

COVID – 19: A Tutorial on Evidence-based Policy

Paul E. Lingenfelter

Beginning with Lyndon Johnson's embrace of Program-Planning-Budgeting (PPBS) a persistent group of policy advocates and political leaders have urged governments to give greater emphasis to empirical evidence in evaluating governmental programs and making policy and funding decisions. The most recent call, at the beginning of the Trump administration, came from the Commission on Evidence-Based Policy Making, mandated by Congress with broad bi-partisan support. Resting comfortably on the assumption that better evidence will lead to better policy, the Commission focused most of its recommendations on the need to improve access to available governmental information and improve privacy safeguards.

A few years earlier In an *Atlantic Monthly* [article](#) Peter Orszag (Obama administration) and John Bridgeland (Bush administration) suggested that the government should play "Moneyball" (as in the baseball movie) and stop funding programs that can't prove they work. In a similar vein the [What Works Clearinghouse](#) in the Institute of Education Sciences seeks to find and promote "what works" in education. And the [Results First Clearinghouse Database](#), created by the Pew Charitable Trusts and the MacArthur Foundation, assembles the studies of eight such "clearinghouses" to guide policy makers in fields including child welfare, criminal justice, education, and social policy.

It is hard to imagine why anyone would be opposed to evidence-based policy. So why are we still discussing it a half a century past Lyndon Johnson? The policy and public responses to COVID – 19 illustrate why – evidence-based policy is easier said than done.

Evidence-based policy is hard when: 1) Despite available evidence policy makers disagree about the existence and the seriousness of a problem and how to approach it; 2) It is difficult to obtain valid, reliable measures of the relevant facts; 3) Multiple complicated factors contribute to the problem and make it difficult to solve; 4) The problem affects people differently, some seriously, others less seriously or not at all ; and 5) The problem resists simple, inexpensive solutions.

The response to COVID – 19 illustrates these challenges. As social problems go, it is relatively simple, what Donald Berwick calls a "conceptually neat" problem. The problem is caused by a single factor, a virus. The "solution" is to develop a vaccine that provides immunity, and while working on a vaccine, to avoid or at least reduce the spread of the disease among the population and discover effective ways to treat the illness.

Evidence-based public policy combatting COVID – 19 has been hampered by all five of the factors listed above: 1) In the U.S. it took months for policy makers to agree about the seriousness of the problem, even though eventually overwhelming evidence has persuaded most of them to take it seriously; 2) The novelty of the virus, the scale of the pandemic, and governmental disorganization have made it difficult for health professionals and policy makers

to assemble the means for tracking infections and containing their spread; 3) Although a single type of virus is the core problem, the complex ways infections spread and their consequences for individuals vary; 4) The health and economic consequences of the pandemic are unevenly distributed – it has been challenging to gain a consensus on solutions to the problem; and 5) Even though the problem is “conceptually neat,” only complicated, inconvenient, and expensive interventions can prevent the spread of infection, and only expensive, complicated, research can (possibly) lead to a vaccine.

Randomized clinical trials (RCT), the favorite tool of evidence-based-policy advocates, are quite helpful for evaluating interventions to solve medical problems, but even medical problems can be maddingly complex. <https://www.nytimes.com/interactive/2020/science/coronavirus-drugs-treatments.html>. Viruses affect different people in different ways. Although clinical trials help health professionals learn about the effectiveness of different treatments, practitioner knowledge, analysis of evidence in particular situations, and wisdom in applying knowledge are needed to successfully help individual patients.

Despite these challenges, evidence-based policy and practice eventually are likely to produce a solution for the “conceptually neat” problem of COVID – 19. The evidence of its seriousness is overwhelming, a substantial number of people are following the recommended social distancing practices, and either a vaccine or herd immunity eventually should overcome the virus.

More complex social problems – e.g. improving public safety while reforming police practices; improving education; reducing persistent poverty and unemployment; reducing child abuse; reducing substance abuse – are more challenging. The complexity of these issues makes it harder to obtain agreement that a problem warrants a policy response, and rarely can a simple policy solution or canned “program” solve them.

Collecting and improving access to more information as recommended by the Commission on Evidence-Based Policy is essential. Policy makers must have valid, reliable information in order to identify public needs and problems that warrant policy responses. Although such information can help policy makers decide whether it is necessary to do something, knowing what to do and how to do it are harder questions.

The tools available to policy makers, laws, regulations, money, and the bully pulpit, have their limits. None of these tools are sensitive enough or nimble enough solve the complex problems that vary greatly among individuals and community settings.

“Evidence-based policy” fails when policy makers don’t recognize these limits. Laws and regulations, even when combined with monetary incentives, have consistently underperformed in improving education and health care. Another approach, searching for programs of “proven” effectiveness and bringing them to scale, has been equally disappointing. First of all, no single program, even a good one, can solve a complex problem as effectively as vaccine can defeat a virus. Secondly, it is impossible to implement a program with the kind of consistency, or fidelity,

that can be employed with a medical treatment. Against impossible expectations, no program can “work.”

Education, health care, public safety, economic development, even warfare – all complex problems – require the skills of sophisticated professionals, managers, and administrators who understand the complexity of particular situations and use evidence from practice to learn and generate better outcomes. In health care <https://onlinelibrary.wiley.com/doi/abs/10.1002/ev.20235> , and more recently in education <https://www.carnegiefoundation.org>, improvement science has generated significant improvements.

The goal of “evidence-based policy,” better solutions for important human problems, cannot be reached without a robust infrastructure of evidence and an authentic, mutually respectful partnership between policy makers and practitioners. Policy makers should support the development of an evidential infrastructure. Policy makers should support and sustain the institutions and professional practitioners who can successfully address important human problems. Policy makers should have high expectations for effective, evidence-based practice, and they should do everything they can to make it possible. But with appropriate humility, they should not expect the impossible – either from policy or from practice.