

**Nisbet, M.C. (2014). Rethinking the Translation and Dissemination Paradigm: Recommendations from Science Communication Research for Health Services Policy Debates. Discussion Paper for AcademyHealth Workshop on Dissemination and Translation Strategies for Health Services Experts, April 28 & 29, Washington DC.**

**INTRODUCTION**

Experts working across fields tend to believe that political disagreement stems from a “gap” between expert knowledge and policymaker knowledge. To close this gap, communication is defined as a process of translation and dissemination from experts to non-experts. The assumption is that if policymakers and the public better understood the technical nature of problems and their proposed solutions, then political consensus would be reached, and societal action would follow.<sup>1, 2</sup>

Motivated by these assumptions, health services experts like their peers across other fields have invested heavily in a variety of translation and dissemination activities. Via blogs, Facebook, Twitter, online video, open access journals and other interactive tools, expert institutions are employing sophisticated narrative styles, presentation formats, and platforms that were once the exclusive domain of news organizations and journalists. For example, the web sites of many universities, non-profit organizations, and philanthropies are now also interactive multi-media hubs featuring news stories, blog posts, and video interviews that are promoted and spread by way of social media.<sup>3</sup> To take advantage of these digital tools, experts are encouraged to enroll in communication workshops where they are instructed on how to blog, use Twitter, make online videos, create visual presentations, provide public testimony, employ Hollywood acting techniques, and cultivate relationships with journalists.<sup>4</sup>

Within this rapidly evolving communication ecosystem, health services professionals along with highly motivated members of the public can recommend, share, and comment on preferred topics across media platforms. Not only are there more expert voices and perspectives to select from, but any motivated individual has direct access to primary sources of information and data including studies, reports, live and archived feeds of press conferences and events, transcripts of speeches, and copies of legislation. Individuals can additionally access the complete archive of past stories, blog posts, interviews, and statements about a health services topic along with substantial excerpts of books and studies via Google and Amazon.<sup>3</sup> All of these trends suggest that we live in a digitally enabled Golden Age for the translation and dissemination of expert knowledge.

Yet despite the wave of enthusiasm among experts for various dissemination and translation activities, research from the fields of science communication, policy

studies, political communication and corresponding disciplines suggest that narrowly focusing on these tactics overlooks a broader set of strategies that are likely to be more consequential for improving societal decisions about health services-related issues. Researchers in these fields have analyzed the factors shaping effective communication and expert advice in relation to environmental problems, scientific breakthroughs, and emerging technologies. Insights from these studies are highly relevant to health services experts, given that the political dynamics of science and environmental controversies are similar to those shaping many complex health care problems and trends.

As I detail in this paper, there are four broad conclusions from this body of research that are important for health services experts and their organizations to consider and that challenge the contemporary translation and dissemination paradigm. First, over the past decade, as part of a growing field that the U.S. National Academies calls the “science of science communication,” researchers have investigated the social and cognitive factors that shape decisions about complex debates over science and technology and how these processes play out across highly contested political environments.<sup>5</sup> Among the major conclusions of this research is that the traditional goal of dissemination and translation – e.g. to boost technical knowledge – is a relatively ineffective way to influence public judgments and decisions.<sup>1,6</sup>

In highly contested political environments, the impact of knowledge often varies by way of an individual's political identity, such that well-educated individuals from different social groups tend to be the most divided in their opinions.<sup>7-9</sup> In this context, even carefully crafted efforts to influence those individuals holding factually incorrect beliefs; may only serve to reinforce those beliefs.<sup>10, 11</sup> Other research suggests that when dissemination, translation and media outreach efforts intensify, it is often the best educated who benefit from the increased access to information as lower socio-economic, and/or minority populations remain inattentive and disengaged.<sup>1, 12-14</sup> In all, disseminating and translating expert knowledge via ever more sophisticated multimedia tools and online platforms may in fact only strengthen political disagreement among already highly informed partisans while simultaneously failing to engage historically under-served segments of the public.

Second, based on this research, social scientists recommend that effective communication focus on “framing” or conveying the social relevance of an issue while fitting information to the existing values, mental models, experience, and interests of an intended audience.<sup>2,15,16</sup> These strategies are enhanced if experts partner with everyday opinion-leaders who are trusted among a targeted group, who can pass on information by way of word of mouth and social media, and who thereby shape impressions within their social networks about what is socially desirable and acceptable.<sup>17,18</sup>

Third, simply applying research to the formulation and design of a broader based communication strategy is not enough. Health services experts also need to carefully consider the role they play as policy advisors. In overcoming the polarized perceptions

that tend to derail substantive discussion of policy, health services experts and their organizations may be most effective if they adopt the role of “honest broker,” expanding and diversifying the policy choices and options considered by decision-makers.<sup>19,20</sup> Finally, instead of viewing communication as a one-way process of dissemination, translation and persuasion, health services experts and their organizations can benefit by pooling their resources and investing in localized public and media forums where decision-makers, stakeholders and members of the public learn, debate, and participate by offering their own recommendations and solutions to health services problems. This local and regional engagement at a time of gridlock at the Federal level can not only help identify policy innovations but also create the cross-cutting networks of support needed to promote policy change at the national level once political conditions change.<sup>20</sup>

### **Perception Gaps in a Politically Contested Media Environment**

My critique of the contemporary dissemination and translation paradigm begins with a basic understanding of how individuals form judgments and make decisions. Past research suggests that when faced with complexity, uncertainty, and limited time and attention, individuals seldom engage in active deliberation about complex policy issues, weighing and assessing many sides and taking advantage of deep sources of expert knowledge available today by way of various online and social media platforms. Research instead characterizes individuals as “cognitive misers,” who as a general tendency collect only as much information about a complex topic as they think is necessary to reach a decision.<sup>21,22</sup>

In this regard, researchers have studied how partisan cues in the form of slogans, talking points, and political labels make it easier for individuals to reach decisions efficiently, resulting in a form of “limited information rationality.”<sup>22</sup> Somewhat counter-intuitively, studies find that individuals with higher levels of education tend to be the most efficient cognitive misers, as they are better at recognizing partisan cues and determining what others like them think, more likely to react to these cues in ideologically consistent ways, and more skilled at offering arguments to support and reinforce their positions.<sup>23,24</sup>

Consider that during the George W. Bush presidency, across polls, there was majority public support for government action to improve health care coverage.<sup>25</sup> Yet following the 2008 election, as elected officials and party leaders quickly diverged in their messaging about the issue, public opinion also shifted to reflect this partisan difference. Following President Barack Obama taking office, there was an almost immediate and deep fall off in support among Republicans.<sup>26,27</sup> These trends are similar to previous changes in public opinion that occurred during the Clinton era health care debate.<sup>28</sup> Moreover, the drop in support was greatest among Republicans who also held the strongest levels of racial resentment, suggesting that the efforts by opponents to

“frame” health care as favoring undeserving racial minorities was especially effective, a topic I return to in the next section.<sup>26</sup>

In a similar pattern, studies have tracked the increasing availability of diverging partisan cues on complex science policy debates such as those over embryonic stem cell research and climate change and the resulting influence on public opinion. Early on in both debates, before political party leaders and activists began to communicate their diverging policy positions, surveys showed only marginal differences in opinion among Democrats and Republicans. But across years, as political leaders quarreled over policy and as news coverage played up these differences, the gap in opinion between college educated Democrats and Republicans grew to be as wide as 30 to 50 percentage points.  
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The tendency for the public and decision-makers to selectively attend to and interpret efforts at dissemination and translation by way of the media is magnified when experts narrowly focus their media outreach efforts on elite outlets like *The New York Times*, the *Washington Post*, the *New Yorker*, National Public Radio and similarly prestigious news organizations. Though these outlets have an important agenda-setting influence on policymakers, in an era of virtually unlimited media choices, if a member of the public lacks a strong interest in public affairs, they can completely avoid such coverage all together, paying only attention to those issues that deeply concern them.<sup>1</sup> As a consequence, research findings suggest that as news attention to a complex issue increases at these prestige outlets, those of higher socio-economic status (SES) who are already attentive and knowledgeable about the subject grow more knowledgeable. Yet among those members of the public from a lower SES background, they tend to gain very little in terms of knowledge. As a consequence gaps in knowledge and concern over an issue are exacerbated rather than reduced.<sup>12-14</sup>

Apart from these knowledge gaps by socio-economic status, today’s media system also reinforces and feeds on the tendency towards perception gaps among highly attentive partisans. In the era of the 24-hour political news cycle, commentators and bloggers on the political left and right rely on the latest insider strategy, negative attack, or embarrassing gaffe to appeal to ideologically motivated audiences, connecting almost every policy issue to the broader struggle for control of American politics between liberals and conservatives.<sup>32-34</sup> In this regard, the divisiveness and rancor that typifies online commentary about health care reform or climate change is driven in part by what Tufts University scholars Jeffrey Berry and Sarah Sobieraj characterize in a series of studies as the media “outrage industry.”<sup>32,33</sup>

This discourse culture specializes in provoking emotional responses from audiences, trading in exaggerations, insults, name calling, and partial truths about opponents and reducing complex issues to “ad hominem attacks, overgeneralizations, mockery, and dire forecasts of impending doom.”<sup>32,33</sup> In the 2009 debate over health care reform, consider the reaction among left-leaning media pundits when the single

payer option was dropped from the proposed legislation in an effort to win support from moderate Democrats. In this case, an outraged Howard Dean and MSNBC host Keith Olbermann urged cable viewers to demand that Congress “kill the bill.” Quoting Winston Churchill, Olbermann said that the “appeasement” of moderate Democrats would mean “total and unmitigated defeat, without a war.”<sup>35</sup>

Yet to be sure, the most notorious example of moral outrage occurred at Fox News where the same year commentators favorably referenced Sarah Palin’s Facebook warning about health care reform leading to “death panels.”<sup>36</sup> A survey at the time found that 45 percent of regular Fox viewers said that the death panels were true compared to fewer than 30 percent among CNN and MSNBC viewers.<sup>37</sup> In such an example where a trusted media source spreads false information, responding to such claims can actually backfire. In one study evaluating the effectiveness of messages attempting to correct beliefs about death panels, among politically knowledgeable experimental subjects who viewed Sarah Palin favorably, efforts at correction actually boosted their belief in the false statement.<sup>10</sup>

Media outrage and distortions spread by way of Americans’ face-to-face conversations and online social networks. In recent decades, as people have sorted themselves into like-minded residential areas, workplaces, and political districts, the similarity of Americans’ social, political, and geographic enclaves has increased appreciably.<sup>24, 34</sup> As a result, on health care reform, for example, many Americans are unlikely to report personally knowing people who hold different views from their own. Instead, the “political other” is a caricature offered at blogs, on talk radio, or on cable news. For many conservatives, those who support health care reform are “socialists” and for many liberals, those who oppose health care reform are “racists.” In each case, the opposing side is viewed as incapable of either reason or compromise.<sup>20</sup>

Editorial and business decisions at prestige news outlets have also unwittingly boosted polarization on complex policy debates like health care reform. Outlets such as the *New York Times* and *Washington Post*, most notably, have cut back on their news budgets, letting go of many of their most experienced reporters, allowing advocacy-oriented media outlets and commentators to fill the information gap. As a consequence, careful reporting at these outlets on the technical details of policy have been replaced by morally framed interpretations from bloggers and advocacy journalists at outlets like *Mother Jones*, *The Nation* or the *National Review*.<sup>20</sup> Online news and commentary are also highly socially contextualized, passed along and preselected by people who are likely to share worldviews and political preferences. If an individual incidentally “bumps” into news about climate change or health care reform by way of Twitter, Facebook, or Google +, the news item is likely to be the subject of meta-commentary that frames the political and moral relevance of the information. Taking advantage of these self-reinforcing spirals, advocacy groups devote considerable resources to flooding social media with politically favorable comments and purposively selected stories.<sup>20, 38</sup>

Even when individuals, prompted by a high profile focusing event, do decide to seek out more information via Google and other search engines, further selectivity is likely to occur. In this case, liberals might choose to search for information on “health care reform” and encounter one set of differentially framed search results; whereas a conservative searching for information on “Obamacare” encounters an entirely different set of search results. Not only does word choice and phrasing shape the information returned through Google, but so does the past browsing and search history of the individual, adding an additional layer of selectivity and bias to the information encountered.<sup>14, 20</sup>

The response to these factors has been to train experts to invest in their own personalized social media strategies and platforms as a way to offset the loss of quality news coverage and as a strategy to counter the spread of false information. Yet it is unlikely that in even in the aggregate, that the individualized social media efforts of experts can compete with well-financed advocacy groups and aligned media outlets. As reviewed, efforts at correcting false information are often ineffective or even backfire. Moreover, to the extent that interest groups and advocacy journalists highlight the dissemination efforts of experts, their research findings are likely to be employed to score partisan points rather than inform decision-making.

In the face of these challenges, health services experts and their organizations would be wise to shift away from the dominant dissemination and translation paradigm, even as this paradigm enjoys growing enthusiasm and attention. Instead, as I review in the next section, health services experts and their organizations can benefit by pooling their resources to conduct research on the framing of complex debates, forge partnerships with trusted opinion-leaders, and invest in the civic capacity of states and regions.

### **The Framing Contest Over Health Care Reform**

No matter how well articulated or explained, expert findings disseminated by way of social media or news coverage do not speak for themselves, nor will policymakers, stakeholders or publics across different backgrounds interpret, accept or perceive as relevant those findings in the same way. Rather perceptions and decisions will turn on the context and points of emphasis that define communication efforts.

Framing — as an area of research and communication strategy — spans several scholarly disciplines and professional fields. Frames as they appear in media coverage and policy debates can be thought of as interpretive storylines that set a specific train of thought in motion, communicating why an issue might be a problem or pose a threat, who or what might be responsible for it, and what should be done about it. If individuals are given a complex and uncertain policy issue to consider, the different ways in which that issue is presented or framed can result in very different responses, depending on the terminology used to describe the problem or the visual context provided in the

message.<sup>1, 15, 39</sup> Framing strategies are typically used by political leaders and activists to emphasize their differences and to mobilize a base of support around strongly held core values and ideologies.

For example, in the debate over health care reform, conservative opponents framed the issue within a larger narrative about liberal big government and out-of-control spending. Framing strategies that called President Barack Obama a “socialist” and warned of a “government takeover” instantly conveyed this strategic meaning. Racial biases and stereotypes similar to those employed in opposition to welfare policies were also applied to the health care debate. In appealing to conservative ideals of perceived fairness or the perceived lack thereof, the Obama administration was defined as pushing for one government giveaway after another to underserving “freeloaders” even as the deficit and debt kept climbing. The phrase “Obamacare” not only easily personalized the issue for conservatives, but the term also resonated with suspicion that Obama favored policies that “unfairly” benefited underserving poor blacks, Latinos, and illegal immigrants over hard working whites.<sup>40</sup>

The fairness message strategy was outlined in a May 2009 report by Frank Luntz, who also recommended that conservative leaders emphasize how “politicians,” “bureaucrats,” and “Washington” would deny Americans individual freedom to choose their healthcare. “It is essential that *deny* and *denial* enter the conservative lexicon immediately because it is at the core of what scares Americans most about government takeover of health care,” wrote Luntz. “Takeovers are like coups—they both lead to dictators and loss of freedom.”<sup>40</sup> Sarah Palin’s later reference to “death panels,” and the media attention it sparked, provocatively triggered these underlying concerns about loss of personal freedom and control.

The Obama White House and political allies responded to the “fairness” framing strategies of conservatives by emphasizing not just the plight of the 30 million Americans without health insurance, but more importantly, the severe risks and escalating costs faced by all Americans who already had health coverage. President Obama also emphasized that the bill was not based on a liberal agenda but on bipartisan ideas and proposals, notably the Massachusetts health care model.<sup>41</sup>

As the White House repeatedly explained, the legislation would mean that every relevant stakeholder would take responsibility for the costs of health care, adding to the emphasis on fairness in a way that might appeal more effectively to Republicans. To underscore this point, the White House frequently cited former Republican Massachusetts governor Mitt Romney, who called his state’s version of health care “the ultimate conservative idea, which is that people have responsibility for their own care, and they don’t look to government ... if they can afford to take care of themselves.”<sup>41</sup>

To create a common enemy that transcended partisanship, the White House also consistently sought to criticize the health insurance industry. As President Obama

emphasized in a 2010 national televised address, with health care reform, it would be against the law for an insurance company to “drop your coverage when you get sick or water it down when you need it the most....because in the United States of America, no one should go broke because they get sick.”<sup>41</sup>

For health services experts, framing is an unavoidable reality of the communication process, especially for those seeking to engage policymakers and stakeholders. There is no such thing as unframed information, and most successful communicators are adept at framing, whether using frames intentionally or intuitively. Lay publics rely on frames to make sense of and discuss an issue; journalists use frames to craft interesting and appealing news reports; policymakers apply frames to define policy options and reach decisions; and experts employ frames to simplify technical details and make them persuasive.<sup>1, 15</sup>

Research on framing is an invaluable tool that can be used by health services experts and their organizations to more effectively communicate the relevance of a problem and why support for policy solutions transcend partisan differences. In this regard, framing, it should be noted, is not synonymous with placing a false spin on an issue, although as was the case in the health care reform debate some experts, advocates, journalists, and policymakers certainly spin evidence and facts. Rather, in an attempt to remain true to what is conventionally known about a complex topic, as a communication necessity, framing can be used to pare down information, giving greater weight to certain considerations and elements over others, thereby communicating personal relevance and shared interests or values.<sup>1, 15</sup>

## **Reframing the Climate Change Conversation**

Studies funded by the Robert Wood Johnson Foundation on the framing of climate change can serve as a model for similar research on complex health services issues and problems.<sup>42</sup> In these studies with my collaborator Edward Maibach and several colleagues, we investigated how the public understands climate change and fossil fuel dependency not as environmental problems or political debates, but as public health threats.<sup>43-45</sup> Our goal was to inform the work of public health professionals, municipal managers and planners, journalists, scientists, and other trusted civic leaders as they seek to engage broader publics on the health and security risks posed by climate change. In doing so, we have applied our findings to the development of educational materials, workshops, and strategic planning initiatives for organizations working across these sectors.<sup>46, 47</sup>

We started with the assumption that re-framing climate change in terms of public health stresses climate change’s potential to increase the incidence of infectious diseases, asthma, allergies, heat stroke, and other salient health problems, especially among the most vulnerable populations: the elderly and children. In the process, the public health frame makes climate change personally relevant to lower socio-economic,



minority, and under served public by connecting the issue to health problems that are already familiar and perceived as important. The frame also shifts the geographic location of impacts, replacing visuals of remote Arctic regions, animals, and peoples with more socially proximate neighbors and places across local communities and cities. Coverage at local television news outlets and specialized urban media is also generated, expanding the focus beyond prestige outlets like The New York Times or National Public Radio.<sup>15, 47</sup>

Efforts to protect and defend people and communities are also easily localized. State and municipal governments have greater control, responsibility, and authority over climate change adaptation-related policy actions. In addition, recruiting Americans to protect their neighbors and defend their communities against climate impacts naturally lends itself to forms of civic participation and community volunteering. In these cases, because of the localization of the issue and the non-political nature of participation, barriers related to polarization may be more easily overcome and a diversity of organizations can work on the issue without being labeled as “advocates,” “activists,” or “environmentalists.” Moreover, once community members from differing political backgrounds join together to achieve a broadly inspiring goal like protecting people and a local way of life, then the networks of trust and collaboration formed can be used to move this diverse segment toward cooperation in pursuit of national policy goals.<sup>15, 47</sup>

To test these assumptions, in an initial study, we conducted in depth interviews with 70 respondents from 29 states; recruiting subjects from 6 previously defined audience segments. These segments ranged in a continuum from those individuals deeply alarmed by climate change to those who were deeply dismissive of the problem. Across all six audience segments, individuals said that information about the health implications of climate change was both useful and compelling, particularly when locally-focused mitigation and adaptation related actions were paired with specific benefits to public health.<sup>43</sup>

In a follow up study, we conducted a nationally representative Web survey in which respondents from each of the 6 audience segments were randomly assigned to 3 different experimental conditions allowing us to evaluate their emotional reactions to strategically framed messages about climate change. Though people in the various audience segments reacted differently to some of the messages, in general, framing climate change in terms of public health generated more hope and less anger than framed messages that defined climate change in terms of either national security or environmental threats. Somewhat surprisingly, our findings also indicated that the national security frame could “boomerang” among audience segments already doubtful or dismissive of the issue, eliciting unintended feelings of anger.<sup>44</sup>

In a third study, we examined how Americans perceived the risks posed by a major spike in fossil fuel energy prices. According to our analysis of national survey data,

approximately half of American adults believe that our health is at risk from major shifts in fossil fuel prices and availability. Moreover, this belief was widely shared among people of different political ideologies and was strongly held even among individuals otherwise dismissive of climate change. Our findings suggest that many Americans would find relevant and useful communication efforts that emphasized energy resilience strategies that reduce demand for fossil fuels, thereby limiting greenhouse emissions and preparing communities for fuel shortages or price spikes. Examples include improving home heating and automobile fuel efficiency, increasing the availability and affordability of public transportation, and investing in government-sponsored research on cleaner, more efficient energy technologies.<sup>45</sup>

### **Recruiting Opinion-Leaders to Span Knowledge and Perception Gaps**

If health services experts adopt research techniques similar to those reviewed on climate change, the next challenge will be to spread conversations about health care-related issues that employ preferred frames of reference. In this regard, identifying and recruiting opinion-leaders across sectors and social groups will be important. Opinion-leaders are everyday individuals who have a stronger motivation for information specific to a health care services-related issue, and who have a special ability as a trusted source to share that information with others. Opinion-leaders rarely hold formal positions of authority and instead prove influential by way of their greater attention to a topic, their knowledge, and their strength of personality and experience in serving as a central go-between for information among their large network of core and loose ties.<sup>17,48</sup>

As a combination of these traits and behaviors, opinion-leaders not only help draw the attention of others to a particular issue, action, or consumer choice, but perhaps most importantly, signal how others should in turn respond or act. This influence may occur by giving advice and recommendations, by serving as a role model that others can imitate, by persuading or convincing others, or by way of contagion, a process where ideas or behaviors are spread with the initiator and the recipient unaware of any intentional attempt at influence.<sup>17,48</sup>

Opinion-leaders can also bridge online audience gaps by passing on and sharing news and information about a health services related issue that their peers would otherwise never be exposed to. This is especially important in coordination with major focusing events or outreach campaigns such as the release of a new government report; a local event or political decision; a pending national decision; or within the context of a primary or general election. Through conversations and social media, opinion-leaders can also serve as direct peer-educators, informing and instructing their friends and family on how to engage in different forms of participation. For low income and underserved populations, they can additionally break down competency gaps in the use of digital technology by modeling the use of mobile and hand-held devices or by teaching others how and where to access quality information sources and digital tools.<sup>17,48</sup>

In using opinion-leaders in outreach efforts, consider the strengths and weaknesses of how they were employed by former Vice President Al Gore's We Can Solve It campaign on climate change. In 2008, Gore announced in a *60 Minutes* interview that he would embark on a three-year television advertising campaign, designed "to recruit 10 million advocates to seek laws and policies that can cut greenhouse gases." Spending more than \$100 million across 2009 and 2010, the campaign featured strategically framed TV ads that asked audiences to visit the campaign's web site, the main platform for putting into action recruited opinion-leaders.<sup>17,48</sup>

The major "ask" at the site was for visitors to sign up to be part of the campaign's action e-mail list so that "your voice can be heard." Immediately, for visitors, the most visually prominent feature of the site was the pop up projection of a fellow everyday opinion-leader, telling visitors in his or her own words why they need to get involved and/or explaining a feature of the site. Also prominent on the front page of the site was statistical information on the number of people to date "who want to be part of the solution" on climate change. The web site also featured a social networking component like Facebook, where visitors could create a profile, friend other people, write blog entries and letters to the editor, create groups, and attempt to organize local events in their community. These action alerts were coordinated with either a major vote in Congress, a major speech by Gore, or, for example, the launch of a new commercial during the August 2008 Olympics broadcast. As an incentive for contacting other citizens, participants who successfully encouraged 40 friends to sign up through word of mouth, forwarded emails and/or other social media actions were named a "WE leader" and given "access to special information." The campaigns also launched their own Facebook application, where participants (referred to as Climate Champions) who signed up fellow Facebook "friends" could earn points that donors would then match as financial contributions to the campaign.<sup>17,48</sup>

Yet the We Can Solve It campaign was likely limited because of an almost exclusive emphasis on online interaction and opinion-leader influence. Relying on digital connections and recruitment is appealing because of the relative ease in which organizers can develop metrics to measure success. Yet ease in tracking data does not equate to effectiveness, and health services experts and their organizations should be careful not to over-rely on digital networks, especially in place of face-to-face influence.<sup>17,48</sup>

Surveys show that Americans still prefer their recommendations via verbal interaction and there still does not exist strong research on whether or not the self-selection biases of the Web can be overcome within digital networks. Second, with strong selectivity bias online, exclusively relying on digital interaction might also result in ideological reinforcement and intensification of beliefs about an issue, which may

eventually limit the willingness of recruited opinion leaders to compromise on pragmatic policy solutions. Moreover, if the “weak ties” of digital interactions lack the strength of traditional opinion leader influence, then time and effort spent online by digital opinion-leaders may be far less effective than traditional face-to-face influence. The danger of relying too heavily on digital organizing is that it might create a false sense of efficacy among participants, with activists believing they are making a difference on climate change, when impact may be limited at best.<sup>17,48</sup>

Given these considerations, future research on opinion-leaders and their relevance to outreach efforts specific to health services issues should examine under what conditions or with which demographic segments digital opinion-leaders can be effectively used, and in which ways online interactions can build on real-world ties. Combining digital organizing with face-to-face interaction by using smart phones, for example, is a strategy that future research should explore more closely.<sup>17,48</sup>

### **Health Services Experts as Honest Brokers**

Apart from applying framing research and recruiting opinion-leaders, health services experts and their organization can also enhance their effectiveness by actively seeking to expand the range of policy options considered on an issue. As the University of Colorado’s Roger Pielke Jr. has analyzed in evaluating science policy debates, instead of allowing their expertise to be used in efforts to promote a narrow set of policy approaches, experts and their institutions should instead strive to be “honest brokers,” expanding the range of policy options and technological choices under consideration by the political community. On complex, often divisive problems like health care, the broader the menu of policies under consideration, the greater the opportunity for compromise among decision-makers and the less likely that polarization is to occur on an emerging issue.<sup>19, 20</sup>

Pielke’s analysis is consistent with the findings of research on how cultural worldviews intersect with the policy choices proposed relative to a complex risk-related subject. In this research by Yale University’s Dan Kahan and colleagues, the acceptance of expert advice is strongly dependent on the proposed policy actions linked with that advice. Consider the controversy across states over mandatory HPV vaccination versus the relative lack of controversy over mandatory Hepatitis B vaccination. As Kahan relates, the manufacturer of the HPV vaccination applied political pressure on the Federal government to “fast-track” the addition of the vaccine to routine immunization schedules that required visibly contentious actions by state legislatures. The competing frames offered by interest groups, elected officials, and experts triggered the type of perception gaps that have derailed consensus on climate change, stem cell research and health care reform. In comparison, the Hepatitis B vaccine was never fast-tracked and instead was slowly introduced by regulatory and administrative agencies, maintaining a much lower profile than HPV vaccination and thereby insulating the issue from conflicting cultural and political cues.<sup>8, 49</sup>

If we apply Pielke and Kahan's reasoning to future debates over health care services, it follows that broad-based public support will depend on safeguarding what Kahan refers to as the "risk communication environment." This means not allowing a social problem or trend to be exclusively defined in terms of a specific legislative bill or regulatory action; or in relation to the goals of a specific ideological group. As honest brokers, health care services experts and their organizations should pro-actively encourage journalists, policymakers, and the public to discuss a broad menu of options, rather than tacitly allow (or sometimes promote) efforts by activists, bloggers and commentators to limit debate to just a handful of options that fit with a specific ideology and cultural outlook.<sup>19, 20</sup>

### **Investing in Regional Civic Capacity and Deliberation**

Yet preventing health care services debates from being re-defined in politically divisive terms will also mean investing in our civic capacity to discuss, debate, and participate in collective decisions. In this regard, U.S. universities and other research institutions can serve a vital function by facilitating public dialogue about health care problems and trends, by working with philanthropic funders and community partners to sponsor local media platforms, by convening stakeholders and political groups, and by serving as a resource for collaboration and cooperation. In fact, cities and local regions are the contexts where we can most effectively experiment with communication initiatives that challenge how each of us debate, think and talk about the future of health care. In these forums, new cultural voices can be heard, new cultural framings and meanings emphasized, and innovative policy approaches discussed. By building up our local and regional communication capacity, we can also start to set the conditions for eventual change in national politics, by rewiring our expectations and norms relative to public debate; and by forging relationships and collaborations that span ideological differences and cultural worldviews.<sup>20</sup>

Face-to-face dialogue should be complemented by online media forums and news services that bridge, blur and add context to perspectives on health care trends and problems; expanding discussion of policy options and solutions; and thereby offering an alternative to the moral outrage that dominates much of our media. As regional newspapers suffer financially and cut coverage of public affairs generally and health care problems specifically, new forms of non-profit, university-based media platforms will be needed if regions of the country are to have the civic capacity to make informed decisions and choices. A leading university-based prototype that can be adapted to the health care sector is *Ensia*, a foundation-funded web magazine launched by the Institute on the Environment at the University of Minnesota ([www.ensia.com](http://www.ensia.com)). The online magazine's mission is to use news, commentary, and discussion to identify and inspire new approaches to climate change and other environmental problems. To do so, *Ensia* features reporting by top freelancers; commentaries by experts and

thought leaders; and a TED conference-like event series that is broadcast and archived online.

These types of regional initiatives that embed health services experts within a conversation among journalists, stakeholders, and members of the public are consistent with the tradition of community-based participatory research (CBPR) initiatives in public health. CBPR methods, such as carefully organized and evaluated public forums, provide a means to effectively and efficiently gather input and foster participation from groups with varying values, concerns, and levels of expertise. Long term planning related to health care services will require careful consideration of matters related to ethics, values, equity, social justice, and economic trade-offs -- questions too important and complex to leave to experts or government officials alone and that necessitate active input and participation from stakeholders and the public. In contrast to the translation and dissemination paradigm, the CBPR paradigm focuses on an equitable, two-way interaction between experts and communities, rather than a one-way expert led communication approach in which experts attempt to broadcast their knowledge to passive lay audiences.<sup>1, 45</sup>

Past research on CBPR approaches and similar initiatives focused on environmental and science-related issues show that organized deliberation and discussion can lead to a number of important outcomes including reducing polarization among participants, enhancing complex forms of knowledge and trust, increasing a sense of efficacy that problems can be solved and that participants have control over decisions, and promoting perceptions of fairness, transparency and justice. In sum, by shifting from the focus of one-way dissemination and translation of expert views by way of social media and other platforms to a focus on institutionally-led investments in the civic and media infrastructure of states and regions, experts will be able to apply their communication training and enthusiasm for public outreach to a process much larger than conveying their single voice or perspective.<sup>1, 45</sup>

## **Conclusion**

In this paper, I have reviewed a number of the weaknesses of today's dominant dissemination and translation paradigm, highlighting alternative strategies and investments supported by insights from science communication research and related fields. They include investing in new frames of reference and cultural voices; pro-actively widening the menu of policy options considered; protecting an issue from becoming easily politicized; and investing in localized public and media forums that provide context on health care problems and trends and bridge perspectives.

Yet despite the evidence supporting the efficacy of these communication strategies, the application of research-based principles to health services-related issues does not guarantee the avoidance of conflict or polarization. Research findings such as those related to framing are often messy, complex, and difficult to translate into

practice. They are also contingent and subject to revision based on new research; changes in the dynamics surrounding an issue; or in applying across issues and social contexts. Moreover, no matter how knowledgeable and adept the health services community might be in applying research-based principles to their engagement efforts; resolution of intensely polarized debates take years, if not decades to resolve; and requires the different sides in a debate to give ground, negotiate and compromise.<sup>20</sup>

In the ongoing debate over how to manage and pay for health care costs, the main drivers of eventual resolution and agreement are most likely to be deeper changes in the political system; demographic and social trends; external shocks such as economic recessions; and/or breakthroughs in technologies and delivery systems. Applying insights from science communication and other disciplines can help accelerate this long-term process in incremental ways but by no means should be considered a silver bullet solution.

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