A report from the Pew-MacArthur Results First Initiative | Jan 2017


Dennis Macdonald/Getty Images


Getty Images


Getty Images

THE PEW CHARITABLE TRUSTS | MacArthur Foundation

How States Engage in Evidence-Based Policymaking

A national assessment

Contents

The Pew Charitable Trusts

Susan K. Urahn, executive vice president
Thomas P. Conroy, vice president

John D. and Catherine T. MacArthur Foundation

Valerie Chang, managing director, programs
Meredith Klein, senior communications officer

Project team

Elizabeth Davies
Sara Dube
Micah Farver
Torey Silloway
Katherine Sutherland
Darcy White

External advisers

This report benefited from the insights and expertise of the following external advisers and reviewers: Katherine Barrett, Barrett & Greene Inc.; Richard Greene, Barrett & Greene Inc.; Marc Holzer, Rutgers University; Don Kettl, University of Maryland; Don Moynihan, University of Wisconsin; and Kathryn Newcomer, George Washington University. Although these individuals have reviewed the report, neither they nor their organizations necessarily endorse its findings or conclusions.

Acknowledgments

We would like to thank Andrew Feldman of the Brookings Institution, Patrick Lester of the Social Innovation Research Center, and Gary VanLandingham of Florida State University for reviewing and providing insightful feedback on the final report. We would like to thank the following colleagues for their contributions to this report: Dan Berger, Hassan Burke, Samantha Chao, Jim Jukes, Rica Santos, and Alan Van der Hilst. We thank Kat Allarde, Catherine An, Dan Benderly, Kimberly Burge, Kristin Centrella, Steve Howard, Bernard Ohanian, Andy Qualls, Kodi Seaton, and Liz Visser for their editorial and production assistance. Many thanks also to other colleagues who made this work possible.

Overview

Evidence-based policymaking is the systematic use of findings from program evaluations and outcome analyses ("evidence") to guide government policy and funding decisions. By focusing limited resources on public services and programs that have been shown to produce positive results, governments can expand their investments in more cost-effective options, consider reducing funding for ineffective programs, and improve the outcomes of services funded by taxpayer dollars.

While the term "evidence-based policymaking" is growing in popularity in state capitols, there is limited information about the extent to which states employ the approach. This report seeks to address this gap by: 1) identifying six distinct actions that states can use to incorporate research findings into their decisions, 2) assessing the prevalence and level of these actions within four human service policy areas across 50 states and the District of Columbia, and 3) categorizing each state based on the final results.

The study finds:

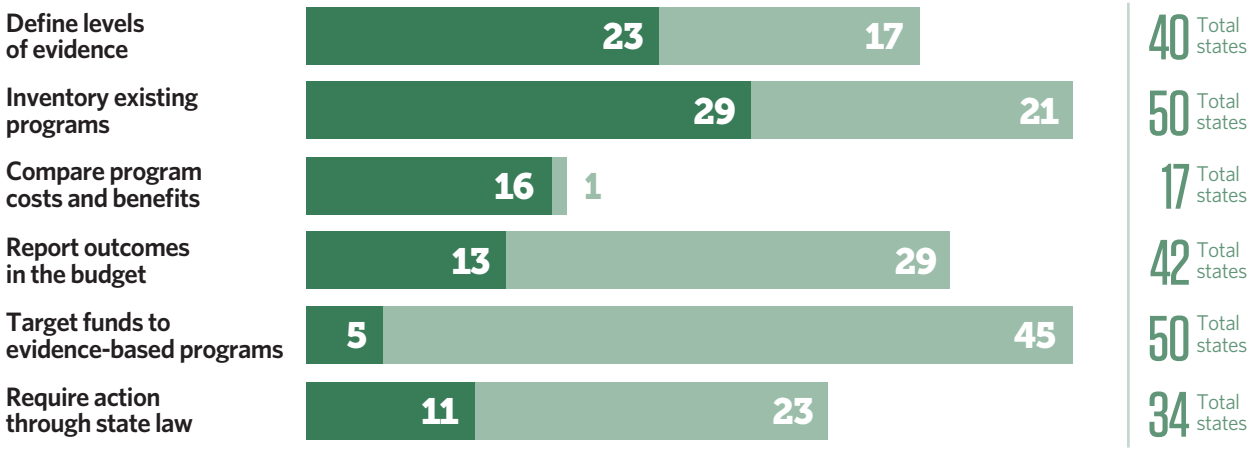
- **Five states lead the way in evidence-based policymaking.**
  - Washington, Utah, Minnesota, Connecticut, and Oregon are *leading* in evidence-based policymaking by developing processes and tools that use evidence to inform policy and budget decisions across the areas examined.
  - 11 states show *established* levels of evidence-based policymaking by pursuing more actions than most states but either not as frequently or in as advanced a manner as the leading states.
  - 27 states and the District of Columbia demonstrate *modest* engagement in this work, pursuing actions less frequently and in less advanced ways.
  - Seven states are *trailing*, taking very few evidence-based policymaking actions.
- **Most states have taken some evidence-based policymaking actions in at least one human service policy area, but advanced application is less common.**
  - **Defining levels of evidence can allow state leaders to distinguish proven programs from those that have not been evaluated.** Thirty-nine states and the District of Columbia have defined at least one level of evidence, such as "evidence-based"; 23 of the 40 have created an advanced definition that distinguishes multiple levels of rigor, such as "evidence-based" and "promising."
  - **Inventorying state programs can help governments to manage available resources strategically.** Forty-nine states and the District have produced an inventory of state-funded programs; 29 of the 50 have created an advanced inventory that classifies programs by evidence of effectiveness.
  - **Comparing program costs and benefits would allow policymakers to weigh the costs of public programs against the outcomes and economic returns they deliver.** Seventeen states have conducted cost-benefit analyses; 16 of the 17 have created an advanced analysis that monetizes benefits to calculate return on investment.
  - **Reporting outcomes and program effectiveness can help policymakers identify which investments are generating positive results and use this information to better prioritize and direct funds.** Forty-one states and the District reported or required key outcome data during the fiscal year 2013-17 budget cycles; 13 of the 42 have created advanced budget materials that include findings from program evaluations.

- **Targeting funding to evidence-based programs, such as through a grant or contract, can help states implement and expand these proven approaches.** Forty-nine states and the District of Columbia have such a funding mechanism; five of the 50 have created advanced mechanisms to dedicate at least 50 percent of program funds for a specific policy area toward these initiatives.
- **Requiring action through state law, which includes administrative codes, executive orders, and statutes, can help states sustain support for evidence-based policymaking.** Thirty-three states and the District have developed a framework of laws to support one or more of the five advanced actions listed above in at least one policy area; 11 of the 34 states have created an advanced framework of laws to support two or more advanced actions.

Figure 1

Most States Are Engaging in Evidence-Based Policymaking

Fewer states utilize advanced forms of the six actions

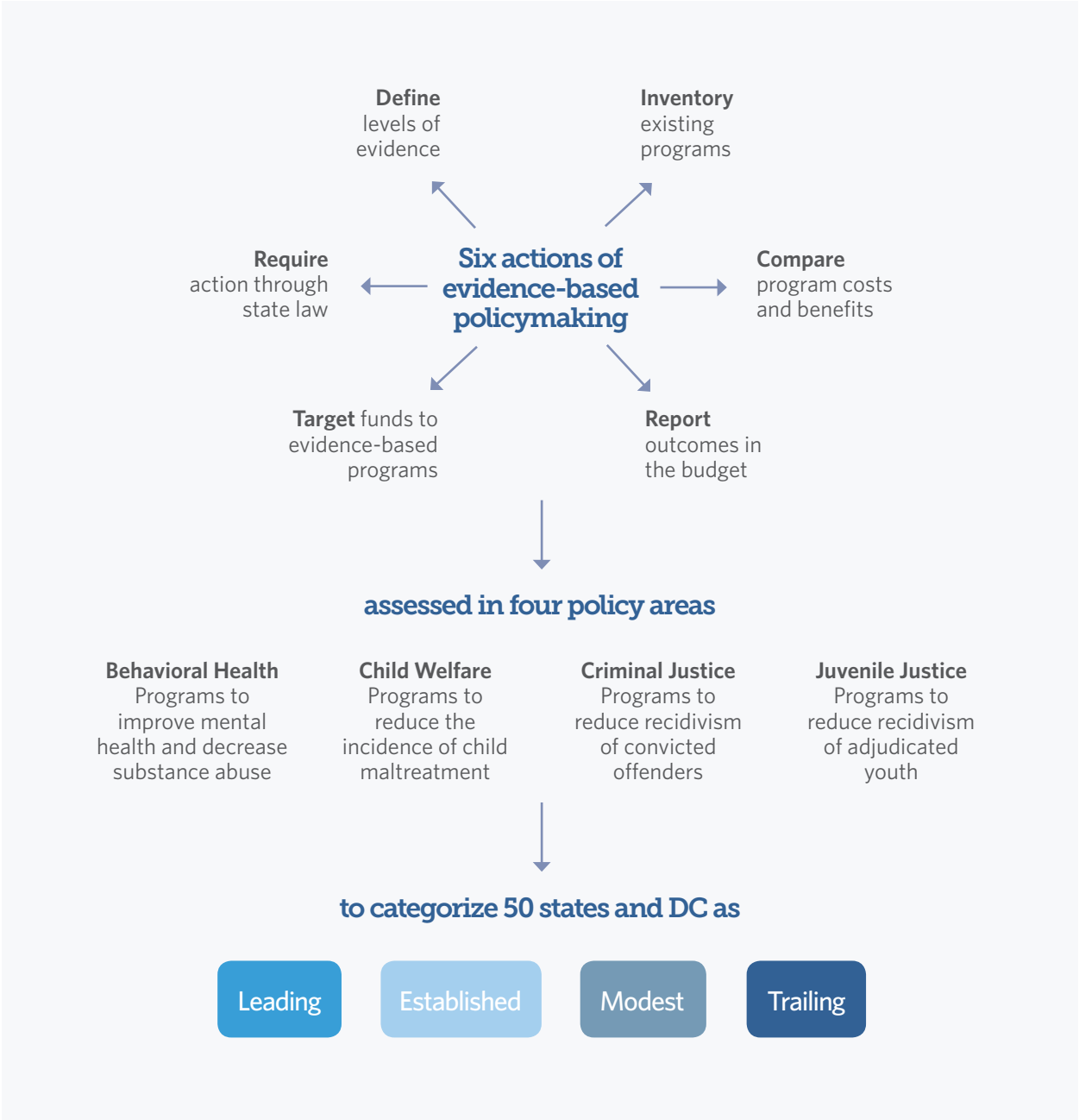


Source: Pew analysis of statutes, administrative codes, executive orders, and state documents

Although many states are embracing evidence-based policymaking, leaders often face challenges in embedding this approach into the decision-making process of state and local governments. This report identifies how staff and stakeholder education, strong data infrastructure, and analytical and technical capacity can help leaders build and sustain support for this work and achieve better outcomes for their communities.

Figure 2

Assessing Evidence-Based Policymaking in the States



Identifying 6 actions of evidence-based policymaking

In 2014, the Pew-MacArthur Results First Initiative published a framework[1] that identifies key components of evidence-based policymaking, including steps that leaders can take to inform their policy and funding choices, strengthen implementation and performance monitoring systems, and conduct rigorous evaluations of new and untested programs.[2]

This study builds on that framework by examining six distinct, recently implemented[3] actions that demonstrate states' engagement in evidence-based policymaking within four policy areas: behavioral health, child welfare, criminal justice, and juvenile justice.[4] States received points based on whether researchers found an advanced example (2 points), a minimum example (1 point), or no example (0 points) of each action, as summarized in Table 1. States could receive a maximum score of 12 points per policy area, or 48 points overall.

To identify examples of these actions, Results First researchers collected data in two phases:

- **Phase I: Review of publicly available documents.** The first phase involved an exhaustive review of statutes, administrative codes, executive orders, and publicly available documents released between 2010 and 2015.[5] Materials were identified through the following mechanisms: 1) highly targeted keyword searches of LexisNexis state databases, using terms associated with the actions; 2) highly targeted keyword searches on Google, using terms associated with the actions and searching relevant state agency websites; and 3) reviews of existing reports on states' use of evidence-based policymaking actions. For more detail see Appendix A.
- **Phase II: Review of internal and state-supplied documents.** The second phase involved an email survey of more than 200 state officials, including agency directors with control over the policy areas examined in this study, budget directors, and directors of commissions and entities that influence policy in these areas (such as sentencing commissions). Respondents were asked to review researchers' initial findings for relevant policy areas and identify additional examples for inclusion. Overall, state representatives were able to review and confirm or supplement data on 83 percent of the 204 combined policy areas studied (representing four policy areas per state and the District of Columbia). The survey also asked directors about their successes and challenges in pursuing evidence-based policymaking; 57 agency leaders responded from 35 states and the District.[6]

Once data were collected, researchers analyzed the distribution of total scores to create four categories of evidence-based policymaking: *leading* (24 or more points), *established* (16-23 points), *modest* (8-15 points), and *trailing* (0-7 points).

It is important to note that this method for assessing evidence-based policymaking in states, based on the documentable prevalence and level of six specific actions in four human service areas, does not attempt to represent all of the work being done by states in these policy areas. Specifically, the study does not attempt to assess a) the weight given to evidence in decision-making, b) the number of evidence-based programs being implemented within the state, or c) how well evidence-based programs are being implemented, including efforts to manage them through fidelity monitoring. States are also assessed based on the work performed within four human service systems, not in all policy areas and not by specific agencies. It is possible that low-scoring states are performing well in specific agencies or in policy areas that were not reviewed. A state could accumulate a majority of points in one policy area and very few points in the other three policy areas, yet still rank high overall. Finally, while each of the actions associated with evidence-based policymaking underwent testing and external

review, there are limitations associated with their scope and measurement. See Appendix A for a discussion of study limitations and how project researchers developed quality control processes and external review to address these concerns.

Table 1

Six Key Actions of Evidence-Based Policymaking

States received points based on advanced, minimum, or no examples in each policy area

Action	Advanced—2 points	Minimum—1 point
Define levels of evidence	Definitions of multiple tiers of evidence that specify the strength of research methods (e.g., randomized controlled trial) or reputable source for categorization (e.g., What Works in Reentry Clearinghouse)	A definition of one tier of evidence that specifies the strength of research methods (e.g., randomized controlled trial) or reputable source (e.g., What Works in Reentry Clearinghouse)
Inventory existing programs	A list of state programs categorized by at least two levels of evidence that includes data on funding, performance, design, or location	A list of state programs that consistently reports data on funding, performance, design, or location
Compare program costs and benefits	A report on the costs and monetized benefits of multiple related programs	A report on the costs and non-monetized outcomes of multiple related programs
Report outcomes in the budget	Inclusion of research on the effectiveness of specific program(s) in official budget materials*	Inclusion of key outcomes† in official budget materials
Target funds to evidence-based programs	An official document prioritizes at least 50 percent of program funds to evidence-based programs	An official document prioritizes funding to at least one evidence-based program and/or demonstrates that at least 10 percent of programming is evidence-based‡
Require action through state law	State laws require at least two advanced actions or five minimum actions noted above in a single policy area	State laws require at least one advanced action or two minimum actions noted above in a single policy area

Notes:

* Research must include a citation or specify rigorous methods used (e.g., replication, control group, cost-benefit analysis).

† Key outcomes vary by policy area: (1) Behavioral Health: hospital re-admissions, relapse, suicide rates, reported substance use; (2) Child Welfare: permanency, maltreatment, out-of-home placement; (3) Criminal and Juvenile Justice: recidivism, employment, and out-of-home placement (juvenile only).

‡ Document (grants, provider/contract guidelines, memorandums of understanding, agency directives, budget items, or other formal funding requirements) must prioritize one or more evidence-based programs or require recipient to defend evidence behind program selection; OR the state can demonstrate that at least 10 percent of program funds, clients, programs, staff, or practices are going to evidence-based programs.

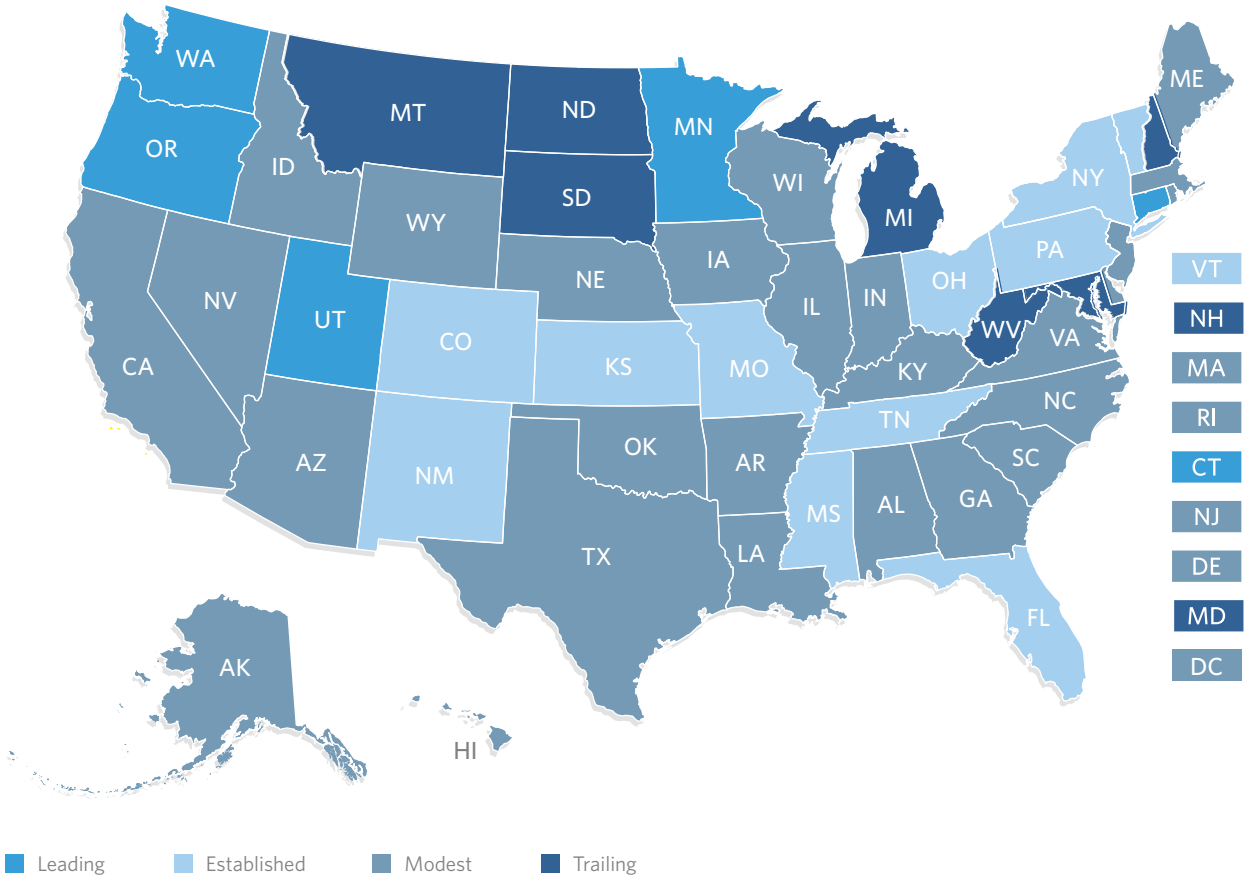
How each state scored

Washington, Utah, Minnesota, Connecticut, and Oregon lead in evidence-based policymaking. Consistently, these states define tiers of evidence, inventory existing programs, compare their costs and benefits, report outcomes in the budget, target funds to evidence-based programs, and require action through state law. Based on total points, Washington showed the strongest commitment to evidence-based policymaking, followed by Utah, Minnesota, and Connecticut and Oregon (tied for fourth).

Eleven states are showing established levels of evidence-based policymaking; these states have taken an average of 13 actions, 6 of which are advanced. Twenty-seven states and the District are showing modest levels of evidence-based policymaking; these jurisdictions have taken an average of 10 actions, two of which are advanced. Seven states are trailing, taking an average of five actions, one of which is advanced. See Map 1 for states' categorization.

Map 1

Most States Show Modest Levels of Evidence-Based Policymaking

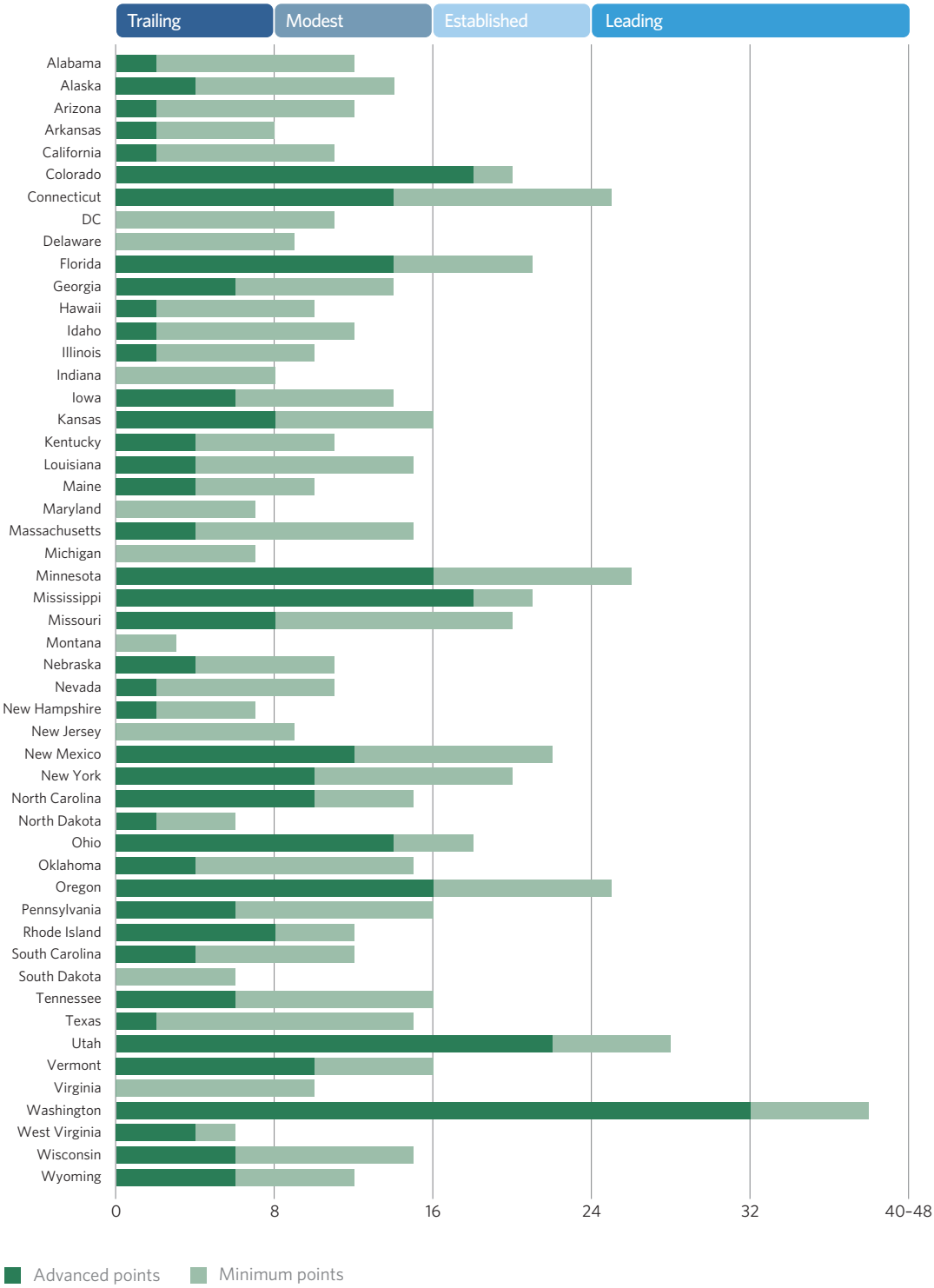


Source: Pew analysis of statutes, administrative codes, executive orders, and state documents

Figure 3

Prevalence of Evidence-Based Policymaking Across the States

Scores based on the total number of minimum and advanced actions



Source: Pew analysis of statutes, administrative codes, executive orders, and state documents

Five states lead the way in evidence-based policymaking

Profiles of Washington, Utah, Minnesota, Connecticut, and Oregon

Washington

Washington state's reputation as a leader in evidence-based policymaking stands on a foundation of clear legislative mandates and tools that help leaders creatively and routinely incorporate information on program effectiveness into funding and policy decisions. For example, in 1997, the Washington Legislature passed the Community Juvenile Accountability Act,[7] which directed the Washington State Institute for Public Policy[8] to establish standards to measure the effectiveness of juvenile justice programs. The institute has created a common set of definitions and a widely recognized process for reviewing national and international studies across multiple policy areas to identify what works. It has also developed a cutting-edge cost-benefit model that calculates the return on investment that the state could achieve through funding a wide range of evidence-based programs.

These analyses have enabled the legislature and agency leaders to target funding to programs that are shown to achieve high returns on investment in areas including criminal and juvenile justice, child welfare, and behavioral health. For example, the state's Department of Social and Health Services has used the findings to increase the number of youth accessing evidence-based mental health services and to strengthen its accountability processes so that training, data systems, and monitoring promote programs' fidelity to their original models.[9]

Utah

Utah has established a strong system of evidence-based policymaking that includes both centralized and agency-specific tools. On a statewide basis, the Office of Management and Budget requires each agency to answer a set of questions when making funding requests for new programs, including the need for the service, the expected outcomes, and whether it is an evidence-based practice or supported by research, data, evaluation, or professional industry standards.[10] Programs that fail to meet this standard must conform in order to receive future funding. The governor's fiscal 2016-17 budget recommendation identified 41 programs that are required to provide additional evidence of effectiveness to receive support beyond 2017.[11]

At the agency level, the Utah Department of Human Services' Division of Substance Abuse and Mental Health uses a mandated,[12] statewide registry of evidence-based prevention programs to guide its contracting decisions. This registry has expanded over the years based on updates from national clearinghouses and internal evaluations. The division has established an evidence-based work group that further refines the criteria for effectiveness by convening groups of experts to set evidence thresholds and grade programs. Candidates not meeting these criteria receive a written explanation of the decision and recommendations for improvement, along with an offer of technical assistance. Within criminal and juvenile justice, the state has conducted detailed cost-benefit analyses that estimate the financial benefit of recidivism reduction. These data, as well as program evaluation findings, are incorporated routinely into funding decisions. For example, a 2015 budget presentation analyzed recidivism outcomes of several programs, including comparisons against a control group, and made recommendations for remediation.[13]

Minnesota

In 2011, Governor Mark Dayton (DFL) launched Better Government for a Better Minnesota to give residents more value for their tax dollars by improving the efficiency and cost-effectiveness of state-funded services. Toward that end, Minnesota has developed and expanded the use of ongoing statewide and policy-specific

tools to help leaders understand what works in improving outcomes. The state Department of Human Services' Evidence-Based Practices database,[14] for instance, contains data on rigorously reviewed children's mental health programs, and provides decision-makers with treatment strategies most likely to be successful based on a child's mental health issue and demographic characteristics. In the area of criminal and juvenile justice, several county governments and the state Department of Corrections formed the Minnesota Correctional Program Checklist Collaborative. The collaborative uses the University of Cincinnati's Correctional Program Checklist tool[15] to assess the extent to which state- and county-run interventions adhere to evidence-based practices. To date, 67 programs have been assessed and scored. Of those, 12 have been reassessed and saw an average increase of 5 percent on adherence to evidence-based practices.[16]

The state is also partnering with Results First to develop detailed inventories that categorize programs based on evidence of effectiveness, as well as cost-benefit analyses to estimate programs' return on investment.[17] This effort (being undertaken in criminal justice, adult and children's mental health, substance abuse, juvenile justice, and child welfare) will give policymakers a tool to consider cost-effectiveness as well as a platform for discussing the importance of high-quality evidence.

Connecticut

Leaders in Connecticut have access to a wealth of information about the programs that the state operates and the outcomes they can expect. Since 2005, the state has engaged in Results-Based Accountability,[18] a budgeting technique that helps policymakers use data on program outcomes to inform their funding decisions. Through a series of structured communication tools such as formal presentations and regular scorecards, policymakers learn which programs are most effective at achieving desired outcomes and can then use this information to make decisions about how to best invest taxpayer dollars. Many agencies now maintain an inventory of the programs they offer. The Department of Correction has an advanced inventory that classifies programs operated in each state correctional facility by their evidence base.[19]

The state has also institutionalized evidence-based policymaking by incorporating key actions into legislation. In a June 2015 special session, the Legislature passed a law requiring several elements of an effective evidence-based system, including creating tiers of evidence for programs in select agencies and requiring an inventory and cost-benefit analysis of programs in adult and juvenile corrections.[20] The legislation was developed from the state's long-term partnership with Results First.

Oregon

Oregon law requires multiple human service agencies to spend at least 75 percent of their funds on evidence-based programs, with funding targets phased in over time.[21] The law also directs agencies to identify cost-effective programs using a cost-benefit tool and mandates regular progress reports to ensure agencies stay on track.

Due in part to this legislation, agency leaders have targeted dollars to evidence-based programs, with investments in juvenile justice and behavioral health in excess of 50 percent of program funding. For example, in 2014, the Oregon Youth Authority reported targeting 89 percent of all funds to evidence-based programs[22] and the Oregon Health Authority's Addictions and Mental Health Services described "a minimum of 75 percent of substance use disorder treatment funds being spent on evidence-based treatment practices."[23] Leaders in criminal justice have also made hefty investments in what works: The state's 2015-17 budget targets $57.2 million in grants to local public safety agencies to fund proven strategies to reduce recidivism and save prison costs.[24] Oregon's new Pay for Prevention initiative directs $5 million in general funds to evidence-based interventions to prevent children and youth from entering the state's child welfare and foster care systems.[25]

Evidence-based policymaking across states

All states and the District of Columbia are taking evidence-based policymaking actions in at least one policy area, but the strength and prevalence of these actions varies.

Define levels of evidence

State leaders who want to identify and fund evidence-based programs need a clear definition of the term to distinguish proven programs from those whose effectiveness is not as well-documented.

Table 2
Criteria for Defining Levels of Evidence

Advanced	Minimum
Definitions of multiple tiers of evidence that specify the strength of research methods (e.g., randomized controlled trial) or reputable source for categorization (e.g., What Works in Reentry Clearinghouse)	A definition of one tier of evidence that specifies the strength of research methods (e.g., randomized controlled trial) or reputable source (e.g., What Works in Reentry Clearinghouse)

To establish a consistent interpretation of what works, 39 states and the District of Columbia have created formal definitions of evidence in at least one policy area; of these, 23 states have defined multiple tiers of evidence in at least one policy area, most frequently behavioral health. Connecticut and Washington have defined levels of evidence across the four policy areas.

States vary in their application of these definitions. For instance, the Nebraska Commission on Law Enforcement and Criminal Justice developed a program classification system in 2013 to guide grant applicants in selecting juvenile justice programs most likely to deliver positive results.[26] As shown in Example 1, the strongest tier—fully evidence-based practice—requires one randomized controlled trial study or two quasi-experimental[27] studies that demonstrate significant outcomes, while lower tiers require less rigor for demonstrating effectiveness.

Similarly, Mississippi passed a law in 2014 that defines four tiers of evidence to help state agencies fulfill a requirement to classify the strength of evidence behind their funded programs.[28] To meet the top tier, programs must have been tested through multiple randomized controlled trials across heterogeneous populations. The remaining tiers require less rigorous evidence of effectiveness and allow agencies to include a broad range of evaluations.

National research clearinghouses, such as the federal Department of Education's What Works Clearinghouse[29] and Blueprints for Healthy Youth Development,[30] have created tiers of evidence that some governments have adopted. These organizations conduct ongoing literature reviews to assess and rate the expected effectiveness of public programs, typically within a specific policy area. To facilitate navigation of the different rating systems and vocabularies used among clearinghouses, the Results First Clearinghouse Database[31] compiles information from eight national clearinghouses.

Defining tiers of evidence is an important step toward building a strong system of evidence-based policymaking. Government leaders can use these definitions to identify what works and to ensure that their limited funds are invested in programs that will achieve strong outcomes.

Example 1

What Defining Levels of Evidence Looks Like

An example from Nebraska

	Classification System for Evidence Based Juvenile Justice Programs in Nebraska	
I.	**Model Program/ Fully Evidence Based Practice**	The program satisfies the following five criteria: 1) The program demonstrated effectiveness with a randomized experimental study or two quasi-experimental studies in which the treatment group showed a significant difference on the target outcome as compared to the control group; 2) The effect lasted for no less than 1 year after the intervention; 3) There is at least one independent replication with a RCT [randomized controlled trial] or two more quasi-experimental evaluations; 4) The combination of designs adequately addressed all the threats to internal validity (i.e., the design allowed for a strong inference of causality); and 5) The program has produced no compromising negative side effects.
II.	**Effective**	One RCT or two quasi-experimental designs document the program's effectiveness. Furthermore, an evaluator has replicated the program's effectiveness with an RCT design or two quasi-experimental designs but the researcher was not an independent investigator.
III.	**Promising**	There has been one successful RCT or two quasi-experiments that document the effectiveness of the program but there was no replication study available OR the program matches the dimensions of a successful meta-analysis practice [which is a systematic review of multiple evaluations].
IV.	**Inconclusive**	There has been one successful RCT or two quasi-experimental evaluations of the program but there are contradictory findings in these or additional studies OR the program would be promising or effective but the effects are short in duration.
V.	**Ineffective**	The RCT or two quasi-experimental evaluations failed to show significant differences between the treatment and control group.
VI.	**Harmful**	The RCT or two quasi-experiments showed that the control group scored higher on the targeted outcome than did the treatment group and the difference is statistically significant.
VII.	**Insufficient Evidence**	There is no RCT or less than two quasi-experimental evaluations of the program to date.

Source: Nebraska Commission on Law Enforcement and Criminal Justice, "2015 Community-Based Juvenile Services Aid Request for Proposal," pg. 9, http://bit.ly/2bhj7ks.

Inventory existing programs

To strategically manage available resources, governments need structured, comparable information about the programs they operate. These detailed lists can help officials better align resources with needs, avoid duplication, ensure services reach the right clients, and monitor and increase their investment in effective programs.

Table 3

Criteria for Inventorying Existing Programs

Advanced	Minimum
A list of state programs categorized by at least two levels of evidence that includes data on funding, performance, design, or location	A list of state programs that consistently reports data on funding, performance, design, or location

Forty-nine states and the District of Columbia inventoried a large subset of their state-funded programs in at least one policy area, most frequently in criminal justice. Twenty-nine states have expanded their inventories to categorize programs by evidence of effectiveness. Despite the overall prevalence of this action, policymakers rarely have comparable information across policy areas, preventing the use of inventories in a statewide process like budgeting.

State leaders have used program inventories to understand how funds are being spent and to identify gaps and redundancies in services. For example, as part of an initiative to address low life-expectancy rates in select counties, the Arkansas Department of Health began working with other health-based entities in 2012 to develop an annual inventory that could be used to assess whether funded programs address health disparities effectively.[32] A 2015 project report suggests that this process enabled the state to address service gaps that will help increase life expectancy in participating counties.[33]

States that have categorized programs by evidence of effectiveness (e.g., evidence-based, research-based, promising, etc.) have used this information to identify which programs are most likely to produce desired results. For example, in 2013, Rhode Island partnered with Results First to inventory its recidivism reduction programs and examine levels of demonstrated effectiveness (see Example 2). This process enabled corrections administrators to determine whether the level and type of programs addressed the risks and needs of their population. Brian Daniels, deputy budget officer in the state's Office of Management and Budget, explained how the work "helped us identify [the service areas in] need of expansion and understand how many more people we could serve with additional programming."[34] Four other states produced advanced program inventories through their work with Results First that were included in this study.

Twelve states reported using the Correctional Program Checklist and the Standardized Program Evaluation Protocol to determine whether their criminal and juvenile justice interventions met known principles of effective programs.[35] For example, through its biennial Correctional Program Checklist assessment, North Dakota's Department of Corrections and Rehabilitation determined that one of its facilities had a program that was not administered with sufficient fidelity. The center used this information to make adjustments that increased the program's score to highly effective on the follow-up assessment.[36]

As these states have found, program inventories play a critical role in evidence-based policymaking by helping determine whether funded interventions are shown to work. As a next step, states can analyze whether the programs are producing positive returns on investment.

Example 2

What Inventorying Existing Programs Looks Like

An example from Rhode Island

Level of Evidence	Program Name	Average Duration	Number Served	Average Age
Evidence-Based	Adult Basic Education Program (Spec. Ed, GED, Basic Lit.)	Academic year	868	35
Evidence-Based	Adult Drug Court	12 months (can be longer for some participants)	91	33
Evidence-Based	Correctional Industries	Open-ended; dependent on release date	905	35
Evidence-Based	Domestic Violence Prevention Group	12 sessions (3 months)	216	35
Evidence-Based	Drug Testing	3 years with option to renew on an annual basis for 2 years	475	35
Promising	Rhode Island Veterans Treatment Court	7 to 9 months	41	36
Promising	Sex Offender Treatment in Prison	Varies on clinical picture and risk level	250	44

Source: Rhode Island Office of Management and Budget, "Results First—Adult & Juvenile Justice Program Inventory" (March 12, 2014).

Compare program costs and benefits

Cost-benefit analyses help policymakers identify interventions likely to generate the highest returns on taxpayer investment.

Table 4

Criteria for Comparing Program Costs and Benefits

Advanced	Minimum
A report on the costs and monetized benefits of multiple related programs	A report on the costs and nonmonetized outcomes of multiple related programs

Seventeen states have assessed[37] and compared the costs and outcomes of similar programs within a policy area, most frequently in criminal justice. Sixteen of these states have estimated the monetary impact of these outcomes (such as the dollars saved from avoiding substance abuse relapse) and are able to compare programs' return on investment. Washington has conducted an advanced cost-benefit analysis in all four policy areas examined.

Florida has conducted a cost-effectiveness analysis to compare the costs and outcomes delivered by similar programs. The state's Department of Juvenile Justice developed a legislatively-mandated tool,[38] Program Accountability Measures, that uses data on risk factors, expected and observed youth recidivism rates, and program costs to score programs.[39] These measures help the department to identify which programs to fund and to communicate to policymakers and the public what works in the state's juvenile justice system. To build confidence in their findings, department leaders meet with providers and policymakers twice a year to solicit feedback about data quality and analysis, which helps foster relationships and reduce adversarial situations.[40]

Advanced cost-benefit analyses enable policymakers to identify which investments are most likely to deliver results with the most prudent use of public dollars. Since 2008, the Pennsylvania Commission on Crime and Delinquency and the Pennsylvania Department of Human Services have funded the Evidence-Based Prevention and Intervention Support Center (EPISCenter) to provide technical assistance to communities delivering evidence-based juvenile justice and delinquency prevention programs. To help policymakers understand the programs' impact on the state, EPISCenter conducted cost-benefit analyses and identified a $55.8 million return on investment based on outcomes from fiscal 2013-14, as shown in Example 3.[41] The state has continued to fund these programs and, with EPISCenter's assistance, scaled up more than 300 replications.[42]

An increasing number of states are leveraging external support to conduct these types of analyses. For example, through their partnership with Results First, eight states have developed a cost-benefit model (similar to the one pioneered by Washington state) and published reports that compare programs' projected returns on investment. To date, New Mexico has used its model to target $104.4 million to child welfare, early education, behavioral health, and criminal justice programs projected to achieve high returns on investment.[43]

As states face resource constraints, cost-benefit analyses can help policymakers identify ways to provide needed services in a cost-effective manner. Such information might be particularly useful during the budgeting process.

Example 3

What Comparing Program Costs and Benefits Looks Like

An example from Pennsylvania

	Prevention programs				
Program	**Cost per participant**	**Benefit per participant**	**Benefit minus cost**	**Number of participants**	**Total cost-benefit**
Aggression Replacement Training (probation)	$1,223	$13,272	$12,049	369	$4,446,081
Big Brothers Big Sisters	$1,690	$10,694	$9,004	953	$8,580,812
Life Skills Training	$227	$3,461	$3,234	1,584	$5,122,656
Project Towards No Drug Abuse	$63	$174	$111	1,914	$212,454
Strengthening Families Program: For Parents & Youth 10-14	$2,127	$4,259	$2,132	428	$912,496
The Incredible Years (parents only)	$953	$1,535	$582	463	$269,466
Total				**5,711**	**$19,543,965**

	Intervention programs				
Program	**Cost per participant**	**Benefit per participant**	**Benefit minus cost**	**Number of participants**	**Total cost-benefit**
Functional Family Therapy	$3,883	$29,944	$26,061	813	$21,187,593
Multidimensional Treatment Foster Care	$60,888	$17,286	-$43,602	2	-$87,204
Multisystemic Therapy	$10,661	$23,082	$12,421	1,222	$15,178,462
Total				**2,037**	**$36,278,851**

Source: EPISCenter, "2014 Annual Report," 2014, pg. 15, http://www.episcenter.psu.edu/sites/default/files/outreach/EPISCenter-Annual-Report-2014.pdf.

Report outcomes in the budget

Aggregate data on program effectiveness, when incorporated into the state budgeting process, can help policymakers direct resources toward programs that are generating results.

Table 5
Criteria for Reporting Outcomes in the Budget

Advanced	Minimum
Inclusion of research on the effectiveness of specific program(s) in official budget materials	Inclusion of key outcomes in official budget materials

Forty-one states and the District of Columbia collected and reported key outcome data, such as recidivism reduction and substance abuse rates, during the fiscal 2013-17 budget cycles, or required it in their budget instructions. Thirteen states report or require data on the effectiveness of individual programs in their budgeting process, allowing them to better understand how individual programs contribute to this overall goal. Florida, Utah, and Mississippi did so across all four policy areas.

Governments frequently reported outcome and program effectiveness data in their executive and legislative budget documents. For example, to support a $6 million funding recommendation for adult offenders' supervision programs, the Minnesota governor's fiscal 2016-17 biennium budget compared the recidivism rates of persons discharged from probation supervision to those released directly from prison, showing that probation completers had a substantially lower rate of recommitment.[44]

Other states opt to report outcome data through separate mechanisms tied to their budgeting processes, such as annual reports, strategic plans, and centralized performance management tools.[45] Oklahoma's OKStateStat, for instance, reports the percentage of children who reunify with their family within 12 months of entry into foster care, 58.7 percent, as well as its targeted goal of 69.9 percent.[46] Similar outcome data are reported for other policy areas with the intent to inform the state's upcoming Performance Informed Budgeting initiative.

While statewide outcomes can help policymakers assess whether an agency is achieving key goals, information on the effectiveness of individual programs provides a more direct link to budget decisions. For instance, New Mexico's fiscal 2016 legislative budget book includes findings from internal and external evaluations, including cost-benefit assessments that show, for example, family support and coaching programs, also known as home visiting programs, could achieve returns as high as $1.49 for every dollar invested.[47] The New Mexico Legislative Finance Committee, which develops the state budget, reported that this information helps leaders identify opportunities for strategic investments and make more informed decisions about where to cut and where to continue supporting programs.[48] Similarly, Florida's Department of Children and Families used research on program effectiveness to support its fiscal 2016-17 budget request to fund Healthy Families Florida.[49]
(See Example 4.)

Though it is not practical for outcome data to be the sole decision-making factor in crafting a state budget, these data can offer a more comprehensive view of how limited resources are spent and increase the likelihood that state dollars are directed toward programs that achieve desired outcomes. As a next step, governments can create formal mechanisms to fund evidence-based options.

Example 4

What Reporting Outcomes in the Budget Looks Like

An example from Florida

An excerpt from an FY 2016-17 budget request

"The Florida Department of Children and Families (Department) requests $2,511,500 ($1,023,125 in General Revenue and $1,488,375 in Federal Grants Trust Fund) for Healthy Families Florida to expand the Healthy Families Florida program into high-risk areas of the state and fund and evaluate a high-risk enhancement component to the Healthy Families Florida (HFF) core model in six projects.... Research shows that the most rapid brain development occurs before the age of five, during the same period when child abuse and neglect is most likely to occur (Shonkoff, 2009). Early traumatic experiences can impede development resulting in children that are more likely to struggle in school and have lower earnings as adults (Johnson and Schoeni, 2006). Conversely, evidence shows that when babies have stimulating and supportive interactions with caring adults, they develop healthier brains, better learning abilities, and more successful interpersonal relationships into adulthood and beyond (Shonkoff, 2009). ...Healthy Families Florida is a nationally accredited home visiting program that is proven to prevent child abuse and neglect in Florida's highest-risk families by promoting healthy child development, supporting positive parenting, and increasing family stability and self-sufficiency..."

Source: Florida Fiscal Portal, "Exhibit D-3A, Expenditures by Issue and Appropriation Category," pg. 106-7, http://floridafiscalportal.state.fl.us/Document.aspx?ID=13803&DocType=PDF.

Target funds to evidence-based programs

A formal funding mechanism that prioritizes funds for evidence-based programs can help states implement and sustain these proven approaches.

Table 6

Criteria for Targeting Funds to Evidence-Based Programs

Advanced	Minimum
An official document prioritizes at least 50 percent of program funds to evidence-based programs	An official document prioritizes funding to at least one evidence-based program and/or demonstrates that at least 10 percent of programming is evidence-based

Forty-nine states and the District of Columbia have established at least one formal funding mechanism, such as a grant requirement, dedicated trust, or provider/contractor guideline that targets state dollars to evidence-based programs, most frequently in behavioral health. Five states have documented that at least 50 percent of agency or sub-division program funds are directed toward evidence-based programs, though no state could demonstrate that it targets this level of funds in all policy areas.

Most states are allocating funding to evidence-based programs through grants or contracts. For example, since 2005, Indiana has required counties that receive state community corrections funds to utilize eight principles of effective intervention, including evidence-based programming, to report on performance measures and undergo programmatic and fiscal auditing.[50] State leaders report that this system has been successful in controlling the prison population and avoiding the need to add new prison beds. "This has created a sense of accomplishment and accountability for all participating counties. It has also demonstrated to the Legislature that the funding Community Corrections receives has been used wisely and has helped us to maintain our capacities without the need to expand," said Julie Lanham, deputy commissioner of re-entry at the Department of Corrections.[51] In 2015, Indiana enacted a law[52] that created the Justice Reinvestment Advisory Council, which helped to evaluate and award grants for evidence-based treatment and to ensure that state money was going to programs with demonstrable results.

The New York Office of Alcoholism and Substance Abuse Services requires providers to dedicate an increasing percentage of full-time equivalent staff to evidence-based substance abuse treatment programs.[53] (See Example 5.)

Example 5

What Targeting Funds to Evidence-Based Programs Looks Like

An example from New York

Fiscal Year	Goal	Actual
2011-12	35%	48%
2012-13	40%	59%
2013-14	45%	62%
2014-15	50%	63%
2015-16	55%	65%
2016-17	60%	70%
2017-18	65%	
2018-19	70%	

Score calculation:

$$\text{EBPS [Evidence-Based Programs and Strategies] FTE [Full Time Equivalent]} = \frac{\text{Total EBPS FTE (Primary + Other Prevention Workplans' EBPS FTE)}}{\text{Total FTE (Primary + Other Prevention Workplans' Total FTE)}}$$

Source: New York State Office of Alcohol & Substance Abuse Services, "2014 Prevention Guidelines," pp. 13-14 of http://www.oasas.ny.gov/prevention/documents/2014PreventionGuidelines.pdf. Data on actual performance obtained through personal correspondence with Mary Ann DiChristopher, New York State Office of Alcohol & Substance Abuse Services.

Require action through state law

To sustain ongoing support for evidence-based programs, many state legislatures and governors have established a framework of statutes, administrative codes, and executive orders that mandate some or all of the key actions described in this report: creating evidence definitions, developing program inventories, conducting cost-benefit analyses, requiring program effectiveness data be reported in the budget process, and targeting funding.

Table 7

Criteria for Requiring Action Through State Law

Advanced	Minimum
State laws require at least two advanced actions or five minimum actions noted above in a single policy area	State laws require at least one advanced action or two minimum actions noted above in a single policy area

Thirty-three states and the District of Columbia require the development of at least one advanced (or two minimum) evidence-based policymaking actions through statute, administrative code, or executive order in one or more policy areas. Eleven of these states have an advanced framework that requires at least two advanced actions or five minimum actions. Missouri and Minnesota have advanced frameworks in all four policy areas.

Of states with laws that require at least one advanced action or two minimum actions,[54] 85 percent have laws that require outcomes to be reported in the budget, such as California's law that mandates annual reporting of outcome and expenditure data for the state's alcohol and drug program services to the Legislature's fiscal and policy committees.[55] Seventy-six percent of these states have laws dedicating funding to evidence-based programs, such as Tennessee's 2007 legislation mandating that the Department of Children's Services target an increasing percentage of programmatic funding (up to 100 percent by fiscal 2012-13) to evidence-based juvenile justice programs.[56] Most of these states have laws mandating program inventories (59 percent), such as Connecticut's 2015 law requiring biennial inventories of criminal and juvenile justice programs to include program descriptions, intended treatment population and outcomes, annual expenditures, and evidence base.[57] Less common were laws that specify a definition of evidence (44 percent) and mandate comparative cost-benefit analysis (41 percent).

Mississippi created comprehensive legislation mandating evidence-based policymaking as part of an effort to revitalize its performance budgeting system. In 2014, Mississippi enacted a law requiring its Legislative Budget Office and Performance Evaluation and Expenditure Review (PEER) Committee staff to work with four agencies to create comprehensive inventories of agency programs and activities; categorize each program based on four tiers of evidence defined in statute; and report expenditure, performance, and return-on-investment data.[58] "Legislative leadership was interested in reinvigorating evidence-based budgeting using cost-benefit analysis. … We selected four agencies whose budgets could really benefit from a clearer understanding of what programs they administer," said Max Arinder, former executive director of PEER.[59] The law is helping the state establish a culture of evidence-based policymaking, as leaders begin to use completed inventories and analyses in budget deliberations. (See Example 6.)

Example 6

What Requiring Action Through State Law Looks Like

An example from Mississippi

An excerpt from Section 27-103-159 of the state law:

1. For purposes of this section, the following terms shall have the following meanings ascribed to them:
   a. "Evidence-based program" shall mean a program or practice that has had multiple site random controlled trials across heterogeneous populations demonstrating that the program or practice is effective for the population.
   b. "Research-based program" shall mean a program or practice that has some research demonstrating effectiveness, but that does not yet meet the standard of evidence-based practices.
   c. "Promising practices" shall mean a practice that presents, based upon preliminary information, potential for becoming a research-based or evidence-based program or practice...
2. Beginning with the fiscal year 2016 budget cycle, the Legislative Budget Office shall require the Department of Corrections, the Department of Health, the Department of Education, and the Department of Transportation to comply with the requirements of this section respecting the inventorying of agency programs and activities for use in the budgeting process...
3. The Legislative Budget Office, the PEER Committee staff, and personnel of each of the agencies set out in this section shall review the programs of each agency and shall:
   a. Establish an inventory of agency programs and activities;
   b. Categorize all agency programs and activities as evidence-based, research-based, promising practices, or other programs and activities with no evidence of effectiveness, and compile them into an agency program inventory. In categorizing programs, the staffs may consult the Washington State Institute for Public Policy's Evidence Based Practices Institute's program catalogue or any other comparable catalogue of evidence-based, research-based, promising practices, or other programs and activities...
   c. Establish a procedure for determining cost-benefit ratios for all programs of each agency.

Continued on next page

> d. The Legislative Budget Office shall report to the Legislative Budget Committee the results of all activities required by this section with recommendations as to how this information can be incorporated into budget recommendations and the appropriations process. The Legislative Budget Committee may incorporate such recommendations into the fiscal year 2017 budget and appropriations bills, or delay such incorporation until the committee is satisfied that the information collected and inventoried under the requirements of this bill will enhance accountability and performance measurement for the programs and activities of state agencies.

Source: Excerpt of Miss. Code Ann. § 27-103-159.

By establishing laws that support evidence-based policymaking, state leaders are building a culture that routinely brings evidence into policy and budgeting processes and strengthens both accountability and programs' ability to achieve better outcomes for residents.

Results First: A Model for Cost-Effective Policy Choices

The Pew-MacArthur Results First Initiative, a project of The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, works with states and localities to help them adopt and use evidence-based policymaking approaches so decision-makers can identify and fund programs that yield high returns on investment.

Results First provides training and technical assistance to help its partner governments implement and customize analytical tools to create an inventory of their currently funded programs; assess the level of evidence available on their programs' effectiveness; conduct cost-benefit analysis to compare programs' likely return on investment; and use evidence to inform their spending and policy decisions.

Currently, 22 states and eight counties are participating in Results First.

Evidence-based policymaking in the human services

Operating an effective prison system requires different program approaches than preventing and responding to child maltreatment. Effective programs used with different populations are often based on different principles and are designed to effect different outcomes. However, in each of the policy areas examined, project researchers found states taking strong steps to engage in evidence-based policymaking. While some states excel within a single policy area, others have created systems that support effective programming across domains.

The following sections take a closer look at how states are developing processes and tools to incorporate evidence into the four policy areas examined in this report: behavioral health, child welfare, criminal justice, and juvenile justice.

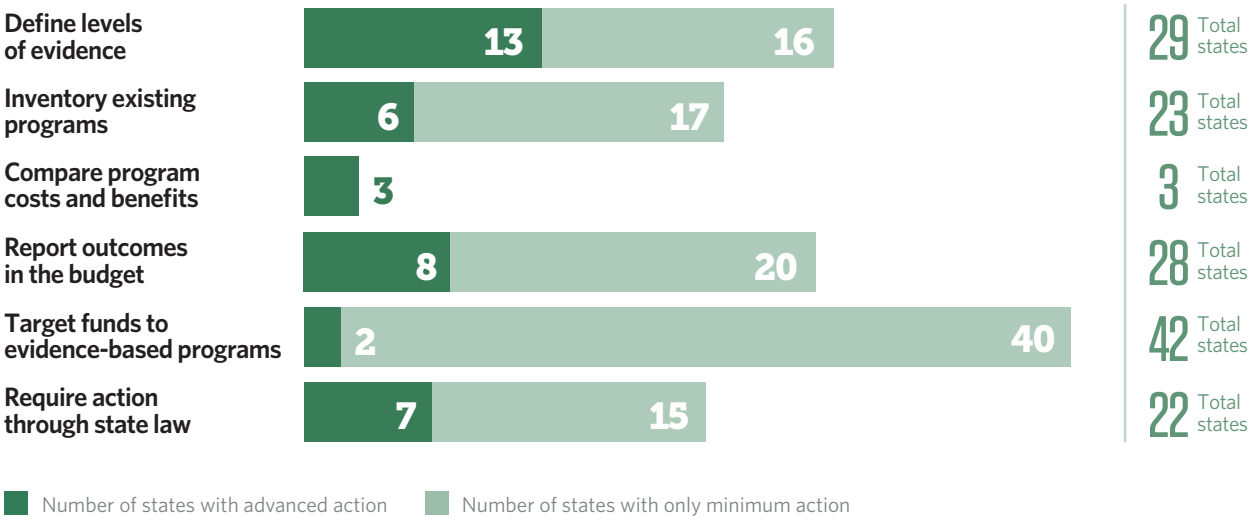
Behavioral health

To help providers and agency leaders consistently interpret what works, 28 states and the District of Columbia have created a formal definition of evidence in behavioral health. Of these states, 13 have expanded their definitions to recognize multiple tiers of evidence, with eight using definitions established by the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA) National Registry of Evidence-Based Programs and Practices.[60]

The District and 22 states have inventoried their mental health and/or substance abuse programs, and six have used definitions to categorize those inventoried programs based on predefined levels of evidence. For example, South Carolina's Department of Alcohol and Other Drug Abuse Services maintains a detailed online catalogue[61] of its currently implemented behavioral health programs, which are classified based on the department's five-tiered definition system.[62] This tool is one element of the state's ongoing effort to identify, fund, and track

Figure 4

Prevalence of Evidence-Based Policymaking Actions in Behavioral Health



Source: Pew analysis of statutes, administrative codes, executive orders, and state documents

provider implementation of evidence-based programs. Since 2007, the department has required each of its 33 substance use disorder service providers to be trained in and to implement one of three evidence-based models, and to inform the agency of how the provider was maintaining fidelity to the model.

Only three states have performed cost-benefit analyses of behavioral health programs. Arkansas' Department of Health and Human Services used the approach to identify the impact of school prevention programming on the state's adolescent substance use, which was nearly triple the national rate for sedative use among 12th-graders. The analysis found that every dollar invested could generate estimated benefits of $7.33 to $33.68.[63]

Twenty-seven states and the District have collected and reported key behavioral health outcome data in budget materials, with the bulk reporting on repeat substance abuse and rates of hospitalization. Eight of these states presented outcome data for specific programs, such as Connecticut's 2015 Results-Based Accountability Report Card that highlights outcome data on its multidimensional family therapy program. This information showed policymakers that 77 percent of participants had remained arrest-free (which exceeded their 75 percent target) and 85 percent improved school attendance.[64]

Forty-one states and the District use a formal funding mechanism to support evidence-based programs in behavioral health, including two states, New York and Oregon, that have targeted more than half of their funding. For example, to receive funds from the New York Office of Alcoholism and Substance Abuse Services, providers must allocate an increasing percentage of their full-time-equivalent staff to evidence-based substance abuse treatment programs, chosen from an internal registry that is reviewed regularly by a panel of prevention scientists.[65] In 2015, over half of contracted staffing was dedicated to evidence-based programs.[66]

Fourteen of the states with formal funding mechanisms track the percentage of clients receiving evidence-based programs through a federal reporting requirement. SAMHSA requires recipients of community mental health grants to report the prevalence of 10 evidence-based programs delivered to clients.[67] According to a recent evaluation of the grant, this requirement has encouraged subrecipients to place greater value on evidence-based programming and has increased significantly the number of evidence-based practices offered to mental health clients.[68]

Despite the availability of some federal funds, states reported facing a number of barriers to making such investments. For instance, 10 states rely on local governments to administer human services, including behavioral health,[69] which can complicate the coordination of funding and services. Related, decentralized systems can pose a challenge for states that wish to target funds to evidence-based programs. For example, leaders of Nevada's Department of Health and Human Services noted that the absence of a central children's mental health authority has made it difficult to incorporate evidence-based policies into provider enrollment guidelines.[70] Furthermore, reimbursement systems that do not provide differential payment to providers that deliver evidence-based programs (which can be more expensive to operate than alternative programs that achieve lower outcomes) can impede support for these programs, as can systems that tie funding to service delivery rather than client outcomes.

To sustain ongoing support for evidence-based policymaking in behavioral health, 21 states and the District have established a framework of laws to support the key aspects, most commonly through budget reporting requirements. Seven of these states have created an advanced framework that supports two or more advanced actions in behavioral health.

Evidence-Based Policymaking in Behavioral Health:
Wyoming

In 2012, Wyoming contracted with the University of Wyoming's Survey & Analysis Center to create an inventory of substance abuse prevention strategies, ranking each strategy according to the evidence supporting its effectiveness and highlighting whether the strategy was implemented in the state.[71] The resulting guidebook has helped community coalitions identify which strategies are most likely to address existing needs, saving time and increasing overall effectiveness.

Brittany Ritter, a community prevention specialist from Lincoln County and member of the Prevention Management Organization of Wyoming, described the effect of the inventory as a change not in *how* coalitions make decisions, but in *how quickly* they do so: "I can't tell you how simple this document is to use compared to the time-consuming and overwhelming task of searching for best practices on your own. [With] the catalog, you can see clearly what is effective and how best to implement it."[72]

Rob Johnston, a community prevention specialist with the Prevention Management Organization, added that while not all coalitions will follow the inventory's recommendations, they now have a definitive guide for what works: "Coalitions may still want to do some things that are not evidence-based. … They just cannot use our dollars for it."[73]

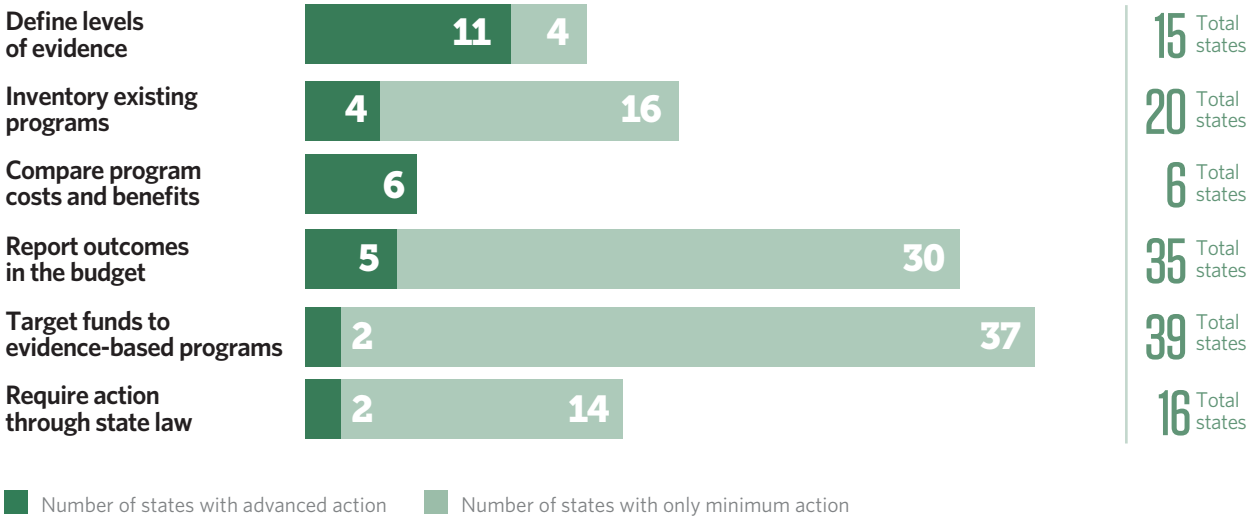
Child welfare

Fourteen states and the District of Columbia have created standard definitions of evidence for child welfare, of which 11 have expanded their definitions to recognize multiple tiers of research strength. Nineteen states and the District have created detailed inventories of their child welfare programs, of which four have used their evidence-based program definitions to categorize inventoried programs by research strength.

Gaps in the child welfare research literature might explain why some states have not inventoried and categorized their evidence-based programs. JoShonda Guerrier, assistant secretary for child welfare at Florida's Department of Children and Families, described how "there are very few funded programs in our inventory, [in part because] when considering the specific needs of child welfare families, few evidence-based programs exist that cater specifically to this population in an effective and meaningful way."[74] The state is developing a Results-Oriented Accountability Program, which relies on the statutory guidelines[75] that became law in 2014, as well as a 2010 guidebook, *Fostering Accountability: Using Evidence to Guide and Improve Child Welfare Policy*, to create a quality assurance system that includes a research review process that closely mirrors the approach detailed in this study; Florida will identify practices based on well-designed studies and broaden the evidence base for interventions.

Figure 5

Prevalence of Evidence-Based Policymaking Actions in Child Welfare



Source: Pew analysis of statutes, documents, and interviews

Only six states have calculated the benefits and costs of their child welfare programs. To address the need for this kind of analysis in the field, a number of resources have been developed, such as a 2009 guidebook by Chapin Hall at the University of Chicago on monitoring return on investment of child welfare programs,[76] a federal child welfare online portal[77] that lists cost-benefit resources, and child welfare-specific cost-benefit tools, such as those available through Results First.

Thirty-four states and the District have reported key child welfare outcome data such as maltreatment and permanency rates in recent budget cycles, of which five states have taken the next step by reporting research findings on specific programs such as home visiting.

To support programs shown to work, 38 states and the District have created formal funding mechanisms to support evidence-based child welfare programs. Ohio and Washington have targeted at least 50 percent of program funding. Many states are working to create grants through the Maternal, Infant, and Early Childhood Home Visiting grant funds, which require at least 75 percent of funds be dedicated to evidence-based or promising family support and coaching programs, also known as home visiting programs.[78]

Sixteen states and the District have developed a framework of laws to ingrain evidence-based approaches into their child welfare budget and policy processes, mostly through requiring the inclusions of outcomes in the budget. Two states have taken the next step of creating a framework that mandates the advanced standard for at least two evidence-based policymaking actions.

Evidence-Based Policymaking in Child Welfare:
Ohio

For the past five years, Ohio has dedicated all state, federal, and private child abuse prevention dollars to evidence-based and promising programs. Previously, counties received funds based on population size and could spend dollars on a range of programs without considering outcomes. The decision to move to an evidence-based approach was made by the Ohio Children's Trust Fund, the state entity responsible for managing these funds, to introduce more accountability into how money was spent and to attract new funders. Trust staff used research clearinghouses to identify effective programs and selected a few on which to train providers. Programs not selected for training can still be delivered, provided they meet evidence-based criteria developed by the trust fund's staff or undergo a formal evaluation. Modifications to evidence-based programs require approval from program developers.

Through these reforms, Ohio now uses more evidence-based programs, and counties have seen a decline in entries into the child welfare system. Kristen Rost, executive director of the Ohio Children's Trust Fund, credits her state's success in evidence-based programming to strong leadership, the ability to support decisions with data, and a commitment to providing technical assistance and training. "[We] showed people that we cared and were in it with them. ... A move to evidence-based programs is more expensive but ultimately a better investment," said Rost.[79]

Ohio plans to use the trust's work in child abuse prevention to identify evidence-based programming for its larger Department of Job and Family Services,[80] which maintains a detailed internal database of evidence-based programs available for public download,[81] and to inform the development of a common definition of "evidence-based" that will apply to all children's programs.

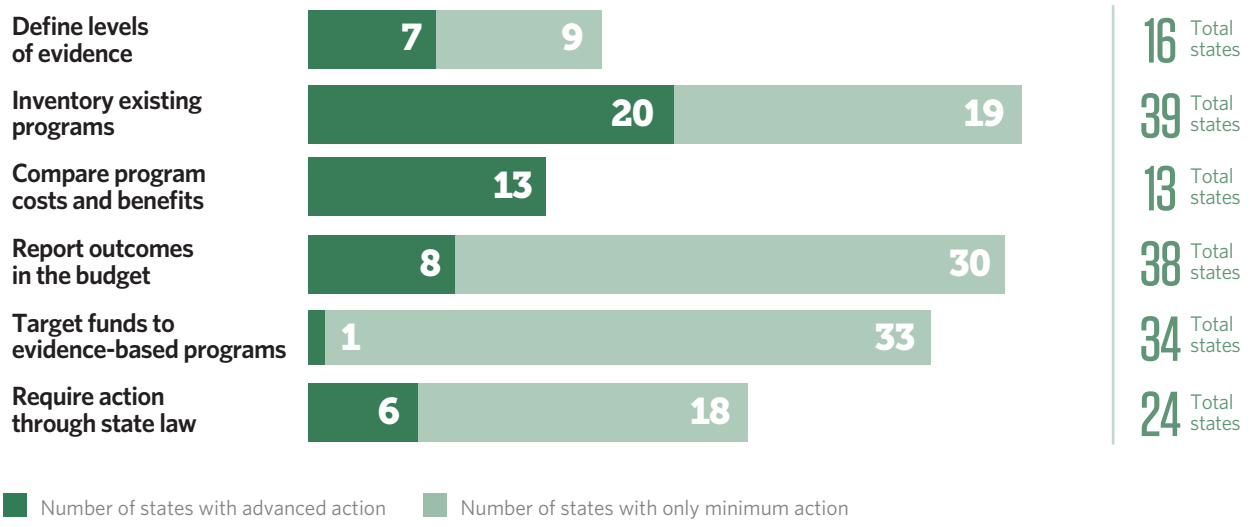
Criminal justice

Sixteen states have developed a standard, rigorous definition of what works in criminal justice, and seven of these states have created multiple tiers of evidence. The remaining states for which researchers did not find a rigorous definition often had guidelines defining evidence-based criminal justice programs as those with a "proven" ability to reduce recidivism, without specifying what standard of evidence is needed to meet these criteria. Such ambiguous definitions can become problematic for states trying to identify and fund evidence-based programs consistently. Bret Bucklen, director of research and statistics at the Pennsylvania Department of Corrections, said, "[The] term is thrown around quite loosely within our system, [and] in some cases the evidence behind so-called evidence-based programs is quite weak. Our challenge is to help staff understand what constitutes strong evidence, such as randomized controlled trials."[82] Researchers at the Urban Institute detected similar uncertainty among parole offices in defining what is meant by evidence-based.[83]

Program inventories are quite common in the criminal justice field, perhaps in part due to a growing consensus on what constitutes evidence-based practice[84] in corrections, along with a strong base of available resources,

Figure 6

Prevalence of Evidence-Based Policymaking Actions in Criminal Justice



Source: Pew analysis of statutes, documents, and interviews

including national research clearinghouses and technical assistance providers. Thirty-nine states have inventoried the criminal justice programs offered within correctional facilities or in the community. Twenty of these states include information on evidence-based programming in their inventories, typically derived from national tools and initiatives including the Correctional Program Checklist (eight states), Results First (five states), and the Justice Reinvestment Initiative (two states). The Louisiana Department of Public Safety maintains a program inventory through its evidence reporting system, which captures information and performance indicators (such as recidivism and population demographics) on state-operated prisons and community corrections. The department has used this inventory to expand use of day reporting centers, reentry centers for those serving time in local jails, and certified treatment and rehabilitation programs. Department Secretary James M. Le Blanc said: "We have a vetting process for certifying programs to ensure we maintain a [thorough] inventory and that programs can be [replicated] statewide. … [The] process also eliminates multiple versions of programs as we can share curriculums between facilities and encourage the use of standardized programs to the degree possible."[85] Le Blanc also noted that the state has seen a decrease in prison population and overall recidivism following these efforts.

Thirteen states have performed cost-benefit analyses of two or more of their criminal justice programs. Eight of these states conducted the analyses using the cost-benefit model provided by Results First. For example, Iowa used this model to determine that its community and prison-based cognitive behavioral programs were inexpensive to operate and generated returns as high as $37.70 for every $1 invested.[86]

Thirty-eight states have incorporated into budget materials research data (e.g., recidivism, employment, and return-on-investment ratios) from inventories, cost-benefit analyses, performance management systems, and other tools. Eight states have taken the next step of reporting research data on the specific programs that help achieve desired outcomes. To support programs shown to deliver results, such as those highlighted in budget

materials, 34 states have established a formal funding mechanism to support evidence-based criminal justice programs, though only New York demonstrated that at least 50 percent of its funds were targeted toward evidence-based programs.

To continue building momentum for evidence-based policymaking in criminal justice, 24 states have developed a framework of laws to support their actions, and six have built a framework that mandates the advanced standard of at least two evidence-based policymaking actions.

Evidence-Based Policymaking in Criminal Justice: New York

In 2012, the New York State Division of Criminal Justice Services partnered with Results First to develop a consistent, cost-benefit methodology that would strengthen decision-making processes already in place[87] and help policymakers prioritize limited state resources toward evidence-based criminal justice programming. The state used its cost-benefit model to identify those programs most likely to reduce criminal recidivism and generate government savings, and to target more than $60 million over three years for several grant initiatives, including about $50 million in state general funds and $12 million in "Pay for Success" funding from the U.S. Department of Labor.[88] New York also introduced quality assurance and evaluation systems that require grant recipients to demonstrate that programs are being implemented with fidelity to their design and are achieving forecasted outcomes.

"We had limited resources and wanted to reduce crime to provide the best programs that get the most out of taxpayer dollars, but at the time we had no idea whether we were funding the right programs for our population or what we were getting for our money," said Michael C. Green, executive deputy commissioner of the New York State Division of Criminal Justice Services.[89] "Before Results First, our primary role was ensuring recipients used their grant funds the way they said that they would, such as paying for salaries or providing services. Our funding decisions were often based on anecdote. There was little emphasis on long-term public safety outcomes or return on investment."

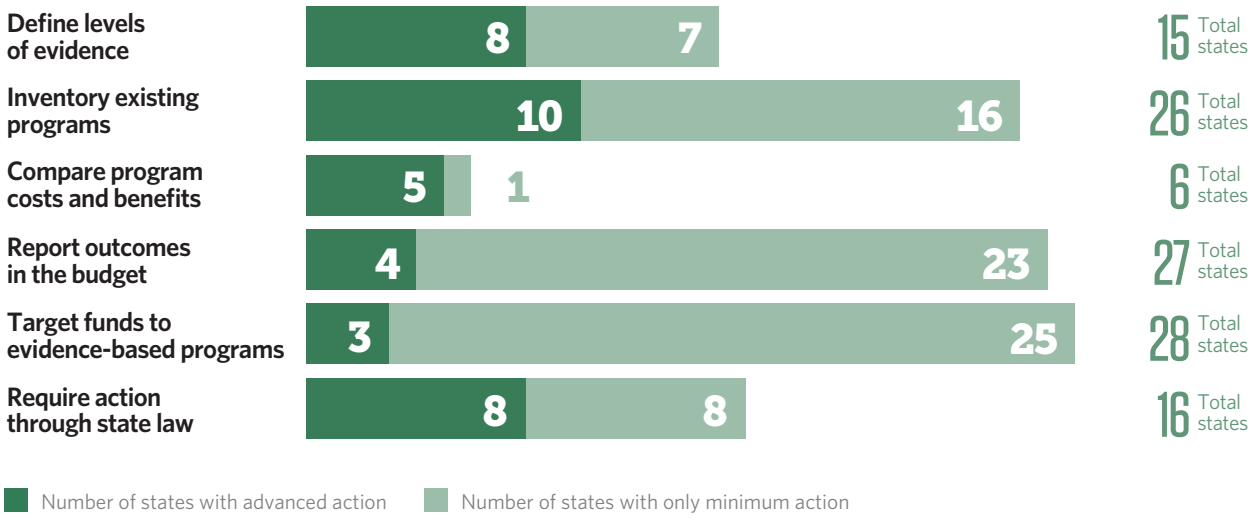
Juvenile justice

Fifteen states have established a definition of evidence for juvenile justice programs, of which eight created multiple tiers of evidence. As in criminal justice, several other states have established guidelines that define evidence-based juvenile justice programs as those with a "proven" ability to reduce recidivism, without specifying what standard of evidence meets this criterion. These definitions did not meet the standards for this study.

To begin to assess their current programs, 26 states have created juvenile justice inventories. Ten of these have compared their programs to research on what works, with four using the Standardized Program Evaluation Protocol (SPEP). This tool is designed to help agencies understand the extent to which their juvenile justice programs, including locally developed ones, employ strategies and practices shown to be effective in reducing

Figure 7

Prevalence of Evidence-Based Policymaking Actions in Juvenile Justice



Source: Pew analysis of statutes, documents, and interviews

recidivism. For example, Tennessee used this protocol and found that approximately 94 percent of agencies employed effective programs for reducing juvenile recidivism.[90] Six states have performed cost-benefit analyses of their funded programs, five of which monetized program outcomes to compare investment options.

Similar to the other policy areas, most states (26 and the District of Columbia) have reported key outcome data—recidivism or employment—in fiscal 2013-17 budget cycles, and four states have taken the next step of reporting research findings on specific programs such as functional family therapy. For example, North Carolina's Department of Public Safety is required by law to report evaluation findings for select juvenile programs to the appropriations subcommittee annually.[91] A 2014 evaluation of the impact of juvenile community programs on cost and recidivism found that placing juveniles in alternative community or residential treatment programs saved up to 80 percent of the cost of committing them to a youth detention center and reduced recidivism by approximately 16 percent.[92]

To continue supporting juvenile justice programs shown to achieve results, 28 states have created a formal funding mechanism. Michigan's Department of Health and Human Services' contract language for residential foster care providers requires that trauma-focused programming be based on an evidence-based, evidence-informed, or promising practice treatment model and directs providers to reputable clearinghouses (e.g., SAMHSA's National Registry of Evidence-Based Programs and Practices) to select such programs.[93] Three states have targeted 50 percent or more of funds to evidence-based juvenile justice programming.

Sixteen states have developed a framework of laws to build and sustain support for evidence-based juvenile justice policymaking. Eight of these states have laws requiring at least two advanced evidence-based policymaking actions.

Evidence-Based Policymaking in Juvenile Justice:
Florida

The Florida Department of Juvenile Justice is one of a few stand-alone juvenile justice agencies (as most are housed in their state's human services or adult corrections department) and has demonstrated persistent focus on delivering evidence-based programs. To support this focus, the department has established a research team that oversees data quality and outcome evaluation.

The department has required all of the state's contracted providers of delinquency intervention programs to implement those with an evidence base, with this requirement established both through contractual agreements and state administrative code.[94] These provisions establish a detailed definition of evidence, which has been supplemented by the department to include multiple tiers of evidence based on scientific methods.[95]

As required by law, the department regularly tracks and reports both recidivism and cost-effectiveness outcomes[96] and has used national tools, including the SPEP, which is used in all residential facilities, as well as internal tracking systems to review and categorize all juvenile justice programs based on levels of effectiveness. For example, the department's 2014 Program Accountability Measures report includes a comparative cost-effectiveness analysis of all juvenile residential treatment programs across the state.[97]

Building support for evidence-based policymaking

Although many states have developed tools to support evidence-based policymaking, challenges to this work exist. Successful evidence-based policymaking efforts have been led by staff and leadership who can share with others the value of the approach, rely on strong data infrastructure, and develop the capacity to identify, fund, and implement programs shown to be effective.

Facilitating dialogue

Champions of evidence-based policymaking can foster its adoption by sharing information with legislative and agency leadership, program staff, providers, and other key stakeholders on the value of using data and evidence to guide decision-making.

To begin this process, several states are facilitating **multi-stakeholder work groups** to discuss how evidence can inform programmatic decisions. For example, when Florida's Department of Juvenile Justice adopted its data-driven approach to programming and evaluation in the early 2000s, it began hosting annual Common Definitions conferences that bring together legislative and departmental staff, researchers, and providers to review and provide feedback on data measures such as recidivism rates.[98] Over the years, these conferences have built trust, transparency, and collaboration toward a common goal of supporting programs that are effective.[99]

Other states noted the importance of **provider outreach and education**. Bobby Cagle, director of the Georgia Division of Family and Children Services, noted the challenge of achieving buy-in from longtime contractors and staff on the division's move toward evidence-based programming.[100] To spearhead support, the division has begun a multistep outreach to individuals and teams. These steps include:

- Monthly meetings with relevant managers and staff to discuss how evidence-based programming advances outcomes for children and families.
- Facilitating staff input and ownership on the ongoing design, implementation, and evaluation of the effort.
- Building staff knowledge on the strengths and challenges of potential evidence-based models.
- Inviting national model developers to discuss specific models and how to replicate them across the state.

Legislative leaders who **commit to using evidence** to inform budgetary and policy decisions can also help facilitate adoption of this approach. New Mexico's Legislative Finance Committee uses cost-benefit analyses and evidence on program effectiveness to inform the annual budget recommendations it develops for legislators. As noted earlier, the Legislature has used these recommendations to appropriate $104.4 million to evidence-based programming for adult corrections, behavioral health, child welfare, and early education.

Similarly, Washington state enacted legislation that requires agencies that deliver services for children's mental health, child welfare, and juvenile justice to prioritize the use of and training for evidence-based programs.[101] Interviews with state stakeholders demonstrated the potential for using legislation to help institutionalize evidence-based policymaking. For example, Cory Redman, acting director of the state's Department of Social and Health Services Rehabilitation Administration, noted: "We were already doing the intent of the bill, but it enabled us to further our conversations and expand to subpopulations that didn't have evidence-based programs. … You are talking about spending state tax dollars, so you want to make sure they are spending that money on things that are proven to work."[102]

Creating strong data infrastructure

Evidence-based policymaking also requires governments to create or draw upon existing data systems that enable staff to populate program inventories, conduct cost-benefit analyses, and include key outcomes in the budget. Automated, high-quality, and real time reporting systems can save staff time that would have been spent on data collection and management and may be particularly useful for centralized evidence-based policymaking efforts. However, shoring up existing data systems often requires states to invest capital, as well as to resolve different logistical and legal issues posed by data sharing. "It is difficult to prove and demonstrate how well a program or process is working when the data systems don't communicate," said Julie Lanham of the Indiana Department of Corrections.[103] More intricate data systems also require analytical staff knowledgeable in using the data to perform the actions highlighted in this report.

Several states are working to address these challenges by **developing interagency agreements** and **restructuring administrative processes** to enable agencies to link data on individuals across human services systems. For example, California's Children and Family Services Division has begun developing agreements that facilitate matching case data with administrative data sources (e.g., public health records, school attendance, and achievement records) to track service delivery outcomes for individuals accessing multiple services from the state.[104] Washington's Department of Behavioral Health has created an Integrated Client Database to link client-level administrative data from other state agencies, which it uses to conduct program evaluations and analyze the cost-effectiveness of treating behavioral health disorders.[105] Recent analyses on the impact of treatment for

Medicaid clients with substance use disorders, for instance, found that increased access to treatment reduced annual growth in medical costs to 1.4 percent, compared to 4.2 percent for clients without treatment access.[106]

Building analytical and technical capacity

Evidence-based policymaking requires trained (and, in some cases, certified) program staff who are able to deliver programs with fidelity to their research-based models and competent technical staff to monitor program performance and track progress on key outcomes and returns on investments.

State agencies can **establish partnerships** devoted to monitoring outcomes of agency-funded programs, providing technical assistance or training for evidence-based program implementation, and/or reviewing research on evidence-based programs. For example, the EPISCenter takes on several roles in its partnership with the state government and local communities.[107] The center provides technical assistance on program implementation, evaluation, and sustainability, including helping providers identify and collect relevant data. The center also serves as a liaison among evidence-based service providers, the agencies charged with overseeing these services, and evidence-based service developers; interprets information on effectiveness for agencies and providers; and helps agencies align their policies to resolve problems and facilitate successful program implementation. As noted earlier, these efforts have contributed to scaling up more than 300 replications of evidence-based programs.

Partnerships can be augmented by **dedicating staff** to analytical or technical tasks. For example, to build in-state capacity to conduct return-on-investment analyses through its Results First partnership, Minnesota's Legislature enacted a bipartisan provision that appropriates $243,000 over two years for the state's Management and Budget Office to hire two full-time analytical staff members to engage in this work.[108] The staff is currently conducting return-on-investment analyses of corrections and adult mental health programs to provide policymakers with cost-benefit ratios associated with evidence-based programs.

Conclusion

While states' engagement in evidence-based policymaking varies, many are making progress in building and using evidence to inform their policy and budget decisions. Connecticut, Minnesota, Oregon, Utah, and Washington are leading the way in this effort by demonstrating a strong commitment to evidence-based policymaking actions, dedicating the resources needed to support evidence-based programs, and working diligently to embed these practices within their governments. As governments continue to face fiscal pressures to produce more value with each dollar, states would be well-served to engage in all six actions of evidence-based policymaking to build a better future.

Appendix A: Detailed methodology

This study provides a baseline assessment of each state's efforts to incorporate research and analysis of programs into their policy and funding decisions in four key human service policy areas: behavioral health, child welfare, criminal justice, and juvenile justice. For this study, program means an intervention that uses a discrete set of activities to achieve a common goal. Project researchers did not have the resources to look at all human service policy areas, so they chose a smaller subset that have a reasonable body of research on program effectiveness.

The study identifies six key actions of evidence-based policymaking, as detailed below. These actions were developed in consultation with a formal advisory panel and a team of consultants knowledgeable in government performance. The scope was limited in part to what could be measured through document review.

The final criteria and scoring for each action are as follows:

Table 8

Six Key Actions of Evidence-Based Policymaking

Evidence-based policymaking action	Advanced—2 points	Minimum—1 point
Define levels of evidence	Definitions of multiple tiers of evidence that specify the strength of research methods (e.g., randomized controlled trial) or reputable source for categorization (e.g., What Works in Reentry Clearinghouse)	A definition of one tier of evidence that specifies the strength of research methods (e.g., randomized controlled trial) or reputable source (e.g., What Works in Reentry Clearinghouse)
Inventory existing programs	A list of state programs categorized by at least two levels of evidence that includes data on funding, performance, design, or location	A list of state programs that consistently reports data on funding, performance, design, or location
Compare program costs and benefits	A report on the costs and monetized benefits of multiple related programs	A report on the costs and non-monetized outcomes of multiple related programs
Report outcomes in the budget	Inclusion of research on the effectiveness of specific program(s) in official budget materials*	Inclusion of key outcomes† in official budget materials
Target funds to evidence-based programs	An official document prioritizes at least 50 percent of program funds to evidence-based programs	An official document prioritizes funding to at least one evidence-based program and/or demonstrates that at least 10 percent of programming is evidence-based‡
Require action through state law	State laws require at least two advanced actions or five minimum actions noted above in a single policy area	State laws require at least one advanced action or two minimum actions noted above in a single policy area

Notes:

* Research must include a citation or specify rigorous methods used (e.g., replication, control group, cost-benefit analysis).

† Key outcomes vary by policy area: (1) Behavioral Health: hospital re-admissions, relapse, suicide rates, reported substance use; (2) Child Welfare: permanency, maltreatment, out-of-home placement; (3) Criminal and Juvenile Justice: recidivism, employment, and out-of-home placement (juvenile only).

‡ Document (grants, provider/contract guidelines, memorandums of understanding, agency directives, budget items, or other formal funding requirements) must prioritize one or more evidence-based programs or require recipient to defend evidence behind program selection; OR the state can demonstrate that at least 10 percent of program funds, clients, programs, staff, or practices are going to evidence-based programs.

Data collection

Data collection occurred in two phases:

Phase I: Review of publicly available documents

The first phase involved a thorough review of statutes, administrative codes, and executive orders identified through a targeted keyword search using LexisNexis search engines. State documents were identified through a targeted Google search using a standard list of search terms on state websites (e.g., "evidence based" "inventory" site:dmh.mystate.gov). Where targeted Google searches did not generate results for a particular evidence-based policymaking action, researchers searched state websites directly. In addition to state-specific sources, researchers also searched national sources that provide state-specific data relevant to the six actions, including the National Association of State Budget Officers, a compilation of state performance budgeting laws conducted by Elaine Yi Lu of John Jay College of Criminal Justice, the National Center for Community-Based Child Abuse Prevention initiative, and federal agencies that provide support directly for evidence-based programs such as the Substance Abuse and Mental Health Services Administration.

Researchers logged every law that resulted from these searches, and then reviewed them for relevance. Only potentially relevant documents from the Google and supplemental searches were logged. For each relevant document, researchers recorded data related to the document source (such as year of publication and author) and to the relevant text. They also wrote a brief summary of whether the identified document met established criteria for one or more evidence-based policymaking actions and entered a score of "does not meet," "meets minimum standard," or "meets advanced standard" for each relevant action.

Phase II: State verification

After the team completed the initial searches and quality assurance, preliminary findings were sent to every state agency head with control over the studied policy areas, as well as budget directors, to determine if information was missing or incomplete. Researchers expected that their search of publicly available documents and enacted laws would not give the complete picture, so this stage of the process was crucial for developing a complete profile of each state. The survey also asked respondents to report on the successes and challenges of creating a system of evidence-based policymaking.

Respondents or their designees were contacted several times, by email and phone, between September and December 2015 and again between May and July 2016. Of the 204 policy areas reviewed for this study, representing four policy areas per state and the District of Columbia, agency heads and/or budget directors were able to verify or supply additional information for 170 policy areas (83 percent response rate). Fifty-seven agency/budget leaders also reported on the successes and challenges, representing 35 states and the District of Columbia.

This study went through three main quality assurance checks. First, researchers tested for inter-rater reliability by coding two states independently and then comparing scores. Due to differences in scoring (inter-rater reliability was 59 percent), researchers refined the criteria for each evidence-based policymaking action to show more clearly whether a law or document met minimum/advanced standards. Second, after all laws and documents resulting from the above searches were logged and summarized, researchers were assigned actions to review for all states to ensure consistency. Third, researchers used an internal research review service to run searches on select states to see if scores differed vastly from what the team had found; that review detected minimal discrepancies.

Data analysis

Once final data were collected and confirmed, researchers created basic aggregate and state-specific statistics of evidence-based policymaking action prevalence. States received points for each policy area based on whether researchers found an advanced example (2 points), a minimum example (1 point), or no example (0 points) of each action. Each state could receive a maximum score of 12 points per policy area. Scores were totaled across all four policy areas to generate an overall score for each state and to categorize states as *leading* (24-48 points), *established* (16-23 points), *modest* (8-15 points), and *trailing* (0-7 points).

Study strengths and limitations

This study evaluates each state's engagement in evidence-based policymaking based on the presence of six key actions (assessed at two levels of sophistication) within four human policy areas. This broad scope allowed researchers to assess multiple aspects of evidence-based policymaking across human service systems, adding more variation and nuance to scoring. Further, because researchers assessed states based solely on laws and documents obtained from targeted searches, state websites, and states' responses to requests for information, the final scores provide a more objective reflection of states' work than self-reported information.

One major aspect of evidence-based policymaking not included is: how the infrastructure and tools developed to inform decision-making translates into a tangible change in the programs and services offered by states. The study does not attempt to assess 1) the weight given to evidence in decision-making, or other tools developed to inform the process, 2) the number of evidence-based programs being implemented within the state, or 3) the quality of evidence-based programs being implemented, including efforts to manage them through fidelity monitoring.

The criteria used to assess each evidence-based policymaking action were vetted through testing and external review; however, there are limitations for each action worth noting:

- The **define levels of evidence** action does not include definitions based on known effective practices within a policy area (for example, a definition of "evidence-based" criminal justice programs that indicates that such programs must target high-risk offenders would not meet the minimum criteria).
- The **inventory existing programs** action requires that states document their currently-funded programs in a policy or subpolicy area, but project researchers were unable to determine whether each inventory accounted for every single funded program.
- The **compare program costs and benefits** action only accounts for examples that compare multiple programs within one analysis; it excludes instances where states analyzed a single program. Identifying every cost-benefit analysis conducted by states was not possible given limited resources. Although project researchers reviewed reports to confirm inclusion of program costs and benefits and/or outcome information, they did not evaluate the quality of individual analyses.
- The **report outcomes in the budget** action includes outcomes identified based on a search of reputable clearinghouses to determine how program effectiveness is gauged. Project researchers did this to keep the criteria clear and consistent, but it does not account for every outcome tracked within these policy areas.

- The **target funds to evidence-based programs** action does not account for states that have funded evidence-based programs without formal documentation that requires or tracks their implementation, nor does it distinguish states by the dollar value of grants awarded to evidence-based programs (unless they report that total as a percentage of program funds, and it exceeds 50 percent). Though the goal of this action is to formalize the use of evidence-based programs as a means of ensuring continual funding, states do not necessarily need a formal funding mechanism to demonstrate this intent.
- The **require action through state law** action can help states ingrain the use of evidence and evidence-based programs but it does not reflect whether states put this framework into practice.

The presence and level of these actions are used to assess individual policy areas and the overall state. As a result, the assessment of each state equates to the work performed within four human service systems, not in all policy areas. It is possible that low-scoring states are performing well in policy areas that were not reviewed. Similarly, the work conducted by a state in a policy area does not always equate to that of a single agency (in some states, most of the examples found were from independent commissions or central analytic entities), nor does it apply to all topics of concern to that area. The narrow definition of each policy area to facilitate easy categorization ignores the overlap between policy areas (such as mental health programs that serve a child welfare need) and excludes certain subpolicy areas often included in such a study (for example, youth violence prevention was not included in juvenile justice).

The categories for ranking states are based on the total points states received across the four policy areas examined. One particular limitation of this method is that it does not account for consistency across policy areas. A state could accumulate a majority of points in one policy area, while having very few points in the other three policy areas, yet still rank high overall.

Project researchers developed intensive quality control processes, including the use of external fact checkers and a verification process with the relevant state entities. However, given the scope of this study and the number of examples that could potentially meet its criteria, some examples may have been missed, particularly if a relevant example was not available on a state's website and/or a state did not respond to requests to verify collected data.

Appendix B: State Data

States received a total score based on whether researchers found an advanced example (2 points, +), minimum example (1 point, ✓), or no example (0 points) of each of the evidence-based policymaking actions in four policy areas.

	AL	AK*	AZ	AR	CA*	CO*	CT*	DC	DE*	FL*	GA	HI	ID*	IL*
Behavioral Health														
Define	+	✓					+	✓		✓	+	✓	✓	
Inventory	✓			✓			✓	✓	✓					
Compare				+										
Report		+	✓				✓	✓	✓	+		✓		✓
Target		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Require	✓			✓	✓		✓	✓		✓				
Child Welfare														
Define					+	+	+	✓			+	✓		
Inventory	✓	✓	✓	✓		+	✓	✓	✓		✓			+
Compare						+								
Report	✓	✓	✓		✓		✓	✓	✓	+	✓	✓	✓	✓
Target	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓		✓
Require					✓		✓	✓						
Criminal Justice														
Define		✓				+	+						✓	✓
Inventory		✓	✓		✓	+	+		✓	✓		+	+	
Compare		+				+								
Report	✓	✓	✓				✓		✓	+	✓	✓	✓	✓
Target	✓	✓	✓	✓	✓				✓	✓	✓		✓	✓
Require	✓				✓		+						✓	✓
Juvenile Justice														
Define	✓	✓				+	+			+	+			
Inventory			+			+	✓			+	✓		✓	
Compare						+				✓				
Report		✓	✓				✓	✓	✓	+		✓	✓	✓
Target	✓		✓		✓						✓		✓	
Require							+			+				

+ Advanced ✓ Minimum Leading state Established state Modest state Trailing state

Continued on the next page

	IN	IA*	KS*	KY	LA	ME	MD	MA*	MI	MN*	MS*	MO	MT	NE
Behavioral Health														
Define		✓				+		✓		✓		✓		
Inventory	✓			✓				✓		✓		✓	✓	+
Compare														
Report	✓				+		✓	✓		✓	+	✓		
Target	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓
Require		✓			✓			+		+		+		
Child Welfare														
Define		+	+				✓				+			
Inventory			+		✓				✓			✓		
Compare														
Report	✓	✓	✓		✓		✓	✓	✓	✓	+	✓		
Target	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓
Require		✓			✓			✓		+		+		✓
Criminal Justice														
Define										+	+			
Inventory	✓		✓	+	✓	✓		✓		+	+	✓		✓
Compare		+	+					+		+	+			
Report	✓	✓	+		✓	✓	✓	✓	✓	✓	+	✓		
Target	✓		✓	✓	✓				✓	✓	✓	✓	✓	
Require				✓				✓	✓	+	+	+		✓
Juvenile Justice														
Define						+		✓						+
Inventory		+	✓	✓	+	✓	✓			+		✓		
Compare														
Report			✓		✓		✓			✓	+	✓		
Target		✓	✓	+	✓	✓		✓	✓	✓	✓			✓
Require				✓				✓		+		+		✓

+ Advanced ✓ Minimum Leading state Established state Modest state Trailing state

Continued on the next page

	NV*	NH	NJ	NM*	NY*	NC	ND	OH	OK	OR*	PA	RI*	SC	SD
Behavioral Health														
Define	✓	✓	✓	✓	✓	+		+	+	+			+	✓
Inventory	✓		✓		✓					+	+		+	
Compare				+										
Report	✓			+	✓		✓		✓	✓	✓		✓	
Target	✓	✓	✓	✓	+		✓	✓		+	✓	✓	✓	
Require		✓	✓	✓					✓	+				
Child Welfare														
Define						+		+			✓			
Inventory			✓		✓			+				✓		
Compare				+	+			+				+		
Report	✓			+	+		✓		✓	✓	✓		✓	
Target		✓	✓	✓	✓			+	✓	✓	✓	✓	✓	
Require				✓					✓	✓			✓	
Criminal Justice														
Define	✓				✓					✓				
Inventory	+	+	✓		✓	+	+	+	✓	+	✓	+		
Compare				+	+							+		
Report	✓		✓	+		✓		✓	+	✓	✓		✓	✓
Target	✓	✓		✓	+	✓		✓	✓	✓		✓		✓
Require				✓		✓			✓	+	✓		✓	✓
Juvenile Justice														
Define					✓				✓	✓				
Inventory			✓	✓	✓	✓					+	+		
Compare								+			+			
Report	✓			✓		+	✓			✓	✓		✓	✓
Target					✓	✓		✓	✓	+	✓			✓
Require				✓		+			✓	+				

+ Advanced ✓ Minimum Leading state Established state Modest state Trailing state

Continued on the next page

	TN	TX*	UT	VT*	VA	WA	WV*	WI*	WY
Behavioral Health									
Define	✓		+	+		+			+
Inventory	✓	✓	+			✓			+
Compare						+			
Report		✓	+	+				✓	+
Target	✓	✓	✓	✓	✓	✓	✓	✓	
Require	+	✓	+		✓	+			✓
Child Welfare									
Define		+				+			
Inventory	✓			✓		+			
Compare						+			
Report		✓	+	✓				✓	✓
Target	✓	✓	✓	✓	✓	+		✓	
Require	✓	✓			✓	✓			
Criminal Justice									
Define			+	+	✓	+		✓	✓
Inventory		✓	+	+	✓	+	+	+	✓
Compare			+			+		+	
Report		✓	+	+		✓	+	✓	✓
Target	✓		✓		✓	✓		✓	
Require	✓	✓			✓	+			✓
Juvenile Justice									
Define	+		✓			+			
Inventory	✓	✓	✓	✓		+		+	
Compare			+	+		+			
Report		✓	+	✓		✓			
Target	✓	✓	✓		✓	+		✓	
Require	+				✓	+	✓	✓	

+ Advanced ✓ Minimum Leading state Established state Modest state Trailing state

Notes:

* States participating in the Results First Initiative. Note that this study did not include all actions that states have taken as part of Results First, particularly those completed outside of the 2010-2015 study period (such as inventories and/or cost-benefit analyses done in 2016 by California, Colorado, and Rhode Island) or work completed at the county level.

Source: Pew analysis of statutes, documents, and interviews

Endnotes

1 Pew-MacArthur Results First Initiative, "Evidence-Based Policymaking: A Guide for Effective Government," (November 2014), http://www.pewtrusts.org/~/media/assets/2014/11/evidencebasedpolicymakingaguideforeffectivegovernment.pdf.

2 For the purpose of this study, "program" is defined as an intervention or practice that uses a discrete set of activities to achieve a common goal, such as Multisystemic Therapy that provides intensive family therapy to juveniles to reduce delinquency.

3 For this study, project researchers counted program inventories and cost-benefit analyses conducted between January 2010 and December 2015 and evidence reporting and targeted funding documents that were completed between January 2012 and December 2015. Budgets for time periods that occur after 2015 (such as a fiscal 2016-17 budget) are included if planning documents were created in 2015. Statutes, administrative codes, and executive orders were included if they were passed on or before Dec. 31, 2015, and had not been repealed.

4 Behavioral health includes mental health and substance abuse, and may focus on residential, community-based, and age-specific programming; it does not include programs for justice-involved adults and youth. Child welfare includes prevention and intervention programming aimed at reducing the incidence of child and family maltreatment; it does not include programs targeted at this population that do not focus specifically on abuse and neglect. Criminal justice includes correctional programming offered in facilities or the community for convicted adult offenders; it does not include sentencing, law enforcement, or crime prevention outside of recidivism prevention. Juvenile justice includes correctional programming offered in facilities or the community for adjudicated delinquents; it does not include sentencing, law enforcement, or crime prevention outside of recidivism prevention.

5 For further explanation, please see the methodology in Appendix A.

6 The open-ended questions were: What key challenges has your state faced in implementing evidence-based policymaking? What do you see as your office's greatest success(es) in bringing rigorous research and analysis into policy and funding decisions? What steps made it a success?

7 State of Washington, Rev. Code Wash. § 13.40.550, http://app.leg.wa.gov/rcw/default.aspx?cite=13.40.550.

8 The Washington State Institute for Public Policy is a nonpartisan research organization created by the state Legislature and overseen by a board of directors including representatives from the Legislature, executive branch and the university system.

9 Washington Department of Social and Health Services, "Evidence-Based and Research-Based Practices Updates and Recommendations" (December 2014), http://www.defensenet.org/news/Evidence-Based%20and%20Research-Based%20Practices%20E2HB2536.pdf.

10 Governor of the State of Utah, "Appendix B: FY 16 / FY 17 Model Business Case," 6, http://gomb.utah.gov/wp-content/uploads/sites/7/2015/09/FY-16_FY-17-Model-Business-Case.pdf.

11 Governor of the State of Utah, "Budget Recommendations, Fiscal Year 2017- Fiscal Year 2016 Supplements," 83–4, http://gomb.utah.gov/wp-content/uploads/sites/7/2015/12/FY-2017-Governors-Budget-Recommendations.pdf.

12 Utah Administrative Code, Rule R523-9, "Evidence-Based Prevention Registry," http://www.rules.utah.gov/publicat/code/r523/r523-009.htm.

13 Utah Department of Corrections, "Department Overview, Issues, and Budget Request," presentation to Executive Offices & Criminal Justice Appropriations Subcommittee, Jan. 30, 2015.

14 Minnesota Department of Human Services, "Children's Mental Health Evidence-Based Practices," http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16_144791#Minnesota.

15 University of Cincinnati, "Summary of the Evidence-Based Correctional Program Checklist," https://www.uc.edu/content/dam/uc/corrections/docs/Training%20Overviews/CPC%20ASSESSMENT%20DESCRIPTION.pdf.

16 Minnesota Correctional Program Checklist Collaborative, "Correctional Program Checklist Scores," June 2016.

17 Minnesota Management and Budget, "Results First," (2016), https://mn.gov/mmb/results-first/inventory-of-services, accessed Jan. 6, 2017.

18 Results-Based Accountability is a tool developed by Mark Friedman of the Fiscal Policy Studies Institute.

19 Connecticut Department of Correction, http://www.ct.gov/doc/cwp/view.asp?a=1502&Q=265422&docNav=|; for example, see Connecticut Department of Correction, "Listing of Programs of Bridgeport," (Sept. 13, 2016), http://www.ct.gov/doc/lib/doc/pdf/compendium/compendiumbridgeport.pdf.

20 Conn. Gen. Stat. § 4-68r-s.

21 Oregon Annotated Statutes § 182.525, "Mandatory Expenditures for Evidence-Based Programs; Biennial Report; Rules."

22 Oregon Youth Authority, "Interim Judiciary Committee Progress Report on SB 267" (September 2014), http://www.oregon.gov/oya/docs/SB%20267_2014%20OYA.PDF.

23 Oregon Health Authority, "Oregon's Community Mental Health Services and Substance Abuse Prevention & Treatment Block Grant Application," 56, http://www.oregon.gov/oha/amh/datareports/2014-2015%20Oregon%20Combined%20MH-SAPT%20Block%20Grant%20Application.pdf.

24 State of Oregon, "2015-2017 Governor's Budget," M-377, http://www.oregon.gov/DAS/CFO/docs/budget_policy/2015-17_gb.pdf.

25 Pay for Prevention, http://oregonp4p.org; Oregon Department of Human Services, "2015-17 Joint Legislative Committee on Ways and Means Reference Documents," http://www.oregon.gov/dhs/aboutdhs/dhsbudget/20152017%20Budget/DHS%20Ways%20and%20Means.pdf.

26 Nebraska Commission on Law Enforcement and Criminal Justice, "2015 Community-Based Juvenile Services Aid Request for Proposals," (November 2014), http://nebula.wsimg.com/f9b0bb1a9f5708309898fde2ead99083?AccessKeyId=FA75F2AA61BF1439B28C&disposition=0&alloworigin=1.

27 Quasi-experimental studies test causal hypotheses but lack random assignment.

28 Mississippi Code Annotated § 27-103-159, http://law.justia.com/codes/mississippi/2014/title-27/chapter-103/mississippi-performance-budget-and-strategic-planning-act-of-1994/section-27-103-159.

29 Institute of Education Sciences, "What Works Clearinghouse," http://ies.ed.gov/ncee/wwc/findwhatworks.aspx.

30 Blueprints for Healthy Youth Development, http://www.blueprintsprograms.com.

31 Pew-MacArthur Results First Initiative, "Results First Clearinghouse Database," http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/results-first-clearinghouse-database.

32 Red County Action Planning Committee, "Existing Projects in High Risk Counties in Arkansas" (October 2012), http://www.healthy.arkansas.gov/programsServices/minorityhealth/Documents/Reports/RCAPCAct790Report.pdf.

33 Office of Minority Health & Health Disparities, Arkansas Department of Health, "Red County Report: County Life Expectancy Profile 2015" (October 2015), http://www.healthy.arkansas.gov/programsServices/epidemiology/ChronicDisease/Documents/publications/RedCountyReport2015.pdf.

34 Pew-MacArthur Results First Initiative, "Program Assessment: Identifying What Works in Your State or Locality" (June 2015), http://www.pewtrusts.org/~/media/assets/2015/06/resultsfirstprograminventorybrief.pdf.

35 The University of Cincinnati and the Peabody Research Institute at Vanderbilt University highlight principles of effective correctional interventions supported by research. These include risk, need, responsivity, and treatment. More information on these principles is available at www.uc.edu/corrections/services/program_evaluation.html and https://my.vanderbilt.edu/spep.

36 North Dakota Department of Corrections and Rehabilitation, "2011-2013 Biennial Report" (December 2013), http://www.nd.gov/docr/media/biennial/archive/Biannual%20Report%202011-2013.pdf.

37 Project researchers reviewed analyses for inclusion of program costs and benefits and/or outcomes information, but did not assess the quality or methodology of individual analyses.

38 Florida State Legislature, Florida Statutes § 985.632, http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0900-0999/0985/Sections/0985.632.html.

39 Florida Department of Juvenile Justice, Bureau of Research and Planning, "2013-14 Program Accountability Measures: Examining Residential Program Recidivism and Cost-Effectiveness" (date unknown).

40 Mark Greenwald, director of research and data integrity, Florida Department of Juvenile Justice, interview with the Pew-MacArthur Results First Initiative, March 16, 2016.

41 EPISCenter "2014 Annual Report" (2014), http://www.episcenter.psu.edu/sites/default/files/outreach/EPISCenter-Annual-Report-2014.pdf.

42 Walker, Sarah C., Bumbarger, Brian K., and Phillippi, Steven W. Jr., "Achieving Successful Evidence-Based Practice Implementation in Juvenile Justice: The Importance of Diagnostic and Evaluative Capacity," Evaluation and Program Planning, 52 (2015): 189–197, http://www.episcenter.psu.edu/sites/default/files/Articles/Achieving-successful-evidence-based-practice-implementation-in-juvenile-justice-The-importance-of-diagnostic-and-evaluative-capacity_2015_Evaluation-a.pdf.

43 Pew-MacArthur Results First Initiative maintains an internal database that tracks partner states' investment in evidence-based programs.

44 Minnesota Management and Budget, "2016-17 Governor's Budget—Department of Corrections," (January 2015), http://www.mn.gov/mmb-stat/documents/budget/2015-gov-rec/p78.pdf.

45 Performance dashboards, reports, and related documents are included in this study only if they have a documented link to state budget processes.

46 State of Oklahoma, "OKStateStat," accessed Nov. 11, 2016, http://www.ok.gov/okstatestat.

47 New Mexico Legislative Finance Committee, "Report of the Legislative Finance Committee to the Fifty-Second Legislature, First Session" (January 2015), https://www.nmlegis.gov/lcs/lfc/lfcdocs/budget/2016RecommendVolI.pdf.

48 Pew-MacArthur Results First Initiative, "New Mexico's Evidence-Based Approach to Better Governance" (August 2014), http://www.pewtrusts.org/~/media/assets/2014/08/nm_results_first_brief_final.pdf.

49 Florida Department of Children and Families, "Exhibit D-3A: Expenditures by Issue and Appropriation Category" (September 2015), 107–109, http://floridafiscalportal.state.fl.us/Document.aspx?ID=13803&DocType=PDF.

50 Indiana Department of Correction, "Grant Application Completion Instructions, FY 2016," http://www.in.gov/idoc/files/CC_FY_2016_Grant_Application_Instructions.pdf.

51 Indiana Department of Corrections, survey response, Sept. 15, 2015.

52 Burns Ind. Code Ann. § 11-12-2-1.

53 New York State, Office of Alcoholism & Substance Abuse Services Addiction Services for Prevention, Treatment, Recovery, "2014 Prevention Guidelines," 13–14, http://www.oasas.ny.gov/prevention/documents/2014PreventionGuidelines.pdf.

54 Of the 17 states that did not meet this criterion, 26 percent had a law requiring outcomes be reported in the budget, 9 percent targeted funding, 6 percent required a program inventory, 3 percent required a cost-benefit analysis, and none created a definition of evidence.

55 California Health and Safety Code Section 11756.8, "Evaluation of Impacts of 2011 Realignment of Alcohol and Drug Program Services: Annual Report."

56 Tennessee Code Annotated § 37-5-121.

57 Conn. Gen. Stat. § 4-68r-s.

58 Miss. Code Ann. § 27-103-159.

59 Pew-MacArthur Results First Initiative, "Legislating Evidence-Based Policymaking" (March 2015), http://www.pewtrusts.org/~/media/assets/2015/03/legislationresultsfirstbriefmarch2015.pdf?la=en.

60 Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, "National Registry of Evidence-Based Programs and Practices," http://www.samhsa.gov/nrepp.

61 South Carolina Department of Alcohol and Other Drug Abuse Services, "Evidence-Based Prevention," http://www.daodas.state.sc.us/toolkit/PublicSearchBrowse.aspx?setid=1.

62 Burritt, S.C., "'Scaling the Pyramid': Understanding and Climbing the Five Levels of Evidence-Based Prevention," Pacific Institute for Research and Evaluation (August 2003), http://www.daodas.state.sc.us/documents/ToolkitSection8.pdf.

63 Arkansas Department of Health and Human Services, "Substance Abuse Prevention Dollars and Cents in Arkansas: A Cost-Benefit Analysis" (February 2010), http://humanservices.arkansas.gov/dbhs/Documents/Dollars%20and%20Sense%20-%20CBA%20Arkansas.pdf.

64 Connecticut Department of Children and Families, "2015 Report Card: Multidimensional Family Therapy," http://www.ct.gov/dcf/lib/dcf/rba/pdf/MDFTFY15Final_Foleyv2.pdf.

65 New York State, Office of Alcoholism & Substance Abuse Services Addiction Services for Prevention, Treatment, Recovery, "2014 Prevention Guidelines," 13–14, http://www.oasas.ny.gov/prevention/documents/2014PreventionGuidelines.pdf.

66 Personal correspondence with Mary Ann DiChristopher, New York State Office of Alcohol and Substance Abuse Services, August 19, 2016.

67 See http://www.samhsa.gov/grants/block-grants for more information on this grant and its reporting requirements. Data can be accessed on each state at http://wwwdasis.samhsa.gov/dasis2/URS.htm.

68 U.S. Department of Health and Human Services, "Independent Evaluation of the Community Mental Health Services Block Grant, 35, 37, 39–40, https://store.samhsa.gov/shin/content/SMA10-4610/SMA10-4610.pdf.

69 Based on reported administration data by the American Public Human Services Association, internal communication, May 26, 2015.

70 Nevada Department of Health and Human Services, survey response, Nov. 4, 2015.

71 Wyoming Statistical Analysis Center, "Catalog of Environmental Prevention Strategies" (October 2012), http://www.wishschools.org/resources/Catalog%20of%20Environmental%20Prevention%20Strategies_Final4%20Wyoming.pdf.

72 Brittany Ritter, community prevention specialist, Prevention Management Organization, Wyoming, interview with Pew-MacArthur Results First, Jan. 26, 2016.

73 Rob Johnston, community prevention specialist, Prevention Management Organization, Wyoming, interview with Pew-MacArthur Results First, Jan. 26, 2016.

74 7Florida Department of Children and Families, survey response, Nov. 18, 2015.

75 Florida Statute 409.997, http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0409/Sections/0409.997.html.

76 Chapin Hall, "Finding the Return on Investment: A Framework for Monitoring Local Child Welfare Agencies" (2009), https://www.chapinhall.org/sites/default/files/Finding_Return_On_Investment_07_20_09.pdf.

77 Department of Health and Human Services, "Child Welfare Information Gateway," https://www.childwelfare.gov/topics/preventing/developing/economic/cost-benefit.

78 National Conference of State Legislatures, "Maternal, Infant, and Early Childhood Home Visiting Programs (MIECHV)," http://www.ncsl.org/research/health/maternal-infant-and-early-childhood-home-visiting.aspx.

79 Kristin Rost, executive director, Ohio Children's Trust Fund, interview with Pew-MacArthur Results First Initiative, March 15, 2016.

80 Ohio Department of Job and Family Services, "Ohio Needs Assessment for Child Welfare Services Report" (January 2016), http://jfs.ohio.gov/ocf/Reports-Plans-and-Presentations.stm.

81 Ohio Department of Job and Family Services, Access Database of Evidence-Based Interventions, http://www.odjfs.state.oh.us/tutorials/ofc/ofcdb/access-database-of-evidence-based-interventions.zip.

82 Pennsylvania Department of Corrections survey response, Dec. 14, 2015.

83 Urban Institute, "Surveying the Field, State-Level Findings from the 2008 Parole Practices Survey" (2011), http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412410-Surveying-the-Field-State-Level-Findings-from-the-Parole-Practices-Survey.PDF.

84 Crime and Justice Institute, "Implementing Evidence-Based Practice in Community Corrections: The Principles of Effective Intervention" (2004), http://nicic.gov/library/019342.

85 Louisiana Department of Public Safety survey response, Oct. 28, 2015.

86 Iowa Department of Corrections, "Return on Investment: Evidence-Based Options to Improve Outcomes" (May 2012), http://www.doc.state.ia.us/UploadedDocument/446.

87 New York State Division of Criminal Justice Services, "Using Data to Inform Evidence-Based Decision Making" (January 2013), http://www.ncja.org/sites/default/files/documents/Terry_Salo_Using_Data_to_Inform.pdf.

88 Pew-MacArthur Results First Initiative, "New York's Investment in Evidence-Based Policymaking," (January 2016), http://www.pewtrusts.org/~/media/assets/2015/11/rf_nys_case_study.pdf.

89 Pew-MacArthur Results First Initiative panel interview, April 28, 2015.

90 Tennessee Department of Children's Services, "Progress Toward Evidence-Based Practices in DCS Funded Juvenile Justice Programs" (December 2008), https://www.tn.gov/assets/entities/tccy/attachments/sccy-pc585-evidence-based.pdf.

91 North Carolina General Assembly, Statute § 143B-811, http://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_143B.html.

92 North Carolina Department of Public Safety, "Annual Evaluation of Community Programs and Multipurpose Group Homes Report" (March 1, 2014), https://www.ncdps.gov/div/JJ/DPS_Annual_Evaluation_of_Community_Programs_2014_03_01.pdf.

93 Michigan Department of Health and Human Services, "Agreement between MDHHS and Contractor," http://www.michigan.gov/documents/dhs/Residential_Foster_Care_JJ_MCT_484530_7.pdf?20151013141333.

94 Florida Administrative Code 63E-7.002 and 63E-7.011.

95 Florida Department of Juvenile Justice, "A Sourcebook of Delinquency Interventions" (2015), http://www.djj.state.fl.us/docs/quality-improvement/sourcebook2015.pdf?sfvrsn=4.

96 Florida State Legislature, Florida Statute § 985.632, http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0900-0999/0985/Sections/0985.632.html.

97 Florida Department of Juvenile Justice, Bureau of Research and Planning, "2013-14 Program Accountability Measures: Examining Residential Program Recidivism and Cost-Effectiveness" (date unknown).

98 Florida Department of Juvenile Justice, "Common Definitions," http://www.djj.state.fl.us/research/reports/research-reports/car/common-definitions.

99 Interview with Greenwald.

100 Georgia Division of Family and Children Services, survey responses, Dec. 4, 2015 and May 26, 2016.

101 Rev. Code Wash. (ARCW) § 43.20C.005 - 43.20C.040.

102 Cory Redman, acting director, Rehabilitation Administration, Washington State Department of Social and Health Services, interview with Pew-MacArthur Results First, April 26, 2016.

103 Indiana Department of Corrections, survey response, Sept. 15, 2015.

104 California Health and Human Services Agency, survey response, Dec. 4, 2015; see also, for example, California Department of Social Services, "Global Memorandum of Understanding, Child Welfare Services" (April 9, 2015), http://www.cdss.ca.gov/pdf/GlobalDataSharingAgreement.pdf.

105 Washington Office of Financial Management survey response, Nov. 10, 2015.

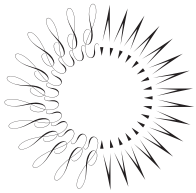
106 Washington Department of Social and Health Services, Research and Data Analysis Division, "The Impact of Substance Abuse Treatment Funding Reductions on Health Care Costs for Disabled Medicaid Adults in Washington State (April 2013), https://www.dshs.wa.gov/sites/default/files/SESA/rda/documents/research-4-88.pdf.

107 Pew-MacArthur Results First Initiative, "Implementation Oversight for Evidence-Based Programs" (May 2016), http://www.pewtrusts.org/~/media/assets/2016/05/rf_programimplementationbrief.pdf.

108 Laws of Minnesota ch. 77, art. 1, sec. 13 (2015), https://www.revisor.leg.state.mn.us/laws/?id=77&year=2015&type=0.

Contact: Catherine An, communications officer
Email: can@pewtrusts.org
Phone: 202-552-2088

Pew-MacArthur Results First Initiative, a project of The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, works with states and counties to implement an innovative cost-benefit analysis approach that helps them invest in policies and programs that are proven to work.



THE PEW CHARITABLE TRUSTS

MacArthur Foundation

pewtrusts.org

macfound.org