B., Kornelia, K. K., et al. (2022). Health consequences of using special diets with restricted carbohydrate consumption. *Journal of Education, Health and Sport*, 12(3), 173–83.

Jason, G. (1989). Fallacies are common. *Informal Logic*, 11(2), 69–78.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Jiang, B., Karami, M., Cheng, L., Black, T., Liu, H. (2021). Mechanisms and attributes of echo chambers in social media. *arXiv*. https://doi.org/10.48550/arXiv.2101.00000.

Kagan, J. (2009). *The three cultures: Natural sciences, social sciences, and the humanities in the 21st century*. Cambridge: Cambridge University Press.

Kahambing, J. G. (2023). ChatGPT, public health communication and "intelligent patient companionship." *Journal of Public Health*, 45(3), e590.

Kahneman, D. (2011). *Thinking, fast and slow*. London: Macmillan.

Kaňková, J., Binder, A., and Matthes, J. (2024a). Health-related communication of social media influencers: A scoping review. *Health Communication*, 40(7), 1–14.

Kaňková, J., Binder, A., and Matthes, J. (2024b). Helpful or harmful? Navigating the impact of social media influencers' health advice: Insights from health expert content creators. *BMC Public Health*, 24(1), 3511.

Kavanagh, M. M. and Singh, R. (2020). Democracy, capacity, and coercion in pandemic response: COVID-19 in comparative political perspective. *Journal of Health Politics, Policy and Law*, 45(6), 997–1012.

Kennedy, G. A. (2009). *A new history of classical rhetoric*. Princeton, NJ: Princeton University Press.

Kerr, J. R., Schneider, C. R., Freeman, A. L. J., Marteau, T., & van der Linden, S. (2022). Transparent communication of evidence does not undermine public trust in evidence. *PNAS Nexus*, 1(5), pgac280.

Kickbusch, I. and Gleicher, D. E., eds. (2012). *Governance for health in the 21st century*. Copenhagen: WHO Regional Office for Europe.

Killoran, A. and Kelly, M. P. (2009). *Evidence-based public health: Effectiveness and efficiency*. Oxford: Oxford University Press.

Kim, D. K. D. and Kreps, G. L. (2020). An analysis of government communication in the United States during the COVID-19 pandemic: Recommendations for effective government health risk communication. *World Medical & Health Policy*, 12(4), 398–412.

Kim, H. M., Saffer, A. J., Liu, W., et al. (2022). How public health agencies break through COVID-19 conversations: A strategic network approach to public engagement. *Health Communication*, 37(10), 1276–84.

Koch, N. and Durodié, B. (2022). Scientists advise, ministers decide? The role of scientific expertise in UK policymaking during the coronavirus pandemic. *Journal of Risk Research*, 25(10), 1213–22.

Koller, J. E., Villinger, K., Lages, N. C., et al. (2021). Stigmatization of Chinese and Asian-looking people during the COVID-19 pandemic in Germany. *BMC Public Health*, 21(1), 1296.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Kostygina, G., Tran, H., Binns, S., et al. (2020). Boosting health campaign reach and engagement through use of social media influencers and memes. *Social Media + Society*, 6(2), 2056305120912475.

Kreps, G. L. (2021). The role of strategic communication to respond effectively to pandemics. *Journal of Multicultural Discourses*, 16(1), 12–19.

Kreps, G. L. and Neuhauser, L. (2010). New directions in eHealth communication: Opportunities and challenges. *Patient Education and Counseling*, 78(3), 329–36.

Labinaz, P. (2023). Public disagreements among health experts and their polarizing effects during a pandemic health crisis. *A Pragmatic Agenda for Healthcare: Fostering Inclusion and Active Participation Through Shared Understanding*, 338, 75.

Lapka, C., Jupka, K., Wray, R. J., and Jacobsen, H. (2008). Applying cognitive response testing in message development and pre-testing. *Health Education Research*, 23(3), 467–76.

Laverack, G. (2017). The challenge of behaviour change and health promotion. *Challenges*, 8(2), 25.

Lechanoine, F. and Gangi, K. (2020). COVID-19: Pandemic of cognitive biases impacting human behaviors and decision-making of public health policies. *Frontiers in Public Health*, 8, 574518.

Lecheler, S. and Egelhofer, J. L. (2022). Disinformation, mis/disinformation, and fake news: Understanding the supply side. In J. Strömbäck, Å. Wikforss, K. Glüer, T. Lindholm, and H. Oscarsson, eds. *Knowledge resistance in high-choice information environments*. London: Routledge, 69–87.

Lee, N. R. and Kotler, P. (2019). *Social marketing: Behavior change for social good*. Thousand Oaks, CA: Sage.

Lee, Y. and Li, J.-Y. Q. (2021). The role of communication transparency and organizational trust in publics' perceptions, attitudes and social distancing behaviour: A case study of the COVID-19 outbreak. *Journal of Contingencies and Crisis Management*, 29(4), 368–84.

Lees-Marshment, J. (ed.). (2024). *Political management in practice: lessons from around the globe* (1st ed.). Routledge.

León, B., López-Goñi, I., and Salaverría, R. (2022). The Covid-19 catastrophe: A science communication mess? *Church, Communication and Culture*, 7(1), 6–22.

Levitt, L. (2020). Trump vs Biden on health care. *JAMA*, 324(14), 1384–5.

Lewandowsky, S., Ecker, U. K., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Mis/disinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest*, 13(3), 106–31.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Lewandowsky, S., Cook, J., Ecker, U., Albarracín, D., Kendeou, P. (2020). The debunking handbook 2020. *Copyright, Fair Use, Scholarly Communication, etc.* [Preprint]. https://digitalcommons.unl.edu/scholcom/245 (Accessed: August 6, 2025).

Li, M. and Guenier, A. W. (2024). ChatGPT and health communication: A systematic literature review. *International Journal of E-Health and Medical Communications (IJEHMC)*, 15(1), 1–26.

Lilienfeld, S. O., Lynn, S. J., and Ammirati, R. J. (2015). Science versus pseudoscience. In R. L. Cautin and S. O. Lilienfeld, eds., *The encyclopedia of clinical psychology*. 1st ed. Hoboken, NJ: Wiley, 1–7.

Lim, S. and Schmälzle, R. (2023). Artificial intelligence for health message generation: An empirical study using a large language model (LLM) and prompt engineering. *Frontiers in Communication*, 8, 118.

van Loon, E. and Bal, R. (2014). Uncertainty and the development of evidence-based guidelines. *Valuation Studies*, 2(1), 43–64.

Lopez-Garcia, G., Campos-Domínguez, E., Palau-Sampio, D., Palomo Torres, M. B. (2021). *Politics of disinformation*. Hoboken, NJ: John Wiley & Sons.

Loroño-Leturiondo, M. and Davies, S. R. (2018). Responsibility and science communication: Scientists' experiences of and perspectives on public communication activities. *Journal of Responsible Innovation*, 5(2), 170–85.

Loss, J., Boklage, E., Jordan, S., Jenny, M. A., Weishaar, H., & El Bcheraoui, C. (2021). Risikokommunikation bei der Eindämmung der COVID-19-Pandemie: Herausforderungen und Erfolg versprechende Ansätze. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 64(3), 294–303.

Ludolph, R. and Schulz, P. J. (2018). Debiasing health-related judgments and decision making: A systematic review. *Medical Decision Making*, 38(1), 3–13.

Lukmanova, O. B. and Sotkina, E. Y. (2022). Freedom and responsibility in American public health debate around COVID-19. *European Proceedings of Social and Behavioural Sciences: Freedom and Responsibility in Pivotal Times*.

Lundgren, R. E. and McMakin, A. H. (2018). *Risk communication: A handbook for communicating environmental, safety, and health risks*. 6th ed. Hoboken, NJ: John Wiley & Sons.

Lutkenhaus, R. O., Jansz, J., and Bouman, M. P. (2019). Tailoring in the digital era: Stimulating dialogues on health topics in collaboration with social media influencers. *Digital Health*, 5, 2055207618821521.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

MacDonald, S. and Brianna, W. (2023). Meme-ifying data: The rise of public health influencers on Instagram, TikTok, and Twitter during COVID-19. *Journal of Digital Social Research*, 5(3), 59–84.

Madanay, F., McDevitt, R. C., and Ubel, P. A. (2022). Hydroxychloroquine for COVID-19: Variation in regional political preferences predicted new prescriptions after President Trump's endorsement. *Journal of Health Politics, Policy and Law*, 47(4), 429–51.

Mahdiabadi, F. R., Mirzaei, S., Entezari, A., Nasiriani, K. (2023). The effect of implementing the COMFORT communication model on communication skills of nursing students. *International Journal of Palliative Nursing*, 29(9), 412–20.

Manfredi-Sánchez, J.-L., Amado-Suárez, A., and Waisbord, S. (2021). Presidential Twitter in the face of COVID-19: Between populism and pop politics. *Comunicar: Media Education Research Journal*, 29(66), 79–90.

Marinho, C. and Billig, M. (2024). How can governments be prevented from manipulating statistics about COVID-19? *Manufacturing Dissent: Manipulation and Counter-Manipulation in Times of Crisis*, 339, 186.

Marzi, P. and Sessa, M. G. (2021). If you cannot rule them, misinform them! Communication strategies of Italian radical right-wing populist parties during the pandemic. *Interdisciplinary Political Studies*, 7(2), 167–96.

McHugh, S. M., Riordan, F., Kerins, C., et al. (2023). Understanding tailoring to support the implementation of evidence-based interventions in healthcare: The CUSTOMISE research programme protocol. *HRB Open Research*, 6, 7.

McMahon, I. M. C. and Cohen, C. K. (2016). *Introduction to logic*. 14th ed. New York: Routledge.

Meppelink, C. S., Smit, E. G., Fransen, M. L., & Diviani, N. (2019). "I was right about vaccination": Confirmation bias and health literacy in online health information seeking. *Journal of Health Communication*, 24(2), 129–40.

Middaugh, E. (2019). More than just facts: Promoting civic media literacy in the era of outrage. *Peabody Journal of Education*, 94(1), 17–31.

Milhazes-Cunha, J. and Oliveira, L. (2023). Doctors for the truth: Echo chambers of disinformation, hate speech, and authority bias on social media. *Societies*, 13(10), 226.

Moyer, M. W. (2019). Why we believe conspiracy theories. *Scientific American*, 320(3), 58–63.

Naidoo, J. and Wills, J. (2009). *Foundations for health promotion*. 4th ed. London: Elsevier Health Sciences.

Nan, X., Iles, I. A., Yang, B., & Ma, Z. (2022). Public health messaging during the COVID-19 pandemic and beyond: Lessons from communication science. *Health Communication*, 37(1), 1–19.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

National Academies of Sciences, Engineering, and Medicine (2017). *Communicating science effectively: A research agenda*. Washington, DC: National Academies Press.

National Academies of Sciences, Engineering, and Medicine (2022). *Addressing inaccurate and misleading information about biological threats through scientific collaboration and communication in Southeast Asia*. Washington, DC: The National Academies Press. https://nap.nationalacademies.org/resource/26466/interactive/ (Accessed: July 25, 2025).

Navarro, V., Muntaner, C., Borrell, C., et al. (2006). Politics and health outcomes. *The Lancet*, 368(9540), 1033–7.

Neuhauser, L. and Kreps, G. L. (2003a). Rethinking communication in the e-health era. *Journal of Health Psychology*, 8(1), 7–23.

Neuhauser, L. and Kreps, G. L. (2003b). The advent of e-health: How interactive media are transforming health communication. *Medien & Kommunikationswissenschaft*, 51(3–4), 541–56.

Nguyen Zarndt, A., Guo, M., and Benoza, G. (2023). The role of social media influencers as trusted messengers in tobacco control mass media campaigns. *Journal of Communication in Healthcare*, 16(4), 344–6.

Overton, D., Ramkeesoon, S. A., Kirkpatrick, K., Byron, A., and Pak, E. S., eds. (2021). *Lessons from the COVID-19 crisis on executing communications and engagement at the community level during a health crisis*. Washington, DC: National Academies of Sciences, Engineering, and Medicine.

Qiu, W., and Chu, C. (2019). Clarification of the concept of risk communication and its role in public health crisis management in China. *Disaster Medicine and Public Health Preparedness*, 13(5–6), 834–836. doi:10.1017/dmp.2019.10.

Pagoto, S. and Nebeker, C. (2019). How scientists can take the lead in establishing ethical practices for social media research. *Journal of the American Medical Informatics Association*, 26(4), 311–13.

Palmer-Wackerly, A. L., Krok, J. L., Dailey, P. M., Kight, L., & Krieger, J. L. (2014). Community engagement as a process and an outcome of developing culturally grounded health communication interventions: An example from the DECIDE Project. *American Journal of Community Psychology*, 53(3), 261–74.

Parker, R. M. and Ratzan, S. (2019). Our future with democratization of health requires health literacy to succeed. *American Behavioral Scientist*, 63(7), 948–54.

Peng, W., Lim, S., and Meng, J. (2023). Persuasive strategies in online health mis/disinformation: A systematic review. *Information, Communication & Society*, 26(11), 2131–48.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Pérez Escolar, M., Lilleker, D., and Tapia Frade, A. J. (2023). A systematic literature review of the phenomenon of disinformation and mis/disinformation. *Media and Communication*, 11(2), 76–87. [Preprint].

Pigliucci, M. (2010). *Nonsense on stilts: How to tell science from bunk*. Chicago: University of Chicago Press.

Lees-Marshment, J., Conley, B., Elder, E., et al. 2019. *Political marketing: Principles and applications*. London: Routledge.

Popper, K. (2005). *The logic of scientific discovery.* Abingdon: Routledge.

Porter, E. and Wood, T. (2021). The global effectiveness of fact-checking: Evidence from simultaneous experiments in Argentina, Nigeria, South Africa, and the United Kingdom. *Proceedings of the National Academy of Sciences of the United States of America*, 118, e2010058118.

Pourkarim, M., Nayebzadeh, S., Alavian, S. M., Hataminasab, S.H. (2023). Determination of influencers' characteristics in the health sector. *Hepatitis Monthly*, 23(1), e144049.

Powell, J. and Pring, T. (2024). The impact of social media influencers on health outcomes: Systematic review. *Social Science & Medicine*, 340, 116472.

Prosser, M. (2021). *The media's role in risk society: COVID-19 coverage through Beck's modernity theory.* Bachelor's thesis. Ohio University.

Purnat, T. D., Nguyen, T., and Briand, S., eds. (2023). *Managing infodemics in the 21st century: Addressing new public health challenges in the information ecosystem*. Cham: Springer International.

Qiu, W. (2016). *Risk communication for emergency management of pandemic prevention and control in China: A comparative study of SARS and H7N9*. PhD thesis. Griffith University, Queensland, Australia.

Rădoi, M. and Lupu, A. (2017). Understanding institutional trust: What does it mean to trust the health system? In A. Maturo et al., eds., *Recent trends in social systems: Quantitative theories and quantitative models*. Cham: Springer International (Studies in Systems, Decision and Control), 11–22.

Raffini, L. and Penalva-Verdú, C. (2022). The problematic relationship between science, politics and public opinion in late modernity: The case of the anti-vax movement in Spain and Italy. In H. Eslen–Ziya and A. Giorgi, eds., *Populism and science in Europe*. Cham: Springer International (Palgrave Studies in European Political Sociology), 141–62.

Ratzan, S. C., Larson, H. J., Batista, C. et al. (2025). The quality health information for all commission: Reinventing health communication for the digital era. *Nature Medicine*, 31, 22–3.

Reynosa Navarro, E., Guerra-Ayala, M.J., Casimiro-Urcos, W. H., et al. (2021). Relevance of the mass media in prevention, education and contextual

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

management of COVID-19. *World Journal on Educational Technology: Current Issues*, 13(1), 129–46.

Roberto, K. J., Johnson, A. F., and Rauhaus, B. M. (2020). Stigmatization and prejudice during the COVID-19 pandemic. *Administrative Theory & Praxis*, 42(3), 364–78.

Rochel de Camargo, K. (2024). Disputed expertise and chaotic disinformation: COVID-19 and denialist physicians in Brazil. *Transcultural Psychiatry*, 61(5), 714–23.

Rollnick, S., Mason, P., and Butler, C. C. (2010). *Health behavior change*. London: Elsevier Health Sciences.

Rose, K. M., Markowitz, E. M., and Brossard, D. (2020). Scientists' incentives and attitudes toward public communication. *Proceedings of the National Academy of Sciences*, 117(3), 1274–6.

Rovetta, A. and Castaldo, L. (2021). Influence of mass media on Italian web users during the COVID-19 pandemic: Infodemiological analysis. *JMIRx Med*, 2(4), e32233.

Rubin, R. (2022). When physicians spread unscientific information about COVID-19. *JAMA*, 327(10), 904–6.

Rubinelli, S. (2009). *Ars topica: The classical technique of constructing arguments from Aristotle to Cicero*. Dordrecht: Springer Science & Business Media.

Rubinelli, S. (2018). Logos and pathos in Aristotle's *Rhetoric*: A journey into the role of emotions in rational persuasion in rhetoric. *Revue internationale de philosophie*, 286(4), 361–74.

Rubinelli, S. (2025a). The paradox of autonomy when disinformation masquerades as truth: A discussion paper. *Patient Education and Counseling*, 139, 109232.

Rubinelli, S. (2025b). Why health institutions must learn from social media influencers: A paradigm shift in health communication. *Journal of Health Communication*, 17, 1–4.

Rubinelli, S. and Diviani, N. (2020). The bases of targeting behavior in health promotion and disease prevention. *Patient Education and Counseling*, 103(12), 2395–9.

Rubinelli, S., Diviani, N., and Fiordelli, M. (2020a). The cognitive and behavioural sciences. In P. Bahri, ed., *Communicating about risks and safe use of medicines: Real life and applied research*. Singapore: Springer, 195–217.

Rubinelli, S., Diviani, N., and Fiordelli, M. (2020b). *Pensiero critico e disinformazione*. Rome: Carocci.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Rubinelli, S., Schulz, P. J., and Nakamoto, K. (2009). Health literacy beyond knowledge and behaviour: Letting the patient be a patient. *International Journal of Public Health*, 54(5), 307–11.

Rubinelli, S., Myers, K., Rosenbaum, M., & Davis, D. (2020). Implications of the current COVID-19 pandemic for communication in healthcare. *Patient Education and Counseling*, 103(6), 1067–9.

Rubinelli, S., Ort, A., Zanini, C., Fiordelli, M., & Diviani, N. (2021). Strengthening critical health literacy for health information appraisal: An approach from argumentation theory. *International Journal of Environmental Research and Public Health*, 18(13), 6764.

Rubinelli, S., Diviani, N., Fiordelli, M., Zanini, C. (2022). *Salute: Il valore della scienza*. Rome: Carocci.

Rubinelli, S., Fiordelli, M., Zanini, C., Fiordelli, M. (2022). It is time for health institutions to invest in persuasive communication to combat low quality information: A lesson learned from the COVID-19 infodemic. *Frontiers in Communication*, 7, 933695.

Rubinelli, S., Purnat, T. D., Wilhelm, E., et al. (2022). WHO competency framework for health authorities and institutions to manage infodemics: Its development and features. *Human Resources for Health*, 20(1), 35.

Rubinelli, S., Häfliger, C., Fiordelli, M., Ort, A., & Diviani, N. (2023). Institutional crisis communication during the COVID-19 pandemic in Switzerland: A qualitative study of the experiences of representatives of public health organizations. *Patient Education and Counseling*, 114, 107813.

Rutledge, P. E. (2020). Trump, COVID-19, and the war on expertise. *The American Review of Public Administration*, 50(6–7), 505–11.

Salovey, P. and Wegener, D. T. (2003). Communicating about health: Message framing, persuasion and health behavior. In J. Suls and K. A. Wallston, eds., *Social psychological foundations of health and illness*. Malden, MA: Blackwell, 54–81.

Sandman, L. and Munthe, C. (2009). Shared decision-making and patient autonomy. *Theoretical Medicine and Bioethics*, 30(4), 289–310.

Saver, R. S. (2023). Physicians spreading medical misinformation: The uneasy case for regulation. *Minnesota Law Review*, 108, 911–76.

Saver, R. S. (2024). Medical board discipline of physicians for spreading medical misinformation. *JAMA Network Open*, 7(11), e2443893.

Schiavo, R. (2013). *Health communication: From theory to practice*. 2nd ed. San Francisco: John Wiley & Sons.

Schiavo, R. (2015). Addressing health disparities in clinical settings: Population health, quality of care, and communication. *Journal of Communication in Healthcare*, 8(3), 163–6.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Schiebel, H., Stone, R., Rossi, T., & Smisek, M. (2021). Developing science communication skills in early career scientists. *Limnology and Oceanography Bulletin*, 30(1), 35–8.

Schneider, K. E., Wilson, D., Dayton, L., Anderson Goodell, E. M., Latkin, C. A. (2021). Political partisanship and stigma against people who use drugs in opinions about allocating COVID-19 prevention resources to vulnerable populations. *International Journal of Drug Policy*, 95, 103301.

Schulz, P. J. (2012). The concept of health literacy. In D. Corrigan, F. Dillon, and A. Gunstone, eds., *Science | environment | health: Towards a renewed pedagogy for science education*. Rotterdam: Sense, 69–84.

Schulz, P. J. and Nakamoto, K. (2024). *Worse than ignorance: The challenge of health misinformation*. Cambridge: Cambridge University Press.

Scutchfield, F. D., Hall, L., and Ireson, C. L. (2006). The public and public health organizations: Issues for community engagement in public health. *Health Policy*, 77(1), 76–85.

Serrano-Puche, J. (2021). Digital disinformation and emotions: Exploring the social risks of affective polarization. *International Review of Sociology*, 31(2), 231–45.

Shahid, D. W. (2022). From epidemic to pandemic: How Pakistan's web media depicts the portrayal of coronavirus. *Journal of Mass Communication Department*, University of Karachi, 27, 1–15.

Shahnazi, H., Araban, M., Karimy, M., Basiri, M., Ghazvini, A., & Stein, L. (2021). A quasi-experimental study to improve health service quality: Implementing communication and self-efficacy skills training to primary healthcare workers in two counties in Iran. *BMC Medical Education*, 21(1), 369.

Sheeran, P., Klein, W. M. P., and Rothman, A. J. (2017). Health behavior change: Moving from observation to intervention. *Annual Review of Psychology*, 68(1), 573–600.

Shekelle, P. G., Woolf, S. H., Eccles, M., & Grimshaw, J. (1999). Developing guidelines. *BMJ*, 318(7183), 593–6.

Shermer, M. (2002). *Why people believe weird things: Pseudoscience, superstition, and other confusions of our time*. New York: Macmillan.

Sickel, A. E., Seacat, J. D., and Nabors, N. A. (2014). Mental health stigma update: A review of consequences. *Advances in Mental Health*, 12(3), 202–15.

Singh, R., Küçükdeveci, A., Grabljevec, K., and Gray, A. (2018). The role of interdisciplinary teams in physical and rehabilitation medicine. *Journal of Rehabilitation Medicine*, 50(8), 725–30.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Skirbekk, H., Magelssen, M., and Conradsen, S. (2023). Trust in healthcare before and during the COVID-19 pandemic. *BMC Public Health*, 23(1), 863.

Sobo, E. J. (2021). Conspiracy theories in political-economic context: Lessons from parents with vaccine and other pharmaceutical concerns. *Journal for Cultural Research*, 25(1), 51–68.

Sopory, P., Day, A.M, Novak, J.M., Eckert, S., Wilkins, L. (2019). Communicating uncertainty during public health emergency events: A systematic review. *Review of Communication Research*, 7, 67–108.

Southall, E., Ogi-Gittins, Z., Kaye, A. R., Hart, W. S., Lovell-Read, F. A., & Thompson, R. N. (2023). A practical guide to mathematical methods for estimating infectious disease outbreak risks. *Journal of Theoretical Biology*, 562, 111417.

Spagnoletti, C. L., Bui, T., Fischer, G.S. et al. (2009). Implementation and evaluation of a web-based communication skills learning tool for training internal medicine interns in patient-doctor communication. *Journal of Communication in Healthcare*, 2(2), 159–72.

Spalluto, L. B., Planz, V. B., Stokes, L. S., et al. (2020). Transparency and trust during the coronavirus disease 2019 (COVID-19) pandemic. *Journal of the American College of Radiology*, 17(7), 909–12.

Sule, S., DaCosta, M. C., DeCou, E., Gilson, C., Wallace, K., & Goff, S. L. (2023). Communication of COVID-19 mis/disinformation on social media by physicians in the US. *JAMA Network Open*, 6(8), e2328928.

Sutton, R. M. and Douglas, K. M. (2020). Conspiracy theories and the conspiracy mindset: Implications for political ideology. *Current Opinion in Behavioral Sciences*, 34, 118–22.

Struye de Swielande, T. (2020). Trump and COVID-19: The arrogance of ignorance. *UCL-Université Catholique de Louvain Working Paper*.

Tandoc, E. C. (2021). Tools of disinformation: How fake news gets to deceive. In S. Jayakumar, B. Ang, and N. D. Anwar, eds., *Disinformation and fake news*. Singapore: Springer, 35–46.

Taper, M. L. and Lele, S. R. (2010). *The nature of scientific evidence: Statistical, philosophical, and empirical considerations*. Chicago: University of Chicago Press.

Tesi, B., Donia, P., Covelli, A. et al. (2023). Health is a serious game: Gamification as a tool for primary prevention in public health. *European Journal of Public Health*, 33(Suppl_2), 160-032.

Thompson, T. L. and Schulz, P. J. (2021). *Health communication theory*. 2nd ed. San Francisco: John Wiley & Sons.

Thornton, R. L. J., Glover, C. M., Cené, C. W., Glik, D. C., Henderson, J. A., & Williams, D. R. (2016). Evaluating strategies for reducing health disparities

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

by addressing the social determinants of health. *Health Affairs*, 35(8), 1416–23.

Toth, F. (2013). The choice of healthcare models: How much does politics matter? *International Political Science Review*, 34(2), 159–72.

Townsend, B., Tenni, B. F., Goldman, S., & Gleeson, D. (2023). Public health advocacy strategies to influence policy agendas: Lessons from a narrative review of success in trade policy. *Globalization and Health*, 19(1), 60.

Tufte, T. and Mefalopulos, P. (2009). *Participatory communication: A practical guide*. Washington, DC: World Bank.

Tung, H. H., Chang, T.-J., and Lin, M.-J. (2022). Political ideology predicts preventative behaviors and infections amid COVID-19 in democracies. *Social Science & Medicine*, 308, 115199.

Turnock, B. (2012). *Public health*. Burlington, MA: Jones & Bartlett.

Turon, H., Wolfenden, L., Finch, M., et al. (2023). Dissemination of public health research to prevent non-communicable diseases: A scoping review. *BMC Public Health*, 23(1), 757.

U.S. Environmental Protection Agency (EPA) (2021). *The SALT framework: A process framework to guide risk communication*. Washington, DC: U.S. EPA. www.epa.gov/sites/default/files/2021-03/documents/web_salt_framework_v7.pdf (Accessed: August 6, 2025).

UNESCO and United Nations Office on Genocide Prevention and the Responsibility to Protect (2023). *Addressing hate speech through education: A guide for policy makers*. Paris: UNESCO.

Updegraff, J. A. and Rothman, A. J. (2013). Health message framing: Moderators, mediators, and mysteries. *Social and Personality Psychology Compass*, 7(9), 668–79.

Usher, N. (2018). Breaking news production processes in US metropolitan newspapers: Immediacy and journalistic authority. *Journalism*, 19(1), 21–36.

Üstün, T. B., Chatterji, S., Bickenbach, J., Kostanjsek, N., & Schneider, M. (2003). The International Classification of Functioning, Disability and Health: A new tool for understanding disability and health. *Disability and Rehabilitation*, 25(11–12), 565–71.

Vaccari, C. (2021). Mis/disinformation and disinformation. In H. A. Mazzoleni, ed., *The Routledge companion to media disinformation and populism*. Abingdon: Routledge, 38–48.

Vraga, E. K., Ecker, U. K. H., Žeželj, I., Lazić, A., & Azlan, A. A. (2023). To debunk or not to debunk? Correcting (mis)information. In T. D. Purnat, T. Nguyen, and S. Briand, eds., *Managing infodemics in the 21st century*. Cham: Springer, 85–98.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Vyt, A. (2008). Interprofessional and transdisciplinary teamwork in health care. *Diabetes/Metabolism Research and Reviews*, 24(S1), S106–9.

Weinreich, N. K. (2006). What is social marketing. *Weinreich Communications*, 10, 1–5.

Widmann, T. (2022). Fear, hope, and COVID-19: Emotional elite rhetoric and its impact on the public during the first wave of the COVID-19 pandemic. *Political Psychology*, 43(5), 827–50.

Wieland, M. L., Doubeni, C. A., and Sia, I. G. (2020). Community engagement with vulnerable populations. *Mayo Clinic Proceedings*, 95(9 Suppl), S60–2.

Wigley, S. (2023). Regime type and data manipulation: Evidence from the COVID-19 pandemic. *J Health Polit Policy Law*, 49(6), 989–1014.

Williams, J. H., Hooker, C., Gilbert, G. L., Hor, S., & Degeling, C. (2023). Disagreement among experts about public health decision making: Is it polarisation and does it matter? *BMJ Global Health*, 8(3), e011182.

Wilson, M. J. et al. (2017). Communicating science: Sending the right message to the right audience. *FACETS*, 1, 127–37.

Woolley, S. C. (2022). Digital propaganda: The power of influencers. *Journal of Democracy*, 33(3), 115–29.

World Health Organization (2001). *International classification of functioning, disability and health: ICF*. Geneva: WHO.

World Health Organization (2021). *WHO competency framework: Building a response workforce to manage infodemics*. Geneva: WHO. https://apps.who.int/iris/bitstream/handle/10665/345207/9789240035287-eng.pdf (Accessed: December 22, 2025).

World Health Organization, Commission on Social Determinants of Health (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health – Commission on Social Determinants of Health final report*. Geneva: World Health Organization.

Yong, E. (2020). Why the coronavirus is so confusing. *The Atlantic*, March 29.

Zanotti, L. and Meléndez, C. (2022). Italy: The diverging strategies of the populist radical right during the pandemic. In D. Albertazzi and A. McDonnell, eds., *Populists and the pandemic*. Abingdon: Routledge, 92–104.

Zhang, A. L. and Lu, H. (2023). Scientists as influencers: The role of source identity, self-disclosure, and anti-intellectualism in science communication on social media. *Social Media + Society*, 9(2), 1–13.

Zhang, L., Li, H., and Chen, K. (2020). Effective risk communication for public health emergency: Reflection on the COVID-19 (2019-nCoV) outbreak in Wuhan, China. *Healthcare*, 8(1), 64.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Zhou, Z. (2018). The logical fallacies in political discourse. *Summer Research Program* 5. https://crossworks.holycross.edu/mellon_summer_research/5 (Accessed: August 6, 2025).

Zhou, Y. and Shen, L. (2025). *Persistence of misinformation: Biased cognitive processing and polarization*. Cambridge: Cambridge University Press.

Zoch, L. M. (2014). Dictating the news: understanding newsworthiness from the journalistic perspective. *Public Relations Journal*, 8(1), 1–15.

Zollo, F., Bessi, A., Del Vicario, M., et al. (2017). Debunking in a world of tribes. *PLOS ONE*, 12(7), e0181821.

Zompetti, J. (2015). *Divisive discourse*. San Diego: Cognella Academic.

Zoran, M., Pavlović, P., Todosijević, B., and Stanojević, D. T. (2021). Support for the measures in fighting the COVID-19 pandemic: The role of political ideology. *Psihologija*, 54(2), 207–22.

Zurloni, V. and Anolli, L. (2013). Fallacies as argumentative devices in political debates. In I. Poggi et al., eds., *Multimodal communication in political speech: Shaping minds and social action*. Berlin: Springer (Lecture Notes in Computer Science), 245–57.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Funding for Open Access

Funding from Swiss Paraplegic Research made it possible for this book to be published open access, making the digital version freely available for anyone to read and reuse under a Creative Commons license.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Statement on AI Use

Artificial intelligence tools (specifically, OpenAI's ChatGPT, version GPT-5) were used to assist in improving the clarity, style, and conciseness of the manuscript text. These tools were not employed for data analysis, interpretation of findings, or generation of original scientific content. All ideas, arguments, and conclusions are the author's own. The author has carefully reviewed and verified all AI-assisted edits and accepts full responsibility for the final content.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Acknowledgments

Aristotle wrote that "Rhetoric may be defined as the faculty of observing in any given case the available means of persuasion" (*Rhetoric*, Book I, Chapter 2, 1355b). This work has been guided by that understanding: the art of (institutional) health communication lies not only in the accuracy of information but also in the ability to perceive, in each situation, how best to reach and engage others. It is the result of research, reflection, and dialogue, shaped profoundly by the experiences and lessons of the COVID-19 pandemic.

I am deeply grateful to the many individuals whose insights and exchanges have enriched this work. In particular, I thank – in alphabetical order – Jerome Bickenbach, Stefan Boes, Mirjam Brach, Shelly Chadai, Louise Cummings, Nicola Diviani, Frans van Eemeren, Maddalena Fiordelli, Clara Hafliger, Luca Jelmoni, Johannes Kinast, Kent Nakamoto, Enxhi Qama, Gabriela Scherer, Peter Schulz, Gerold Stucki, Claudia Zanini, and the two anonymous reviewers whose constructive feedback helped enhance the clarity and depth of the final text.

I am sincerely grateful to the Faculty of Health Sciences and Medicine at the University of Lucerne and to Swiss Paraplegic Research for their institutional support and for providing the academic environment that made this work possible. I warmly acknowledge the support of the Swiss National Science Foundation for funding the project *Developing Standards for Institutional Health Communication During Public Health Emergencies* (Grant No. 196736), which provided a strong foundation for this work, and of the World Health Organization for the opportunity to contribute to the development of the *competency framework for infodemic management* under the lead of Tina Purnat. Finally, I wish to thank the *International Association for Communication in Healthcare* (EACH), which I had the privilege of serving as president, and my colleagues on the *Nature Medicine Commission on Quality Health Information for All*, for their continued commitment to advancing the field.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Cambridge Elements

Health Communication

Louise Cummings
York St John University

Louise Cummings is Visiting Professor at York St John University in the UK. She conducts research in pragmatics, clinical linguistics, communication disorders and health communication. She is the author and editor of over 20 books, including most recently the *Oxford Handbook of Communication Disorders in Neurodegenerative Diseases* (2026), the *Handbook of Pragmatic Language Disorders* (Springer, 2021), and *Language in Dementia* (Cambridge University Press, 2020). Prof. Cummings is editor of the book series Routledge Research in Speech-Language Pathology and Cambridge Elements in Health Communication. She is a member of the Royal College of Speech and Language Therapists in the UK.

About the Series

This series brings together a wide range of disciplines that converge on the study of communication in health settings. Each element examines a key topic in health communication and is carefully crafted by experts in their respective disciplines. The series is relevant to students, researchers, and practitioners in humanities, medical and health professions, and social scientific disciplines.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984

Cambridge Elements

Health Communication

Elements in the Series

Worse Than Ignorance: The Challenge of Health Misinformation
Peter J. Schulz and Kent Nakamoto

Protecting the Public's Health during Novel Infectious Disease Outbreaks
Louise Cummings

Persistence of Misinformation: Biased Cognitive Processing and Polarization
Yanmengqian Zhou and Lijiang Shen

Clinical Communication: The Ideal of Patient Empowerment and the Reality of Patient Vulnerability and Dependence
Peter Salmon

Institutional Health Communication in the Information Age
Sara Rubinelli

A full series listing is available at: www.cambridge.org/EIHC

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 19 Nov 2026 at 12:29:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009379984