Translating Research into Action: A Framework for Research That Supports Advances In Population Health

Steven H. Woolf
Center on Society and Health, Virginia Commonwealth University, steven.woolf@vcuhealth.org

Jason Q. Purnell
Brown School, Washington University in St. Louis., jpurnell@brownschool.wustl.edu

Sarah Simon
Center on Society and Health, Virginia Commonwealth University, sarah.simon@vcuhealth.org

See next page for additional authors

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Abstract

The research community faces a growing need to deliver useful data and actionable evidence to support health systems and policymakers on ways to optimize the health of populations. Translating science into policy has not been the traditional strong suit of investigators, who typically view a journal publication as the *endpoint* of their work. They are less accustomed to seeing their data as an *input* to the work of communities and policymakers to improve population health. This article offers four suggestions as potential solutions: (1) shaping a research portfolio around user needs, (2) understanding the decision-making environment, (3) engaging stakeholders, and (4) strategic communication.

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Authors

Steven H. Woolf, Jason Q. Purnell, Sarah Simon, Emily B. Zimmerman, Amber Haley, Gabriela J. Camberos, and Robert Fields

INTRODUCTION

With health systems and policymakers increasingly focused on how to optimize the health of populations, the research community faces a growing need to deliver useful data and actionable evidence. Translating science into policy has not been the traditional strong suit of investigators, who typically view a journal publication as the *endpoint* of their work. They are less accustomed to seeing their data as an *input* to the work of communities and policymakers to improve population health. The old lament of researchers was how to get the community engaged in their studies; the more pressing need in today's environment is how to get researchers engaged in the work of communities and learning how to make their data more relevant. Drawing on a model we have discussed elsewhere,[1] we offer four suggestions: (1) shaping a research portfolio around user needs, (2) understanding the decision-making environment, (3) engaging stakeholders, and (4) strategic communication.

USER-ORIENTED RESEARCH

"User-oriented" research seeks to supply the data needed by those who can influence change. It does not supplant investigator-initiated research, which remains vital, but caters to an audience of change agents who seek data, either to be convinced to act or to inform action. This kind of scholarship has unique characteristics. It requires researchers to learn the information priorities of decision-makers. Data collection and analysis must be documented with sufficient transparency to establish trustworthiness and remove concerns about bias and partisan distortion. Sampling decisions must navigate the tension between statistical power and user needs: decision-makers often want evidence for their setting or population, but sample sizes may be inadequate or data may be censored. On the one hand, scholars must cautiously avoid statements that reach beyond the evidence or cross the line into activism or lobbying. On the other hand, they must often tolerate an uncomfortable degree of statistical uncertainty to deliver the contextualized data that decision-makers seek. And they must learn ways to present data and make use of graphic design, communication science, and the psychology of information processing.

UNDERSTANDING THE DECISION-MAKING ENVIRONMENT

Researchers can benefit greatly from the perspective of decision-makers and by trying to *meet them where they are*—learning their agendas, the opportunities and threats they perceive, and how they believe scientific evidence could help. Academics must "leave the campus" to meet with these change agents, whose decisions offer the greatest prospect of "moving the needle." The dialogue can expose the types of information that would be most useful in resolving barriers to funding or implementing the actions that would improve population health. One-on-one meetings with legislators or their staff, agency heads, business executives, or civic officials can yield insights about the obstacles they face, as well as the language, pace, practices, and chief concerns of the people who would be using their research. These insights can then be incorporated into subsequent materials that present the data in ways that speak directly to their concerns and invoke familiar terms and language.

STAKEHOLDER AND COMMUNITY ENGAGEMENT

Translating research into action often depends on the engagement of those with a stake in the outcome. Stakeholder engagement can be vital, not only because implementation depends on their "buy-in," leadership, or material support, but also because their insights help complete the researcher's understanding of the issues. Whom to engage depends on the topic: certain health outcomes are driven by the decisions of patients, parents, practitioners, businesses, public health

officials, community organizers, funders, or lawmakers. Meaningful impact on the determinants of health often requires a multi-sector, "health in all policies" approach[2] that engages transportation, housing, employers, schools, retailers, and other change agents outside the health sphere.

Engaging stakeholders who lack a public health mission typically requires advocates to demonstrate the value proposition. Making that case begins by explaining how their decisions potentially impact health—a connection many have not considered—and demonstrating how their interests are served by improved health outcomes. Buy-in is more likely when incentives are aligned to create a "win-win" in which all parties have something to gain by collaborating. In a number of U.S. cities, diverse sectors have joined hands to achieve "collective impact"[3] in ways that improve the bottom line for all concerned, such as lowering health care costs while also creating jobs, preventing crime, and yielding other societal benefits.[4]

A prerequisite before research begins is to engage stakeholders most directly affected by health outcomes, such as local residents, parents, patients, and caregivers—especially the most vulnerable. Meaningful engagement treats residents, patients, families, and communities as true partners; it requires more than token efforts, such as appointing a patient to an advisory board. Authentic engagement means taking the time to demonstrate respect and build relationships based on trust. True participatory research involves the community in all phases, from a study's inception to its end. This sense of agency is important to disenfranchised populations (e.g., low-income communities, communities of color), especially those with a historic legacy of distrust and past exploitation by the academic community (Figure 1).

Figure 1: Four elements of effective translation of research into action to improve population health. Collaboration is at the heart of the effort, in which stakeholders from different sectors find aligned incentives to improve health outcomes.

STRATEGIC COMMUNICATION

As epitomized by the "elevator speech," busy decision-makers often need findings distilled into talking points that are brief and sharply focused. The standard deliverables of academia—peer-reviewed articles or scientific presentations framed around the 4-part template of introduction, methods, results, and discussion—are rarely in the format, length, or language the decision-

maker needs. Strategic communication is about methodically packaging evidence in formats and venues appropriate to the audience. It applies the tools of communication arts, which have been mastered with great success by advertisers and other industries.

No principle is more basic to strategic communication than starting early, ideally when proposals and projects are first planned. Strategic communication includes four other steps: First, define the target audience(s), an essential step to tailor outreach efforts. Materials intended for Congressional staff should differ from those meant for employers. Second, define the talking points. What is the main message to convey in the "elevator speech"? What are the key takeaways? Third, design the product. Considering the target audience, along with time and resource constraints, can help choose from available options, such as media outreach, one-on-one meetings, policy briefings, videos, infographics, one-pagers, social media campaigns, town hall meetings, or public forums. A poignant map can speak volumes (Figure 2). Fourth, plan the outreach campaign. How and on what date will the release occur? Work in advance with partners and colleagues, who can help disseminate materials through their respective communication channels, as can the news media, social media, and Web 2.0 platforms.

Figure 2: Life expectancy in Richmond, Virginia. Although calculations of life expectancy were available for dozens of census tracts, the media-friendly map draws out specific examples and uses tag lines and familiar geographic landmarks to convey the message that health outcomes vary across small distances. From: Center on Society and Health 2015; Richmond, Virginia. http://societyhealth.vcu.edu/work/the-projects/mapping-life-expectancy.html.

A challenge for researchers is writing talking points in ways that are engaging and succinct. The tentative language, graphs, and *p* values that properly belong in scientific papers can lose the attention of busy lay audiences and the media. Statements that are pithy, approachable, and free of jargon are often essential to connect with these audiences. They should "speak the language"

of the audience. For example, an issue brief for state government may refer to Medicaid waivers, whereas a brief for Congress might allude to entitlement spending. Whatever the audience, the final products must be engaging and aesthetically attractive. A compelling infographic or statistic (Figure 3) can say more to a general audience than pages of data tables. Skilled graphic art design—attending to layout, fonts, and colors—can present the evidence more powerfully than traditional academic materials.
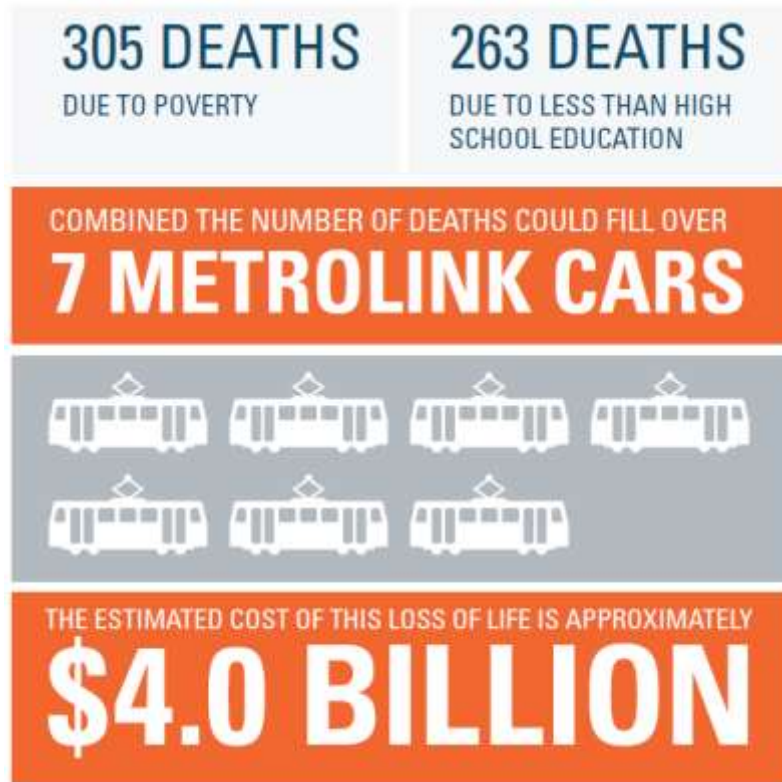

Figure 3: Graphic from the first *For the Sake of All* illustrating the estimated number of deaths attributable to low levels of education and poverty among African American adults 25 years and older in the City of St. Louis and St. Louis County in 2011. From: Purnell J. 2013. *How Can We Save Lives—and Save Money—in St. Louis? Invest in Economic and Educational Opportunity* (website). For the Sake of All. St. Louis: Washington University and St. Louis University. http://forthesakeofall.files.wordpress.com/2013/08/policy-brief-1.pdf

IMPLICATIONS

This article does not address the many other challenges that impede research translation. For example, today's policymakers do not always seek research evidence, or even facts, as a basis for decisions; politics and ideology often prevail. However, the four tenets emphasized here—strong science, understanding the decision-making environment, stakeholder engagement, and strategic communication—may create a constructive environment for understanding and dialogue that can ultimately facilitate research translation. Elsewhere, we have published case studies in which the four strategies were applied in a national and local initiative: the Education and Health Initiative[5] and *For the Sake of All*),[6] an effort in St. Louis, Missouri. Although both examples took action on social determinants of health, the principles apply to the implementation of other areas of research and related efforts to translate evidence into action.

REFERENCES

1. Woolf SH, Purnell JQ, Simon SM, et al. Translating evidence into population health improvement: strategies and barriers. Annu Rev Public Health 2015;36:463–82. PMID: 25581146; DOI:10.1146/annurev-publhealth-082214-110901.

2. American Public Health Association. Health in All Policies. https://www.apha.org/~/media/files/pdf/factsheets/health_inall_policies_guide_169pages.ashx.

3. Kania J, Kramer M. 2011. Collective impact. Stanford Social Innovation Review; Winter 2011:36–41. http://www.nist.gov/ineap/upload/2011-Stanford-Article.pdf.

4. Federal Reserve Bank. 2012. Investing in What Works for America's Communities: Essays on People Place & Purpose. San Francisco: Federal Reserve Bank of San Francisco and Low Income Investment Fund. http://www.whatworksforamerica.org/.

5. Center on Society and Health. Education: It Matters More to Health than Ever Before. Issue brief. Richmond: Center on Society and Health, Virginia Commonwealth University, 2014. http://www.rwjf.org/en/library/research/2014/01/education--it-matters-more-to-health-than-ever-before.html.

6. For the Sake of All. St. Louis: Washington University and St. Louis University. http://forthesakeofall.org.