

MEDIA COVERAGE OF HEALTH ISSUES AND IMPACT ON AUDIENCES

ANALYSIS OF THE RESEARCH LANDSCAPE

PREPARED BY:

USC Annenberg Norman Lear Center

Dana Weinstein, Kristin (Eun Jung) Jung, Veronica Jauriqui, Erica L. Rosenthal and Shawn Van Valkenburgh

TABLE OF

CONTENTS ____

3	
6	EXECUTIVE SUMMARY
O	INTRODUCTION
7	
	DOMINANT CULTURAL NARRATIVES
10	
10	MEDIA CONTENT
11	News coverage of health issues and outcomes
11	Factors affecting news coverage
	Importance of context and explanation
12	
12	MEDIA IMPACT
13	Narrative influence
14	Narratives can explain causal complexities
14	Narratives can influence causal attributions
15	Narratives and attributions can influence policy suppor
16	Narratives can promote public action and policy chang
	MEGGA GINIO CONIGIDED ATIONIO
16	MESSAGING CONSIDERATIONS
17 18	Ideological biases
18	Activating negative stereotypes Unanticipated effects
10	Fragmented audiences
19	Tragmontod addionoco
19	CONCLUSION
20	Recommendations for journalists and content creators
	Questions for researchers and advocates

21

REFERENCES

EXECUTIVE SUMMARY

Media narratives influence how people understand the causes of and solutions to health problems and inequities. However, media representations of health issues may perpetuate the belief that individuals are largely responsible for their own health outcomes, and that health problems are frequently caused by the poor decisions of individuals. Largely absent from media discussions of health issues are stories that highlight the social determinants of health—the broader social and environmental forces that influence health outcomes, including racism, sexism, wealth inequality, and more. How might mass media challenge the dominant health narrative of individualism and promote a *culture of health*? What challenges might content creators face in their attempts to integrate stories about systems and structures into media content? This report summarizes the available literature on these topics and concludes with a series of evidence-based strategies for how content creators can more effectively communicate these structural factors.

Dominant cultural narratives

- The dominant narrative in U.S. culture and mass media is one of *individualism*, which suggests that individuals are responsible for their own health outcomes, and that correcting health disparities means changing individual behaviors. Closely-related narratives include neoliberalism, mentalism/cultural deficiency, and the family bubble model.
- A less common narrative highlights the social determinants of health, or the broad systemic factors that influence health outcomes. This narrative promotes structural solutions to widespread health problems and inequities.

Media content

- News coverage of health issues typically use episodic framing, which focuses on individuallevel stories and actions. Thematic framing, on the other hand, focuses on the systems and institutions in which individuals are embedded. Hybrid framing combines the two approaches.
- News media also have a tendency to use game framing that presents politics and policy issues
 as competitive debates. Game framing can increase attitude polarization and divert energy
 away from meaningful healthcare solutions.

Media impact

- Media, and particularly entertainment narratives, are persuasive because stories can bypass audience resistance.
- Transmedia campaigns take place across multiple media formats and can create multi-layered stories that increase media consumption and engagement.
- Episodic framing that focuses on individual choices invites people to make internal attributions,
 placing responsibility for societal problems on those most in need, thereby blaming victims of
 social injustice for their own health outcomes.
- Thematic framing, on the other hand, treats problems as a consequence of larger systemic
 factors, inviting external attributions of responsibility. Thematic framing and external attributions
 are associated with support for broader systemic policy changes, such as federal relief
 programs.
- When media narratives combine individual responsibility with social or structural causes, this
 hybrid frame tends to elicit more empathy from audiences.
- Media narratives that present the complex social factors that influence health outcomes can garner support for system- and policy-oriented healthcare strategies.

Messaging considerations

- Audience members' ideological biases and preconceptions present a significant yet surmountable barrier to communicating about structural and systemic factors.
- When news stories inadvertently resort to harmful stereotypes, coverage can amplify racialized and stigmatizing attitudes.
- The fragmented, competitive media market can incentivize content creators to cut corners when describing health issues. This increases the potential for confirmation bias, whereby people are more likely to agree with content that conforms to their preexisting belief systems.

Recommendations for journalists and content creators

- Avoid presenting disparities in health outcomes without context. Instead, be thorough in explaining the complexities of the systems and structures that underlie these disparities.
- Use a hybrid approach that combines stories about individual choices and behaviors with the systemic factors that influence these behaviors and choices.
- When possible, tailor messages to key audience segments who may have different values or motivations.

- Focus on characters or protagonists who challenge common beliefs and stereotypes.
- Develop "transmedia" narratives to amplify messages across platforms and reach larger audiences.
- Focus on solutions and concrete actions the audience can take.

Questions for researchers and advocates

- How do different audience segments respond to different message frames and formats around social determinants and health equity?
- How can we effectively balance mass appeal messages with those tailored to more specific audience segments?
- Can narratives around social determinants and health equity be connected to any concrete policy outcomes?
- To what extent have new narratives of health equity emerged around the COVID-19 pandemic, and how might these narratives affect audience attitudes and policy support?

INTRODUCTION

At a rate of \$10,000 per person annually, the United States spends more on healthcare than any other developed nation (OECD, 2018). However, American health outcomes rank lower than many countries that spend even less on healthcare services (Woolf & Aron, 2013). Such poor health outcomes are associated with a web of social and environmental factors—including race, ethnicity, income, and education. Understanding the nature of these social determinants of health is an important step toward promoting what the Robert Wood Johnson Foundation (RWJF, 2015) identifies as a *culture of health*:

"This means placing well-being at the center of every aspect of our lives. In a Culture of Health, Americans understand that we're all in this together—no one is excluded. Everyone has access to the care they need and a fair and just opportunity to make healthier choices. In a Culture of Health, communities flourish and individuals thrive."

The narratives we tell ourselves influence how we understand health, and can support a movement toward better health outcomes for all. Decades of research have shown that media messages shape social norms, attitudes, and behavior on a wide variety of health-related issues (see e.g., Stacks et al., 2015 for a review). However, there is limited research on media messages specific to health equity and related issues.

This landscape analysis is part of an initiative of the USC Annenberg Norman Lear Center, commissioned by RWJF to understand existing media narratives related to health equity and social determinants and imagine new narratives around a culture of health. In this report, we summarize existing research on the cultural narratives that shape Americans' mindsets related to health and well-being, and examine mass media frames that may obscure or illuminate the importance of social and structural barriers. We draw upon academic publications as well as research commissioned by RWJF, focusing primarily on literature from the last decade (2010-2019). Specifically, we examine how existing mass media narratives frame a variety of related concepts such as health equity, access to care, social determinants of health, welfare, and poverty. Next, we discuss the impact of these narratives on audiences and identify several considerations for developing effective media messages to communicate these topics. We conclude by proposing strategies and recommendations for content creators to foster a culture of health through mass media and noting potential avenues for future research.

DOMINANT CULTURAL NARRATIVES

Dominant cultural narratives are "stories communicated through mass media or other large social and cultural institutions and social networks" (Rappaport, 2000, p. 3). In the U.S., individualism is a dominant narrative that influences public thinking on health and other social issues (Baran et al., 2013). The U.S. is a prime example of an individualistic culture, defined by emphasis on the needs and decisions of the individual over those of the community. Individualistic cultures are often contrasted with more collectivist cultures that focus on in-group goals, social responsibilities, and communal relationships (Grossman & Santos, 2016). An individualistic framework suggests health behaviors and outcomes are a matter of personal responsibility (Baran et al., 2013; Lundell et al., 2013). As a dominant cultural narrative, individualism has various narrative offshoots that discount the structural factors underlying disparities in health outcomes.

Four individualistic narratives: neoliberalism, mentalism, cultural deficiency, Family Bubble

The term *neoliberalism* usually refers to a set of ideologies and governmental practices that promote deregulated global trade, the privatization of public services, and the weakening of labor unions and collective organizing (Harvey, 2007). This mode of thinking rose to prominence in the 1980's and has structured American economic, political, and cultural institutions ever since (Healey & Barish, 2019). As an ideology and worldview, neoliberalism focuses on the decisions of individuals while valuing competition, consumer choice, and personal responsibility. Neoliberalism presumes a level playing field and attributes financial successes to personal strengths and efforts (Dobson & Knezevic, 2017; Healey & Barish, 2019). Neoliberalism has also been associated with a worldview that sees all spheres of life in economic terms and considers human beings as commodities (Brown, 2015). The neoliberal ethos is perhaps best captured in a famous quote from neoliberal pioneer Margaret Thatcher:

"And, you know, there's no such thing as society. There are individual men and women and there are families. And no government can do anything except through people, and people must look after themselves first. It is our duty to look after ourselves and then, also, to look after our neighbours."

As an ideology that views society as a set of free-floating individuals and commodities, neoliberalism presents a challenge to promoting a culture of health that values collective solidarity and interdependence (RWJF, 2019). Neoliberalism is built on the assumption that a free market is a legitimate and fair approach to distributing resources. Accordingly, it is associated with distrust for public interventions like Medicaid, paid family leave, and support for early childhood education. Under this framework, reliance on government support programs is seen as a personal shortcoming (Baran et al., 2013). Poor health and poverty are therefore constructed as individual rather than systemic failures (Dobson & Knezevic, 2017). Neoliberalism has manifested in America's increasingly privatized health care system as a set of governmental practices that dismantle health-related public services.

The *mentalism* and *cultural deficiency* narrative frames are closely related to neoliberalism and individualism. Mentalism attributes differences in life outcomes to differences in internal traits such as drive and willpower (Baran et al., 2013). The mentalist model also assumes equal opportunity for everyone to attain good health, such that illness is perceived as a personal choice. The mentalist model presumes the existence of an American *meritocracy*, a system that allows anyone to succeed financially and in terms of health and wellness if they work hard enough. Failure to succeed indicates laziness or lack of intelligence (GOOD, 2019). Mentalism generates a blindness to the systems and contexts in which social problems emerge (Baran et al., 2013, p. 8).

GOOD's (2019) research on public perceptions and narratives of poverty in the U.S.¹ outlines characteristically American beliefs about success, personal responsibility, and meritocracy. GOOD's *meritocracy* and *character* narratives, which attribute the causes of poverty to personal choices and character flaws, are closely related to *mentalism*. The mentalist attitude is embodied by a distinct audience segment GOOD termed the *Bootstrappers*. The Bootstrappers hold highly meritocratic views about society and believe that each individual can attain success with enough hard work. They endorse the idea that poor people are lazy, greedy, and feel entitled to welfare handouts. Bootstrappers are politically conservative and tend to be older, whiter, less educated,

¹ Although perceptions of health outcomes are distinct from perceptions of poverty, they overlap significantly with the narratives about poverty described in GOOD's 2019 research.

and more family-oriented than other groups (GOOD, 2019).2

The *cultural deficiency* model explains social ills as the result of cultural flaws in marginalized communities. This model is often weaponized against communities of color who are accused of perpetuating a "culture of poverty" (GOOD, 2019). Poverty within black communities has historically been blamed on supposedly weak family structures headed by single mothers (Ryan, 1971). The cultural deficiency model implies that poor people have a "deviant value system" that accounts for poor life outcomes across generations. Cultural deficiency arguments minimally acknowledge the influence of social problems like poverty, injustice, and racial discrimination. However, "the stigma, the defect, the fatal difference, though derived in the past from environmental forces, is still located within the victim, inside his skin" (Ryan, 1971, p. 7). In other words, the cultural deficiency model may be more sympathetic to the challenges faced by disadvantaged groups, but still places responsibility on individuals and marginalized communities to overcome those challenges.

The Family Bubble model applies the mentalism and cultural deficiency models to the family unit. Children's well-being is understood to be the responsibility of their parents, and home life is understood to be the foundation of health (Metzler et al., 2017). This model conceives of the community as a source of danger from which children need to be protected, rather than a source of resources to enhance their well-being (Baran et al., 2013). Responsibility for health outcomes is placed on individual families. Cultural narratives that locate the causes of poor health in personal choices and behaviors are associated with the belief in individualistic solutions to health disparities (Ryan, 1971). These narratives ignore the structural causes of inequities and present barriers to public understanding of these systemic factors (Baran et al., 2013). This is relevant because lack of understanding of the social determinants of health may translate into reduced support for structural solutions that address health disparities and inequities (FrameWorks, 2019; Lundell et al., 2012; Young et al., 2016). In other words, revealing the subtle ways that social conditions influence health outcomes is an important step towards establishing a culture of health.

² In addition to *Bootstrappers*, the GOOD research identifies three segments of people who endorse distinct narratives about poverty. *Progressives* emphasize systemic causes of poverty and believe in changing systems to address social problems. They are politically liberal, mostly female, and tend to be highly-educated, non-religious, and relatively young. The *Conflicted* are aware of poverty as a social problem and generally feel sympathetic toward poor people. However, they largely avoid the issue because they do not believe they can have much of an impact. This group is politically moderate, mostly male, and typically economically advantaged, younger, and whiter. (4) *Strivers* hold largely systemic views on poverty and generally recognize the role of systems in creating and maintaining inequality. However, they differ from Progressives in their belief that 'keeping their heads down' and respecting authority will enable them to attain success. While they believe in systemic barriers to economic mobility, they believe that these barriers can be overcome through individual efforts.

MEDIA CONTENT

News coverage of health issues and outcomes

Most research on media coverage of health outcomes focuses on print news. News media outlets typically frame health-related issues in ways that ignore systemic factors, focusing instead on individual-level stories, explanations, and solutions. Studies on media coverage of health disparities are somewhat rare, and most existing studies are limited to news media coverage of racial health disparities (Niederdeppe et al., 2013). Less than one third of newspaper coverage of racial health disparities between 1996 and 2004 provided any causal explanations for these disparities, whether genetic, behavioral, environmental, or related to health care access (Kim et al., 2010). In another study of health-related articles published in local papers from 2010-2011, references to health disparities were rare, constituting approximately 3% of all health stories (Nagler et al., 2016). In both of these studies, behavioral explanations were the most commonly cited reasons for racial health disparities. Declining coverage of racial health disparities may limit public understanding and support for policies designed to address health inequities. Thus, increased media attention to health disparities may impact public opinion and increase support for positive health policy solutions that address social determinants, particularly on a local scale (Nagler et al., 2016). However, increased news coverage of health disparities alone is not enough to encourage public support for proactive health policies. If such coverage implies individual solutions or provides no explanations at all, news consumers are more likely to default to the dominant narrative of personal responsibility.

Even media campaigns designed to raise awareness about social determinants of health often address certain social issues, like income and home or workplace environment, to the neglect of other factors such as racial discrimination, education, and social support (Clarke et al., 2012). Such campaigns often combine systemic solutions, such as changes in public policy, with individual behavior change.

In media coverage of health issues, *episodic frames*, which focus on individual actions, are more common than *thematic* frames, which focus on broader social trends. In particular, episodic framing is most prevalent in local news broadcasts, which cover individual-level stories at significantly higher rates than national TV news and other forms of news reporting (Gollust et al.,

2019). Here, we use the term *hybrid framing*³ to refer to stories that combine elements of individual responsibility (i.e., choices and behaviors) with an emphasis on structural or contextual factors. *Game framing*, which presents issues as competitive debates, is favored by news media over *policy framing*, which focuses on the substance of the policies themselves. Game framing is particularly common during national election cycles and other times when federal legislators engage in policy debates (Gollust et al., 2019). During the 2013-2014 rollout of the Affordable Care Act (ACA), researchers observed that local news coverage fixated on political disagreements and controversies about the ACA, rather than its actual content and policy provisions (Gollust, Baum, et al., 2017).

Factors affecting news coverage

There are many reasons why news media might overuse episodic framing when discussing healthcare issues. Reporters rely on informational goods and services like press releases and conferences. Combined with deadline pressures or insufficient critical thinking, these information sources may lead to coverage that highlights superficial factors over structural causes (Viswanath & Emmons, 2006). Moreover, because they must compete for limited audience attention, media organizations frequently sensationalize news stories at the expense of information quality (Gollust et al., 2019). Media ownership and management also influence which topics are covered (Mao et al., 2011). Providing in-depth coverage of systemic issues may not be as profitable as easily digestible, individual health tips. Furthermore, American journalists are embedded in an individualistic culture and as a result their reporting may reflect dominant cultural narratives about personal responsibility. Finally, even when they do hold different values, reporters may be expected to work within neoliberal frameworks of health (Raphael, 2011). These industry practices and obstacles may be difficult to overcome when attempting to implement and test alternative framing.

Importance of context and explanation

When news media fail to provide coherent, compelling, and systemic explanations of social phenomena, consumers often default to individualistic explanations (FrameWorks, 2019). A content analysis of news coverage related to long-term care for aging populations showed that few stories include broader context on the topic, such as government cuts or an aging populace, to frame the

³ Our conceptualization of "hybrid framing" is drawn from Churchill (2019), who uses the term to summarize a thread of health communication research suggesting the effectiveness of introducing the element of personal responsibility into social determinants messaging (see Carger & Westen, 2010; Gollust & Capella, 2014; Niederdeppe et al., 2015). However, we use the term more broadly to refer to messages that combine elements of episodic framing (individual choices/responsibility) and thematic framing (structural context). This use of hybrid frames is conceptually different from Brüggemann & D'Angelo's (2018) conception involving a combination of generic and issue-specific news frames.

importance of the issue (Mebane, 2001). Moreover, when contextualized information was provided, there was no single explanation to underscore why the public should care about long-term care topics. According to Mebane, providing social context for healthcare issues may affect how audiences judge the importance of the issue, the policy solutions they perceive to be available, and the solutions they are willing to support. For example, the public may be more amenable to investing government resources if the problem is framed in terms of external factors beyond anyone's control.

FrameWorks references Daniel Kahneman's influential theory of "fast" vs. "slow" thinking to explain how audiences interpret inconsistent or missing explanations. Fast thinking is automatic and story driven, whereas slow thinking is calculated and orderly (Kahneman, 2011). Fast thinking is deft at creating a coherent story from available information by triggering patterns of existing ideas in memory. According to Kahneman, the coherence of a story is associated with people's confidence in the story's veracity. When news stories *lack* coherent explanations of social issues, they get processed through the fast thinking route and, as a result, audiences tend to revert to dominant cultural narratives. Though the mind generally resists the level of effort required for slow thinking, it can be activated when encountering surprising information that inspires curiosity and learning (FrameWorks, 2019). Therefore communicators must find ways to summon audiences' slow thinking with coherent explanations that encourage the deliberate processing of new information.

MEDIA IMPACT

Narrative influence

While the majority of research on media coverage of health outcomes and disparities focused on news media, there is substantial research on the impact of other types of media, including entertainment, in the context of health. Numerous studies show that mass media can positively influence health-related knowledge, behaviors, and outcomes. Mass media have been used to improve condom use for HIV prevention (LaCroix et al., 2014), increase flu vaccination rates among the elderly (Yoo et al., 2010), enhance appreciation of regular gynecological pap tests (Murphy et al., 2015), and shift attitudes regarding abortion and alcohol abuse (Walter et al., 2018). However, because media often frame health as a matter of individual behavior management (Knibbe et al., 2017), media-effects research has largely neglected content that addresses health at the societal or policy level, focusing primarily on individual knowledge, attitudes, emotions, and behavior.

Existing literature shows that narratives have a unique capacity to connect with audiences. Narrative strategies can be used to promote public health and improve health literacy more effectively than simply providing facts about health risks (Knibbe et al., 2017). Stories can be tailored to particular experiences and needs, which make them especially effective for reaching lower socio-economic populations. Entertainment narratives may also be more accessible than written health information among lower-income and populations (Beacom & Newman, 2010).

Research indicates that entertainment narratives can effectively reduce knowledge gaps about health disparities, since these narratives allow for comprehensive and nuanced treatment of health stories and can reach large numbers of people at a relatively low cost. Entertainment narratives are uniquely persuasive because of their ability to bypass the audience's resistance to overt persuasive attempts (Beacom & Newman, 2010; Moyer-Gusé, 2008).⁴ In particular, the emergence of diverse entertainment platforms and formats creates unique opportunities for message creators to reach and engage various audiences. *Transmedia* storytelling—which moves characters and storylines across platforms like books, films and video games—can make stories seem more realistic and compelling (Jenkins, 2010). Transmedia campaigns allow for multilayered, complex storytelling, capable of increasing audience consumption and engagement (Jenkins, 2003). Hulu's *East Los High* capitalized on the transmedia strategy to deliver sexual and reproductive health messages to young Latinx Americans. The show's use of multiple digital platforms facilitated wide audience reach and engagement to encourage healthy sex practices (Wang & Singhal, 2016).

Narratives can explain causal complexities

Media narratives can effectively explain complex health issues because they can show (rather than tell) audiences about interrelated causal factors (Niederdeppe et al., 2013). One Canadian study found that watching episodes of *Grey's Anatomy* could stimulate critical thinking about healthcare policies and highlight the perceived shortcomings of the privatized American healthcare system (Jubas et al., 2017). Focus group participants watched stories about patients who could not afford necessary treatment due to lack of health insurance. In the ensuing discussions, participants expressed their preference for a policy framework that ensured universal access to health care. Narratives can also encourage openness to new ideas and effectively communicate the complex relationships among social determinants and health outcomes. Such stories may be particularly useful for demonstrating the value of incremental interventions for improving physical and emotional

⁴ The mechanisms underlying the influence of media and entertainment narratives represent a huge area of research (encompassing the entertainment education literature) that is beyond the scope of this landscape analysis. For a theoretical overview, see Moyer-Gusé, 2008.

health, and for portraying how such interventions can affect individuals across their lifetimes (Lundell et al., 2013). They can also show how an individual's health is interdependent with their community, clarifying that individuals are influenced by their surroundings, and that their actions can also affect their social environment.

Narratives can influence causal attributions

Attribution theory can be used to understand how media frames shape public perceptions of the causes and solutions to health disparities (Niederdeppe et al., 2008) and describes how individuals assign responsibility for behavior and events. *Internal attributions* are inferences that locate the cause of behavior in personal character traits or choices squarely within the control of individuals. *External attributions*, on the other hand, are inferences that locate the cause of behavior in external factors outside of an individual's control. How Americans make sense of poor health outcomes depends on the extent to which they attribute the causes of these outcomes to internal factors such as laziness or poor lifestyle choices, or external conditions such as lack of access to health care, discrimination, or other systemic barriers.

Episodic framing of social issues fosters internal attributions, placing responsibility for societal problems on the affected groups. When media coverage focuses on individual people living in poverty, audience explanations for poverty subsequently concentrate on individual characteristics and shortcomings, such as lack of motivation, education, or job skills (lyengar, 1987). This tends to increase stigma and victim blaming, while decreasing empathy for those affected by societal problems (Savani et al., 2011; Saguy et al., 2014). On the other hand, when media stories use thematic framing, highlighting poverty as a national issue or focusing on national poverty relief programs, the audience is more likely to make external attributions, centering on structural factors, such as economic downturns that lead to unemployment. These patterns and associations persist even after controlling for partisan attitudes, political ideology, and socioeconomic status (lyengar, 1987). Hybrid frames that embed stories about individual behaviors in a broader systemic context tend to elicit more empathy from audiences (Churchill, 2019; Niederdeppe et al., 2015).

Narratives and attributions can influence policy support

Narratives can convey causal information about social issues in ways that invite support for specific policy solutions (Niederdeppe et al., 2011). Audiences' understanding of causal factors is associated with attitudes on policies that address societal issues like unemployment, poverty, and healthcare (Lundell et al., 2012).

Internal attributions can undermine policy support for structural interventions. Iyengar (1989) found participants' attributions of individual versus societal responsibility for poverty were associated with their willingness to support federal spending and policies to address the issue. Specifically, those who believed in societal responsibility for poverty were more likely to support reduced defense spending and increased spending on social services. These relationships have been replicated by more recent research on perceptions of the poor (Applebaum, 2001). Participants read vignettes about fictional poor characters, whose poverty was presented as either individually-caused (e.g. rejected a job offer) or societally-caused (e.g. laid off due to budget cuts). They were then asked to imagine themselves as Congress members and to assess their likelihood of recommending hypothetical policies to address poverty. Consistent with lyengar's findings, when the character was presented as personally responsible for their poverty, participants were more likely to endorse policies aimed at reducing government benefits. But when the character was portrayed as experiencing economic hardship as a result of societal causes, participants were more likely to recommend liberal policies to extend government assistance.

The presence of an individual case example may direct attributions of responsibility toward the individual. Merely including an image of an overweight child in a news report on obesity can decrease support for obesity prevention policies, regardless of whether the article emphasizes individual or social causes of obesity (Barry et al., 2013). Whether episodic framing merely implies individual solutions or recommends them outright, the tendency to individualize the causes and solutions to health issues is pervasive and well-documented across print and TV news (Kim et al., 2010; Barry et al., 2013; Gollust et al., 2019; Viladrich, 2019; Winett et al., 2018). Furthermore, when media content employs a hybrid frame, audiences are more open to the idea that society is partly responsible for health outcomes (Carger & Westen, 2010) and are more supportive of public policies that address health inequities (Gollust et al., 2019), relative to content that uses thematic framing of social determinants messages alone (Gollust & Cappella, 2014; Niederdeppe et al., 2008; Niederdeppe et al., 2015).

Research suggests framing that combines individual choices and structural context works especially well for conservative audiences as it aligns with some of their political values and may cushion the impact of introducing new ideas about systemic inequality (Carger & Westen, 2010). Messages that acknowledge the role of personal choice in health outcomes, while still highlighting social and environmental factors, result in less anger and debate among Republican audiences (Gollust & Cappella, 2014).

A failure to explain the structural causes of a given social issue may foster a tendency to overlook or dismiss structural solutions in favor of individualistic ones. Such media framing patterns invite individual-level attributions of responsibility, which reinforce personal responsibility narratives about health. These narratives extend into public discourse, and subsequently influence public policy.

Narratives can promote public action and policy change

Narratives build audience members' self-efficacy—confidence in the ability to carry out certain actions. In this way, they encourage the audience to be part of the solution. Messages that both identify social problems and provide plausible solutions are especially effective at increasing audience interest and engagement. In the context of news reporting, this is sometimes known as "solutions journalism," which provides news consumers with actionable responses to social problems that can increase the audience's self-efficacy (Curry, 2014). News consumers prefer messages that include some kind of actionable direction or a set of principles to guide meaningful action (Carger & Westen, 2010). Similarly, research has shown messages about health issues are more impactful when they show actions that individuals can take to address the issues (Lundell et al., 2013; Niederdeppe et al., 2008).

Narrative approaches are also used by advocates who seek to influence public policy (Davidson, 2017). One meta-analysis of narrative research (Fadlallah et al., 2019) found health narratives can raise awareness, encourage policy inquiries, and inspire audiences to initiate discussions about public policies. Narratives that include personal stories about multiple people, rather than episodic frames of a single event or individual, are especially effective at inspiring debate over policy change. Policy advocates who develop strong working relationships with media outlets produce particularly effective outcomes. In these cases, media involvement is an important catalyst for policy change. Fadlallah et al. caution, however, that narratives not grounded in scientific evidence can lead to policies that are ineffective or harmful. Likewise, according to Davidson, unsuccessful policies have been created because decision-makers were moved to take action by a powerful story that did not represent scientific reality.

MESSAGING CONSIDERATIONS

Both public health research and media coverage often focus primarily on individual factors and responsibility for health outcomes, neglecting contextual and environmental influences

(Niederdeppe et al., 2008). We discuss additional considerations for messaging related to health outcomes below, with the caveat that the research in some of these areas is limited.

Ideological biases

Ideological and partisan biases influence attitudes about health-related narratives and policies. Those whose ideology leans conservative tend to react negatively to messages about health disparities and are more likely to attribute responsibility for health outcomes to individuals (Gollust et al., 2009; Gollust & Lynch, 2011; Gollust & Cappella, 2014; Niederdeppe et al., 2013). In Young et al.'s (2016) study on social determinants messaging for obesity, conservatives were less likely than liberals to attribute health issues to societal or structural causes. Moreover, when healthcare messages used both individual and social determinants explanations for health problems, conservatives still focused more on individual factors (Niederdeppe et al., 2011, 2013).

When news stories about health policy issues cite political or partisan sources, viewers are cued to interpret and filter information through their own political predispositions (Gollust, Barry, et al., 2017). News stories that feature a political source or discuss a politically charged issue are more likely to produce an attitude backlash in audiences (Gollust, Barry, et al., 2017; Leeper & Slothuus, 2014; Gollust et al., 2019). When news reports reference social or environmental factors to explain health outcomes, they tend to increase political polarization (Gollust et al., 2009).

Political biases are not insurmountable, however. For example, Pelika et al. (2010) found when news stories focused more on the substantive aspects of the Affordable Care Act than the legislative mechanisms and procedures and actors involved, the public had greater appreciation of social determinants and more supportive attitudes toward the policy. This was true regardless of the audience's political affiliation. Entertainment media can also offer opportunities to overcome the barriers posed by ideological biases in news consumption. For example, the Lear Center's recent study, *Are You What You Watch?* (Blakley et al., 2019)⁵ identified several "cultural touchstones" — shows that appeal across ideological divisions.

Activating negative stereotypes

Multiple studies suggest that when news stories about health problems inadvertently employ stereotypes or emphasize personal moral failures, coverage can amplify negative, racialized, or

⁵ Full report available at: https://learcenter.org/wp-content/uploads/2019/05/are_you_what_you_watch.pdf

stigmatizing attitudes toward people who suffer from health problems (Kennedy-Hendricks et al., 2016; McClure et al., 2011; McGinty et al., 2018; Niederdeppe et al., 2013; Gollust et al., 2019).

Even a single visual image of a person of color can produce negative and inaccurate stereotypes about that person's racial or ethnic group and its relationship to disease (Niederdeppe et al., 2008). Narratives about African-American single mothers living in poverty, for example, may unintentionally activate negative stereotypes about people of color, and shift attributions of responsibility for poverty to individual decisions (Iyengar, 1991). When negative stereotypes are triggered, they affect the audience's perceptions about which individuals or groups deserve government support (Kim et al., 2010).

These patterns apply to people of color as well. Hannah & Cafferty (2006) found that both white and black participants who were exposed to messages about white poverty were far more likely to support funding for anti-poverty programs than participants who were exposed to messages depicting black poverty. Public opposition to welfare programs has been linked to racial stereotypes that associate welfare with black populations (Gilens, 1999; Kim et al., 2010). More research is needed to identify what factors are most likely to activate harmful stereotypes. Future research might investigate the extent to which stereotypes influence public support for policies that address racial disparities in health outcomes (Niederdeppe et al., 2013; Kim et al., 2010).

Unanticipated effects

Creating compelling stories that illustrate the social and environmental factors that underlie health disparities without compromising the protagonist's relatability can be a challenging endeavor. Focusing too much attention on the complexities of health issues may risk undermining a story's appeal to a larger audience (Lundell et al., 2012). Furthermore, when narratives focus on a character's unique traits and motivations, audiences may turn their attention away from environmental and structural factors (lyengar, 1991). For example, Lundell et al. (2013) examined the effects of different vignettes describing community-based health interventions (e.g., efforts to overhaul a neighborhood's infrastructure, teaching emotional maturity impoverished youth). When stories featured protagonists who displayed characteristics of strength and leadership, audiences perceived the intervention as only useful in that specific scenario and did not generalize its effectiveness to other contexts. On the other hand, portraying a protagonist as displaying weakness or lack of responsibility may raise doubts about their deservingness of help and support (Weiner, 2006; Lundell et al., 2013).

Fragmented audiences

The current media landscape offers multiple platforms, streaming services, and social networks that end up producing fragmented audiences. This landscape presents new challenges and opportunities for content creators who seek to convey complex health-related messages. Because outlets must compete for larger audience shares, they may resort to catchy and shareable content that undercuts the quality and prominence of public health information (Gollust et al., 2019; Tanner et al., 2015; Wenger & Papper, 2018). Health messaging is particularly prone to errors and omissions, as comprehensive information gets sacrificed for the sake of grabbing attention in social media spaces (Gollust et al., 2019).

Audiences have become more inclined to consume media content that confirms their prior belief systems (Kahan, 2012; Gollust et al., 2019). The tendency for content consumers to seek out messages that they already agree with is known as *confirmation bias* (Del Vicario et al., 2017). Declining audiences for traditional media outlets (such as TV newscasts and local TV stations) means budget cuts for health journalists, reducing the already limited volume of healthcare coverage (Viswanath et al., 2008). In turn, declining media coverage of health issues undermines the public's support for policies that support health equity (Niederdeppe et al., 2013; Robert & Booske, 2011; Williams & Purdie-Vaughns, 2016; Gollust et al., 2019).

CONCLUSION

The objective of this landscape analysis was to summarize existing research on mass media coverage of health outcomes and the effect of this coverage on audiences. This analysis was conducted alongside in-depth interviews with key stakeholders in academia, health policy, health communication, and the entertainment industry. Insights from this analysis will continue to inform our research activities, including a qualitative analysis of the messages and frames employed by health-related content in scripted TV and film, and a national audience survey examining the relationships between media preferences and health equity attitudes and values. Through a partnership with the Behavioural Insights Team, we will also be exploring how different types of health equity messages affect the attitudes and behaviors of different audience segments.

Recommendations for journalists and content creators

Based on our review of research on media coverage of health outcomes, we propose the following evidence-based strategies for counteracting individualistic views of health and fostering a culture of health mindset.

- Avoid presenting disparities in health outcomes without context, as this type of messaging may inadvertently reinforce individualistic explanations. Instead, be thorough in explaining the complexities of the systems and structures that underlie these disparities.
- Use a *hybrid* approach that combines stories about individual choices and behaviors with the systemic factors that influence these behaviors and choices. This approach is more effective than presenting either individual stories or social determinants alone.
- When possible, tailor messages to key audience segments who may have different values or motivations, as the same message may backfire for different audiences.
- Focus on complex, multidimensional characters or protagonists who challenge common beliefs and stereotypes.
- Develop transmedia narratives to amplify messages across platforms and reach larger audiences. This strategy has been shown to increase audience engagement.
- Focus on solutions and concrete actions that the audience can take. This approach can increase the audience's confidence in their ability to make a difference.

Questions for researchers and advocates

Future research could expand the existing literature by examining the following:

- How do different audience segments respond to different message frames and formats around social determinants and health equity?
- How can we effectively balance mass appeal messages with those tailored to more specific audience segments?
- Can narratives around social determinants and health equity be connected to any concrete policy outcomes?
- To what extent have new narratives of health equity emerged around the COVID-19 pandemic, and how might these narratives affect audience attitudes and policy support?

This research was conducted between January and May 2020. When we began our analysis, COVID-19 was not yet on the national radar. In a short time, however, it has shifted the national

conversation around structural inequities and disparities in health outcomes in a seemingly unprecedented way. Research on the nature and effects of COVID-related messaging is only beginning to emerge, but it is likely that the pandemic will leave an indelible footprint on how we as a culture think about, talk about, and study health equity for many years to come.

REFERENCES

- Applebaum, L. D. (2001). The influence of perceived deservingness on policy decisions regarding aid to the poor. *Political Psychology*, 22(3), 419-442. https://doi.org/10.1111/0162-895X.00248
- Baran, M., Lindland, E., Kendall-Taylor, N., & Kohut, M. (2013). "Handed to them on a plate":

 Mapping the gaps between expert and public understandings of human services. FrameWorks
 Institute. http://frameworksinstitute.org/assets/files/humanservices/NHSAMaptheGapsFinal7-31-13.pdf
- Barry, C. L., Brescoll, V. L., & Gollust, S. E. (2013). Framing childhood obesity: How individualizing the problem affects public support for prevention. *Political Psychology, 34*(3), 327-349. https://doi.org/10.1111/pops.12018
- Beacom, A. M., & Newman, S. J. (2010). Communicating health information to disadvantaged populations. *Family & Community Health*, *33*(2), 152-162. https://doi.org/10.1097/FCH.0b013e3181d59344
- Blakley, J., Watson-Currie, E., Shin, H., Valenti, L.T., Saucier, C., & Boisvert, H. (2019) *Are you what you watch? Tracking the political divide through TV preferences.* The Norman Lear Center. https://learcenter.org/wp-content/uploads/2019/05/are-you-what-you-watch.pdf
- Brown, W. (2015). Undoing the demos: Neoliberalism's stealth revolution. Zone Books.
- Brüggemann, M., & D'Angelo, P. (2018). Defragmenting news framing research. In P. D'Angelo (Eds.), *Doing news framing analysis II: Empirical and theoretical perspectives* (pp. 99-115). Routledge.
- Carger, E., & Westen, D. (2010). *A new way to talk about the social determinants of health.* Robert Wood Johnson Foundation. https://www.rwjf.org/en/library/research/2010/01/a-new-way-to-talk-about-the-social-determinants-of-health.html

- Churchill, E. (2019). Changing the narrative of social determinants of health: Messaging for Ontarians. (Publication No. 2207) [Master's thesis, Wilfrid Laurier University]. Scholar Commons at Laurier. https://scholars.wlu.ca/etd/2207
- Clarke, C. E., Niederdeppe, J., & Lundell, H. C. (2012). Narratives and images used by public communication campaigns addressing social determinants of health and health disparities. International Journal of Environmental Research and Public Health, 9(12), 4254-4277. https://doi.org/10.3390/ijerph9124254
- Curry, Alex. (2014, June). Solutions Journalism. Center for Media Engagement. https://mediaengagement.org/research/solutions-journalism/
- Davidson, B. (2017). Storytelling and evidence-based policy: Lessons from the grey literature. *Palgrave Communications*, 3(1), 1-10. https://doi.org/10.1057/palcomms.2017.93
- Del Vicario, M., Scala, A., Caldarelli, G., Stanley, H.E., & Quattrociocchi, W. (2017).

 Modeling confirmation bias and polarization. *Scientific Reports*, 7 (40391), 1-9. https://doi.org/10.1038/srep40391
- Dobson, K., & Knezevic, I. (2017). 'Liking and Sharing' the stigmatization of poverty and social welfare: Representations of poverty and welfare through Internet memes on social media. *TripleC: Communication, Capitalism & Critique*, *15*(2), 777-795. https://doi.org/10.31269/triplec.v15i2.815
- Fadlallah, R., El-Jardali, F., Nomier, M., Hemadi, N., Arif, K., Langlois, E. V., & Akl, E. A. (2019). Using narratives to impact health policy-making: A systematic review. *Health Research Policy and Systems*, *17*(1), 17-26. https://doi.org/10.1186/s12961-019-0423-4
- FrameWorks Institute. (2019). *Unleashing the power of how: An explanation declaration*. FrameWorks Institute. http://frameworksinstitute.org/assets/files/unleashingthepowerofhow-anexplanationdeclaration.pdf
- Gilens, M. (1999). Why Americans hate welfare: Race, media, and the politics of antipoverty policy. University of Chicago Press. https://doi.org/10.7208/chicago/9780226293660.001.0001

- Gollust, S. E., Barry, C. L., & Niederdeppe, J. (2017). Partisan responses to public health messages: Motivated reasoning and sugary drink taxes. *Journal of Health Politics, Policy and Law, 42*(6), 1005-1037. https://doi.org/10.1215/03616878-4193606
- Gollust, S. E., Baum, L. M., Niederdeppe, J., Barry, C. L., & Fowler, E. F. (2017). Local television news coverage of the Affordable Care Act: Emphasizing politics over consumer information. *American Journal of Public Health*, 107(5), 687-693. https://doi.org/10.2105/
 AJPH.2017.303659
- Gollust, S. E., & Cappella, J. N. (2014). Understanding public resistance to messages about health disparities. *Journal of Health Communication*, *19*(4), 493-510. https://doi.org/10.1080/10810730.2013.821561
- Gollust, S. E., Fowler, E. F., & Niederdeppe, J. (2019). Television news coverage of public health issues and implications for public health policy and practice. *Annual Review of Public Health*, 40, 167-185. https://doi.org/10.1146/annurev-publhealth-040218-044017
- Gollust, S. E., Lantz, P. M., & Ubel, P. A. (2009). The polarizing effect of news media messages about the social determinants of health. *American Journal of Public Health*, 99(12), 2160-2167. https://doi.org/10.2105/AJPH.2009.161414
- Gollust, S. E., & Lynch, J. (2011). Who deserves health care? The effects of causal attributions and group cues on public attitudes about responsibility for health care costs. *Journal of Health Politics, Policy and Law*, 36(6), 1061-1095. https://doi.org/10.1215/03616878-1460578
- GOOD Inc. (2019) *Public perceptions; Narratives of poverty in the U.S.* (final project report)

 [PowerPoint slides]. https://roar-assets-auto.rbl.ms/documents/6139/

 Public%20Perceptions%20&%20Narratives%20of%20Poverty%20 %20Executive%20Summary.pdf
- Grossmann, I. & Santos, H. C. (2016). Individualistic cultures. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of personality and individual differences* (pp. 2-10). Springer. https://doi.org/10.1007/978-3-319-28099-8 2024-1

- Hannah, G., & Cafferty, T. P. (2006). Attribute and responsibility framing effects in television news coverage of poverty. *Journal of Applied Social Psychology*, *36*(12), 2993-3014. https://doi.org/10.1111/j.0021-9029.2006.00139.
- Harvey, D. (2007). A brief history of neoliberalism. Oxford University Press.
- Healey, R. & Barish, J. (2019) *Beyond neoliberalism: A narrative approach*. Narrative Initiative. https://narrativeinitiative.org/resource/beyond-neoliberalism-a-narrative-approach/
- lyengar, S. (1987). Television news and citizens' explanations of national affairs. *American Political Science Review*, 81(3), 815-831. https://doi.org/10.2307/1962678
- Iyengar, S. (1989). How citizens think about national issues: A matter of responsibility. *American Journal of Political Science*, *33*(4), 878-900. https://doi.org/10.2307/2111113
- lyengar, S. (1991). *Is anyone responsible? How television frames political issues*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226388533.001.0001
- Jenkins, H. (2003, January 15). *Transmedia Storytelling*. MIT Technology Review. https://www.technologyreview.com/2003/01/15/234540/transmedia-storytelling/
- Jenkins, H. (2010). Transmedia storytelling and entertainment: An annotated syllabus. *Continuum,* 24(6), 943-958. https://doi.org/10.1080/10304312.2010.510599
- Jubas, K., Johnston, D., & Chiang, A. (2017). Healthy democracy: What Grey's Anatomy teaches audience members about deserving patients and good citizens. In L. Nicosia & R. Goldstein (Eds.), *Through a distorted lens* (pp. 55-69). SensePublishers, Rotterdam. https://doi.org/10.1007/978-94-6351-017-2 4
- Kahan, D. M. (2012). Ideology, motivated reasoning, and cognitive reflection: An experimental study. *Judgment and Decision Making*, 8, 407-24. https://doi.org/10.2139/ssrn.2182588
- Kahneman, Daniel. (2011). *Thinking, fast and slow.* Farrar, Straus and Giroux.

- Kennedy-Hendricks, A., McGinty, E. E., & Barry, C. L. (2016). Effects of competing narratives on public perceptions of opioid pain reliever addiction during pregnancy. *Journal of Health Politics*, *Policy and Law, 41*(5), 873-916. https://doi.org/10.1215/03616878-3632230
- Kim, A. E., Kumanyika, S., Shive, D., Igweatu, U., & Kim, S. H. (2010). Coverage and framing of racial and ethnic health disparities in US newspapers, 1996–2005. *American Journal of Public Health*, 100(1), 224-231. https://doi.org/10.2105/AJPH.2009.171678
- Knibbe, M., de Vries, M., & Horstman, K. (2017). Responsible use of media supports 'critical public health literacy.' *Journal of Public Health*, 39(2), 353-357. https://doi.org/10.1093/pubmed/fdw036
- Leeper, T. J., & Slothuus, R. (2014). Political parties, motivated reasoning, and public opinion formation. *Political Psychology*, 35, 129-156. https://doi.org/10.1111/pops.12164
- Lundell, H., Niederdeppe, J., & Clarke, C. (2012). Exploring interpretation of complexity and typicality in narratives and statistical images about the social determinants of health. *Health Communication*, 28(5), 486–498. https://doi.org/10.1080/10410236.2012.699887
- Lundell, H., Niederdeppe, J., & Clarke, C. (2013). Public views about health causation, attributions of responsibility, and inequality. *Journal of Health Communication*, *18*(9), 1116-1130. https://doi.org/10.1080/10410236.2012.699887
- Mao, Y., Richter, S., Kovacs, Burns, K., & Chaw-Kant, J. (2011). Homelessness coverage, social reality, and media ownership: Comparing a national newspaper with two regional newspapers in Canada. *Mass Communication and Journalism*, *2*(7), 1-7. dx.doi.org/10.4172/2165-7912.1000119
- McClure, K. J., Puhl, R. M., & Heuer, C. A. (2011). Obesity in the news: Do photographic images of obese persons influence antifat attitudes? *Journal of Health Communication*, *16*(4), 359-371. https://doi.org/10.1080/10810730.2010.535108

- McGinty, E. E., Goldman, H. H., Pescosolido, B. A., & Barry, C. L. (2018). Communicating about mental illness and violence: Balancing stigma and increased support for services. *Journal of Health Politics, Policy And Law*, 43(2), 185-228. https://doi.org/10.1215/03616878-4303507
- Mebane, F. (2001). Want to understand how Americans viewed long-term care in 1998? Start with media coverage. *The Gerontologist*, 41(1), 24-33. https://doi.org/10.1093/geront/41.1.24
- Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., & Ford, D. C. (2017). Adverse childhood experiences and life opportunities: Shifting the narrative. *Children and Youth Services Review*, 72, 141-149. https://doi.org/10.1016/j.childyouth.2016.10.021
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-education messages. *Communication Theory, 18*(3), 407–425. https://doi.org/10.1111/j.1468-2885.2008.00328.x
- Murphy, S. T., Frank, L. B., Chatterjee, J. S., Moran, M. B., Zhao, N., Amezola de Herrera, P., & Baezconde-Garbanati, L. A. (2015). Comparing the relative efficacy of narrative vs nonnarrative health messages in reducing health disparities using a randomized trial. *American Journal of Public Health*, 105(10), 2117-2123. https://doi.org/10.2105/AJPH.2014.302332
- Nagler, R. H., Bigman, C. A., Ramanadhan, S., Ramamurthi, D., & Viswanath, K. (2016). Prevalence and framing of health disparities in local print news: Implications for multilevel interventions to address cancer inequalities. *Cancer Epidemiology, Biomarkers & Prevention, 25*(4), 601-612. https://doi.org/10.1158/1055-9965.EPI-15-1247
- Niederdeppe, J., Bigman, C. A., Gonzales, A. L., & Gollust, S. E. (2013). Communication about health disparities in the mass media. *Journal of Communication*, 63(1), 8-30. https://doi.org/10.1111/jcom.12003
- Niederdeppe, J., Bu, Q. L., Borah, P., Kindig, D. A., & Robert, S. A. (2008). Message design strategies to raise public awareness of social determinants of health and population health disparities. *The Milbank Quarterly, 86*(3), 481-513. https://doi.org/10.1111/j.1468-0009.2008.00530.x

- Niederdeppe, J., Roh, S., & Shapiro, M. A. (2015). Acknowledging individual responsibility while emphasizing social determinants in narratives to promote obesity-reducing public policy: a randomized experiment. *PloS One, 10*(2), e0117565. https://doi.org/10.1371/journal.pone.0117565
- Niederdeppe, J., Shapiro, M., Kim, H. K., Bartolo, D., & Porticella, N. (2011, November 16). Complex attributions of responsibility in narratives designed to increase support for policies to reduce rates of obesity [Presentation]. VOICE: 2011 National Communication Association Convention. New Orleans, LA, United States.
- OECD. (2020), *Health spending (indicator)*. OECD. Retrieved January 15, 2020 from https://data.oecd.org/health-spending.htm
- Pelika, S. L., Clark, J. H., & Rigby, E. (2010). "Don't let the government touch my Medicare": How media framing shapes public support for health care reform. Conference Proceedings at OpenSIUC. http://opensiuc.lib.siu.edu/pnconfs 2010/17
- Raphael, D. (2011). Mainstream media and the social determinants of health in Canada: Is it time to call it a day? *Health Promotion International*, *26*(2), 220-229. https://doi.org/10.1093/heapro/dar008
- Rappaport, J. (2000). Community narratives: Tales of terror and joy. *American Journal of Community Psychology, 28*(1), 1-24. https://doi.org/10.1023/A:1005161528817
- Robert, S. A., & Booske, B. C. (2011). US opinions on health determinants and social policy as health policy. *American Journal of Public Health, 101*(9), 1655-1663. https://doi.org/10.2105/AJPH.2011.300217
- Robert Wood Johnson Foundation. (2015). From vision to action: A framework and measures to mobilize a culture of health. https://www.rwjf.org/en/cultureofhealth/taking-action.html
- Robert Wood Johnson Foundation. (2019). *Mindsets and expectations*. https://www.rwjf.org/en/cultureofhealth/taking-action/making-health-a-shared-value/mindsets-and-expectations.html
- Ryan, W. (1971). Blaming the victim. Pantheon Books.

- Saguy, A. C., Frederick, D., & Gruys, K. (2014). Reporting risk, producing prejudice: How news reporting on obesity shapes attitudes about health risk, policy, and prejudice. *Social Science and Medicine*, 111, 125-133. https://doi.org/10.1016/j.socscimed.2014.03.026
- Savani, K., Stephens, N. M., & Markus, H. R. (2011). The unanticipated interpersonal and societal consequences of choice: Victim blaming and reduced support for the public good. *Psychological Science*, 22(6), 795-802. https://doi.org/10.1177/0956797611407928
- Stacks, D. W., Li, Z. C., & Spaulding, C. (2015). Media effects. *International Encyclopedia of the Social & Behavioral Sciences*, 29–34. https://doi.org/10.1016/B978-0-08-097086-8.95045-1
- Tanner, A. H., Friedman, D. B., & Zheng, Y. (2015). Influences on the construction of health news: The reporting practices of local television news health journalists. *Journal of Broadcasting & Electronic Media*, 59(2), 359-376. https://doi.org/10.1080/08838151.2015.1029123
- Viladrich, A. (2019). "We cannot let them die": Undocumented immigrants and media framing of health deservingness in the United States. *Qualitative Health Research*, 29(10), 1447-1460. https://doi.org/10.1177/1049732319830426
- Viswanath, K., Blake, K. D., Meissner, H. I., Saiontz, N. G., Mull, C., Freeman, C. S., Hesse, B.I, & Croyle, R. T. (2008). Occupational practices and the making of health news: A national survey of US health and medical science journalists. *Journal of Health Communication*, *13*(8), 759-777. https://doi.org/10.1080/10810730802487430DOI: 10.1080/10810730802487430
- Viswanath, K., & Emmons, K. M. (2006). Message effects and social determinants of health: Its application to cancer disparities. *Journal of Communication*, 56, 238-264. https://doi.org/10.1111/j.1460-2466.2006.00292.x
- Walter, N., Murphy, S. T., & Rosenthal, E. L. (2018). Narrative persuasion in a new media environment: The impact of binge-watching and second-screening. *Communication Research Reports*, 35(5), 402-412. https://doi.org/10.1080/08824096.2018.1525348
- Wang, H., & Singhal, A. (2016). East Los High: Transmedia edutainment to promote the sexual and reproductive health of young Latina/o Americans. *American Journal of Public Health*, 106(6), 1002-1010. https://doi.org/10.2105/AJPH.2016.303072

- Weiner, B. (2006). Social motivation, justice, and the moral emotions: An attributional approach. Lawrence Erlbaum Associates. https://doi.org/10.4324/9781410615749
- Wenger, D., & Papper, B. (2018). *The state of the industry: Local TV news and the new media landscape: Part 1*. Knight Foundation. https://kf-site-production.s3.amazonaws.com/ media elements/files/000/000/171/original/TVNews1 StateOfTheIndustry v4.pdf
- Williams, D. R., & Purdie-Vaughns, V. (2016). Needed interventions to reduce racial/ethnic disparities in health. *Journal of Health Politics, Policy and Law, 41*(4), 627-651. https://doi.org/10.1215/03616878-3620857
- Winett, L. B., Dorfman, L., Yoshino, L., & Nixon, L. (2018). Equity arguments in news reporting on school nutrition policy. *Health Equity*, 2(1), 117-121. https://doi.org/10.1089/heq.2017.0061
- Woolf, S. H., & Aron, L. (2013). *U.S health in international perspective: Shorter lives, poorer health.*National Research Council (US) & Institute of Medicine (US). https://www.ncbi.nlm.nih.gov/books/NBK115854/ doi: 10.17226/13497
- Yoo, B. K., Holland, M. L., Bhattacharya, J., Phelps, C. E., & Szilagyi, P. G. (2010). Effects of mass media coverage on timing and annual receipt of influenza vaccination among Medicare elderly. Health Services Research, 45, 1287-1309. https://doi.org/10.1111/j.1475-6773.2010.01127.x
- Young, R., Hinnant, A., & Leshner, G. (2016). Individual and social determinants of obesity in strategic health messages: Interaction with political ideology. *Health Communication*, *31*(7), 903-910. https://doi.org/10.1080/10410236.2015.1018699

Support for this research was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.