

MAKING POLICY WHEN THE EVIDENCE IS IN DISPUTE

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- Policy makers have to make decisions even when the research is contradictory and/or clashes with the values and preferences of certain individuals or groups.
- To make the best policy choices, policy makers need to define what they want to achieve and consider that goal against the strength of the evidence, its applicability, and the tradeoffs involved.
- Understanding how policy makers analyse disputed evidence can help knowledge transfer practitioners maximize the chances of getting research used.

Science-based policy debates are as contentious as ever. The controversies are often as much about values as they are about science. This can complicate policy choices, but those choices still need to be made, even in the absence of scientific consensus.

In this article, David Atkins, Joanna Siegel, and Jean Slutsky provide a series of questions to help policy makers separate issues of evidence from conflicts over values and perspectives. The aim is to accurately weigh the credibility of competing arguments over the evidence.

Using antibiotics to treat common ear infections in children is one example where competing arguments exist. While antibiotics can modestly increase the speed of healing and reduce the number of patients whose symptoms fail to improve, some children may develop antibiotic-induced vomiting or diarrhea. Meanwhile, most children with ear infections who do not take antibiotics recover completely in a week. So how do policy makers make sense of the evidence?

The following is a summary of Atkins et al.'s question-based framework for getting research used in healthcare policy. While it is directed at policy makers, it is also relevant to knowledge transfer practitioners who can benefit from understanding how decision makers may go about analysing disputed research findings.

What is the ultimate goal, and how does the intervention achieve that end?

Policy debates can obscure the relationship between a proposed policy initiative and its ultimate aim. Examining this relationship more closely can 1) untangle underlying issues (for example, will lower drug costs increase the likelihood that medications are taken?); 2) clarify the relative importance of desired outcomes (such as weight loss for individual patients versus improvements in the rate of heart disease for the system); and 3) identify the target population (for example, tuberculosis testing for new immigrants versus all school children).

How good is the evidence that the intervention can improve important outcomes?

While policy makers do not need to be experts in evaluating research, answering the following questions can help them assess the strength of a particular evidence-based intervention: Can it work? Will it work? Is it worth it?

The answer to the first question lies in understanding whether the data are sound. Good evidence comes from studies where bias is minimized and confounding factors controlled for. But policy researchers often use non-experimental study designs that are prone to bias. In this latter case, policy makers should ensure the validity of the studies is protected through their design and statistical analysis.

That process, however, addresses only the first question – whether the intervention *can* work. Conflicts arise when findings do not adequately address whether the proposed intervention *will* work in a particular setting or if the tradeoffs are worth it – both may be more important to a given policy maker. The next two sections provide advice on bridging that divide to make good evidence-informed decisions.

How good is the evidence that the intervention will work in my setting?

The best trial results in the world are no guarantee an intervention will work under real-world conditions. In practice, an intervention is more likely to work if the evidence directly links it to important health outcomes, such as mortality, rather than intermediate outcomes, like tumour size. It is also more likely if results are consistent across several studies.

How do potential benefits compare with possible harms or costs of the intervention?

This area of questioning gets at “is it worth it?” Important decisions involve tradeoffs and judgments about those tradeoffs. To decide whether a policy is worthwhile, policy makers have to consider the relative importance of each outcome, the harm and benefit involved, and the uncertainty associated with each.

What constitutes “good enough” evidence for a policy decision?

Policy makers must weigh the risk of acting too soon against the risk of not acting soon enough. Acting too soon can result in ineffective, costly, or harmful change. It also makes assessing other options or changing course more difficult. Waiting for clearer evidence, however, may delay the benefits of a potentially valuable treatment. Weighing these competing risks can help policy makers determine if and when sufficient evidence exists.

What other considerations are relevant to policy decisions?

Public-sector policy makers sometimes need to consider broader questions not captured through a harm/benefit analysis, such as achieving other social goals. Likewise, private-sector decision makers may grapple with the perceived value of an intervention to a given stakeholder, such as the insurance industry.

Summary

Debates about research can arise from differences in opposing values and perspectives. Armed with an understanding of these differences and using the proposed analytic framework can help policy makers clarify the arguments around research and arrive at the best possible evidence-informed decision.

Bibliographic Reference

Atkins D et al. 2005. “Making Policy When the Evidence is in Dispute.” *Health Affairs*; 24(1): 102-113.

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