

POLICY BRIEF

Evidence-Based Policymaking at the State Level

A Guide for Governors

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Executive Summary

How can governors ensure that their policy solutions are the right ones and are being targeted to the correct populations? Once an appropriate policy solution is found, how can the governor ensure it is being monitored for performance and being used by the populations it is meant to serve? This brief offers a range of evidence-based policymaking strategies for state leaders. It is meant for all governors and their policy advisors but offers particular guidance to those starting their terms. The brief will offer guidance on practices already prevalent at the state-level, such as evidence-based budgeting practices, as well as those that are nascent. Although evidence-based policymaking may seem like a daunting approach, we offer easy applications that borrow from the private sector as well as practical solutions and resources. Although we offer general frameworks and advice based on a range of sources and state examples, the specifics will depend on your state context. States are crucial policymakers that understand their constituents' needs, have the capacity to implement significant policy change, and transfer over \$500 billion funds to local governments per year. The opportunity to use the principles of evidence-based policymaking to more effectively direct and evaluate these efforts is significant. We hope this guide will be the first step in making states forerunners of evidence-based policymaking practice.

Introduction

A governor steps into office on the first day. There are many pressing issues on their mind: meeting campaign promises, developing impactful public programs, the local or state crisis du jour, and the looming task of building a successful team to handle the pressing affairs of the state. One topic that might not top the list is how best to use data, research, and evidence to guide executive decisionmaking. However, the reality is that evidence-based policymaking may actually help new leaders meet their other goals, by focusing limited public funding on programs and policies that work and fostering deeper understanding of constituents' needs.

The goal of this brief is to equip governors—especially a new governor and their policy or transition team, charged with developing an agenda for the first term of office—to build research, evaluation, and evidence-based policymaking into that agenda. It will offer recommendations for communicating about the value of evidence, effective strategies for implementation and retaining the focus on evidence despite constant demands for the governor's attention. The brief will also integrate important sources in the field to provide a roadmap for building a state-level evidence-based policy agenda.

What Evidence-Based Policymaking Is and Why Governors Should Care about It

In 2015, Massachusetts was in the midst of an opioid crisis when the legislature passed Chapter 55 of the Acts of 2015. The act directed the Secretary of Health and Human Services and the Department of Public Health to work together to produce a report documenting the prescribing and treatment history of all persons who suffered fatal overdoses in the Commonwealth of Massachusetts in 2014. The Department of Public Health (DPH) was ready. It had already been working to create a Public Health Data Warehouse to use administrative data from across state agencies to answer questions about effectiveness of programs and returns on investment in many public health areas, not just the opioid crisis. The Chapter 55 legislation gave the DPH the mandate to act. DPH integrated 10 datasets from five state agencies to answer specific questions about fatal and nonfatal opioid overdoses. The data provided crucial information about the characteristics of people who experienced overdoses, allowing the state to design upstream policy interventions to prevent further deaths. Since DPH instituted the new interventions, there has been a 30 percent reduction in opioid prescriptions in the state and a reduction in the statewide opioid-related death rate. Although it's hard to say whether DPH's specific measures led to this outcome, the effort gave the state crucial information about the nature of the problem and possible solutions—an invaluable contribution to a difficult policy problem. (Readers can find more details about this effort in the section Leveraging Administrative Data for Performance, Research, and Evaluation.)

At its heart, evidence-based policymaking is the systematic use of evidence to guide decisionmaking in government to improve citizens' lives (PMRFI 2014). Evidence-based policymaking is about building an institutional culture of learning, testing, and building from what has been shown to work and what might work. There are two main goals: to use existing information and program evaluation to make policy decisions and to build knowledge to better inform future decisions.³

Evidence-based policymaking practices have the ability to direct ever-scarcer public dollars to programs that are effective, bring private-sector principles of efficiency to governmental processes, and bridge political divides as a policy-neutral effective-governance tactic. Furthermore, states are poised to use evidence-based policymaking to better direct their own funding and the large amounts of federal dollars that are disbursed through them, which directly impact constituents in cities and counties. As we detail later, the federal government, along with funders, some legislatures, and other organizations, increasingly requires and incentivizes evidence-based policymaking in its grants and other legislation, which has implications for states that manage federal pass-through grants. While there are significant efforts at the federal level, in most states the prevalence of evidence-based policymaking is nascent at best. A Pew-MacArthur Results First Initiative report found that zero states invest at least 1 percent of program funds in evaluations, and only a few states have chief data officers or chief evaluation officers.

Evidence-based policymaking provides an opportunity to make government more efficient. Evaluation can reveal programs that are effective, which may assist the governor and agency leaders to make choices about funding allocations and future policy directions. Aligning incentives and working to achieve a broad coalition of support early on can assist in the evidence-based policymaking effort.

Therefore, governors should be thinking about how to build consensus effectively around a culture of learning from their first day in office.

Starting Evidence-Based Policymaking Work on Day One

How can a new governor institute evidence-based practices along with other important policy priorities? According to the National Governors Association, a new governor should focus their efforts on the four levers of power: pulpit, processes, people, and programs. Evidence-based policymaking efforts can be woven into these transition activities from the first day in office (NGA n.d.).

- Using the pulpit to identify and communicate the vision for the state is one of the critical early tasks for a new governor. Successfully messaging the importance of research and evidence can be a powerful tool for governors in building support for a new policy agenda. There are many ways to discuss evidence-based policymaking that resonate with stakeholders and constituents. In the next section, we detail how governors and state leaders have talked about their focus on evidence-based policymaking using three important themes: customer service, social impact, and the big tent.
- Shaping processes, particularly the budget process, can be a critical first step and key part of achieving policy goals. Like any policy priority, the budget office should be informed early on about the governor's focus on evidence. This is particularly important as many state budget offices may already have staff with some fluency in performance measurement, cost-benefit analysis (CBA), or other relevant skills useful for leveraging evidence-based policymaking efforts. Second, if a governor does not engage on the budget with an immediate and effective strategy, the legislature could sidestep the new governor and work directly with cabinet officials, potentially hindering the governor's opportunity to modify this process (NGA n.d.). The Seeking Out Partnerships section discusses how to modify the budget process to ensure that tested and effective state programs are being funded.
- Hiring the correct people and understanding the capacity of the career staff already working for the state government is another important step the governor should take. It is vital to have a person who reports directly to administration leadership who understands the value of research, data, and government performance management in policy development. This person must be able to convey the governor's commitment to evidence-based policymaking and help the governor understand why it matters and how it can fit in the overall policy agenda. The governor or leadership staff can charge this person with inventorying current evidence-based policymaking practices and research capacities in each department, and learning from those departments' staff the extent to which evidence practices have had a role there. Research capacities should be defined broadly to include but not be limited to evaluation, performance management, data, and other analytical capabilities.

Understanding programs and existing partnerships. Career staff are important implementers of the governor's new strategies and methods in their respective programs. First, in addition to assessing research capacities, the governor's advisors should locate gaps where staff training could be strategically deployed and determine how program effectiveness is being monitored. Another important question is whether the state has any existing partnerships or relationships with universities or research organizations. The governor may want to task the chief of staff, policy director, or appointed evidence-based policy lead with identifying the two to five most knowledgeable researchers in each of their administration's priority areas. These persons already may have advised the governor or senior campaign staff during the campaign. By meeting with each set of researchers within the first 60 to 90 days of taking office, the governor can develop a formal or informal "research cabinet," a body that serves as a receiving ground for research input.⁴ As we describe in the Seeking Out Partnerships section, such partnerships are critical and take time to develop. Last, an important early task is to survey ongoing evidencebased policy work in the state, to build from those efforts and not start everything from scratch. One good example is the Results First Initiative's technical assistance opportunities, which are available in 20 states.

Using the Pulpit: Communicating Evidence-Based Policymaking in the State Policy Agenda

One of the most important early steps that a governor can take to set evidence-based policymaking as an important agenda item is signaling its importance to internal and external stakeholders as well as constituents through strategic communications. While evidence-based policymaking may seem less immediate than constituents' pressing needs, it is a foundational approach that, when effectively implemented, can improve government impact, efficiency, and ability to address complex and multifaceted challenges. Of course it is not enough just to talk about evidence-based policymaking, but it does represent a good start. Governors and state officials who are leading this work have conveyed its importance using three broad themes: customer service, social impact, and the big tent.

Customer Service

Using a *customer service* theme, governors focus their communication about evidence-based policymaking as a commitment to efficiency and thrift in managing state government and taxpayer funds. Language such as "maximizing scarce resources" and "return on investment" that relates to "efficiency" and "effectiveness" is used to convey the goal of delivering quality government processes at the lowest cost. This framing is particularly important in a time of reductions in public funding.

Social Impact

Governors also discuss evidence-based policymaking efforts using a *social impact* frame. For example, they describe evidence-based policymaking as a tool that empowers government and its programs to know "what works," tackle social ills, and generate positive outcomes for citizens.

Big Tent

Last, as mentioned, facts and evidence help bridge the political divide and drive the discussion about effectiveness of government programs in an era of ever-decreasing public resources. Evidence-based policy prescriptions can be a vehicle for building bipartisan coalitions that can advance difficult policy issues. State leaders have highlighted this aspect of using evidence in public remarks by describing how evidence-based policymaking, facts, and research can provide a path for various stakeholders to work together toward the state's common goals.

TABLE 1
What Do Governors Say about Their Evidence-Based Policymaking Efforts?

Excerpts from various state leaders

Customer service	Minnesota governor Mark Dayton's quote in response to Pew evidence-based-practice recognition: "With informed decision-making and strong financial management, we have made state government work better for the people of Minnesota." Governor Rick Snyder's creation of the Michigan Interagency Council on Homelessness "The
	10-year plan shall include evidence-based improvements to programs and policies that will ensure services and housing are provided in an efficient, cost-effective, and productive manner."
Social impact	Governor Gary Herbert's preface to Utah's Education Roadmap: "Through data-driven decision-making and evidence-based best practices, all Utah students can have increased opportunities for educational success."
	Governor Bill Haslam announcing the "Healthier Tennessee" initiative: "We know from clinical research and real-world experience that there are effective ways to change behaviors and create healthy habits, and we believe programs and tools to do that have to be evidence-based, so we will be very focused on measuring results and reporting them regularly."
Big tent	Oregon governor Kate Brown in an online article about a 2018 Pew Results for America report: "Facts should not be a political debate. Rather, the use of evidence-based policy gives lawmakers the opportunity to put their differences aside and work towards common goals for our state." Skip Priest, ranking Republican on the Washington State House Committee on Education, on the Washington State Institute for Public Policy: "WSIPP's research provides objective investment advice, and because they have such high standards, it takes a lot of the politics out of it. People started to joke that in addition to the Democratic Caucus and the Republican Caucus, we had developed an 'education caucus' that came together based on evidence as opposed to
	partisanship."

Sources: Results for America, Twitter, July 10, 2018; State of Michigan Executive Office, "Executive Order No. 2015 – 2: Creation of Michigan Interagency Council on Homelessness," January 16, 2015; Governor's Education Excellence Commission 2016–17, "Utah Education Roadmap 2018–2027," December 7, 2017, Tennessee Office of the Governor, "Haslam Launches Statewide 'Healthier Tennessee' Initiative," press release, August 6, 2013; Matt Parke, "Study: States Are Getting Smarter about Data-Driven Policy," Working Nation, July 12, 2018; and PMRFI (2012).

Where Are Evidence-Based Policymaking Tools Relevant? A Guide for Implementation

Once a governor has decided to encourage evidence-based policy, the critical next question is: What areas have the most potential for implementing such strategies? The following sections will introduce five areas in which there is promise for growth in states' use of evidence-based practices:

- developing a research/learning agenda
- implementing performance- and evidence-based budgeting
- using evidence to improve agency grant-making
- leveraging administrative data for performance, research, and evaluation
- embedding testing and learning wherever possible

Some areas are well suited for enterprise-wide governance change, and others can be targeted to key policy priorities. Each section explains how research and evidence could be used to drive either enterprise-wide governance change or specific policy change.

Developing a Research/Learning Agenda

WHAT IS A LEARNING AGENDA AND WHY MIGHT A NEW GOVERNOR BE INTERESTED IN ESTABLISHING ONE?

A *learning agenda* is a set of questions addressing the critical knowledge gaps about a public policy area or a specific program. These questions are directly related to the work that an agency conducts, and they provide important answers about the effectiveness of agency programs.⁵ The agenda guides an agency's research and evaluation projects both short and long term.⁶ State leaders may choose to develop a learning agenda statewide, in which research questions are prioritized across program areas, or for a specific priority-program area to ensure the most important questions about the issue and interventions are being addressed. Learning agendas can also reveal questions that may impact strategies in more than one state agency or program area. For instance, at the federal level, the Small Business Administration and the Departments of Agriculture and Commerce worked together to evaluate the impact of business technical-assistance programs, which were operated separately in each agency.⁷ According to a Results for America (2018) review, only four states had an evaluation policy, plan, or learning agenda. By contrast, use of learning agendas at the federal level is becoming more routine. Several federal agencies have created learning agendas, and there is impetus for more through proposed legislation.⁸

BOX 1

The State of Tennessee: Creating a Research Agenda in Partnership with a Local University

In the case of the Tennessee Education Research Alliance, the state Department of Education's Office of Research partnered with the Peabody College of Education and Human Development at Vanderbilt University to develop a research agenda that addresses issues of high importance to the state and external stakeholders. This partnership has allowed the Alliance to survey educators in the state annually and use these data to provide key policy recommendations for improving teacher development and effectiveness.

While the university–state partnership was in place before development of the research agenda, both partners decided that staff time dedicated to each research product needed to be better balanced with its usefulness for policy decisionmaking. The partners therefore decided to guide their work by creating an agenda that prioritized research projects by answering the following questions:

- What are the major priorities of the department?
- What decisions would the department need to answer in the short term?
- What topics will equally matter now and three years from now?

The research agenda^a allowed both the Department of Education and Peabody College to leverage their unique expertise.

^aTennessee Education Research Alliance, "Research Agenda," accessed October 16, 2018.

HOW CAN A GOVERNOR IMPLEMENT A LEARNING AGENDA IN THEIR STATE?

There are two main factors to consider when implementing a learning agenda: existing capacity and stakeholder engagement. Regarding the first, one important question is who should lead the effort.

Most states will not already have a chief evaluation office or its equivalent. At several federal agencies the deputy secretary, a political appointee, works closely with the evaluation, budget, and performance teams as the agency's chief operating officer (COO). Some states have adopted a similar practice. For example, in Colorado, the lieutenant governor serves as COO and works with agencies on performance management and process improvement (Results for America 2018, 5). This COO has created an online dashboard where progress of outcome goals under five categories are made public. If a governor opts to create a learning agenda in one or two priority program areas, rather than statewide, a COO or chief evaluation officer may not be needed. However, it is important to have at least one or two staff members invested in developing the research agenda serve as key partners in research–policymaker partnerships. Where possible, the governor should consider deputizing career staff to manage

learning agenda development. Career-staff involvement and buy-in will improve the chances of this practice becoming established.

Second, stakeholder engagement in the development of a learning agenda is key. Involving external stakeholders ensures that end users' voices are being heard. For example, teachers and educators have long been skeptical of evidence-based agendas because of research being done *on* schools and not *with* schools. Cities provide innovative examples of creating learning agendas while engaging with relevant stakeholders. For example, the Houston Education Research Consortium is a partnership between Rice University researchers and several Houston-area school districts to produce research on closing socioeconomic gaps in education achievement. One of the consortium's strategic goals is to sustain a culture for jointly developing a research agenda based on local needs and interests. Bengaging stakeholders during agenda development has a number of tangible benefits: increasing constituent buyin, building policy momentum, strengthening coalitions, and easing implementation of difficult policies. Though written for federal agencies, the Evidence-Based Policymaking Collaborative's new guide, *Engaging Stakeholders in Learning Agenda Development: A Playbook for Federal Agencies* (Schupmann et al. 2018), provides a useful roadmap for engagement relevant to state agencies.

Implementing Performance- and Evidence-Based Budgeting

For several reasons, the budget process is a prime lever to use when building an evidence-based policy agenda. First, in most states the governor has significant control over the budget process. The budget may originate with either the executive or the legislative branch. Either way, the starting point for the budget process is input from executive branch program agencies. As a result, governors and their teams inevitably have influence over the process. Second, the budget office is often where states already have evaluation, performance management, and/or research expertise, and thus it can be a strong partner in evidence-based policymaking efforts. Last, there are already significant efforts in performance-based budgeting at the state level with resources and best practices to draw upon. As of 2018, 12 states were using performance management and continuous improvement efforts in at least one agency, 10 were making costs and benefits of public programs publicly available, and 6 required outcome data for statefunded programs during the budget process (Results for America 2018, 9–10).

TABLE 2
State Budget Processes

Budget process	States		
Performance management/continuous improvement	California, Colorado, Florida, Maryland, Minnesota, New Mexico, Oklahoma, Oregon, Tennessee, Virginia, Washington, and Wisconsin		
Publicly available cost-benefit analysis	Colorado, Connecticut, Minnesota, Mississippi, New Mexico, New York, Oregon, Rhode Island, Utah, and Washington		
Outcome data requirements	Colorado, Minnesota, Mississippi, New Mexico, Oregon, and Utah		

Source: Author's analysis.

HOW IS EVIDENCE-BASED BUDGETING DIFFERENT FROM TRADITIONAL BUDGETING?

An evidence-based budget process uses performance metrics such as output and outcome data to track year-over-year efficiency and ensure that limited public funds are being used for impact. Program evaluation can also be required in the performance-based budget process. New Mexico state agencies are required by law to submit performance indicators along with program evaluation information in the annual state policy and fiscal analysis (Results for America 2018, 6). Another related approach, outcome-based budgeting, asks which outcomes the government hopes to achieve and funds outcomes rather than budget line items. ¹⁴

HOW CAN A GOVERNOR EFFECTIVELY IMPLEMENT AN EVIDENCE-BASED BUDGETING APPROACH?

Evidence-based budgeting is typically an enterprise-wide approach used to link resources (inputs) to program outcomes. Using performance data to influence budget formation can take many forms:

- Zero-base budgeting requires every dollar for every budget to be reapproved each year, which is different from most traditional budgeting processes that require approvals only of line-item changes from the previous year. Performance information and data are used in this analysis to redirect funding and budget toward specific outcomes (NASBO 2014, 4).
- In *modified zero-base budgeting*, a spending baseline is determined above zero with which to identify programs that will be subject to justification.
- Performance-based budgeting presents programs and activities as budget line items, with indicators of performance (output and outcome measures) directly in the budget (NASBO 2014, 4). Budget allocations are used to move the performance on these indicators.¹⁵
- Outcome-based budgeting is a similar approach to performance-based budgeting; however, the
 budget is organized by outcome rather than by department. This facilitates cross-agency work
 that may be necessary to achieve a certain goal. It also allows leaders to focus budget cuts
 where there are not strategic priorities.¹⁶

Another important approach to consider in the budget process is cost-benefit analysis (CBA), which compares the costs of programs to the monetary value of outcomes that they can deliver, as shown by research. The Washington State Institute for Public Policy (WSIPP) analyzes program models within 12 Washington State policy areas and makes subsequent cost-benefit estimates publicly available on its website. A Results First report on this model states that there are several social impacts that can be directly attributed to use of the cost-benefit tool in policy decisions, including an incarceration rate lower than the national average and savings of \$1.3 billion per budget cycle, achieved by eliminating the need to build new prisons and closing an adult prison and a juvenile detention facility (PMRFI 2012).

Cost-benefit analysis can facilitate performance budgeting efforts by providing legislators with objective data on program efficiency that they can use to evaluate budget decisions. While there is no statutory requirement that the Washington State executive or legislative branches use WSIPP cost-benefit estimates in budgeting decisions, two state legislators serve on WSIPP's board, and WSIPP's

reports are sent directly to state legislators.¹⁹ The Results First Initiative offers technical assistance to states interested in taking up a CBA approach similar to the WSIPP model. States must commit to making evidence-based decisions, providing data for the model, and dedicating resources for the effort.²⁰ To date, this effort has brought the model to over 13 states throughout the country.²¹

Performance- and outcome-based budgeting institutionalizes ongoing use of evidence by state agencies by facilitating the collection of performance data for an annual or biannual process. It also allows a governor to balance the budget and/or make cuts as needed without sacrificing the most important outcomes for constituents. That said, like any change management process, moving from a traditional budgeting process to something new will take buy-in, staff training, and some necessary preconditions. First, it is important that the state have a strategic plan and that the governor's policy priorities be included in that plan.²² Additionally, in states where the budget process originates in the legislature, legislative stakeholders will need to be engaged much earlier and more thoroughly. Regardless of type of budget process, the state governor's office should engage legislative stakeholders. Legislative buy-in can help make this approach official through legislation. For example, in New Mexico a statute directs state agencies to engage in performance-based budgeting (Results for America 2018, 9–10).

Last, career-staff buy-in is important. Governors must balance the amount of change required with benefits for the agencies involved. One strategy is to build in incentives. For example, if significant efficiencies are achieved, consider allowing the agency to keep and reprogram funds rather than decreasing budget authority (NASBO 2014). Initial career-staff hesitation may be due to lack of skills in the new area. The governor should invest in staff training and development. This shows goodwill on the part of the governor's team and a willingness to raise all ships through the change management effort. Performance-based budgeting efforts are only as effective as the quality of the performance metrics and data used to measure improvement in programs; therefore, improving staff capacity in these areas is essential for an effective process. While no change management effort is easy, implementing changes to the budgeting process creates a culture of continuous learning and using evidence to guide program decisionmaking in the long term.

Using Evidence to Improve Agency Grant Making

In addition to improving its own practices, states can incentivize grantees and local partners to use evidence-based practices. This could have a large impact, since states transferred over \$500 billion to local governments in 2015.²³ Whereas evidence-based budgeting is an accountability mechanism for the state, grant-making strategies encourage evidence-based practice not only in state agencies but also with grantees implementing programs in communities. Evidence-based grantmaking strategies can apply to both competitive grants and noncompetitive, or mandatory, spending.

How can a governor implement an evidence-based grant-making approach?

Governors and their state agencies have the ability to implement grant requirements stipulating that recipients of grant dollars use evidence-based practices. Florida's Department of Juvenile Justice publishes a registry of practices that have met evidentiary standards for success. Local grantees must

choose from the practices on this registry to be eligible for state funding and must monitor intervention fidelity and performance (Results for America 2018, 39). This process has allowed the department to focus on improving services for youth and ensuring that interventions align with evidence-based practices. ²⁴ Several evidence-based practice registries exist at the federal level and can be used by states for this purpose. ²⁵ The Corporation for National and Community Service publishes a directory of publicly accessible databases of research, evidence, and evaluations of various social programs. ²⁶ Such grant requirements may be easier and less costly to implement when there is already a strong evidence base on a specific social intervention.

PAY FOR SUCCESS

A particularly innovative approach that blends evidence and funding is Pay for Success financing. An investor provides the initial capital to scale a social program and is only paid back by the government if the program achieves certain agreed-upon outcomes. If it fails to meet those targets, the investor is not repaid and the program does not continue. This method reduces the financial risk usually borne by the government and ensures that programs are having the intended impact. By tying payments to outcomes, local governments only invest in programs that are effective while encouraging interventions to be evidence based. Outcomes are measured by rigorous independent evaluation, which builds the evidence around promising programs and scales those that have been shown to work. Pay for Success is a funding mechanism that states can employ to incorporate evidence into their programs and processes, potentially saving money if programs are not effective. It is not a tool appropriate for all policy contexts, but even asking the questions necessary for this approach can push a project to be more outcome oriented (Milner et al. 2016).

TIERED-EVIDENCE GRANT MAKING

Another approach that, to date, has been tested only at the federal level is tiered-evidence grant making. This approach incentivizes programs backed by strong evidence by offering larger shares of the grant pool to such grantees. All grantees are funded both to administer their program and to evaluate its effectiveness. Applicants backed by strong evidence receive the highest tier of eligible grant dollars; untested but innovative programs are eligible for a smaller portion of funds. Evaluation results on both established and new programs add to the knowledge base and determine which interventions might be funded in the future. Using this approach, states can simultaneously support new, innovative programs while investing more dollars in interventions with strong evidence backing their effectiveness. Tiered-evidence grants require substantial capacity and time. Among the drawbacks of this approach is that each grant is inherently more expensive because it includes evaluation funding. Research experts may be needed to participate in the grant review process to evaluate proposed evaluation strategies. Last, technical assistance may be needed to help grantees design effective evaluations.²⁷ Though potentially costly, this approach can help states build knowledge about what works in their communities while investing in innovation.

USING EVIDENCE TO DIRECT MANDATORY SPENDING

Last, regarding mandatory spending, states can ensure that their funding formulas are incentivizing the intended outcomes—particularly significant as a large proportion of funding comes from mandatory programs. It is important to keep formulas simple and to ensure they are tied to intended spending outcomes. States can incentivize better use of formula funding by giving local grantees who use evidence-based practices to direct spending "priority points" for other competitive programs. This practice has been promoted at the federal level through Office of Management and Budget directives.²⁸

Leveraging Administrative Data for Performance, Research, and Evaluation

States collect administrative data through their daily operations that can be used to provide programmatic evidence. Administrative data are low cost because they do not have to be collected outside of normal governmental processes; they are longitudinal because they follow individuals over time; and they can potentially encompass the whole population. ²⁹ These types of data can also be leveraged to rigorously evaluate programs, since they provide a way to measure outcomes without a separate data-collection process. Integrated administrative data systems (IDSs) are a sophisticated approach to synthesizing data collection across agencies. An IDS uses several sources of administrative data and, sometimes, private data and creates linkages between these datasets. IDSs can help public agencies understand served populations and their needs by determining program eligibility and indicating effective approaches as well as by revealing a particular intervention's effectiveness in meeting those needs.

WHY MIGHT A GOVERNOR BE INTERESTED IN IMPLEMENTING THIS APPROACH?

A good example comes from the Massachusetts DPH, which has used administrative data to improve its response to the opioid crisis.³⁰ Since DPH instituted the new programs, there has been a 30 percent reduction in opioid prescriptions in the state and a reduction in the statewide opioid-related death rate.31 The goal of this IDS project was to understand the prevalence of opioid use disorder and reveal promising policy solutions. The analysis involved combining 10 datasets from five state agencies. Before the project, the state estimated that 2 percent of its population had opioid use disorder; however, the data were able to identify opioid users who were not being actively treated, which raised the new estimate to 4 percent. The data also provided crucial information about the characteristics of people who experienced nonfatal and fatal overdoses, allowing the DPH to design upstream interventions to prevent further deaths. DPH found higher rates of overdose in residents who had experienced homelessness and/or housing instability, who used multiple pharmacies and/or multiple providers, who had mental health disorders or had experienced previous incarceration, and in women 6 to 12 months after childbirth. As a result, DPH implemented programs to provide stable housing during recovery, issued guidance to prescribers, collaborated with colleagues in the criminal justice system to implement treatment programs before discharge, and created a neonatal abstinence dashboard for medical providers, among other interventions.

HOW CAN A STATE OPEN UP DATA FOR PERFORMANCE, RESEARCH, AND EVALUATION?

It can take time to get systems, processes, staff capacity, and partnerships in place to successfully capture insights from administrative data; however, when there are administrative data sources that are related to outcomes of interest, the potential payoff is great.

Staff likely will not have the expertise and capacity to fully leverage administrative datasets and assess the quality of the raw data. A governor's strategic hire of a data expert could assist. For example, in the 1970s, South Carolina governor John West hired a prominent statistician to gather health statistics for crafting state policy. This led to subsequent research on thresholds for hospitalization effectiveness, which enabled the state to save millions and decrease patient recovery times by preventing unnecessary hospitalizations (Kitzmiller 2014). South Carolina's Office of Research Services has carried this work forward and, as of 2015, had almost 40 full-time employees working on data integration efforts. Among these efforts, the office has linked rural Medicaid patient records and patient outcome data with geographic data to identify health access disparities.

Government agencies tend to be protective of administrative data for research, often citing privacy concerns and institutional risk. Privacy concerns are paramount and should be deeply considered in any administrative data or IDS effort, since unique identifiers are needed to combine datasets (Doar and Gibbs 2018). However, public agency staff can easily misunderstand or too strictly interpret privacy laws. Increasing staff knowledge of and comfort with privacy laws can help (Doar and Gibbs 2018).

For IDS efforts, one common challenge for public agencies is technology and data infrastructure capacity. Many public agencies are using legacy systems that may not support linking data points across common fields. State leaders may need to invest in modernizing these systems before an IDS project can even begin. In many IDS projects, several state agencies will need to collaborate to share datasets. It is important to build relationships and gain trust across departments and organizations. Creating written legal and data-use agreements is useful. In Massachusetts, state agencies executed legal agreements on linking to, sharing, hosting, and having access to data (DPH 2016, p. 85). They also alleviated privacy concerns by building a system in which data were deidentified through randomized ID codes but remained connectable across datasets. To answer specific questions, the system allowed for linking datasets "on the fly" only. Once an analytics session was complete, the temporary linked datasets were deleted. Governors and legislative leaders can provide incentives and momentum for state agencies to collaborate and share data by emphasizing the urgency around a particular public issue.

HOW CAN PARTNERSHIPS INCREASE A STATE'S CAPACITY TO USE ADMINISTRATIVE DATA?

Partnerships with external stakeholders, such as local universities are another way to boost capacity. In Massachusetts, DPH solicited expertise from stakeholders outside of state government to conduct work on its behalf, using a zero-dollar procurement action.³³ This allowed the state to partner in a structured and competitive manner with interested parties. It also recognized the tremendous value of these administrative datasets to researchers. By asking researchers to explain how their research would inform policymaking or public health efforts, all research was explicitly designed to impact policymaking. Philanthropic partnerships are also important. Many existing IDS initiatives began with a

philanthropic gift. For example, South Carolina's Circle of Love initiative started in the early 1990s with a grant from the Robert Wood Johnson Foundation to link patient data with administrative data to gain a deeper understanding of the health care sector (Kitzmiller 2014). This data linkage has informed various research studies, one of which examined the types of services used by vulnerable youth, and has allowed the relevant agencies providing these services to connect and better serve this population.

Recently, national organizations, such as the Administrative Data Research Facilities Network at the University of Pennsylvania, have been serving as intermediaries to connect administrative data holders with privacy leaders and other stakeholders to empower public agencies to utilize and leverage these data.³⁴ Even when led by partner organizations, IDS initiatives should be fully embedded in government budget and procurement processes, known well by the state legislature, and guided by the appropriate agency heads.³⁵ More information, including model data-use agreements, can be found on the Evidence Collaborative website³⁶ and in the Results for America/American Enterprise Institute report *Unleashing the Power of Administrative Data* (Doar and Gibbs 2018).

Embedding Testing and Learning Wherever Possible

Evidence building does not always have to take the form of traditional, large-scale evaluations of programs. States can even look to the private sector to find useful methods for building evidence to apply to their own policymaking process. Similar to private companies, agencies can embed the monitoring and testing of outcomes and metrics into decisionmaking and service delivery processes, and use that information to determine program effects and improve upon them (Manzi 2012).

BEHAVIORAL INSIGHTS

Practices and techniques informed by behavioral science can be used to inform more efficient and effective policy outcomes. *Behavioral nudges* are subtle policy shifts that alter "people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler and Sunstein 2008). Nudges can be cost-effective since they involve small adjustments to policies rather than traditional mandates or economic incentives but still have the potential to lead to meaningful changes in outcomes. For example, the State of New Mexico aimed to reduce unemployment fraud by implementing pop-up boxes with messaging that encouraged unemployment insurance claimants to accurately report information (Pew Charitable Trusts 2016). This small behavioral nudge reduced overpayments caused by inaccurate reporting from more than 5 percent to 2.9 percent, saving \$1.9 million annually. Many nudges simplify processes to make the benefits easier to obtain. Early studies of policies implemented through behavioral strategies have shown they can be more impactful and cost-effective than traditional incentives (Benartzi et al. 2017).

RAPID-CYCLE EVALUATIONS

A/B testing³⁷ is a method often used by the technology sector to optimize websites. It creates two different versions of a web page and displays each to visitors at random to determine which page performs better by leading visitors to purchase a product, stay on the site longer, or click on a link. The

methodology of A/B testing can be applied in a policy context as rapid-cycle evaluation, which aims to measure and isolate the effect of a programmatic change. An agency debating a program change (e.g., in eligibility, engagement and messaging strategies, or service provision) can apply the change to a subset of program participants, compare outcomes to participants without the change, and measure the change's effectiveness. Its iterative cycle applies successful changes to the entire program, allowing for continuous improvement. Rapid-cycle evaluation has been used at the US Department of Education³⁸ to help educators determine which classroom technologies are effective, and at the Center for Medicare and Medicaid Innovation to assess which care and payment models were effective at reducing costs or improving quality of care (Shrank 2013). It can also be used in conjunction with behaviorally based techniques to measure whether the nudge is having the intended effect.

PERFORMANCE MANAGEMENT

While evaluating outcomes can help determine the effectiveness of a policy, measuring outputs is also an important way to incorporate data into the decisionmaking process. Performance management and measurement strategies are used to track outputs and measure the functioning of a program. Tracking program outputs "provide[s] factual information used in making decisions for the planning, budgeting, management, and evaluation of government services" (NPMAC 2010, 38). PerformanceStat, a strategy that uses performance data in leadership decisions and meetings, is a way to track the success of programs and use evidence to inform future decisions.³⁹ This strategy has been used in various forms throughout federal, state and local governments and agencies. For example, Baltimore uses a tool called CitiStat that gathers and consolidates data on a number of performance metrics such as overtime pay, the timing of snow removal, and number of vacant buildings (Perez and Rushing 2007). This approach was later adopted by the State of Maryland as "StateStat," to monitor and manage state performance. In both cases, the output data were used to consistently inform goals and policy decisions. PerformanceStat processes can also be used for specific issues, such as BlightSTAT in New Orleans, which tracks blighted properties and enables the city to measure its progress toward blight eradication. State agencies can implement stat processes at various levels to ensure that policy decisions and other performance management decisions are informed by data.

LOW-COST EVALUATIONS USING ADMINISTRATIVE DATA

States can also use rigorous research methodology to evaluate their programs without the expenses typically associated with these types of studies. Randomized controlled trials (RCTs), which randomly assign research subjects to program or control groups, remain the gold standard for evidence building but can be very expensive to implement. Often, the main costs of an RCT come from the data collection process or the implementation of a new demonstration project. However, by using existing data or embedding evaluations into existing programs, conducting an RCT becomes easier and cheaper. States can use already collected administrative data as outcome measures to evaluate the effects of an intervention. For example, New York City randomly distributed bonus payments to its public schools and used existing student test score data to determine whether the intervention improved student performance. The city found that the intervention was not successful and chose not to implement the program citywide but was able to leverage existing data to evaluate an intervention

without additional data collection. Alternatively, when a new program is implemented, an RCT can be an initial part of the implementation process. While low-cost RCTs are constrained by the type and quality of data available, they provide a valuable opportunity to introduce more rigorous evaluations of programs and policies and are a useful tool to build into a broader learning agenda.

Seeking Out Partnerships

As mentioned in various contexts throughout this brief, key to a successful evidence-based effort are solid researcher-practitioner partnerships. Even when a state office already has research capability in house, external researchers are typically able to nimbly provide complex statistical and methodological expertise and have the ability to manage long-term, multiyear research projects. External researchers can also provide objectivity when the program being studied is managed directly by the state agency or when the research question itself is particularly politically sensitive.

A governor can establish the conditions for positive partnerships between the executive branch and researchers early in the administration by creating a "research cabinet" to lay the groundwork for future relationship-building efforts. ⁴³ A governor's policy director or other members of the administration's leadership may already have strong connections to the research community. The research cabinet should comprise these along with other "go to" research experts in topics aligned with the governor's priorities. The formality of this cabinet is up to governors and their advisors. The partnerships can be defined by formal agreements, such as memoranda of understanding, or be dictated by a standing phone call or meeting with this group of researchers. The important point is that these partnerships not be short term and transactional in nature, but long term. This allows researchers to increase their understanding of state-level policymaking, creating room for trust to develop, and enabling state staff to effectively explain in what format research may be the most helpful to policymaking efforts (Owen and Larson 2017).

Researchers are not the only partnerships that state leaders should consider. Philanthropy can be an important neutral convener and has often played a role in funding existing state evidence-based policymaking efforts, particularly in the space of integrated data systems. National foundations and those that operate in local markets may help launch successful partnerships by setting a table to which several partners are invited, ensuring accountability during the grant period, and providing incentive and funding for parties to work together. Funders also learn a great deal about what works in researcher-policymaker partnerships that they fund and should work to disseminate these findings widely. Last, philanthropy may be interested in providing evaluation funding to test new approaches. The Knight Foundation, for example, has an effort called the Prototype Fund, which helps people and organizations develop and then evaluate early-stage ideas.⁴⁴

States might also consider private sector and nonprofit partners. Massachusetts's DPH partnered with private sector and nonprofit organizations who were willing to assist with its IDS effort to understand and combat the state's opioid epidemic (DPH 2016, 95). Further, several nonprofit organizations,

including the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Results First, offer information and technical assistance on evidence-based policymaking directed to public sector leaders.

Evidence-Based Policymaking at the Federal Level and Implications for States

In recent years, the federal government has introduced, through legislation, commissions, ⁴⁵ and grant-making activities, evidence-based practices for certain grantees including states. These federal efforts take both a carrot and stick approach, at times requiring grantees to use evidence-based practices, at other times providing an incentive or resources to do so. Either way, the federal trend is tilting toward further use of evidence, and efforts have continued through Republican and Democratic administrations. Some recent examples follow:

- The Bipartisan Budget Act⁴⁶ directed states to use federal grant dollars toward evidence-based programs in the area of child welfare, including the Family First Prevention Services Act and Maternal, Infant, and Early Childhood Home Visiting Program.⁴⁷
- The Workforce Innovation and Opportunity Act, ⁴⁸ the first update to the enabling legislation for the US workforce system in 15 years, included provisions that federal investments be in evidence-based and data-driven training programs. This includes the mandate that state performance reports be made publicly available.
- The Social Impact Partnerships to Pay for Results Act, passed as part of the Bipartisan Budget Act, created a \$100 million standing fund held by the US Treasury Department to support Pay for Success feasibility studies and projects in 21 policy outcome areas.⁴⁹

Conclusion

States, and the governors who lead them, are key to ensuring that cities and counties are harnessing evidence and administrative data to make better-informed policy decisions with their federal and state dollars. According to the Results First Initiative, "Counties are uniquely equipped to carry out key elements of evidence-based policymaking... Their relatively smaller size and close relationships with service providers, agency leaders, and other stakeholders can help [them] work to solve policy problems quickly" (PMRFI 2018, 2). However, many cities and counties are underresourced for this task. As mentioned at the beginning of this brief, states have the unique ability to support cities and counties in their efforts. For this reason and due to the influence that states hold over many important policy areas, it is imperative that more states take up the worthwhile challenge of using evidence to guide their efforts. There are a variety of approaches and actions that governors can take to encourage the use of evidence within their agencies, regardless of their existing evidence capacity or knowledge. Innovative

approaches taken by other states or even the federal government can serve as helpful models for a new evidence-based policy agenda and can highlight the multitude of ways that evidence can be used to inform important policy decisions. Adopting an evidence-based policymaking approach can help governors accomplish policy goals and more positively affect citizens' lives. Providing strong leadership support for integrating evidence into state-level policymaking—at the beginning and in whatever capacity—ultimately allows for more effective, impactful, and thoughtful policy decisions.

Appendix: Helpful Resources

How States Engage in Evidence-Based Policymaking (2017)

Pew-MacArthur Results First

Invest in What Works State Standard of Excellence (2018)

Results for America

Evidence-Based Policymaking: A Guide for Effective Government (2014)

Pew-MacArthur Results First

Principles of Evidence-Based Policymaking (2016)

Evidence-Based Policymaking Collaborative

Learning Agendas

Learning Agendas (2018)

Evidence-Based Policymaking Collaborative

Engaging Stakeholders in Learning Agenda Development: A Playbook for Federal Agencies (2018)

Evidence-Based Policymaking Collaborative

Performance and Evidence-Based Budgeting

Investing in Results: Using Performance Data to Inform State Budgeting (2014)

The National Association of State Budget Officers

Cost-Benefit Analysis (2016)

Evidence-Based Policymaking Collaborative

Agency Grant-making

Clearinghouses and Evidence Reviews for Social Benefit Programs (2016)

Corporation for National and Community Service

Chiefs for Change

Administrative Data

Data-Driven Approaches to Delivering Better Outcomes (2015)

National Governors Association.

Unleashing the Power of Administrative Data: A Guide for Federal, State, and Local Policymakers (2017)

Results for America

Data Access and Integration (2018)

Evidence-Based Policymaking Collaborative

Moneyball for Higher Ed: How States Can Use Data and Evidence to Improve Student Outcomes (2018) Results for America

Notes

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- 3. Evidence-Based Policy Collaborative, "Principles of Evidence-Based Policymaking," September 2016, p. 2.
- 4. Jenni W. Owen, interview by authors, August 31, 2018.
- 5. See Office of Management and Budget, "Implementing a Learning Approach," January 25, 2017. Resources exist that provide guidance on creating learning agendas (e.g., US Agency for International Development, Landscape Analysis of Learning Agendas: USAID/Washington and Beyond, March 1, 2007). Although written for a federal audience, the methodology and insights are applicable to state governments as well. Cities also provide good models. For example, the University of Chicago's Consortium on School Research is a partnership between the university and researchers from the Chicago Public Schools district that conducts high-quality research to inform policy and practice in the city's public schools. The consortium produces a four-year research agenda to guide their research efforts.
- 6. Ibid.
- 7. Executive Office of the President, Office of Management and Budget, "Next Steps in the Evidence and Innovation Agenda," July 26, 2013.
- 8. Demetra Smith Nightingale, Keith Fudge, and Will Schupmann, "Learning Agendas," March 22, 2018.
- 9. See PMRFI (2014), "Appendix B: Potential Roles in State Government."
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- 15. The NASBO (2014) report on performance-based budgeting is an excellent resource and provides more detail and other budgetary concepts.
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- 17. Darcy White and Torey Silloway, "Cost-Benefit Analysis," Evidence-Based Policy Collaborative, September 2, 2016.
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BROOKINGS







With support from the Laura and John Arnold Foundation, researchers from the Urban Institute, Brookings Institution, American Enterprise Institute, and the Pew-MacArthur Results First Initiative have formed the Evidence-Based Policymaking Collaborative. The Collaborative brings together researchers from organizations across the ideological spectrum to create tools to support evidence-based policymaking at the federal level. The Collaborative's work is assisted by an Advisory Group consisting of stakeholders throughout the evidence-based policymaking field. The opinions expressed in this brief do not necessarily reflect the views of all members of the Evidence-Based Policymaking Collaborative.