
Editorial

From Research to Health Policy Impact

The opportunities for researchers to improve health and health care by contributing to the formulation and implementation of policy are almost unlimited. Indeed, the availability of these opportunities is a tribute to a generation of health services researchers questioning existing policies or studying essential “Why?” and “What if?” questions using rigorous analysis. Moreover, the steady albeit uneven transition of health care delivery from a paper-based cottage industry toward an enterprise that provides transparent information to clinicians, patients, policy makers and the public, and potentially vast amounts of data to policy researchers, combined with the expectations of an increasingly information-savvy public, have increased the focus on health care quality, access, and costs.

Our health care system, like those in other countries, confronts continued pressures from increasing costs; inconsistent quality; avoidable patient harms; pervasive disparities in health and health care associated with individual characteristics such as race, ethnicity, income, education and geography; and poor population health outcomes. The persistence of many of these challenges reflects, in part, a failure of science alone to improve health. Strategies to address many of these challenges exist in the laboratory, but the contribution of this science to the health of the public is limited by a research enterprise that values discovery of new knowledge far more than its successful application.

The Robert Wood Johnson Foundation (RWJF) Clinical Scholars Program, now approaching its 40th birthday, was designed to create “change agents” for the U.S. health care system by training physicians interested in creating and applying innovative research or other approaches to address important societal health challenges. Prior scholars have received advanced training in fields from anthropology and history to business administration. Alumni of the program have served in major leadership roles in both public (federal and state governments, health departments) and private (health systems, business, nonprofit organizations, medical professional organizations) sector organizations

for many years. This unprecedented long-term investment in human capital has yielded leaders who have made a tangible difference in health policy. Those leaders have forged new paths that blend clinical training and expertise with science-informed policy development and implementation, whether in academia, government, or the private or nonprofit sectors.

This commentary, by authors now directly engaged in policy, describes the ways that research influences policy and offers reflections on the culture and imperatives of a policy environment.

EXAMPLES OF HOW RESEARCH INFORMS POLICY

On the surface, health services researchers and policy makers often seem locked in an unrequited love affair. Each seeks the attention and respect of the other and each is endlessly frustrated. Beneath the surface, however, the relationship is more successful than it appears. Almost all recent developments in health policy—from the conceptualization of accountable care organizations to the structure of health insurance expansions—are rooted in policy-informed research, because researchers increasingly recognize the importance of applying their energies to policy-relevant questions.

Health services researchers can influence policy making in four ways. They can identify critical problems, research the benefits and harms of policy solutions, estimate the costs and consequences of policy proposals, and actively participate in the policy process to aid real-time decision making.

The role of research in informing policy begins by defining the contours of a problem. For example, physicians and hospitals have always made mistakes. Iatrogenic injury has been recognized since the time of Hippocrates. Highly publicized incidents, media attention, and public advocacy drew attention to these mistakes. But research, such as the analyses of hospital records in New York, Colorado, and Utah, which has illuminated how frequently errors occur, persuaded policy makers that the problem deserved more than sympathy and hand-wringing (Brennan et al. 1991; Thomas et al. 2000). Advocates and media used these estimates, suitably crafted to be clear to a nonspecialist audience, to make their case that policy was needed. This is a slow process—it took nearly two decades between the time Brennan et al. published the Harvard Medical Practice Study and the time that serious policy inroads were made to address medical errors.

Identifying problems is a critical, but also dangerous step in policy making. Policy makers, faced with compelling narratives of human suffering, are

reluctant to just sit there and not do something, even when it is not at all clear what the something ought to be. Policy analysis can identify the potential strengths and weaknesses of policy options, but good decision making requires an understanding not only of what might happen, but of what is most likely. Health services research, through studies of small-scale natural or controlled experiments, is critical to advancing from a problem toward a solution. For example, careful studies of insurance plans that implemented value-based insurance design persuaded policy makers to incorporate these designs into the Affordable Care Act (Fendrick et al. 2001; Chernew, Rosen, and Fendrick 2007). Policy solutions, such as value-based insurance design, are more likely to penetrate the policy making process if their logic can be explained easily (say in an elevator), if the empirical design of studies is straightforward enough to be understood by nonspecialist staffers, and if practitioners and patients can provide compelling narratives of these projects in operation. Research on policy solutions can influence the policy process more quickly than research that identifies problems. However, researchers are rarely successful alone and can benefit from collaboration with deft communicators and advocates to help make their case in language the public and policy makers understand. Nevertheless, researchers should expect a good decade's delay even if the problem is clearly important.

A third venue for research to affect policy is in the budget. Estimates of the budget agencies—the Congressional Budget Office and the Office of Management Budget—of the costs and consequences of legislative proposals often determine their fate. The budget estimators ground their estimates in the published literature, often directly citing publications in their documentation. Budget estimators seek research that is rigorous and highly specific to the problem at hand and expert estimators are usually aware of the latest findings. For example, the Congressional Budget Office's estimates of the costs of mental health parity in 2007, which were instrumental in passage of the Mental Health Parity and Addiction Equity Act of 2008 (PL110-343), relied heavily on a study of parity in the Federal Employee Health Benefits plan, published just a year before the budget estimate (Goldman et al. 2006; Congressional Budget Office 2007). The key to influencing policy in this way is keeping a close watch on the policy process and choosing appropriately salient areas of research.

A fourth place where researchers can influence policy making is in the implementation of legislation or development of other policies. Policy implementation happens in real time, addresses problems that have often not been studied before, and continually balances competing interests. Researchers can

rarely affect implementation decisions by publishing papers. There just is not enough time and, by design, the data to evaluate a brand new program generally do not exist. But researchers who actively participate in the policy process, such as RWJF Clinical Scholars and Policy Fellows visiting in administrative departments, can bring their research and clinical experience to bear in this real-time decision making.

CAREER PATHS—ACADEMIA TO POLICY ENVIRONMENT

Influencing policy requires a different approach than academia for health services researchers, like the integrative approach of the RWJF Clinical Scholars. The most immediately familiar path for scholars is one based in academia. Researchers have created and refined the multidisciplinary field of health services research, and focus on issues that are highly relevant to addressing the challenges confronting health care today. In today's economic climate the challenges of obtaining external support for research can be daunting, but the requirements and milestones, that is, funding, publications, and promotion, are quite clear. At the same time, the culture and imperatives of academic life can be strikingly different from those of a policy environment. Where academia rewards scholarly productivity and teaching, often allows schedule flexibility, and values extensive debate, most policy positions offer the potential of influencing decisions that affect the lives of millions, guarantee unpredictable events and interruptions, and often have an excruciatingly short time frame for summarizing and applying scientific knowledge to the decision at hand. To be valuable to policy makers, researchers have to move beyond their scholarly cautions and calls for further research. Policy makers have to be convinced that a proposed intervention *will* work—in the real world. Assessing the latter dimension requires clear understanding of program operations and constraints, that is, the *context* for implementation. For example, the appeal of value-based benefit design (see article by Fendrick and others in this issue) is undeniable. Its immediate application must be shaped by an understanding of current payment systems and the capacity to persuade policy makers that this approach won't create immeasurable administrative burden or other unintended consequences. Academic researchers are frequently consulted on specific issues by policy makers, but the opportunity to contribute usually comes with short, inflexible (and often unpredictable) time frames.

Academic researchers yearning for impact often arrange intermittent, temporary stints working directly in policy. Indeed, all three authors have taken full advantage of bringing in visiting scholars, including clinical scholars and health policy fellows, for anywhere from 3 months to 2 years or more. This arrangement has the advantage of minimizing the cultural or social distance between research and policy, and offers the benefits of immersion in the constraints inherent in the application of research to decision making. This approach has also resulted in meaningful policy development. For example, clinical scholars have contributed to the development of strategies to use social media in preparedness and response (Merchant, Elmer, and Lurie 2011), and contributed to the development of a strategic plan for the Emergency Care Coordination Center within the Office of the Assistant Secretary for Preparedness and Response, Department of Health and Human Services (HHS). Health policy fellows who joined the Agency for Healthcare Research and Quality (AHRQ) went on to lead important programs in health information technology and enhance the health care system's role in public health emergency preparedness. Fellows working in the HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) recently have contributed to research on child health insurance expansions and to the development of workforce policy in the Department. The relationships developed on the job may provide a platform from which future opportunities for researchers to advise policy makers emerge. For example, a clinical scholar working at AHRQ and ASPE as a White House Fellow now leads major quality improvement efforts at the Centers for Medicare & Medicaid Services, following a brief return to academia. Notwithstanding advances in information and communication technology, "immersion" of researchers in a policy environment requires geographic proximity for a period of time; advising may not, particularly after relationships with policy makers have been established.

Other researchers may identify change agents not directly involved in making policy, whose efforts can benefit from their work, ranging from medical professional organizations to nonprofit organizations. For example, federal agencies frequently call on external groups to identify individuals with specific expertise to participate in expert or advisory panels who may influence policy options. Collaborating with colleagues in think tanks, accreditation organizations, or similar entities is an alternative model. Identifying and seizing opportunities to testify or work with groups focused on state or local issues in one's area of expertise is another course. Of note, many researchers, including the three of us, transition between these options during their careers. Since U.S. health care is by definition a mix of public and private financing and delivery,

leaders in the private sector are frequently consulted about policy options. In addition to health care systems, employers in businesses far removed from health care play an important role in influencing and implementing health policies.

CHALLENGES

The context and temporal requirements of health policy are two main challenges facing the health services researcher aiming to influence policy with relevant evidence. One implicit assumption of a pure academic model to informing policy is that proximity to policy making risks biasing or even “politicizing” science, so research that is conducted at a safe distance remains objective. A more practical premise recognizes that change in health and health care requires policy development and implementation, and that that implementation occurs in a context that is shaped by Americans’ beliefs, concerns and ultimately, votes (Blendon and Benson 2001). In addition, moving from research to implementation is not possible in any sphere without explicitly understanding the context and landscape in which research is to be applied. Everett Rogers’ work on diffusion of innovation clearly articulates the critical need for work that clarifies the interaction between an intervention and context, including assessing how the intervention is modified as a result (Rogers 2003).

There are also striking differences in the temporal requirements of policy. While a number of policy-relevant, peer-reviewed journals have accelerated paths for publishing papers that address a timely issue, application of research findings and skills to policy often occurs at an even more rapid pace. Policy windows are often brief and unpredictable, and do not wait for reviewers’ comments to come in. For example, when the H1N1 epidemic arrived in 2009, information regarding its likely impact was imperfect, existing data systems were far from ideal, and many people were frightened. Immediate decisions had to be made with the best possible information, and innovative approaches to tracking real-time impact put in place quickly. That said, subsequent evaluations of some of these systems provide the opportunity to improve future responses.

An essential component of the daily work of health services researchers is communicating scientific findings to colleagues and decision makers from very different backgrounds. This is often enhanced by consulting academic colleagues and external stakeholders, similar to the skills now emphasized in the current RWJF Clinical Scholars Program working with communities.

Research does and should influence policy. But simply producing rigorous and precise results about important problems is not enough to make it happen. Instead, just as policy research must be informed by a knowledge of the institutional context, policy researchers are much more likely to contribute to the policy process if they understand the context in which they are working. Clinical scholars, who spend time deeply engaged both with policy problems and the policy process, are an excellent example of this contextual immersion.

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