Improving Human Services Programs and Outcomes Through Shared Data

Executive Summary

Governors are responsible for ensuring that state government meets the needs of their constituents across a range of areas—human services/social services, public health, education and public safety—as effectively and efficiently as possible. The siloed nature of public agencies and public funding, however, can make it difficult for governors and their senior leaders to understand the extent to which public programs are achieving their goals. The challenge of administering public programs when each program has its own funding stream, rules and regulations is widely discussed in policy circles,[1] but siloed data systems compound those challenges, making it nearly impossible for state leaders to know how many individuals and families receive services from one or more agencies and whether those services are making a difference in their lives.

To find ways to address those challenges, state and local governments are developing strategies to sare data across agencies, careful to protect and secure individuals' private information. This brief provides examples of effective approaches to sharing state data and offers lessons for governors and their senior staff interested in enhancing their capacity to do so.

The information presented in this paper is drawn from a roundtable that the National Governors Association Center for Best Practices convened with a small group of state and local agency leaders, researchers and other experts in the field. The roundtable highlighted many ways in which shared data can enhance the effectiveness and efficiency of public programs—for example, by reducing the time and burden of separate intake and enrollment systems; helping agencies better

understand client needs, develop appropriate solutions and document outcomes; and facilitating research that can inform policy decisions.

Governors interested in promoting better use of data for decision making can play roles supporting data coordination that range from removing unnecessary barriers to data coordination at a local level to actively promoting or supporting data sharing throughout the state. Governors can draw three primary lessons from efforts in other localities:

- Start small and build from there;
- Treat data as a strategic asset; and
- Communicate the value of data both externally and internally.

Introduction

Conversations about big data have become commonplace in recent years, with growing interest and application in the government sector. More and more, state and local government agencies are analyzing administrative data to identify ways to better target services, improve service delivery and achieve cost efficiencies—for example, in targeting communities for greater resources in disaster recovery and improving learning opportunities for children in the education system.[2]

Yet, in most cases, public agencies have access only to data for programs that agency runs, and it is difficult for agencies to connect data programs and systems. For instance, a school system may notice that a child has been absent frequently in the past month. The housing authority knows that the child's family has lost their housing subsidy and so had moved, but

the authority is not able to share information about the child's whereabouts with the school system, even though that information could help facilitate transfer of the child's records to his or her new school. From a data perspective, it is as if there are three different children: the one who attended the first school, the one whose family had a housing voucher and the one attending a new school. It is not difficult to imagine the inefficiencies that this lack of communication and coordination creates, not to mention the lost opportunities to serve children and their families better.

Those siloed data systems make it difficult for governors and agency leaders to get a holistic view of the outcomes for residents in their state. In the example in the paragraph above, state leaders would not know how well children receiving housing subsidies are faring in school compared to their more stably housed peers. Even within the educational system, if student data are not connected across schools and school districts, the opportunity to learn how experiences in one grade affect outcomes in the next is lost when a child moves.

That lack of data coordination is problematic because it makes it difficult for governors to understand how policy changes in one program (such as changes in housing or homelessness policy) affect outcomes in another (such as education). It also makes it difficult for states to understand the intersections among their siloed programs or coordinate their efforts because they cannot tell which residents are receiving services from multiple programs.

What Is Data Sharing?

Broadly speaking, "data sharing" refers to any method that permits the connection of data elements— for example, demographics, services provided, client outcomes—for the same individuals across data systems. Data sharing can be informal, such as sending data from one program or agency to another on an as-needed basis—for example, to query whether a given client is receiving other services. Data sharing

can also be more formal and structured, such as a fully integrated data system (IDS) across programs or agencies. Some state IDSs consist of a data warehouse that compiles data from multiple systems into a single database located on a physical server or, increasingly, in the cloud. Other state IDSs are federated systems in which source agencies maintain possession of their data and simply contribute extracts for analysis upon request from other agencies. Hybrid structures also exist in which a federated system allows agencies to share client data for case-management purposes, and a cross-agency data warehouse is used for research and evaluation to support policymaking. These formal IDSs permit authorized users to generate consolidated reports across programs and agencies for individual clients, subgroups of clients or all clients receiving the applicable services.[3]

By definition, data sharing involves data from more than one system. Some initiatives combine data from only two systems; others involve dozens of partner organizations, all contributing data. Similarly, there are no set standards on which agencies are involved. Agencies commonly involved include education, health, human services, child welfare, justice and housing, but some partnerships go well beyond that into the spheres of economic development, workforce training and unemployment insurance. In addition, many IDS efforts pull in data from health care providers, training providers, nonprofit organizations (NPOs), industry boards and other nongovernmental organizations.

Sharing arrangements can take place at the state level, at the local level and between levels of government. Governors have a role to play even in local data sharing, given that privacy laws and regulations around data access likely come from the state level.

Sharing Data Across State Programs: Assessing the Risks and Benefits

Efforts to ensure the privacy of individuals' information and the security of state data should be paramount in

any data-sharing endeavor. Although it is impossible to remove all risk to data security, technology has made it easier both to coordinate data in a way that does not require sharing personally identifiable information (PII) and to protect data that are merged or linked. For example, an effective, well-established method of protecting privacy involves eliminating PII (name, address, birthdate and so on) from the shared data, replacing it with a client number (a unique identifier) to link the same client's data across data systems.

Unfortunately, concerns about privacy and data security often preempt any real discussion of the potential benefits of sharing data across state agencies or programs or the opportunity costs of not sharing those data. Securely sharing data across programs and agencies can provide actionable information to improve the reach and effectiveness of programs. Data sharing allows program managers to obtain the full picture of clients' needs, track their participation and outcomes across programs and determine other services that may be helpful. Data sharing also allows policymakers to identify pockets of need to better target resources—geographically and for subpopulations with multiple or particular needs—leading to more effective and efficient service delivery. Finally, data sharing can support policy research on the effectiveness of programs and policy interventions.

Many state and local governments have found ways to protect the privacy and security of individuals' information in state data systems while accessing those data to improve the reach, effectiveness and efficiency of service delivery. Thus, it is not necessarily the case that a governor needs to decide between protecting the privacy of citizens and data sharing across state programs or agencies.

How Can Data Sharing Help States and Their Citizens?

Shared data across state agencies and programs helps governors make more informed policy and budgetary decisions. State agencies that share data can better serve their constituents by:

- Improving client services;
- Better allocating state resources; and
- Conducting ongoing assessments of the quality of state programs through research and internal monitoring.

Improving Client Services

By sharing or integrating data at the level of the individual, states can help reduce the cost and burden to citizens by easing the process of applying for services or programs. States are increasingly looking at integrating their application and case management systems, particularly in the areas of health and human services. Rather than having to report the same information multiple times to apply for different government programs, clients can enter their information once and be assured that it will be used in eligibility determinations for multiple programs.

One example of this approach can be found in **Pennsylvania**, which launched COMPASS, an online portal where users can determine their eligibility for Medicaid, the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families and the Low Income Home Energy Assistance Program. Data are integrated across the different programs' eligibility support systems, eliminating the need for clients to reenter their information each time.[4]

In addition to supporting less burdensome eligibility procedures, data sharing allows case management data to flow across programs so that case workers can more carefully target their work toward clients' individual needs. **Washington**'s Predictive Risk Intelligence System combines medical, behavior health, social service and health assessment data in a decision-support application. The system uses predictive models to identify how best to serve dual-eligible Medicare and Medicaid patients and helps the state identify high-risk individuals to provide services that help them avoid costly emergency department (ED) visits.[5]

The **Kentucky** Health Information Exchange (KHIE) collects data from multiple hospitals and health care providers for a similar purpose. Using KHIE, former Governor Steve Beshear launched an initiative to identify and provide coordinated care to those individuals most likely to visit the ED for their health care. The state was able to develop a warning system whereby an individual entering one of the affiliated EDs would trigger the facility to send specialists to work with the patient and potentially avoid future ED visits.[6]

As demonstrated in Kentucky, integrated data can be used in early warning systems to prevent adverse outcomes before the need for costlier and intensive services. To a similar end, **Massachusetts** links education data with human services data, allowing human services case managers to see when their clients' children are missing school, which the state has identified as a strong predictor of school dropout. Case managers are then able to intervene with the family to address the truancy problem and any underlying issues, such as the need to care for younger siblings while a parent works, with the aim of preventing the child from dropping out and potentially requiring costlier interventions and programs later.[7]

Better Allocating State Resources

The more complete picture that multi-agency data provides can give governors a better sense of how issues of concern are distributed throughout regions in the state, among various subpopulations and across particular state programs. That information can help the state better target resources.

Indiana recently undertook a robust effort to understand the root causes of one of the state's most concerning problems: infant mortality. To identify what was driving infant mortality rates, the state combined 17 data sets from across five agencies and programs to create Indiana's management and performance hub, a site to help identify risk factors connected to infant deaths. Contrary to the assumption that at-risk populations were not enrolled in Medicaid,

the state learned that most of the affected mothers were enrolled in Medicaid but received inadequate prenatal care, which was the strongest predictor of infant mortality in the state. Using other related factors, such as maternal age and zip code, the state created a predictive tool to calculate the risk of poor birth outcomes in specific geographic areas and for certain subpopulations, which allowed state leaders to better target interventions.[8] For example, the data led Governor Mike Pence to request $7.5 million for new efforts related to infant mortality.[9]

Another state, **Virginia**, is using integrated data to facilitate a shift from a program-centric model to a customer-centric, coordinated care model. The new focus requires program providers to have visibility into the full range of services an individual or family is receiving. To accomplish that, comprehensive datasets are giving state leaders an understanding of where programmatic overlap is occurring so that those agencies and programs can work better together to the benefit of those they serve.[10]

Comprehensive Data for Research

Administrative data from state and local programs and agencies have become a valuable way to understand the reach, implementation and, with the right evaluation design, the effectiveness of policies and programs. States can use administrative data to conduct evaluations without the high costs of or time needed for lengthy research studies. By providing a more complete set of information about the individuals or communities receiving services, integrated and shared data can help enhance the quality and usefulness of those evaluations.

For example, **South Carolina** used integrated data to evaluate telepsychiatry services, which provide virtual services for patients instead of requiring them to go to a provider's office. The analysis showed that telepsychiatry results in patients achieving the desired outcomes at a substantially reduced cost compared to traditional services.[11]

Another state, **Washington**, used integrated data to study the relationship between substance abuse treatment and cardiovascular disease. Through that analysis, program leaders were able to identify a strong relationship between early substance abuse treatment and declining rates of cardiovascular disease.[12]

Public agencies can also partner with universities and researchers to connect state data with other data sources, such as census information or national employment data. For example, Case Western Reserve University has partnered with the city of Cleveland to conduct an evaluation of how living in substandard neighborhood conditions affects a child's academic performance. The initiative combines neighborhood data on foreclosures, vacancies and other indicators with education data to build a robust data set that researchers can analyze. The findings from that study will give policymakers better insight into whether they can improve student outcomes by improving neighborhoods, a strategy that some believe is effective but lacks conclusive evidence.[13]

How Interested Governors Can Promote Greater Data Sharing for Better Governance

Governors are in a unique position to help make progress on the coordination of state data. They can play an important role in elevating the conversation to one that addresses both the risks and the benefits of sharing data. They can also champion or facilitate action in the form of legislation, executive orders, regulations and other approaches that increase opportunities for data sharing across the state. Further, governors are the only individuals who oversee all the state agencies and, therefore, are uniquely positioned to promote and enforce greater coordination across those agencies.

Data sharing can happen at multiple levels of government—federal, state, county, city—and across many types of programs that serve individuals and families. Not all governors will be interested in

promoting or supporting data sharing at the state level. In some cases, such as in county-administered states, it may make more sense for the data sharing to take place at a more local level. Even so, governors can support data sharing at those levels by sending a clear message to municipalities that data sharing for improving programs and services is encouraged, clearly distinguishing when data sharing is allowable and when it is not and articulating the safeguards required to protect the privacy of citizens.

For governors who are interested in supporting greater data sharing at the state level, there are many lessons from states and localities that have already traveled this road:

- Start small and build from there;
- Treat data as a strategic asset; and
- Communicate the value of data both externally and internally.

Start Small and Build From There
Developing a mechanism for sharing state data can take resources in terms of budget, time and political capital; therefore, leaders looking to coordinate data should be strategic in how they begin the process. One common theme across states and localities that have successful IDSs is that they started small, focusing on one topic or coordinating a few pieces of data, and built their work from there. That approach allowed them to build a track record of success before broadening the effort to other topics or data types. Taking an incremental approach also allows states to make mistakes and course correct before building a large, complicated IDS.

The ability to demonstrate success is important as well, particularly given skepticism both inside and outside government about the value of large-scale information technology projects and concerns about privacy. An incremental approach allows a state to start small, with fewer resources, and build over time after they have demonstrated value.

One way to begin the process is to focus on an issue of value to both internal and external stakeholders. By addressing a policy problem or issue of widespread concern in the state, governors and their staff will have an easier time getting individuals and organizations on board and committed to the success of the project. Further, the public and other interested groups will be more willing to accept government data-collection and sharing efforts if they are working toward a goal they deem important.

One reason **Indiana**'s data-sharing initiative was successful was its focus on the state's high infant mortality rate. With an important cause serving as the motivation, the state was able to identify which data would provide insight into the root causes of the high mortality rate, bring that data together for analysis and discover which risk factors were contributing to adverse outcomes.[14] With the data coordinated to tackle one problem, the state can now use those data to address other issues of importance.

An alternative approach is to begin data-sharing efforts with a low-risk or low-visibility project to demonstrate value before growing the number or programs or agencies contributing to a data-sharing system. When the state has evidence showing the value of data sharing and has built an infrastructure for sharing and protecting the data, it will be easier to expand into higher profile issue areas.

For instance, **Virginia** started a data sharing project centered on death registry information. When agencies and other organizations in the state were approached about linking death records with their own data, they immediately saw the value in having access to the information. Before the initiative, many programs within the state did not have access to that information, resulting in resources spent contacting or providing services to recently deceased individuals. Sharing data about individuals who have died was not controversial, however, and the process of sharing those data with success gave the state an example to point to when

establishing future data-sharing efforts.[15]

Washington and **Maryland** also started with small initiatives and a limited number of agencies and have slowly added agencies and programs into the partnership over time. Washington now incorporates data from dozens of agencies, programs and NPOs into robust integrated data-sharing networks, and Maryland is currently working toward this structure.

The specific approach the states took varied, but the broad outline of an incremental approach involves:

- Determining which policy questions need to be addressed;
- Identifying available data sets that can help answer those questions, focusing on data that are already linked or can be linked relatively easily and quickly;
- Building the process to connect those data sets and keep them secure;
- Analyzing the data;
- Documenting concrete wins from the small-scale IDS; and
- As opportunities arise, expanding data links and bringing alignment to data-sharing requirements among multiple systems to broaden the questions that can be addressed.

Treat Data as a Strategic Asset

The data that states collect and house are a key asset in state policymaking and should be treated as such. It is the information that helps a governor and senior staff understand what is happening across the state and how the state is operating. It is important that states treat their data as the resource it is, including ensuring that the data are secure. It is also includes considering data a core component of organizational and programmatic decisions so that when policy decisions are made, the question of what will be collected, how it will be housed and how it will be used are central parts of policy design. Finally, to make optimal use of the data, the state will need a skilled workforce that

can maintain the data and turn them into actionable information that informs decision making.

Safeguarding Privacy

A significant challenge to starting a state data-sharing project is the general public's concerns that data sharing may violate their privacy and that the government does not adequately protect their information. Most people understand that when they interact with an agency or program, that organization is going to collect and store data about them such as their income, health information, and family and legal issues. They are not, however, comfortable with or even aware that the organization then shares those data with other agencies, even if those agencies fall under the umbrella of the state government. For some, the fact that the state holds those data at all raises concerns.

Citizens have a reasonable expectation that the state will handle their information securely and that the information will be protected against people who might publicize or otherwise use their information to harm them. Federal laws such as the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) put restrictions on how and when data can be shared to ensure individuals' privacy.

That said, it is possible to both share data across state agencies and maintain individuals' privacy. In most data-sharing arrangements, data are deidentified— that is, altered or aggregated in a way that prevents the identification of individuals in the data set—when shared or integrated. The identifiable data, which might include an individual's name or Social Security number, for example, will be available only to a small number of state staff, typically only in the agency that originally collected the data.

Those who have created shared or integrated data systems recommend addressing the issue of data privacy head on because there are typically approaches that can work to both share data and keep them safe.

For example, **Delaware** recently passed legislation to ensure that student privacy is protected while allowing the education system to use data to improve programs. The Student Data Privacy Protection Act requires the agency managing the data to write clear rules outlining how it stores and uses data and who can access them. In addition, the law establishes a complaint process for parents and prohibits the use of student data for targeted advertising.[16]

When Allegheny County, **Pennsylvania**, initially embarked on its data-sharing initiative, officials were concerned that FERPA and HIPAA would be insurmountable roadblocks to the data system they envisioned, which would include data from the county's human services department, school districts and a number of other publicly funded systems. As they dug deeper, however, they learned that the laws contained provisions that allowed for data sharing under certain circumstances. For instance, a 2008 amendment to FERPA permitted agencies to share student data without written consent as long as the parties sharing the data had a memorandum of understanding (MOU) that spelled out clear privacy and use protocols and indicated that they were using the data to conduct research to improve educational outcomes. Because the exemption aligned with the project's purpose, the county was able to move forward to include education data without jeopardizing the trust or privacy of its residents.[17]

Data Governance

A key factor in keeping data secure and ensuring that they are handled appropriately is having a clear data governance structure. Establishing who owns data is fundamental for a data-sharing culture to survive and thrive. There is no one-size-fits-all answer to the question—different approaches may be best for different states—but without an explicit strategy, states may find data territorialism an impediment to data sharing. Fears can develop that the data that agencies hand over might be misused, misunderstood or used against them to make substantial programmatic changes or cuts.

Formally established data governance structures can circumvent or alleviate data territorialism. Further, an effective data governance strategy ensures that an entity is responsible not only for data security but also for data quality. Without persistent monitoring and validation of data quality, sharing initiatives run the risk of making decisions based on bad data. Finally, data governance includes the processes and procedures that will be used to determine how data are analyzed and by whom as well as how agencies are informed of findings and their implications. All those factors can affect how the data are used and whether agencies are willing to participate.

States and localities have used two general approaches to data governance. In the first approach, an intermediary organization—often outside the government—helps facilitate the sharing and integration of data, but the state or local agencies remain the owners of the data. In the second approach, one agency or organization becomes the owner of all the shared data.

In the first approach, an intermediary data organization acts as a steward for the data, providing the technical infrastructure and expertise to link and manage data from different systems. That organization may also provide the analytical expertise to extract answers from the data for agencies. Agencies retain ownership of their data; hence, the intermediary cannot link or share any data without the source agency's permission (and often involvement). That approach can make agencies more comfortable with the process; it also requires the data steward to be diligent in proving the value it provides and ensure that it is meeting agencies' expectations.

For example, **Rhode Island**'s DataHUB is managed by an NPO (DataSpark) that acts as an intermediary for state agencies that share the data. DataSpark provides the technical resources and encourages the sharing of data but cannot unilaterally embark on projects. This partnership benefited from years of building relationships with agencies and organizations to demonstrate expertise and value.

The second approach to data sharing gives one organization formal ownership of the data from multiple agencies. Ownership is typically established through an executive order or legislation, giving the organization a legal mandate to extract and use data from the other identified parties. An example of that approach is in **North Carolina**, which passed legislation mandating that all state agencies coordinate business intelligence activities through the Government Data Analytics Center (GDAC), which sits in the office of the state chief information officer.[18]

That approach allows for the quicker integration of data because the designated organization does not need to take time convincing partners of its value and abilities. In contrast, contributing agencies may be skeptical of the process and could be reluctant to cooperate beyond the extent mandated by law. States taking that approach would still do well to build support among partner organizations and recognize the potential expertise that they bring to the table.

Some states have developed a functioning data-sharing culture through carefully building trust among partner agencies. The organization managing the data facilitates sharing on an as-needed basis and must continually demonstrate its value to partner organizations to maintain its role. **Maryland** has built the foundation for a statewide data-sharing network through an informal trust network, with the University of Maryland at its center. Two agencies were interested in linking their data to one another. Because the university already had MOUs related to data for each agency, it was asked to serve as a facilitator for those agencies' data-sharing initiative. Having proved that they had the technical expertise to link and securely manage the data while respecting each agency's ownership of the data, the university continues to develop additional relationships with other state agencies to further expand the state's data-sharing network.

As the examples above show, states can choose different entities to serve as the organizing body for

data sharing. In **North Carolina**, for instance, the GDAC sits in a central office of the executive branch. **South Carolina** has had an IDS since the 1970s and houses the data in the multilateral South Carolina Budget and Control Board, which the governor, the state controller, the state treasurer and the chairs of the South Carolina House Ways and Means and Senate Finance committees oversee. In **Washington**, the integrated client database sits within the research and data analysis division in the state's department of social and health services.

States can also choose external entities to serve in that coordinating role, as is the case in **Rhode Island**'s DataHUB, which is housed in a nonprofit agency. More common is a relationship with a local university, as in **Florida, Illinois, Louisiana, Maryland,** Charlotte-Mecklenburg **North Carolina,** Cuyahoga County **Ohio, Utah and Wisconsin**.

Technical Expertise

Some states may decide that having an external intermediary helps sell the initiative to the public because residents may have a more positive perception of data use by universities or NPOs than by the government. Others may decide that bringing in additional, non-state partners adds to the overall risk associated with the project and would rather handle the data internally. In either case, state leaders should consider the established competencies within the state to determine where appropriate technical expertise lies.

Just as states will need to think through the governance of the data, they should also consider how they will support data maintenance and use. States devote resources to maintaining their buildings, public lands and other assets, and they ensure that there are individuals with the knowledge and expertise to maintain those assets and ensure that they are being used in a strategic way. Likewise, states should not expect that they will be able to make optimal use of data without devoting resources to maintaining and analyzing those data. That requires sufficient funds

to hire staff and maintain technological systems that support data security, quality, analysis and interpretation. Even the best designed data systems will not add value without talented individuals working to understand the story behind the data.

States looking to improve their use of integrated data will need to bring in skilled data analysts and data scientists in addition to training current staff in analytics skills. Governors have the opportunity to prioritize recruiting individuals who have analytical and technical skills and focusing professional development efforts on analytics training for incumbent workers. Because of the relative newness of the analytics field and rapidly changing technology, that cannot be a one-time effort if states want to stay at the forefront of the analytics field. States will need to invest in hiring, training and retaining staff who have skills in the latest data analytics advances and trends.

States and localities have experienced both challenges and opportunities in this realm. Agency leaders may have difficulty competing for a limited pool of analytics talent because they cannot offer the level of compensation analysts command in the private sector. Some public agencies have had success in recruiting by emphasizing their ability to provide employees with workplace flexibility and an opportunity to have a meaningful effect on society. Universities may also be willing to partner with states to provide analytics capacity if the partnership also benefits the university—for instance, by producing publishable research or providing internships and career opportunities for students.

Communicate the Value of Data Externally and Internally

Governors play an important role in communicating the value of data sharing while ensuring and reassuring the public and state agencies that the data are handled with care. States and localities that have embarked on data-sharing arrangements have often found that much of the resistance to those efforts is driven by fear rather than by actual risks or legal barriers to data

sharing. That is not to say that there is not a legitimate need to secure against privacy breaches, but many mechanisms can support safe sharing of data across agencies and minimize the risks inherent in this effort. By clearly communicating both the value of sharing the data—what is gained from sharing and the opportunity costs of not sharing—and the protections provided to minimize the risk of privacy breaches or misuse, governors can help generate greater support for the effort.

External Communication

Communication with the public is critical, given the general distrust of government, particularly when it comes to data. Those opposing data-sharing efforts may be more organized and vocal than the members of the public likely to support such measures. By continually pointing out where data initiatives are driving value, governors will better be able to counter future challenges to their efforts.

Benefits of data sharing can be diffuse and, therefore, difficult for state residents to see. One lesson from states that have had success is to highlight how local communities benefit from the data-sharing effort. Citizens may be better able to see the value in using data if their community directly benefits from it. For example, if parents can see how data are being used to improve education at their children's schools, they will have a better appreciation of the value of data-sharing efforts.

One state that has made a concerted effort to craft a public message is **Rhode Island**, which publishes data stories—interactive slides that visualize data from the integrated DataHUB—each of which addresses a single policy question. Those stories help show the value of data sharing by explaining exactly what the data are being used for.[19] Another state that made an effort is **Virginia**, which created a short video explaining how its longitudinal data system works and how the state uses it. The video can be shown to parents or other members of the public who are concerned over data collection so that they understand what data are being collected, how they are secured, who is seeing them and how their children ultimately benefit.[20]

Internal Communication

Some of the greatest challenges to sharing data may come from those within state agencies. Agency officials may worry about the privacy of the individuals whose data are being shared with other agencies and also about how the data will be used to judge the agency's performance. Program staff may be trained that laws such as HIPAA and FERPA prohibit any data sharing. General counsel, which may not know the ins and outs of those and other privacy laws, may adopt a risk-averse stance and advise against data sharing.

As with the public, governors can overcome some of that opposition by emphasizing the value of data sharing, with the measures taken to protect privacy. Governors can work with their state attornies general to help clarify for public agency legal departments that cross-agency data sharing is legal and even encouraged under federal data privacy laws (HIPAA, FERPA) and to find ways to share data in accordance with those laws. They may also want to coordinate conversations between the U.S. Departments of Education and Health and Human Services, general counsel and state agency staff to determine which approaches to data sharing are legal and supportive of data privacy. The National Association of Attorneys General and the Data Quality Campaign are also helpful resources.

When speaking with state government staff, the governor's message will need to extend beyond issues of privacy. Agency leaders and staff may fear that releasing the data to anyone outside the agency may lead to unwanted or unfavorable external scrutiny. Thus, governors should be careful to communicate to state staff that the data will be used for continual learning and improvement and not to "catch" agencies doing something wrong. In promoting data sharing, governors can also build buy-in from agencies by helping them adopt governance rules that will allow

them to see any data before they are released and provide reflections on the findings. By promoting a culture of continuous improvement in the state, governors can avoid many of the pitfalls that arise when they attempt to promote greater use of or access to data in the state.[21]

Conclusion

Governors are responsible for ensuring the responsible use of taxpayers' money and promoting the well-being of the residents of their state. Governors can enhance their state's ability to use data to drive better decision making by promoting and facilitating greater sharing of data among state agencies. The outcomes that governors and the public care about—health, education and economic security—are not confined to a single public program or agency. To get a holistic picture of how his or her state is doing, a governor needs data that draw from the many agencies that address key outcomes its programs and services target.

Governors can take a variety of approaches to and play many roles in facilitating the sharing, coordination and integration of state data, ranging from calling for integrated data to removing administrative barriers that prevent agencies and localities from sharing data among themselves. Whatever role governors choose to play, they will almost certainly have to address data privacy and use, so understanding the trade-offs associated with data sharing is vital to making decisions that are in the best interests of their constituents.

The work of states and localities that have developed successful data-sharing arrangements suggests that governors should start small and proceed incrementally. Governors can begin this process by addressing a single policy problem or focusing on sharing data from a small number of state programs or agencies. Treating state data like a strategic asset is important; it directs governors to pay careful attention to issues of privacy and security and data governance and to ensure that the state workforce has the skills needed to use the data well. Finally, lessons

from states and localities highlight the importance of effectively communicating with both the public and state employees about the value in sharing data, the steps taken to protect privacy and how data will and will not be used.

Governors who are hesitant to push for increased data sharing at the state level can promote coordination in other ways. They can identify and remove administrative barriers that prevent data sharing at local levels of government, such as overly complex procurement processes regarding cross-agency projects, restricting the use of operating funds on systems enhancements or overly restrictive barriers to data access and sharing.

Even governors who are not interested in championing data sharing should be aware of the value and risks involved in this sharing because they are likely to make decisions that affect the legality and feasibility of data sharing. Specifically, governors will have to decide whether to support legislation and issue or rescind executive orders relating to data sharing. In 2014, 36 states passed legislation that tightened privacy and effectively limited the ability to share student data with other state agencies that may also be serving those children and their families.[22] In making those decisions, governors and their advisors should understand the potential trade-offs between effective and efficient government and individual privacy. They may want to explore which technologies and processes can be set up to balance the risks and benefits of data sharing.

Data sharing alone does not guarantee an effective state government, nor does it guarantee better outcomes for state residents. But governors' policy priorities are increasingly focused on breaking down silos across government programs to better address outcomes as a whole. Data sharing can be a core facilitator of that work, and states are finding ways to improve access to data across state agencies—without jeopardizing the security or privacy of the public—thereby leading to more to data-informed decision making.

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Endnotes

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