Defining the Authority of Online Providers of Health Information

April 5, 2021

RAYNARD S KINGTON

Hello, and welcome to the National Academy of Medicine webinar to gather information for the NAM project on principles for defining and verifying the authority of online providers of health information.

I'm Raynard Kington, and I'm head of school at Phillips Academy in Andover, and president emeritus of Grinnell College, and chair of the Project egHh27.953 hd (iTj1.953t)7(ri)0oTrfu5 0.000 Tw 50.0d0 Td[(cf)1 (sch[3 Td[]TJ

I am joined today by fellow members of the Advisory Group. First, Stacey Arnesen of the National Library of Medicine; Sylvia Chou of the National Cancer Institute; Sue Curry, University of Iowa (emeritus), David Lazer of Northeastern University, and Antonia Villarruel of the University of Pennsylvania. We are grateful to have this opportunity today to hear feedback on this important project.

Some health housekeeping items for today's session: First, please pay close attention to the chat box for logistical announcements; note that the chat box is disabled for audience use. Members of the audience should use the Q&A box to enter questions for the speakers and feedback for the advisory group. Today's webinar will be recorded, and the recording and slide presentations will be posted on the project web page. You'll receive an email notice when these materials are available.

I would also like to note that the NAM is hosting a public-comment period on the project starting today through midnight Eastern Standard Time on Friday, April 9. We encourage you to view our preliminary discussion document, which is at NAM.edu/AuthoritativeHealthSources (all 1 word),

Finally, we will hear from Zeynep Tufekci of the University of North Carolina, who will outline some of the unintended consequences of large-scale content-curation strategies.

Following these presentations, we will have a discussion with the Project Advisory Group. Starting off, let me hand off to Dr Graham.

GARTH GRAHAM

Thanks Dr Kington. I'm going to try to do a quick overview of how we came to this: some of the background of activities that we've been doing and working on, how we came to this discussion, some of the points to be taken away from this discussion, and really talk a little bit about what YouTube has been doing in this regard around getting information out to the public, particularly information that that is relevant, scientific, and engaging. Next slide, please.

So, the overall goal here, and why we engage with National Academies and the community that you're all a part of in this discussion, is really around increasing the accessibility of authoritative health information that says, in simpler ways, “How do we get good information to people?” and

making sure that information is scientific and evidence based. It's a complicated process. You're going to hear from all of the speakers about all of these complicated dynamics that go into this, but really the overall goal is to think through, how do we get that information to communities and especially communities that need it the most. Next slide, please.

So when thinking through the opportunity, I always try to think through the scale——and that's part of the opportunities in scale and certainly a lot of the challenges are in scale as well. So on YouTube we're able to reach 2 billion logged-in viewers every month. And I often say that the world only has 7 billion people, so it's almost a third of the world population we're able to reach, and, as you can see here, all different kinds of ways in which those folks are engaged at scale. So it's a huge opportunity from a health and public-health standpoint to be able to reach people with type, timely, relevant healthcare and public-health information. Next slide, please.

And one of the other opportunities is that video is able—this again, we're speaking about YouTube context, but I also want you to think about how these platforms in general can reach people—well one of the added

benefits, in addition to scale, is that YouTube is able to take complicated clinical topics and, through the video medium, be able to explain it to people. I often say, you know, who would have ever thought that, you know, messenger RNA would be the kind of thing that you'd want the general public to understand—it's such a complicated technique in terms of developing, or development around that technique—and the truth of matter is video allowed us to be able to explain that, and explain that at scale. So video allows us to take complicated topics and make it digestible, and then the platform makes it accessible, and then this idea of the way you create the video is about how you make it culturally competent, engaging, and able to reach communities in general. Next slide, please.

And COVID-19 has been one of those opportunities that has allowed platforms like ours to be able to evolve and change quickly to meet the dynamic needs of a lot of what's needed to be delivered to communities, but also to be able to evolve our process to make sure we're meeting the needs of communities overall. As you see here, you know, with COVID-19 information, we are able to reach out to 400 billion impressions in terms of reaching people across the world, as particularly with engaging content.

But we also looked at how we evolved our processes even further, to be able to steer people away from issues related to misinformation. This snapshot, this graphic that you see at the top, is one of the Business Insider articles that just recently came out showing, culling, referring to some of the evidence that culled together how, especially more recently, the algorithm was able to steer people away from anti-vaccine videos. Now, truth of the matter is, that is an ongoing challenge, and I think, hopefully, you'll hear from some of the speakers here today about some of the prior times, especially with how algorithms can be challenging, but this is an example of just showing you how this has evolved, especially for us over a time, and now we're able to kind of move into a different phase and where we steer people more towards correct information.

We've also, um, I come from a background around Community health and social determinants of health, and we were very concerned with making sure that we were reaching communities, particularly communities who need this information and who were on the platform. And we partnered with the Kaiser Family Foundation, the Black Coalition Against COVID, Tulane University, actually some of the doctors, the Black doctors from the National Academy of Medicine, and others to be able to figure out and

create the kind of information that can reach local communities through this platform. There are a lot of different ways to reach communities; it’s not the only way—there's a lot of things that need to also happen on the ground ,

One of the things that we've developed is a strategy for how do you deal with both misinformation, but more importantly, how do you proactively raise information. And for the purposes of what we're going to be talking about in this webinar today we're really going to try to delve a lot more in this issue of raising information, meaning how do you lift up the scientifically engaging information. You're going to hear from somebody who I consider kind of a hero in terms of the work that she's been doing with Lisa's work and others about how, you know, people are working with communities to adequately reach communities and raise information—that's one strategy. But we also have been practically working as a secret before, particularly as it involved our COVID-19 policies around removing and reducing information. And this is an ongoing issue. It’s not meant to say that the challenges are solved, but as you saw from some of the more recent data. And a lot of that is being thought through in a different realm in terms of how we kind of tackle that and make sure that we are approaching that effectively. We

here is to both engage National Academy of Medicine, and actually through this webinar, engage folks in the community to both understanding the challenges, but much like you see with heroes like Lisa Fitzpatrick, how people are able to focus on raising that information and getting that information out to communities appropriately. So

up for, you know, a community member, a user,

different kind of choose and credibility markers to be able to identify and showcase that. Next slide, please.

So alright, our ask and really the focus of the discussion: When you think about information, information dissemination, especially the information dissemination on a very big scale out to the public through platforms like ours, there is, it's a lot of different things we could talk about. And you know, when we were first engaging in this discussion with National Academies and I'm saying, you know part of part of my prior experiences, and I think, including folks on the committee, is when you have big problem you got to think through bite-sized chunks, like what are some of the things that we can work on and solve. I know I think about this issue around information and information dis (i)0.8 (on)]TJ(e c)4.1 (an w)2.9 r.3 (ces)4.2 (0.2

And I think my last slide… next slide, please… is going back to just the part of Summary. And we have this slide here twice to emphasize: The question around today is our own definition and categories of sources, high-level definition of methodologies for authority definition and the verification, and how do we then raise this information. I like to say that, you know, it's like a garden. When you think about health information, how it's out there in the world, you have a lot of misinformation and those are the weeds. And we need to pull out the weeds from the garden, but if you don't put something else back in there, then things proliferate because people are asking questions. So how do we fill in the garden with the right kinds of information, the eviden8u-3 -2.3 Td Tc 0 Tw.3 (b8 (3py.3 (b80.002 a2s t)1 ut)

that social media has caused the problem. Social media did not cause political polarization. It did not cause vaccine hesitancy. It may contribute to those problems but that's a more subtle point. So it's always important to remember that social media is going to reflect what's happening in the world. And that's a point that platforms, I think, often get hung up on and get defensive about, so I think we should stipulate to that point.

The second stylized fact, which I'll share some research supporting with you, is that most people are not in so-called echo chambers of like-minded information. When people think about the problem, that interventions like what's being proposed are intended to address, that's often what they have in mind—that people are going to online sources and they're getting untrustworthy information, particularly untrustworthy information that seems to reinforce their predispositions, whether it's about health or about politics. I'll share research with you suggesting that that kind of behavior seems to be relatively rare from the best digital behavioral data that we have. However, there are small minorities of people who are deep into those kinds of digital echo chambers. And I would encourage us to separate that problem, and that small minority of people who may be consuming a lot of untrustworthy information, from the broader problem of

people going online who don't consume large volumes of belief-consistent, untrustworthy information but would like to get authoritative information when they do. Those are separate and distinct problems, and we should really think about those. You know, kind of the marginal viewer at each group is being someone quite different and the right intervention for one group may not be the right intervention for the other. And I think it's worth keeping that in mind as we think about interventions like elevating authoritative sources.

The final point is that even though social media platforms get blamed for reflecting problems, it is absolutely true that they do often amplify problematic content and that content can be harmful. We're in the midst of a deadly pandemic; people may be distrusting vaccines because of what they see on social media platforms. For instance, on the margin, right, even if platforms didn’t create vaccine hesitancy, there's the potential for real-world harms. So platforms do need to take responsibility for those harms and intervene to address them. Next slide, please.

Okay, so on the first point, that platforms get blamed for problems that exist in the world, I'll just give you one example. This teenager, who

testified before Congress a couple of years ago, and attributed the fact that he had not been vaccinated to Facebook. But he was 18 years old at the time, Facebook—at the time when his mother was making choice about whether to vaccinate him according to the recommended schedule—Facebook didn't yet exist as a general public service. It was still limited to higher education. So there's no plausible scenario where his mother was not vaccinating him because of what she was seeing on Facebook. In fact, vaccine hesitancy long predates the rise of social media. Again, that doesn't mean that there's not a problem, but it's a more specific and subtle problem than simply Facebook causing vaccine hesitancy or something like that. This is a much more general problem; it's not one that's closely linked to the rise of social media. Next slide, please. And that same principle applies to problematic content on YouTube, by the way.

Now, what is the problem? Well, one concern people have p0.8 (em)2.4 (a 002 Tc -pa

pages in their browser.

but really it's a small minority of people who are doing the bulk of its consumption, and that's a theme that will reoccur here. Next slide, please.

We then looked,

even for that group the mean of volume of that content was very low, and in fact lower than content that wasn't skeptical about vaccine safety and efficacy. So there was no evidence of widespread consumption of anti-vaccine content, at least when it came to people's web-browsing diets. Okay, so that problem, to the extent it exists, is probably more subtle than just where people are getting their information online and what they're seeing. Next slide, please.

Most recently, my coauthors and I looked at exposure to alternative and extremist videos channels on YouTube. So these are channels that subject-matter experts and scholars had identified as either being alternative in the sense of being potential gateways to harmful content or extremists in the sense of being outright white supremacist or other kinds of really problematic content. And what we found was that about 2 in 10 of the participants we were able to recruit to install this web browser extension that visited at least one video from an alternative channel in about six months in 2020 and a little less than 1…

Oh, in fact I don't have the slide I'm thinking of, so let me just tell you that more than about 80% of the consumption of alternative videos came from about 10% of our users, and the concentration was even more extreme for those extremist channels that I was describing. So again, there's a small percentage of people consuming a lot of potentially harmful content. The reason we might be worried about this are the predispositions that people bring to bear. You can see here that people who scored in the top third of the US population in the levels of racial resentment they express, using a standard survey scale and political science, their mean consumption of these types of videos was much higher. And, you know, something like 90% of the views of videos from these channels came from people with high levels of racial resentment. So again, small group consuming a lot of potentially problematic content. Next slide, please.

Now we know that platforms can play an important role in directing people to these kinds of content. The box, which is a little messed up, on the left there just shows that Facebook stood out as a site that people were

websites during the 2016 election. We didn't see similar evidence for the vaccine…. for the vaccine-skeptical websites, however. Next slide, please.

Most importantly, because we're talking about YouTube, I want to note two findings about YouTube from that study. The first is that recommendations to these alternative and extremist channels were quite rare for our participants. You can see they made up fewer than 2% of all the recommendations they were shown. However, for people who were viewing videos from those channels, they made up a substantial fraction of the recommendations they received. So among people who would seek out those kind, that kind of content, they were potentially getting recommendations for more similar content. So it's not the simple rabbit-hole story of you're watching a cat video and something terrible happens, but nonetheless, those recommendations are being offered once you're viewing that kind of content. And we need to worry about that in the health domain as much as we need to in the domain of potential extremism. Next slide, please.

So I very much agree with the need to highlight and trust authoritative sources, and I'll just add it would be very helpful if they were trusted

sources. So just an example here from polling on the coronavirus, that Anthony Fauci is actually more widely trusted than the CDC itself, according to the polling data from Morning Consult and Politico (on the left). And, similarly, an experimental study found that a Fauci endorsement of, at that point, a hypothetical vaccine was overall the most effective at increasing willingness to take a vaccine and confidence in the safety and effdefe.4 ,n2afauci

take down or not take down

more subtle than people think, but these

Pennsylvania. But the bulk of our work has been in Washington, DC, and on some of our virtual work we've had people from outside this area. But largely I'll be sharing perspectives from people we've talked to in underserved communities here in DC. But because of the lesson, the lessons we've learned today, I want to challenge the notion about who is and who isn't a credible messenger. And many of my comments will reflect back to you the questions and concerns raised from the community of our trusted and credible sources of, of information—health information. Here, and next slide.

And here is an overview, an overview of what I will cover today. I'll say a few words about how the community used traditional science messengers, let you hear directly from the community, and then I'll reflect on some of the highest priority lessons learned and offer recommendations about how we might better establish credibility, authority, and trust in the delivery of health information. Next slide.

But, before turning to the community voice, I think it's important to share a few observations from the community about traditional messengers like our government agencies. Many people we've interacted with remain

deeply skeptical of government agencies, and as a scientist and clinician it's humbling to hear how little people understand about the importance or the functions of these agencies. And I can't recall anyone being able to distinguish CDC from NIH or even broadly describing FDA’s role in science. And, while some have come to know and even love Dr Fauci as we just heard, they believe he's the CDC director, and that CDC makes vaccines. In addition, responses from traditionally authoritative sources like CDC can be vague and generalized, and because they lack specificity this exacerbates distrust. Next slide.

I wanted time to community voice, so the remainder of my talk will really focus on what we're hearing in the community: what we've heard during the pandemic. But to be honest, my work focusing on health literacy and community advocacy, patient engagement, has reflected a lot of the same things we are seeing now, which are exacerbated during the pandemic. So my team at Grapevine, including several doctors, and I'll highlight doctor Fabian Sandoval who you can see in the picture at the very top; he communicates with community members in Spanish, and this will become a growing component of the work we do. And because of that, because of the work he's doing in the LatinX community, we think there's a need for

us to expand his work, especially outside

information, I'm looking for my *own* information.” In other words, he needed to vet the information amongst his credible sources. Next slide.

wrong, and what are missed opportunities to address the misinformation and skepticism you'll hear? Next slide.

[audio clip 1]

PODCAST INTERVIEWEE #1

What do we do when we get in the community? You go out in the community, you talk to the people that's out there and tell them what you're trying to do, and you try to bring them in, because they are the people they’re gonna listen to. If they, or somebody outside tell them the sky is blue, trust me, they’re gonna believe the sky is blue, ‘cause that’s just how people are. What I’ve encountered, I don’t have to believe nothing you saying; but if I like you, and my friend like you, we’re going with you, because we like you. It don’t matter if you right, we just like y don’t re go( )6(re

So when you hear health information on the street, how do you decide if you trust it? I heard you say, if you like the person, you believe what they're saying. But really, if you're trying to decide if, if you trust the information, how do you decide that?

PODCAST INTERVIEWEE #1

Oh well me, I research. I don't listen to what nobody says, really at all.

PODCAST INTERVIEWER

Where do you do your research? How? What's your process?

PODCAST INTERVIEWEE #1

I Google it. I ask around…

PODCAST INTERVIEWER

Who are you asking?

PODCAST INTERVIEWEE #1

Whoever say they encountered it. I’m asking everybody, “Did you ever do this before? Does this ever happen to you?

Oh I go to the library. And I call my mom because my mom is very resourceful.

[end audio clip 1]

[video clip 1]

LISA FITZPATRICK

Where do you get your information?

PANELIST #1

I get my information from media. It could be… I try… or the news. I don't really believe the news because they don't really tell the whole story. I really don't try to obtain information unless it's a health issue that's regarding me. I'm really connected with my doctor. I've had the same physician since I was 13, and I went to talk with her, and I felt like she just blew me off. I may look into… And I like to also cross-reference information because if you see something or hear something, it doesn't mean that it's accurate unless it's coming from… even if it's coming from a good source like a news channel.

So with the COVID, I see stuff but I’m not really… I’m not interested in receiving the vaccine. I’ve experienced it for myself, because I’ve had COVID, so my information is going off of me; because I actually had it and it didn’t affect me. Not to say that it can’t, or I’m invincible, but it’s just that I don’t take it that seriously. So I’m not looking for information. I don’t even like watching the news, actually.

LISA

read that they went from 6 feet to 3 feet. And I just feel like they're just, I kind of felt like it’s planned, like everything in this world is planned.

[end video clip 1]

[video clip 2]

LISA FITZPATRICK

So if you get a COVID-19 test, what does it mean if it's negative?

WOMAN ON STREET #1

If it's negative, that means you got a problem. That you need to go to the doctor and see what's going on, if the COVID-19 is negative.

WOMAN ON STREET #2

Me personally, I don't know if it’s real … I don't know because with all the politics and everything that was going on with Trump … Personally, I feel that government sometimes oversteps its boundaries. Always felt that way. And I, sometimes I think that this is a scare tactic. I hate to say it, but I think they’re just exempting people because they can … My brother-in-law that died, not until he got in the hospital did they say he had COVID. And wasn’t nothing wrong with him. The other person I know that they said

died of COVID was feeling fine until they went into the hospital. I asked doctors, I said, “Is it real?” They said they don't know.

LISA FITZPATRICK

Really? Well, I'm a doctor and I will tell you it is real.

MAN ON STREET #1

They don't have a plan. I’m a let you know that.

LISA FITZPATRICK

Who doesn't have a plan?

MAN ON STREET #1

The FDA.

LISA FITZPATRICK

Oh.

MAN ON STREET #1

They don't have a, they don't have a serious curricular plan, for real.

LISA FITZPATRICK

Do you want to get the vaccine?

MAN ON STREET #2

At no time. I'm good.

LISA FITZPATRICK

Why not?

MAN ON STREET #2

Why should I get something that I don’t know the side effects. I might die in 30 days or 40 days.

LISA FITZPATRICK

So tell me: What questions you have about the vaccine?

MAN ON STREET #2

What's the side effects? What do it does? Who took it, and they still alive? So you was a crash dummy when you took that test.

LISA FITZPATRICK

I did.

LISA FITZPATRICK

And do you know where to get information about the vaccine?

WOMAN ON STREET #3

Um, I can Google it. I can get it from my health care provider.

LISA FITZPATRICK

Okay! Thank you so much.

WOMAN ON STREET #3

You’re welcome.

[end video clip 2]

LISA FITZPATRICK

So I chose these video clips because they were most instructive and

I'm going to also say, I think, there's a notion among academics and policymakers that the digital divide affects people's access to information, but our research shows, and these conversations like the ones you've heard,

truth versus information they should trust? And ideally, we could achieve both. And, finally, people feel distrustful and disconnected from these credible institutions. Sure, people respect and listen to Dr Fauci, but even he has about a 60% approval or trust rating. So where are we going wrong? Next slide.

And I'll just end with some recommendations based on what we've heard in the community. The first, I think we have to design our messaging and ensure we are incorporating the voices, the culture, the context for people we're trying to reach. And I have a quote here from someone who told me in the community, when he told me, "Well, I don't understand what doctors are saying. And if I don't understand you I can't trust you." And I think this also applies to our academic and authoritative institutions.

Second, we must bridge trust and credibility through language and dialogue. So what language are we using? Do people understand us? We have a video—you can go to our YouTube page at Grapevine Health and the video is entitled "Do You Speak Coronavirus?" And we did this as a bit of a fun exercise because, as I was listening to the TV doctors and credible messengers on television, they were using words that I suspected

that the community didn't understand. And sure enough, that was borne out in our experience that day on the street. But the broader lesson is, we need to be thoughtful about how we message to ensure we are not isolating and alienating certain segments of the population, particularly those under-resourced and underinvested communities like we're working with. We need to educate people about the roles and responsibilities of these different agencies. People are conflating the work of CDC, NIH, and FDA—and I think that's particularly important for FDA. I can't tell you how many times I've been asked to consult to help agencies and researchers understand how to improve enrollment in clinical trials, or how do we increase the diverse participation in clinical trials? I think it starts with the basics, just helping people to understand and letting them know you want their participation. But also speaking—I can't overemphasize the importance of plain language, and speaking a.4 t7o0.8 (arl)54 (knowa3no-8,a[t)1 (t)1 (

follow up with information that is relatable, understandable, and then provide access so that people can dialogue with us and ask questions so that they understand, I think we'll continue to see this problem.

And finally—next slide—I think my take-home message is: People are on social media. So you heard Brendan said, or Professor Brendan say, social media didn't create the problem; but it certainly is perpetuating the problem. And that's where people are getting their information, so we need to be in those spaces with them and we need to ensure our content is relatable. And that's certainly the path we're now on, and you can find in the upcoming weeks and months as we start to populate our content on YouTube. And I'll just leave you with this quote, “A lie can travel halfway around the world while the truth is putting its shoes on.” And that is never

questions that are being sent in the Q&A will not be answered today. Now let me turn to Professor Tufekci.

ZEYNEP TUFEKCI

Hello.

RAYNARD S KINGTON

Welcome.

ZEYNEP TUFEKCI

Alright, so I'm assuming I'm being heard. So thank you very much. I listened to the previous ones with great interest, and I've been looking at the question and answer too. So I want to start by saying that I want to talk about one aspect of it, which is, well, how do we moderate content that's on the social media sites, and what are, sort of, some of the guidelines? Now to give us a little bit of background, I have previously writt'1 Tw 24.34 (d)]TJ0I hav

the “this is concerning and this has certain effects that are not good for society” side.

But what I want to do here is highlight something that is, that interacts with how these sites operate but is somewhat outside of it, too. But it's going to come back to why and how it's really hard to fix this problem because of the way they operate, because the scale makes it very hard.

So um one thing that's come up is that there's a lot of misinformation or disinformation or incorrect stuff that circulates on these sites. You Google something, you find a lot of things that are somewhat correct, somewhat incorrect, a mix, outright misinformation of confusing, not confusing–so all of those things happen. But the question is: Well, what is the role of authorities in providing the correct information, and what is the role of authoritative sources in defining what can be allowed and not allowed in these sites? I’m going to give an example from what happened recently when Facebook was finally pushed to curb some of the health misinformation on its site. And to be clear, just like YouTube, Facebook and YouTube have been very significant in spreading an enormous amount of misinformation and even amplifying it, both by giving it a space

and also on making it easy for it to be shared, making it easy for sometimes their algorithms amplifying, so this is a problem, something needs to happen. But when you come to “what,” you realize quickly that our existing institutions aren't really equipped to draw those lines. And I'm going to go with Facebook's own guidelines as my example, but the problem is broader than Facebook.

What they decided, when finally, you know, when they were on it to act, was that they were going to take the World Health Organization as the authoritative guideline and basically declare things that were not within World Health Organization guidelines about COVID and COVID vaccines as misinformation and not allow them on Facebook. Now you quickly realize this is not going to be feasible because you essentially have to ban perhaps the first six months of the COVID newspapers—all of them—because the World Health Organization's guidelines, until like a couple months ago, until December of 2020, were saying that people did not need to wear masks separated by 3 feet indoors—I mean like 1 meter. And we know from last year, Dr Fauci was for a long time saying you don't need masks before, you know, that changed. There's a lot of information that has changed in our guidelines. And you might say, well, science got

debate.” And I would say that makes sense, except *where* is that line and *who* decides that line? Who decides which line divides inter-science debate that's legitimate from things that are outside of science and are misinformation? And, as I just gave you as an example, you can’t easily say the World Health Organization guidelines partly because, I mean I'm not trying to blame the World Health Organization here, I'm just saying that's not what they're… that's not what they were meant to do. They issue guidelines, but that doesn't mean that everything outside of those guidelines is not science or is misinformation. That's like, that's not what that institution has been equipped to like distinguish between, “okay, this is valid science or valid scientific disagreement” versus “this is complete misinformation.” So when you come piece by piece into what we keep out, it's not at all straightforward as saying, “Let's go listen to science. Let's go listen to scientists. Let's go listen to authoritative sources.”

Also, further, even for things that I think we can easily say they're outside of science, like I would be comfortable saying that for certain things, they need to be debated and discussed to convince people, because if you basically only completely just try to block it and then you… there's a lot of… like when Facebook tried to clamp down on things, there's a lot of

things where there were genuine attempts to try to convince people about vaccine efficacy and safety that got occasionally, and sometimes very prominently, got nixed from the site because, well, how do you convince people if you're not letting the objections be aired openly? And if you're constantly just saying like "I'm just going to talk and you're just going to listen to me," is not the best way to convince people. And I think the previous presentation was very, very interesting and telling in showing, like, you need to talk to people, and you need to listen to people, and you need to earn their trust, which are not the same as, you know, we're just going to block out everything. Plus, even the Facebook guidelines, for example, I was looking at their guidelines and they had claims like, "Nobody can say the vaccine trials did not have a placebo arm. They were gonna… because apparently that's a, sort of a misinformation talking point that the vaccine trials did not have a placebo arm. So they banned that from their site, but there are current vaccine trials looking at comparing different booster regimes that do not have a placebo arm. So even there, like even Facebook's sort of authoritative health rules, I could immediately spot errors in their health rules, which kind of tells you this is not something easy. And the reason this corresponds to the business-model problem is that we can't… the problem is, if you had a small number of

sources to evaluate, you could maybe do something like, you know, form a reasonable committee of people who would say, “All right, you know what? This is outright grift and misinformation and snake oil” versus “This is inter-science debate where scientists are debating it out,” versus “It’s perhaps okay to try to have this conversation.” But on the scale of Facebook or YouTube where there's, I don't know, last I checked there were like millions of minutes uploaded every second, there's just no way for something to work on the scale of Facebook or YouTube, which creates a huge problem. Their business model would not allow it. Even if you tried to do better at it, it would be at this, I mean for me, and let's just be honest, for YouTube and Facebook, these are costs, this is not how they make their money. All moderation attempts are how they lose money, how they spend money, and if we come up with a plan that drastically ups their moderation costs,

for this. Our authoritative sources, even when they issued guidelines,

I believe that, in most cases, the answer lies in authoritative sources gaining trust of people in an effective way so that they can be what people believe. Like so this is the part where I go back to you know, given all of this, I believe the answer is going to go back to like, how do we convince people that you know the authoritative sources are the right sources, rather than the other way around. So that's kind of where I would like to, you know, we ran a little over time, so I'm going to cut myself short to give the panel the time. It's a big, challenging moment and I just wanted to be the person saying I don't think we have the guidelines we wish we had Thank you.

RAYNARD S KINGTON

Thank you, Dr Tufekci. So we're going to take down the slide and we're asking the panelists to turn on their videos, and then we will start. We'll have some Q&A from the panels.

Let me start asking the first question. Professor Tufekci, while you clearly highlighted just how challenging it is tEMearp with a schearike the one that this is, that is being proposed, my question is, wouldn't it be better—not perfect—but better to elevate, to raise sources that are more

likely to leave this sort of Wild, Wild West that

Wouldn't it be better not perfect, but better than what we

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Because also the CDC and World Health Organization… I just want to make it clear.

relatable, being accessible, really trying to provide the clarity people need so that they feel comfortable. So I think, you know, even though they might not be in a position to make these kinds of decisions, they could at least be in the spaces where people are getting their information and also adding relatable information. I mean, that's sort of my message over and over and over again. People want to hear from these credible authoritative institutions, but the messages we get are sometimes too confusing, too generalized, and they're not useful for people.

RAYNARD S KINGTON

Let me ask Dr Curry. I see your hand up.

SUE J CURRY

Yeah I know Garth came into the chat before I put my hand up, that he had a question, so I'm gonna let him ask his question and then I'll go.

GARTH GRAHAM

Or you know I'm going to defer to you. Please, I'll go after you.

RAYNARD S KINGTON

If Dr Nyan had had any comments. Have you, did you have any comments?

BRENDAN J. NYHAN

Well, look, I guess I would say that I would encourage folks to not reinvent the wheel here. We had this exact debate about Facebook and what a credible source was like four years ago. So it seems strange to me that we're proceeding as if there exists like a list of authoritative sources that one can just like staple on here and solve this problem. But I would try to build on that, I guess. You know, relative to political journalism, there is more authoritativeness. They will sometimes get it wrong. Zeynep is, of course, correct about that. I think we have to live with that, and I think the relative standard of “better than” is fine. But we, it's just thinking about where the takedown policies are being enacted.

RAYNARD S KINGTON

And Dr Curry.

SUE J CURRY

Great, well, thanks. So actually, I have a question for Brendan and, first, I just want to thank the panelists because this was really, really, I mean you all, you know brought your top game today. It was it was really enlightening to listen to you. So, the researcher in me wants to ask this question because you showed a lot of data. It seemed to me that there was this assumption that more consumption is indicative of a stronger belief. So, people who are in echo chambers have stronger beliefs. And I guess what I'm wondering is, if people hear from somebody something that they want to verify, and they go to YouTube, and they find that one video as off the mark, or you know, unauthoritative as it might be, that confirms what they heard, I mean might they just stop there? So is there research to suggest that watching more videos makes you… is indicative of stronger, harder-to-change beliefs?

BRENDAN J. NYHAN

So I'll just respond briefly. That's a hard question to answer causally. So what we're simply doing is describing the consumption behavior and saying

May I add something there? I think the problem that is very hard to measure here, is that, one, the platforms themselves experiment and do A/B tests and other tests, but we don't have access to it as independent researchers. So that's problem number one. Problem number two is that these platforms have changed the whole ecology. So I know, for example, FOX news is competing with Breitbart on Facebook. So even if you're never on YouTube or on Facebook, the FOX news you watch is being influenced by the fact that the whole ecology [inaudible] in different directions. The New York Times is competing with MSNBC in some ways, which is very competing on Facebook. So, if you look just on what happens on YouTube, you'll miss this big very important shift, which is that there's only so many hours in a day, and if a very active, usually like partisans are active, you see this in primary research too, if a very active group is slightly shifting to Breitbart all the time, TV FOX news is going to change to compete with that. And all of a sudden, you think there's no effect when what has happened is that the whole ecology has shifted. And such things are very hard for social science to measure because you don't have a counterfactual Earth—Planet Earth without YouTube and Facebook in which you observe what happened to the static FOX news—

and you're just looking at, as social scientists, we can only look through fairly narrow, kind of, you know, whatever we can do.

RAYNARD S KINGTON

Thank you. I'm going to go next to Dr Chou.

WEN-YING SYLVIA CHOU (NIH/NCI) [E]

Thank you so much. I have one question for everyone and one for Brendan, and they're both quick. I think I hear a lot of repeated is the idea that trust and trusted sources is as important as just determining what's credible and what's authoritative. I'm struggling to figure out how do we take into account this notion of trust in our work, because obviously I understand the need for listening, the need for bottom up—we can't do anything top down, because we will miss a lot of people and we can further exacerbate disparities. So that's one question.

And one for Brendan. In light of all the data that shows that it's a small percentage of people that have gone into these deep rabbit holes or have fallen prey to misinformation, do you see this as a parallel to the way we look at vaccine hesitancy? There's a small group of staunch refusers, and

then there's a group that's undecided but they can be swayed. Because I'm thinking, from our perspective of communication, even all the ways platforms manage, should we think of those as two separate types of users and what do we do about that small percentage that, this is causing a lot of harm to them and, potentially, to the rest of the society? So, however people want to deal with both trust and the small fraction of extremist activities.

RAYNARD S KINGTON

Dr Nyhan, do you want to give it a shot?

BRENDAN J. NYHAN

Sure. So on trust, a simple thing one might do would be, so Facebook, for instance, I know has experimented with crowdsourced trusts in combination with other signals it uses. So one could imagine, for instance, authoritative institutions that have high levels of trust expressed by the public in surveys are gathered in ways that aren't easily gamed or manipulated, which has been a big concern with that kind of rating. Gordon Penny Cook and Dave Aranda have shown that public ratings of

indicators of quality. Something similar might be possible when it comes to health sources to help elevate those that are likely to be trusted and, importantly, as Dr Fitzpatrick reminds, is trusted across our society: trusted broadly, trusted in communities that might be disproportionately harmed or affected. I think there's a lot that, one could do there. It could be your local hospital, it could be, you know there's lots of ways that you could imagine making that more targeted to people's needs in a respectful nonmanipulative way. On the second point, I absolutely agree. I was trying, this is exactly the partition that I was trying to recommend is to avoid making platform policies around the tiny percentage of extremists and miss how you can most effectively communicate with say the marginal vaccinator. Those are, um, the parent who has some hesitancy but we're going to be trying to convince him to vaccinate their kid in a few months, or the adult who's on the fence about whether to get a COVID vaccine now. That's really different than someone who's selectively opting out of childhood vaccines, which is, as you said, under 10% of the population.

with

preventing platforms from being exploited to surface that content to more and more people and potentially harm.

RAYNARD S KINGTON

We have a couple of questions for Dr Fitzpatrick, so Dr Villarruel and then Dr Graham.

ANTONIA M. VILLARRUEL

Dr Fitzpatrick, thank you for your, and all panelists, for their talks. You in particular addressed an issue that I'm concerned about and that's differentiating the messenger from the message. Your work and your organization certainly have worked a lot on the messenger, how do we marry the message and the messengers? We're looking at finding these areas of trusted sources that will promote content on YouTube, specifically since you don't fit. And again, we need to widen the net of hospital based, professions based, librarian based, but again you're a fabulous interpreter. So what are the characteristics of your organization that we should consider as we're looking at trusted sources?

LISA FITZPATRICK

Thank you so much for that question. It's linked to a part of the response I was going to give to the previous question about trust. But first I just want to give a brief

does include the faith community, but that's not the only solution, particularly for black communities. The people we work with, it's rare for a lot of the people we've talked to so far, and we've probably spoken to over 1000 people, it's rare for someone to say, "Oh well, you know I'm getting this information from my pastor," or "I'm getting it from my church." But that is definitely an institution that's important to partner with. But why don't we see institutional partnerships with these social service agencies that have already built trust with the communities, the people who are on the front lines providing social determinants– or social drivers–related services? I think creating, uh, building bridges with those organizations and then helping them to deliver the messages as well because… I mentioned we're doing virtual sessions during the pandemic. This includes for some of these social service organizations, and they are asking for support and for help to be able to explain these difficult concepts to the people they are serving. So I think there is a need and a hunger for this kind of collaboration and relationship. So to me it's a call to action to build that trust.

RAYNARD S KINGTON

Dr Graham.

GARTH GRAHAM

So this is another question for Lisa. I'm going to start by performing a self-critique as I give that question. You know, as someone who had thought he spent a lot of time in research and Chief of Health Services Research, and generally research, I have to tell you, it's one thing to research and write about on issues, but it’s another thing to do

a capacity to have resonance at scale, or is that more of a localized phenomenon and based on who community of folks are used to interacting with?

LISA FITZPATRICK

Well, thanks for that question. I mean the approach we're using at Grapevine Health, it's because of the information we were getting back from the community. They wanted to see people in the community who could answer their questions, and so I think there is a huge opportunity to scale. There are so many doctors leases on the street across the country, and there's a need to rally this group of people. We're calling them our tribe. We're trying to find more people who have, you know, and find time and resources for these people to do this work out in community, but then digitize it. So that's the importance of the videography. So that we're out in the community, answering these questions, educating people, but it's captured on video like one of the ones I showed you. And then we can put it on YouTube and then these other places, but then allow people to reach in and ask questions. I can't overemphasize how disconnected people feel from health and science, institutions, and even healthcare providers.

and health of others, that could be a teachable moment to experience or experiment with something, that… different.

ZEYNEP TUFEKCI

So that's a great question because, again, I kind of try to point the finger at what's missing outside the platforms, not because I don't think there's a problem at hand. But I want to go back to what Dr Fitzpatrick was saying, which is so important, is that we don't have the tools at the scale we need to win the argument. Right? Like, you, I think you can do a lot on like the amplification side and maybe find a way to draw the line a little better and do a lot of these things, but in the end, you need to be able to convince the people by winning that argument. And I've been writing a lot publicly about the pandemic, partly because of weird circumstances. And the number of times, people come to me and say, “This is the first article I read that explained something to me.” And I'm a writer, so I write articles. I'm not going to be able to make TikTok videos, but if I could, I would do TikTok videos, to be honest, because they’re clearly more effective in that there's so much basic stuff, like really basic stuff, that we haven’t done the outreach on. And I don't care how many nice guidelines and papers you have, somebody needs to explain what on earth does vaccine efficacy

mean. And just, I write it, and I have these very grateful people saying “thank you for explaining to me” from all over the country. And I'm kind of wondering. I'm not doing something magical here; I'm just saying wait, this isn't being explained well. And that's just in writing. Like the amount of video you can do, the amount of sort of what Dr Fitzpatrick is saying, like the CDC isn’t equipped for this. I'm not blaming them; it's, you know, created so many years ago. But this is the 21st century, and we need to update these things and say how do we make them step into the space and win that argument? Because in the end, that's what's going to work more than everything else, I think, combined. Not that there isn't...

WEN-YING SYLVIA CHOU (NIH/NCI) [E]

Yeah, effective science communication, right?

Raynard S Kington

I’m going to have to shut off. Clearly, we could go on for a long time. But let me just take this. And we just barely sort of whet our appetite on these questions. So let me thank again everyone who’s participated in today's webinar. Let me particularly thank the speakers and the audience for being here and sharing insights through your questions. As just a reminder

that this session was recorded, and the recording and the slides will be posted on the project web page. We also want to remind people to submit feedback on our preliminary discussion. You can go to NAM.edu/AuthoritativeHealthSources (all 1 word), and we would appreciate any insights that you might have. And let me again thank our panelists and advisory committee for participating today. And thanks to the audience for listening. Have a good day.