This is an overview of a pretty big topic—translating public health research for use in policy and practice. I’ll be talking about the importance of translating research, why it’s so difficult, looking at characteristics of both academic researchers and policymakers, and how we can do a better job of communicating science for use in policy and practice.

This figure from a 2012 article by Dowdy and Pai depicts knowledge funneling from generation through translation. The more knowledge proliferates, the greater, or more concerted, the effort required to translate. And the more knowledge available, the more important the translation function in order to move the knowledge into tools and policy to lead to improved health.

To put it starkly, “failing to translate research knowledge into action in health care contributes to health inequities and wastes costly and time-consuming research.” This is as true for public health research as it is for medical research. In order to actively link knowledge production to knowledge use, we need to think about how we’re communicating and translating research, in order to make that research useful for policies, programs, and practice.

So why is it so difficult to translate research into policies and practices? What ideally would be a seamless transition in reality often seems like a wall to be surmounted.

One reason for the failure to communicate effectively is that academic producers of information typically work within a different communications framework or style than the intended users of that information in the policy and practice worlds. The American Association for the Advancement of Science illustrates the difference between the scientist’s framework and the public’s this way. Scientists, because of the very nature of their work, must provide a lot of background information to frame the research they’re writing about. Every published journal article must have this background discussion and all of the supporting details in order to show the meaning and relevance of the results and conclusions. The public is concerned with the bottom line. I think we could replace the word “public” with “everyone else.” Whether you’re talking about your neighbor, a journalist, an elected official, or the director of a public health agency, it’s the bottom line and the “so what” that are going to capture enough attention to last through the supporting details.
There also are differences of opinion about the role of researchers and research institutions: producing knowledge vs. engaging in the policy process, and informing vs. influencing. These tie in to concerns about advocacy, objectivity, and credibility as scientists. It may also be that the more specialized the field of communications gets, the less researchers see communications as their role or their skill set.

Academic institutions provide their own disincentives to doing the kind of work necessary to translate research for different audiences. Writing policy briefs, giving presentations to health agency staff, or being interviewed by a health policy blog aren’t the kinds of activities that tenure committees tend to value, and these kinds of activities compete with other activities for researchers’ time. Additionally, academic publishing may not include negative results that could be useful for policy and practice. Institutional culture may be a barrier or a help. Some institutions, or divisions within institutions, foster policy-relevant research and promote engagement with policymakers and the practice community, while others don’t.

Now let’s look at barriers for the recipients of information. Policy makers and public health practitioners, just like everyone else, are dealing with information overload. There’s too much information and too little time. Brownson and colleagues found that state-level policy officials – including legislators, legislative staff, and executive branch administrators – often are “overwhelmed with the volume of information they receive.” And this information is not always relevant to the current health policy debates they are dealing with—it’s mistimed. In Brownson’s study, legislators, their staff, and executive branch administrators were dealing with a wide array of pressing issues, and the information they received about policy matters was described as “disconnected, random, and chaotic” (Brownson et al. 2011). It arrived on their desks at the wrong time. The information product or communication tool may also be poorly matched to the audience—a lengthy analysis delivered in hard copy to someone more likely to respond to a one page set of bullet points and graphs, for example, or a set of broadly worded, “big picture” recommendations for someone who really needs a summary of the evidence for a particular type of intervention’s return on investment.

Sorian and Baugh did a survey of state-level health policymakers in 2000-2001. These policymakers were legislators on health-related committees, legislative staff specializing in health policy, and managers of state health agencies. These respondents reported that they read only 27% of the material they received for detail, they skimmed half of it, and they never even got to 35% of the material they received. The percentages add up to more than 100 because of the way the survey was structured, but you can see the gist of this finding: Most of the information they received was not read thoroughly. And a lot has changed since this survey was conducted. The amount of information and the communication channels have changed dramatically. We can assume that policymakers are not finding more time now to read materials than they did at the turn of the century.
Scientists, practitioners, and policymakers may have different perspectives about what constitutes the best "evidence." They may rely on different types of evidence (e.g., empirical evidence, stories from constituents, or experience running programs). They may have different perspectives on the credibility of the source related to a perception of bias or a "stake in the outcome," or related to credentials, or to institutional affiliation, or maybe the support of key constituents. Even within the public health workforce, there may not be consensus about what "evidence-based" means. For instance, in a 2012 study by Jacobs and colleagues, chronic disease practitioners reported that lack of consensus about what “evidence-based” means is a barrier to practicing evidence-based decision making in state health agencies.

Many authors have observed that scientists and policymakers ask different questions, and that the time frames for research don’t necessarily align with the time frames in which policy decisions are made.

In Shonkoff’s words, "Science is focused on what we do not know. Social policy and the delivery of health and human services are focused on what we should do. Scientists are interested in questions. Policymakers and practitioners are interested in answers. Scholars suggest that we stop and reflect. Service providers are expected to act."

Do researchers even produce the kind of research that policymakers and practitioners need or want? The organization What Works for Children compared the research questions that practitioners wanted answered with studies that were funded by the major funding sources in the U.K.

- 45% of practitioners wanted research about the effectiveness of interventions, but those questions made up only 13% of funded studies.
- 16% of practitioners wanted research to help understand problems, while those research questions made up 64% of funded studies.

These percentages may not be the same in the U.S., and they may have changed since the study was done, but the point is that the needs of practitioners and policymakers are not necessarily congruent with the research agenda of funders or scientists.

So how can we do better?

First of all, recognize that this is part of your job as a researcher. Does your work rely on public funding? If so, the public and policymakers need to see why it’s important and what its effects are. Do you want to see the effects of your work anywhere besides on your CV? Translating research for use in policy and practice is one way of reconnecting with why you do the work you do. You probably entered the field because you wanted to make a difference in population health, not just to publish journal articles. And the public health practice community needs your help in this endeavor. Jacobs’ 2012 study of chronic disease
practitioners in state and local health agencies identified communicating research to policymakers as a top competency gap. The creators of public health knowledge are in a position to help translate their findings and provide tools for the practice community.

Putting time and thought into this kind of translation work is also important because there are a lot of other messages and information sources out there. I asked two communications experts from the National Academy of Sciences for their advice about translating research for public health agencies and policymakers. We hear first from Lauren Tobias, Director of Communications at the Institute of Medicine, and then Molly Galvin, Senior Media Officer at the NAS.

Lauren Tobias: One of the things that’s important when you're trying to reach those sorts of organizations is really acknowledging where they're coming from, because they face a lot of stakeholders that you might not be thinking about. And so if it’s medical advice or information for example, you need to acknowledge and face head on that they're also getting information from pharmaceutical companies, who usually have deeper pockets than you do. So they're reaching them more frequently, and with more slick messages. So how do you compete with that? And you do really need to acknowledge, I think, that it’s a competition. They don’t necessarily see you as the unbiased absolute answer, and pharmaceutical companies they way you see pharmaceutical companies. Or, you know, name your industry.

Marjory Ruderman: So, just being from an academic research background doesn’t make you a credible source?

Lauren Tobias: It might make you credible, but that doesn't mean that you win the debate.

Molly Galvin: That’s a really good point. And I would add that when you are speaking to those audiences, you have to think how can my information benefit this audience, like how can this Congressman benefit from what I'm saying. And you know, I'm not suggesting that you massage your research findings or anything like that, that but it's really helpful to keep in mind who you're talking to and how they're going to use this this information, and how can you make it the most relevant to them.

The advice we just heard takes us back to this illustration from the AAAS. You need to be able to accurately identify what's most important for your audience in order to craft an effective message.
And you need to be able to put into clear language what you want them to do with that information—refining the message for the audience as well as for the medium.

Lauren Tobias: So there's a huge possibility with the way that media has changed in the past few years that your work is going to be boiled down once, twice, you know, whether it's to a summary that still might be 50 pages, to a brief that might be, in our case, four pages, to a web blurb that might be a couple paragraphs, to a tweet that needs to be 140 characters. And so if you can't get to that point, then you need to keep working. I mean, it goes to the idea of an elevator speech, right? If you can't explain what you just said in an elevator ride up to the eighth floor, then you need to keep working and get it to that point, because in a lot of cases right now, that's the attention span you have to work with.

Molly Galvin: As Lauren said, there's all different kinds of media even. Your message might be different for a daily newspaper than for a blog. So, I guess this is very simple, but you just always have to think about which audience you're trying to reach at what particular moment, and do your best to tailor the message that way.

Lauren Tobias: Just in terms of a simple idea, it's a very common tactic for communications firms to do, the first thing, is to just boil down what you have into the five key messages. And the language is not critical at that point. I mean, the language can be tweaked for various audiences, but what are the five things that you want to make sure are captured and are conveyed. And you know, that's the same thing as an elevator speech. What are the five important messages that you want somebody to walk away with after you've talked to them? And then you can tailor each of those messages to the right audience. Or maybe only three of those messages matter to X audience, but if you can agree on those messages, you're more than halfway there.

The first step in knowing your audience is to establish relationships with the policymakers and other users of knowledge you’re trying to reach. One way to do this is to partner with other credible organizations involved in the policy process, particularly if they already have established relationships and a reputation as trusted messengers. And if you have communications staff available to you, get to know them as well. They may be an underused source of expertise and assistance in crafting your message and delivering it through the right channels. Building these relationships early on is important. Communication strategies are more effective when they’re not isolated add-ons at the end of a study.

Finally, be strategic. Ideally, at the outset of your research, you’re considering whether your research questions lend themselves to the translation of knowledge into action. And throughout your communication efforts, you ask yourself—and others—what the audience needs to know, in terms of both background knowledge and the bottom line for their area of influence, as well as how they prefer to receive information—whether it’s a website, a newspaper article, a briefing, or so on. In a 2011 study by Brownson, state-level legislative staff and executive branch administrators reported preferring policy briefs that highlighted stories to illustrate an issue, while state-level legislators found data-oriented policy briefs more useful. This finding is contrary to what I would have expected, which is a reminder that we shouldn't just rely on our own intuition in these matters. So create your communication tools carefully, taking into consideration what you know about your audience when determining the length, format, and balance of data to “story.” You may need multiple types of communication tools for different audiences, or even for the same audience. And of
course, communication is not all about written products. Given the importance of ongoing relationship building with policymakers and other audiences for applying research, other methods could include bringing people to a research site, or in some other way presenting anecdotes and stories that convey the emotional impact of the work as well as the benefit and potential return on public investment. The timing of communication should be strategic, too, so that your communications aren’t just contributing to information overload. And you may need to communicate the same information at different times through different channels, rather than relying on a "once and done" approach.

We can think of knowledge translation "not as a one-way transfer of information from researchers to policy-makers but as a reciprocal process of interaction and exchange among the producers and users of knowledge, where users might include policy-makers, service providers, nongovernmental organizations, private industry or the general public" (Jacobson N, Butterill D, Goering P, 2003). This kind of reciprocal process and relationship building can be messy and complex. Research communication strategies sometimes take a neater, linear or cyclical approach. But establishing a more organic process of engagement allows for the development of relationships that might lead to unpredictable opportunities for influence—and may even, over time, spur research that is inherently more useful for translation into policy and practice.

To sum up, the challenges to translating research into policy and practice are real, but we need to overcome the challenges if we want the evidence base to be used in public services and policy. As a producer of knowledge, you can make it part of your job to compete in the marketplace of ideas and make it more likely that academic research will inform policy and practice. You need a toolbox with the right strategies and solutions: A clear message, with both the message and the delivery vehicle refined for a specific audience, and relationships that will help you understand the audience and deliver your message in the right way at the right time. And finally, continue to engage in the process and sustain your commitment to making a difference. That’s probably what brought you to the field of public health in the first place.

If you’d like to keep learning, here are two resources for more online skills building tutorials on translational writing and communication.

This is Marjory Ruderman, from the Women’s and Children’s Health Policy Center. Thanks for listening.