IBM Center for The Business of Government

Federal Grants Management: Improving Outcomes

Shelley H. Metzenbaum
The BETTER Project

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The grants management landscape has changed over the past few decades, with new laws, administrative processes, technologies, and expectations for increasing the use of data and evidence to boost federal program the effectiveness. Given the priorities of the Biden-Harris administration and the enormous influx of grant dollars to address the health and economic impacts of the pandemic, this is an opportune time to rethink and reframe how the federal government manages grant programs.

Dr. Metzenbaum argues that the federal grants management system needs to shift from an emphasis on administrative matters to one on improving outcomes, informed by analyses that suggest the right places to focus. She argues further that this will require rethinking the roles and responsibilities of the many diffuse and dispersed players in federal grant and related programs. For example, this would mean identifying “outcome brokers” for every grant program’s objectives. They would be responsible for coordinating and, where necessary, catalyzing efforts that inform where to focus, find ways to improve, and successfully encourage adoption of increasingly effective practices.

Dr. Metzenbaum proposes designating a leader to serve in this role who may work in the grant program or elsewhere, noting that this represents a very different role than the administrative, fiscal, and compliance roles performed by most grant program officials currently identified by the Office of Management and Budget. In addition, designating outcome brokers—and where appropriate, outcome improvement teams—for grant programs would support cross-program collaboration and learning, both to improve grants outcomes and to improve grant efficiency as well as other aspects of operational quality.

Dr. Metzenbaum offers a blueprint to improve grant outcomes both short and long term, offering specific recommendations for multiple participants in the federal grants management system. These participants include federal policy, program, regional, and oversight officials; grant recipients; and nongovernmental allies supportive of program goals.
This report complements an earlier IBM Center report, *Reducing Administrative Burden in Federal Research Grants to Universities*, by Lisa Mosley, Jeremy Forsberg, and David Ngo.

While this report is targeted to federal policy makers and grants managers, we hope it provides leaders at all levels of government in the U.S. and abroad—and possibly private sector funders—with a useful set of actions they can consider to improve the program effectiveness, cost-effectiveness, and equity of their grant programs, make wiser resource allocation decisions, and operate more seamlessly to serve citizens and their communities.
EXECUTIVE SUMMARY

Managing grant programs to focus on outcomes is not easy. It is, however, essential. Every grant program needs to be clear about its purpose.

Grant programs need to set outcome-focused goals and objectives guided by their enabling law and informed by evidence about what is happening in the world, the effectiveness of actions to affect what is happening, feedback from beneficiaries and those working on the frontline, and policy preferences of key elected officials.

Managing grant programs to improve outcomes requires:

- **Defining program focus.** Clearly identifying and communicating outcome objectives and deciding where to focus long and short term.
- **Finding ways to improve.** Identifying what works, what works better, and situational differences affecting practice effectiveness.
- **Increasing adoption of what works better.** Increasing adoption of practices that improve outcome progress while reducing use of less effective practices.

This report offers a blueprint to stimulate and support rethinking of the federal approach to grants management to increase attention to improving outcomes. This is in line with the objectives of multiple federal laws enacted over the past few decades. The report also discusses how evolving advances in technology continue to open up unprecedented opportunities for communication, collaboration, and learning to support outcome improvement efforts. It builds on the experiences of (as well as robust research about) numerous outcome-improving practices federal programs and others have pioneered over the years, highlighting lessons learned about better and less successful practices.

**Background.** The federal grant system is vast. In fiscal year 2019, a pre-pandemic year, the federal government spent $765 billion on grants to states, localities, research institutions, nonprofits, and others. This amounts to 30 percent more than federal spending on direct contracts for goods and services. Federal grant spending surged to $921 billion in FY 2020 to address the Covid-19 pandemic.

Historically, most of the attention given to federal grants management has gone to the important tasks of awarding and distributing grant funds and, post-award, to tracking grant spending. Until recently, surprisingly little attention has been given to determining, communicating, and enhancing what grant spending accomplished. This lack of attention occurs even while recent changes in law and executive branch initiatives have attempted to increase emphasis on improving the outcomes of grant programs. Noteworthy progress has been made managing to improve outcomes in some programs. Nevertheless, backsliding is evident in others, including in programs long managed with a strong emphasis on outcome improvement.

Numerous challenges may explain this slow progress and backsliding. These include:

- A lack of clarity about who is responsible for coordinating outcome improvement efforts for each grant among the large number of federal officials who affect a grant program’s decisions and activities.
• Difficulties sharing data across programs, a difficulty recently evident when the Treasury Department sent a significant number of pandemic relief payments to dead people because it could not access current Social Security system data
• Oversight systems that emphasize compliance audits often better resourced than the systems that generate insights to improve outcomes

Because of these and other challenges, attention to managing federal grants in ways that improve their outcomes has been neglected over the years. Fortunately, this is starting to change.

At the same time, numerous recent developments offer unprecedented opportunities to improve the outcomes of grant programs. These include technology advances, evolving analytic and evaluation methods, and a growing collection of examples of frontline workers using data to find ways to achieve significant improvements in performance.

Recommendations for Managing Federal Grants to Improve Outcomes.

This report recommends specific actions that different participants in the grants management system can take to improve the beneficial effects of federal grant programs. Some of these actions can be initiated immediately. Others will need to be embraced as part of a long-term transformation of the management of the broader federal grant system to be more outcome-focused.

Changes at the Grant Program Level. Federal departments and agencies should:
• Designate grant program “outcome brokers.” Every grant program needs someone who brings together goal allies and those with relevant expertise and resources to realize progress on the grant program’s outcome objectives. Among the dozens of existing roles in the grants management system, there is no explicit champion for grant program outcomes. Unless every grant program has someone assuming this outcome broker role, progress on a grant program’s outcome objectives is likely to be slower.
• Ensure every grant program (and its home organization):
  • Creates an outcome focus to find what works and what works better to make progress on the grant program’s outcome objectives, understand the situational variations affecting what works, and increase adoption of better practices by those on the frontline.
  • Invests in building analytic and research capacity along with more actionable data systems for use by the federal government and grant recipients.
  • Communicates to support outcome improvement efforts and build public understanding of grant program objectives, strategies, and accomplishments.

Changes by the Office of Management and Budget. OMB should undertake or catalyze cross-agency efforts that:
• Rebalance the federal grants management system to direct greater attention to improving outcomes.
• Support effective communication, outreach, and networking to connect those working to advance the same and related outcome objectives, such as healthy people, no child hungry, financial literacy, and safe travel.
• Update data standards and data sharing systems to make it easier for grant programs to find goal allies with whom to collaborate as well as ways to improve.
• **Provide forums and shared technology platforms that support collaboration and learning.**

• **Increase use of cross-agency priority goals** and other effective collaboration approaches when cross-agency action is needed to improve outcomes or tackle impediments to progress confounding multiple grant programs.

• **Find, build, and share evidence** about more and less effective grant program mechanisms used to improve outcomes.

**Changes by oversight organizations.** Oversight entities such as agency inspectors general and the U.S. Government Accountability Office should support an emphasis on improving outcomes, including how well grant program managers and grant recipients use data and well-designed trials to inform where to focus, find ways to improve, and increase adoption of better practices.

• **Promote greater transparency by grant programs.** To boost accountability, oversight entities should give more attention to how well grant programs and grant recipients communicate with each other and the public about their outcome objectives, strategies, accomplishments, lessons learned, and planned next steps.

• **Make their own websites more user-friendly.** Oversight entities should also support improvements in program outcomes by updating the structure of their own websites to make it easier for grant programs to find which grant program mechanisms are more and less effective for improving outcomes.

**Actions by grant program “goal allies.”** Grant recipients, their networks, and other programmatic goal allies can build knowledge, nurture networks, collect feedback, and innovate. This should be done in ways that inform where to focus, find ways to improve, and increase uptake of better practices. They can also advocate for grant program legal authorities and resources to improve outcomes.

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**Two companion white papers complement this report**

*Federal Grants Management: Improving Transparency* examines ways to improve grant program transparency and discusses why communication is so essential to improving grant outcomes and accountability.

*Federal Grants Management: Improving Operational Quality* describes ways to improve grant program operational quality, including service quality and wise risk management.
INTRODUCTION

Grants are, essentially, partnerships between grantors and grantees to advance shared outcome objectives. The federal government identifies general and sometimes specific outcome goals and objectives it wants to advance through grants.

By offering and awarding a grant, the federal government finds states, localities, and nonprofit organizations including colleges and universities willing and able to step forward to make progress on general and specific outcome objectives. These outcome objectives are as varied and important as healthy people, preventing wastewater from polluting public waters, every child succeeding, safe transportation, and economically vibrant communities.

Grants are one policy tool Congress chooses to use to improve outcomes, often combining multiple tools for a single purpose. Other tools include contracts, regulations, tax incentives, transfer payments, loans, information provision, and more. Grants are used when “no substantial involvement is anticipated between the executive agency, acting for the federal government, and the state or local government or other recipient during performance of the contemplated activity.” Grants are different than contracts. The federal government uses contracts to engage a third party to do something for the direct benefit or use of the federal government. Grants are also distinct from cooperative agreements, used when substantial involvement is anticipated between parties co-developing or co-delivering an outcome as at some large-scale research facilities. This report focuses on the use of federal grants to improve outcomes.

The federal government has almost always used grants in some form, and currently runs about 1,700 grant programs. In recent years, grants accounted for about 20 percent of federal spending. In fiscal year 2019, federal spending on grants totaled $765 billion, 30 percent higher than federal contract spending. Grants catalyze action and build capacity not just by their direct spending but also by their ability to catalyze additional action and spending by grantees and their partners. Grant programs—for research, infrastructure, agriculture, economic development, and much more—contribute significantly to improving the state of the world.

Federal grant programs come in many shapes and sizes. Some are large. Some are small. Some are given out by mathematical formula, while other grants go out through competition. Some go to the same recipients each year if prior performance was acceptable, while others go to different recipients. Some receive multiple grants while some receive only one federal grant. Some spend all of their grant funds themselves, while others use contractors and sub-grantees.

Block grants such as those for mental health and community development specify more general outcome objectives, while categorical grants set more specific goals such as school lunches for economically disadvantaged children, stormwater management, and specific advances in scientific knowledge. Many grant programs set general outcome objectives appropriate to the national scale but also expect their grantees to set goals appropriate to the local situation.

Organization of This Report

The remainder of this report elaborates on the kinds of actions needed to make progress on achieving the outcome objectives of grant programs. It shares research and vignettes illustrating past grant management practices worth trying to replicate and continue if replicable, as well as past problems to be avoided. Each section discusses actions grant program officials can take. Each section also discusses actions where central management office or cross-agency actions are likely to help.

The author hopes this report encourages others to identify and share effective and less-effective grant management practices to improve program outcomes. The report concludes with a blueprint suggesting how the federal grants management system can constructively evolve in the future and the roles the many key stakeholders in this vast system can play to improve outcomes.

Although this report pertains primarily to improving the outcomes of U.S. federal grants, many of the insights presented here may also be helpful to grant-giving organizations in state and local governments and other governments around the world as well as to grant-giving foundations. Moreover, many of the suggestions offered here are likely to help other governmental programs, not just those giving grants, boost progress on their outcome objectives.


4. In FY2020, grant obligations soared to $971 billion in response to the Covid pandemic. (Source: USASpending.gov).
Beyond Outcomes: Two Additional Dimensions of Grant Performance to Be Improved

The emphasis of this report is on improving the outcomes of grant programs. Effective grant program management includes two other complementary performance dimensions: transparency and operational quality. Ways to improve the performance of grant programs on these dimensions are described in two separate white papers accompanying this report:

**Federal Grants Management: Improving Transparency.** In addition to managing grant programs to improve progress on outcome and operational quality dimensions, grant program leaders need to advance three distinct transparency objectives:

- Communicating to help grantees improve outcome and other aspects of performance
- Communicating to strengthen accountability to grantees, program partners, and the public
- Communicating to demonstrate results to build understanding of and trust in grant program action

**Federal Grants Management: Improving Operational Quality.** To improve operational quality, grant program leaders must improve service quality and stewardship. Service quality starts with service to grantees and others on the frontline and, where appropriate, to beneficiaries and others. Service quality to grantees is not just about grant application and reporting ease and process streamlining, though. It is also about providing knowledge-building services that answer questions grantees need answered to improve outcomes in cost effective and equitable ways. Stewardship is about helping grantees steward federal resources wisely to apply continually more cost effective approaches, prevent operational problems including operational inequities and bias, and manage risks as appropriate to the risk tolerance of the program.
The Federal Grants Management “Ecosystem”
The current federal grants management system has four primary components: rules and guidance, processes, data and evidence systems, and people. The challenge is to make these components work well together to improve grant program outcomes.

**Rules and Guidance**

To assure that grant funds are spent as intended and allowed, the federal government issues grant guidance. The U.S. Office of Management and Budget (OMB) issues the Uniform Grant Guidance applicable to all grant programs. Agencies complement this governmentwide guidance with their own guidance translating the governmentwide guidance more understandably to their grant applicants and recipients and often specifying additional objectives and requirements in line with the grant program’s enabling legislation and priorities of the grant program and parent organization’s leaders. Some regional offices also issue their own grant guidance, supplementing national program guidance.

The sheer volume of guidance (the recently released Uniform Grant guidance is about 300 pages long, while the complementary compliance supplement with agency-specific information is 1,500 pages) is daunting. Grantees who fear an oversight official will find noncompliance with a requirement buried in the copious body of guidance often dedicate significant resources to making sure their administrative matters are in order. According to the Federal Demonstration Partnership, a network of research and development grantors and grantees, university-based grant managers reported spending an average of 44.3 percent of their time meeting requirements rather than conducting active research in 2018, two percent higher than administrative time reported in 2005 and 2012 surveys. Grantees know that if they don't give enough attention to compliance, they run the risk of getting called out publicly for a deficiency and possibly jeopardize prospects for future grant funds as well as political and professional reputations.

**The Grant Lifecycle**

OMB on Grants.gov describes three phases of the grant lifecycle:

- **Pre-Award Phase**—Funding Opportunities and Application Review
- **Award Phase**—Award Decisions and Notifications
- **Post Award Phase**—Implementation, Reporting, and Closeout

U.S. Government Accountability Office (GAO) reports describe a similar although slightly different grant lifecycle.

What is noteworthy about both the OMB and GAO descriptions of the grant lifecycle is how much they emphasize oversight activities while omitting mention of insight-building ones such as data analytics, running well-designed trials, convening data-informed conversations to decide where to focus and find ways to improve, and communicating better practices successfully to support grant recipients in their improvement efforts and to inform the public.

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For example, OMB describes the post-award implementation phase as “Providing Support and Oversight,” and elaborates on what that means with language about “reporting compliance,” “oversight,” and “auditing.”

Similarly, GAO’s description of the post-award “Implementation Stage” describes “Management and Oversight,” but the activities listed are “conduct site visits and review recipient reports.” “Reviewing reports” sounds more like a compliance activity than would language such as “analyze and apply insights from reports and other data.” Site visits can be helpful in theory. In practice, grantees often experience these visits as time-consuming and threatening but not very helpful.

Data and Evidence

A number of different data systems, websites, and evidence repositories contain information to which grantees submit information. These same systems, especially in the age of big data, also contain useful information that can inform where to focus and ways to improve. As laid out in the section on state and local grants of the annually-prepared Analytical Perspectives, Budget of the United States Government, websites with grant program information include:

- Grants.gov is a primary source for communities wishing to apply for grants and other federal financial assistance.
- System for Award Management (formerly called the Catalog of Federal Domestic Assistance) is hosted by the General Services Administration containing information about federal financial assistance programs such as grant objectives, eligibility criteria, application procedures, estimated obligations, beneficiaries, and, if a grant program fills it out, accomplishments.
- USAspending.gov provides details on federal grant and other spending.
- Federal Audit Clearinghouse is an online database providing public access to grant audit reports with information such as the amount of federal money expended and audit findings.

Analytical Perspectives also lists 14 agency-run websites containing agency information on grants. The document does not list, however, the Payment Management System that the Department of Health and Human Services (HHS) operates for itself and some other agencies.

Taken together, these data sources and systems all contain rich nuggets of knowledge that can be mined in the age of big data. Mining them will become even easier after the data standards mandated by the Grant Reporting Efficiency and Agreements Transparency (GREAT) Act of 2019 are implemented in coming years. The Congressional Research Service and GAO have previously used the HHS Payment Management System, for example, to report to Congress on grant close-out status.

Many other data systems and websites across the federal government—such as those run by the Census Bureau, the Bureau of Labor Statistics, the Centers for Disease Control and Prevention, the Environmental Protection Agency, the National Oceanic and Atmospheric Administration,

9. See, for example, Chapter 17, “Aid to State and Local Governments,” in the FY 2020 Analytical Perspectives, which can be accessed at: https://www.govinfo.gov/content/pkg/BUDGET-2020-PER/pdf/BUDGET-2020-PER-5-1.pdf.
10. The site is currently in beta and can be accessed at: https://beta.SAM.gov. It will ultimately be renamed SAM.gov.
11. The site can be accessed at: https://harvester.census.gov/facweb/.
and the Departments of Agriculture, Treasury, and Transportation—contain valuable outcome-related information that grant programs and grantees can use to inform where to focus, decide what to give priority attention, and find ways to improve.

People
A wide range of players currently are or could constructively be involved at various points in the grant lifecycle. These people, in and outside the grant program and government, may influence both what grant program objectives are or the rate and magnitude of progress on those objectives.

Those influencing the refinement of a grant program’s focus are located in a wide variety of positions across the government. They may be in:

- Congress or the White House (including offices of the president and vice president, White House policy offices, and OMB)
- Offices of departmental leaders and heads of major agency components
- Agency policy and evaluation offices, budget offices, program offices
- Grant offices within program offices

They may include people involved in designing the grant application process and those involved in setting grant award criteria.

Those influencing decisions about where to focus may also reside at the top of grant-receiving organizations—governors, local elected officials, or boards and CEOs of nonprofit organizations—as well as among those working on the frontline. Organized advocates can also sometimes play a role influencing refinement of grant program focus.

Once a grant program’s focus is refined, those involved in improving grant outcomes may include:

- Grant program leaders and staff
- Departmental chief operating officers, performance improvement officers, data scientists, and evaluators
- Regional staff
- IT staff making data systems work

They also include agency human resource offices helping find people with analytic skills as well as people with the communication skills to help implementers and researchers work together to improve outcomes.

Once better practices are found, those involved in encouraging their adoption include:

- Federal staff working in grant offices, program offices, regional offices, evidence repositories, and resource centers as well as those working on communications, training and technical assistance, and other forms of outreach
- Researchers at universities and in think tanks participating in researcher/practitioner partnerships
Those involved in oversight—grant program monitors and sometimes regional offices as well as agency inspectors general, the General Accountability Office, and Congressional oversight committees.

Where federal staff, researchers, and oversight bodies choose to focus can greatly affect attention to outcome improvement efforts.

The challenge is knitting together the dispersed efforts of these scattered actors into a productive whole that produces more than the sum of the parts. For this to happen, several GAO studies as well as academic research\(^{12}\) conclude that identification and authorization of an “outcome broker” is highly effective.

The president, others in the White House including heads of policy councils and OMB, agency leaders, and even regional office leaders can constructively designate outcome brokers and outcome improvement teams, where appropriate. Moreover, federal law (the Government Performance and Results Act Modernization Act of 2010) requires identification of outcome brokers (referred to in the law as “goal leaders”) for agency and cross-agency mission-focused priority goals, as well as for all agency and governmentwide performance goals.

Lesson Learned: Designating “Outcome Brokers” Boosts Results

A 2014 Government Accountability Office report described the value of an outcome broker:

“Officials in the Recovery Implementation Office employed a collaborative, facilitative approach, while also leveraging the authority of the vice president to facilitate the participation of stakeholders. The office functioned as a convener and problem-solver that engaged with a wide range of federal, state and local partners. This approach was embodied in the objectives identified by the vice president when the office was established. These objectives included the expectation that office staff respond to requests and questions within 24 hours, cut across bureaucratic silos by reaching out to a variety of partners, and always be accessible. Toward this end, the office adopted the role of an “outcome broker,” working closely with partners across organizational silos at all levels of government in order to foster implementation of the Recovery Act and achieve results.”\(^{13}\)

Unfortunately, it is currently far easier to identify those working on grant fiscal, audit, and oversight matters than those working on improving program outcomes. While the Office of Federal Financial Management in OMB has developed a list of grant program fiscal managers to whom it distributes proposed and final grant guidance, no one has developed a parallel list of individuals in charge of managing the improvement of grant outcomes. Such a list may not exist within agencies, either. Yet, finding, communicating with, and connecting these individuals holds great potential for increasing beneficial grant impacts.


Historic Inattention to Improving the Outcomes of Federal Grants
Despite their importance, a management focus on the outcomes of federal grants has historically gotten relatively little attention. Attention has primarily been given to grant processes: their availability, making grant-awarding decisions, distributing funds, and ensuring grant recipients comply with reporting and other requirements. Attention to the outcome-improving practices that need to happen has historically been notably absent. Also scarce is institutional support for those working on grant program management in contrast to the federal acquisition system, which is supported by three federally operated “universities” dedicated to contracts and acquisition management. No similar training exists for federal grant program officials, except perhaps for those who are grant fiscal managers.

What has also gotten surprisingly little attention and is remarkably hard to find is information about trends and discrete accomplishments for individual grant programs and across grants. The new one-stop website for federal grant programs, Beta.SAM.gov, asks every grant program to describe their accomplishments. Few do. Moreover, while it is possible to sort the site’s content by beneficiary category, it is not possible to sort on or generate reports about accomplishments by outcome category (e.g., improving Americans’ health, better transportation, climate change) to get a more coherent picture of grant program accomplishments.

Equally surprising is the difficulty of finding theories of change and evidence pertaining to the effectiveness of grant program mechanisms—the requirements, resources, and supports grant programs provide and how well those work and could work better. The paucity of evidence on the effectiveness of these different grant management mechanisms is especially surprising given sustained efforts over the last several presidential administrations to encourage grant recipients to build and use rigorous evidence to increase the impact of grant-funded activity. These mechanisms include:

- Goal setting, communication, and use
- Feedback and data analyses provided grantees, including but not only that provided through monitoring and oversight practices
- How incentives and motivational mechanisms are structured and used
- Evidence repositories, training and technical assistance, and other outreach and coaching efforts
- Support for networked continuous-learning-and-improvement communities

Challenges in Managing Federal Grants to Improve Outcomes

Given its size and import, the field of federal grants management clearly warrants serious and significant attention. However, the field faces a number of operational challenges to become more outcomes oriented.

Three of the more vexing challenges include:

- A lack of clarity about responsibility for coordinating grant outcome improvement efforts across the wide range of federal officials currently and potentially involved in each grant program’s ecosystem
- Difficulty sharing data and other evidence across systems and programs, a problem exacerbated by growth in the numbers of grant programs with multiple reporting systems and data requirements increasing the burden and cost of grants management
- An oversight infrastructure heavily focused on procedural compliance that tends to overwhelm the insight-generating activities grant programs need to do to improve outcomes

A long-time federal manager at the U.S. National Highway Traffic Safety Administration describes how the heavy focus on procedural compliance and problem avoidance has hindered the work of those trying to make progress on grant program mission objectives:

"Relatively little of our time is now devoted to consideration of what issues need attention and more to staying out of trouble . . . The bureaucratic burdens of spending the grant money are about risk aversion. There has been a layering on of risk averse processes, procedures, checks, double checks so the money is spent on what we could easily do versus what needs to be done. It is so hard to get the dollars out the door because there are so many processes and loops to get it out the door. All of our time is spent getting the dollars out the door rather than figuring out what we should be doing with the dollars."

The inability to share data between administrative systems, within and across agencies, complicates the oversight overload. It is time-consuming and sometimes impossible to share outcomes and other data even when different programs serve the same population and address a common need, such as helping low-income and otherwise vulnerable children. A recent example of this data-sharing problems was evident when a significant number of pandemic relief payments got sent to dead people because Treasury was unable to access current death data from the Social Security system.15

Some progress is being made at the local level sharing data, such as in Allegheny County, Pennsylvania.16 Previous federal efforts to encourage this sort of integration such as the Disconnected Youth Performance Partnership Pilot identified data-sharing challenges that need to be worked out, including confusion about grant program flexibilities and logistical and privacy concerns related to data sharing.17

Recent Increase in Attention to Improving Outcomes in Federal Grant Programs

Historic inattention to grants management and especially their management to improve outcomes is fortunately starting to change. Recent congressional, executive branch, and nongovernmental initiatives are encouraging and supporting this shift.

Congress. Over the past 25 years, Congress has enacted a number of new laws to improve the way federal programs are managed and the way grant programs collect and use data to make those data more useful. These and other laws push for a deep rethink of the roles and responsibilities of different players in the large grant ecosystem to sort out how to make the systems more outcomes-focused, agile, and continually improving. These laws include:

- **Government Performance and Results Act Modernization Act of 2010.** Building on a 1993 law that required agencywide strategic planning and annual performance planning and reporting, the 2010 amendments require outcomes-focused goal and priority setting, designation of goal leaders, and use of routines that bring people, data analytics, and other evidence together frequently around priority goals to decide where to focus and find ways to improve.

• Program Management Improvement Accountability Act of 2016. Requires OMB to identify best practices and develop a standards-based model for program management and a job series for program managers.

• Foundations for Evidence-Based Policymaking Act of 2018. Requires agencies to develop “learning agendas” to identify knowledge gaps and plan when to fill them in addition to inventorying existing knowledge and data.

• Grant Reporting Efficiency and Agreements Transparency Act of 2019. Requires common data standards for grant recipient reports and a comprehensive taxonomy of standard definitions for federal financial assistance data.

• Inventory of Program Activities of Federal Agencies (2020). Requires a public inventory of every federal program (including grants), along with links to any related evaluation, assessment, or program performance review.

These new statutory expectations are just starting to be integrated into a coherent, holistic picture of how federal grants should be managed. Taken together, especially with new technologies and growing sophistication in evidence finding and building methods, they allow for a radical but practical rethinking for federal grants management and how the roles and responsibilities of those involved in the grants and outcomes-improving ecosystem should evolve.

Executive Branch. The executive branch, too, has taken important actions to increase attention to improving the outcomes of grant programs. This includes designating grants as a cross-agency priority (CAP) goal, developing a “playbook” comprised of promising practices for improving outcomes, updating federal data systems to include an emphasis on program outcomes, and developing staff with an outcome orientation.

In 2017, “Results-Oriented Grants” was designated as a federal cross-agency priority goal. The goal statement was to “Maximize the value of grant funding by applying a risk-based, data-driven framework that balances compliance requirements with demonstrating successful results for the American taxpayer.” An Executive Steering Council was formed to serve as the CAP goal leader leading progress on the goal. In addition, in 2020, HHS was designated the Quality Service Management Office (QSMO) to serve as market coordinator, solutions manager, and community builder for grants.

In April 2020, those leading the Results-Oriented Grants CAP goal released Managing for Results: The Performance Management Playbook for Federal Assistance Awarding Agencies: Version 1 (commonly called the Grants Playbook). The Grants Playbook calls for “a paradigm shift in grants management from one heavy on compliance to a more balanced approach that includes establishing measurable program and project goals and analyzing data to improve results.” The Playbook shares promising practices from federal agencies. For example, it points to the Department of State’s “Program Design and Performance Management (PD/PM) Toolkit,” which lays out an improvement-oriented grant lifecycle chart.

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18. As a CAP goal, goal leaders are designated, a clear goal statement is articulated, and the reasons the CAP goal was important is explained along with challenges, opportunities, and longer-term strategy on Performance.gov. In addition, quarterly updates are publicly posted describing actions taken, progress made, and planned next steps.


Several data-focused initiatives are reinforcing efforts to become more outcome oriented. For example, a statutorily-mandated Federal Program Inventory is being developed by OMB. The pilot inventory project was organized around outcomes, a promising step toward outcome-improving grants management.\(^{22}\) Also, the updated data system for grants information, beta.SAM.gov, includes a field for every grant program to describe its program objectives and a field to describe accomplishment. This would afford grant program leaders (and future outcome brokers, outcome improvement teams, as well as goal allies) an opportunity to collectively increase their attention on improving grant outcomes.

Finally, the relatively new White House Leadership Development Fellows program, based at the General Services Administration, is building federal career leadership capacity with a focus on understanding how to manage across agencies and programs with an emphasis on improving outcomes.

**Nongovernmental Entities.** Nongovernmental entities, too, are starting to take helpful actions to encourage and support federal grants management, including more outcomes-focused, improvement-oriented management:

- MITRE is exploring whether blockchain methods can be used to improve the transparency, quality, and timeliness of grant financial and performance information to support grantor and grantee decision making.

- The National Academy of Public Administration, with support from Grant Thornton, runs a quarterly grants management symposium. NAPA also hosts an Intergovernmental Forum on Outcome-Focused Innovation to improve state and local capacity to improve outcomes especially for vulnerable populations and to identify and resolve barriers impeding use of data, evidence, and cross-sector innovation.

- REI Systems in cooperation with the George Washington University Trachtenberg School and the National Grants Management Association convenes grant management breakfasts and conducts an annual grant manager survey. REI also created a “Grant Impact Story Tool” featured at a CAP goal Innovation Exchange session, offering one approach grant programs can use to explain their outcome goals, strategies, and results more understandably to the public.\(^{23}\)

- The nonprofit Results for America, through its Federal Standards of Excellence program, assesses the practices of selected federal human service grant programs annually to encourage greater use of evidence to improve grant outcomes.

- The nonprofit Data Foundation and the Association for Government Accountants have long advocated for opening federal data to enable more meaningful analysis and transparency.

Associations of grantees have also initiated efforts to improve grants management. The National Head Start Association, for example, launched the Data Design Initiative to improve capacity for using data and evidence to advance the well-being of Head Start children and families.\(^{24}\) Numerous policy-specific organizations such as the Forum for Youth Investment have also taken actions to find what makes grant programs work better to improve outcomes and to help grantees adopt those practices.\(^{25}\)


Define and Communicate the Focus of Every Grant Program
Every grant program has an intended purpose, often within the context of a broader policy framework. Outcome goals and objectives communicate focus by articulating that purpose clearly. Clarifying this focus encourages those administering the grant program, those receiving grant funds, and those thinking of applying for grants to think and act more intelligently about ways to make progress on the goals the grant supports.

The outcome goals and objectives of grant programs vary in their specificity and ambitiousness. All have general goals indicating areas where a program hopes to make progress, such as improving health or the environment. Many set more specific objectives to communicate more precisely the priorities being focused on in the current grant cycle, such as increasing the number of people with health insurance or reducing certain air pollutants.

Grant programs also may use more specific objectives as ways to communicate their preferred strategies for making progress. Cascading objectives become a way of aligning grant programs and the efforts of grant recipients and other supporting allies in achieving the particular outcome. One approach being used with increasing frequency is the development of strategy maps for each outcome objective. Strategy maps facilitate conversations about who will do what to advance a broader outcome goal. For example, OMB’s performance.gov website posts quarterly the progress towards the objectives of each cross-agency priority (CAP) goal as a way of communicating progress and next steps to goal allies and others.

**Grant Program Goals Should Be Outcome-Focused**

Managing grant programs with a focus on outcomes is not easy. It is, however, essential. Every grant program needs to be clear about its purpose, whether clean air, reduced fatalities, every student succeeding, or building knowledge in a particular area. If a grant program is not clear about its outcome objectives, it is just a mechanism to transfer federal money to others.

Outcome-focused goals encourage grant program managers and grantees to think more broadly about strategies for problem-solving and improvement, as well as ways to find, eliminate, reduce, and navigate barriers to improvement. Outcome objectives create the opportunity to untether grant programs from past practices that may never have worked well or no longer work as well as once suspected and encourage them to act in more productive, agile, adaptive, and innovative ways. This is especially true when grant program managers actively manage, meet, and communicate with grant recipients to discuss progress on outcome objectives supported by shared analyses of data and the findings of well-designed trials to decide next steps.

For example, after an Environmental Protection Agency (EPA) regional office set a goal of making the Charles River in Massachusetts swimmable in 10 years, analysis of volunteer-collected water quality data led to the realization that illicit wastewater connections to storm sewers pipes that should have been connected to sanitary sewers to be treated were a far bigger problem than previously realized. These illicit hookups would never have been found using routine practices for improving water quality: issuing permits and conducting inspections of permit holders. Focusing on finding and eliminating these illicit hookups resulted in water quality rising from being swimmable only 19 percent of the time to being swimmable 65 percent of the time five years later.26

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Grant program managers cannot manage solely on the basis of outcomes, though. Using output and activity targets—such as the number of vaccines administered each day or setting a milestone for completion of a project—help when appropriately employed. Output and activity targets, however, should not be used as a long-term substitute for outcome goals, but only as an interim measure of progress towards the outcome goal.

The types of problems that can arise when attention drifts from outcomes to outputs is evident in a program started 25 years ago by EPA and state environmental agencies, the National Environmental Performance Partnership System (NEPPS) grant program. NEPPS was launched to give states greater flexibility in setting priorities without compromising environmental outcomes. Despite the intent of NEPPS to focus attention on improving outcomes, EPA chose to track only NEPPS’s outputs—counting the number of states and tribes receiving partnership grants or signing partnership agreements. As a result, it is hard to determine whether the increased flexibilities in the grant led to better environmental outcomes. Fortunately, in 2017, the Environmental Council of States launched a performance hub to share with the public each state’s air, water, and waste management trends as well as their economic and population trends, making it easier for the public to see progress on the multiple objectives EPA grant programs support.

Output and activity targets and milestones work far better when closely linked to outcome goals and measures, and when continually reconsidered during data-informed discussions of progress and planned next steps to assess if the chosen output targets still make sense or if other targets and milestones make more sense.

Use Outcome Goals and Objectives to Communicate Priorities

No grant program or grantee can afford to do everything all the time. Goal setting compels the discipline of deciding what an organization will and will not do. Both grantors and grantees must establish priorities about where to focus—which people and places to serve and which problems and opportunities to pursue.

Grant purposes and specific goals do that and come from many places. Grant program goals are sometimes set in statute, sometimes by regulation, sometimes by grant agreement, and sometimes in publicly shared plans. Grant program goals can also be informed by evidence about what is happening in communities around the country, such as which homes lack broadband, which lack safe drinking water, and which cars and drivers are the least safe. Grant program goals can also be informed by knowledge of the effectiveness of actions taken to affect what is happening, feedback from beneficiaries and the frontline, and the policy preferences of key elected officials.

Grant programs sometimes set national level goals and give grantees the flexibility to set local goals appropriate to the geographic, population, or intellectual areas the grant seeks to advance. Other times, as with EPA’s National Ambient Air Quality Standards grant program, the federal government sets goals and affords grantees some flexibility deciding how to meet the goals. Where grant programs and grantees choose to focus often changes over time as new information is learned at the national and local level and as progress is made in earlier focus areas.

Use Outcome-Focused Goals to Foster Partnerships with Others

When a grant program organizes its efforts around outcomes it hopes to achieve, it makes it easier for an outcomes broker and an outcomes-improvement team to help grant program leaders look for, find, and work closely with others inside and outside the grant-giving agency who care about the objective and have relevant knowledge, skills, and resources to contribute to progress on it. These “goal allies” include not only others within a grant program’s own agency, such as in policy and evaluation, performance improvement, statistical, and other program offices, but also in other federal agencies. Allies can also include state and local governments, universities, foundations, nonprofits, and businesses.

For example, a national focus on improving rural health conditions has stimulated an unexpected but promising alliance by expanding broadband access to rural areas. One multi-stakeholder effort, the LAUNCH initiative (Linking and Amplifying User-Centered Networks through Connected Health), is targeting rural Kentucky. An entrepreneurial behavioral scientist in a Boston hospital steers the effort. Partners include the Federal Communications Commission through its Connect2HealthFCC Task Force, the National Cancer Institute, the U.S. Department of Agriculture, a user-centered design team from the University of California San Diego and the Markey Cancer Center in Lexington, Kentucky. Several states have also initiated their own broadband projects to try to improve rural health.28

Federal grant programs work to advance their own primary mission objectives, but also work to advance governmentwide outcome objectives (e.g., equity and fairness, nondiscrimination and inclusion, environmental protection, small business health.) When government sets governmentwide outcome objectives for grants and manages them as outcome objectives—such as the way the CAP goal for renewable and efficient energy was during the Obama administration—this may improve the chances that these important outcomes objectives are not treated by agencies or grantees as an annoying regulatory requirement to be minimally met.29

Use Outcome-Focused Measures to Reinforce Outcome-Focused Goals

It is often said that organizations manage what they measure. What grant programs measure, especially their key performance indicators, reinforces (and sometimes unfortunately undermines) the message that goals, objectives, targets, and measurement send about where those working on and funded by grants should focus. For example, years ago, one employment office chose to count outputs—the number of interviews it conducted—as its performance indicator, not an indicator of the program’s intended outcome, the number of job placements. Not surprisingly, this led staff to conduct a lot of employee interviews but neglect the necessary but harder work of lining up jobs for those interviewed.30 Since that time, jobs programs have become more sophisticated about how to measure outcomes, such as focusing not just on job placement but also on job duration and quality. With big data advances, jobs programs are also starting to develop more sophisticated ways to measure longer-term outcomes by using unemployment insurance and other data. This helps grant-funded programs decide where to focus and find ways to improve.

Use Strategy Maps to Support Improvement Efforts of Grant Recipients and Other Goal Allies

Goals, objectives, and specific targets serve as a great shorthand for communicating where a grant program is and is not trying to make progress. Strategy maps are a powerful way to lay out supporting strategies for each outcome objective. Strategy maps for each target within a strategy can be a helpful way to support conversations to sort out who will do what by when, especially when the supporting goals cascade up to and down from the central office and out to the frontline and other goal allies. Strategy maps are especially useful if they include or link to theories of change for each contributing strategy, relevant evidence, known knowledge gaps and plans to fill them, planned future actions, and who has the lead on each action.

Sharing these strategy maps creates a line of sight between high-level goals and the actions of staff and contributing goal allies. They reduce the risk that those in the delivery system will lose sight of how their efforts contribute to the larger objective. Strategy maps support data-informed discussions that sort out what has been learned, what needs to be done next, and who will do what next to make progress on the outcome objectives. They help keep the program's objectives more prominent in everyone's mind and also invite consideration of whether or not the goals and strategy need updating. Evolving online technologies and software make strategy mapping to support collaborative outcome alliances more feasible than ever.

The HealthyPeople.gov 2020 website functioned somewhat like a strategy map. It focused on 42 outcome topic areas with more than 1,200 objectives.\(^3^1\) A subset of those objectives were identified as Leading Health Indicators (LHIs). Each topic linked to evidence and showed trend information for each health objective and leading health indicator. When states developed their own plans, the site linked to state plans. State and local governments were able to and did use HealthyPeople.gov to inform selection of their own priorities. The HealthyPeople.gov website provides one good model of how grant programs can organize and communicate outcome-focused goals and relevant evidence. In the future, adding additional information about grant and other programs contributing to each HealthyPeople.gov topic would help the public better understand how grant programs contribute to health outcomes. It might even make it easier for contributing programs to find each other to collaborate.

Grant Programs Can Support Goal Setting and Goal Communication Efforts by Grant Recipients

Grant programs can support grant recipients in selecting their own goals, measures, and strategies. They can also help grant recipients find effective ways to communicate their goals to interested local policy makers and use their goals to enlist local goal allies. For example, starting in the 1990s, state leaders started working with each other and subject matter experts to develop the National Core Indicators (NCI).\(^3^2\) The federal government, primarily the HHS Administration for Community Living (ACL), supported this effort financially and in-kind from its inception. The states wanted indicators that helped them learn from their own and other states’ experience how to help people with developmental disabilities, explain local needs and progress to win local support, and identify common issues that could benefit from collaboration on joint solutions. States, ACL and others also use the NCI for priority-setting. Today, all but four states use the common core indicators. NCI runs occasional seminars to help states


\(^{3^2}\) NCI is a joint project of states, the National Association of State Directors of Developmental Disabilities, and the Human Services Research Institute (HSRI.) The federal government, most prominently the Administration for Community Living (ACL) within HHS, has supported this effort financially and in-kind.
and community-based organizations understand ways to use the core indicators. It also convenes an annual meeting to help states share how they use NCI data to inform their own assessments. In addition, states, ACL, and others use NCI and other information to help those trying to assess treatment efficacy and find more effective treatment approaches.

**Governmentwide Action Can Facilitate the Search for Goal Allies**

Governmentwide efforts, such as the recently piloted Federal Program Inventory, can be used to help grant program leaders, outcome brokers (a designation proposed by the author), and others working on the same and related objectives find each other and share knowledge and questions to inform goal setting and find ways to improve. Many grant programs (and grant recipients) are already aware of other programs working on the same and related objectives but do not necessarily know about others with valuable knowledge and resources for improving outcomes in the grant program area. Progress has been made with the Federal Program Inventory initiative and the new GSA beta.SAM.gov website organizing program information around outcomes, but more progress is needed.

The path forward is eminently feasible if those setting data standards and running government-wide information websites engage programmatic goal allies in developing the standards and websites to be useful resources for information on how to improve outcomes. Areas for potential improvement include:

- The USAspending.gov website, which includes a Spending Explorer section that reports aggregate grant spending by budget function and sub-function. It does not, however, make it possible to drill down to see which grant programs contribute to each aggregated budget function and sub-function total.

- Outcome-focused websites such as Performance.gov, HealthyPeople.gov, and ChildStats.gov do not include information identifying grant programs contributing to each outcome objective. Nor do agency strategic and annual performance plans and annual performance reports. Adding that information would be helpful.

- Adding standardized outcome objective categories to existing evidence repositories and their content could be a helpful way to inform programmatic focus and facilitate the search for better practices. Making it possible to sort evidence repositories and learning agendas by outcome categories, not just by agency, would also support outcome improvement efforts.

One approach moving forward might be to convene selected grant program leaders (or an outcomes-brokers user group once those are designated as proposed by the author) to provide rapid feedback on proposed updates to Beta.SAM.gov and other grant-related and outcomes websites and on data standards for outcome categories for use across various other federal data sets.

**Governmentwide Action Can Improve the Effectiveness of Goal Setting, Communication, and Use**

It makes no sense for every grant program to learn about goals on their own. Grant programs can and should learn about goal setting, communication, and use from their own experience but also from the experience of other grant programs, the private sector, and research on goal setting, use, and communication.

A robust body of research exists on goal setting and goal use, identifying the kinds of goals and the situations when different kinds of goals are likely to work well and when they are likely to
work less well. Researchers have learned a fair amount about when stretch targets are likely to work well and when they are not, for example. Much has been learned over the years, too, about when linking goals and incentives is likely to garner better results and when it is likely to backfire.

For example, one study of the Job Training Partnership Act (JTPA) found, “[W]hen performance measures are compensated, bureaucrats respond by finding the least-cost strategies of boosting those performance measures” without a compensating boost in outcomes. They also found evidence that rewarding performance did not improve outcome, while measuring but not rewarding it did: “[O]nly the studies of programs where performance is uncompensated show statistically significant correlation between JTPA-style performance measures and impacts.”

Its successor job training program, the Workforce Investment Act (WIA), tried sanctioning states that failed to meet 80 percent of negotiated performance levels for 17 measures. This led some states to skim their clientele, avoiding harder-to-serve clients, and others to adopt timid targets, in some cases setting performance expectations below the state’s own baseline level. It also consumed valuable grantor and grantee analytic time and resources negotiating targets rather than analyzing the data to find ways to improve program performance.

The difficulty of finding and following lessons learned about setting and using goals may be one reason why GAO, in a 2006 study, did not apply the evidence about the potential risks of using sanctions or rewards when it suggested that grant performance accountability be defined as “rewards given or penalties imposed—when performance exceeds or fails to meet specified levels.” Governmentwide action to build an evidence-repository complemented by a learning agenda on goal-setting, communication, and use could help grant programs avoid repeating many of the problems prior grant programs have encountered.

Find Ways to Improve: What Works, What Works Better, and When
After general and more specific outcome objectives are chosen and communicated, grant program leaders and those they fund must find ways to make progress on them. This requires three discrete but intersecting lines of inquiry and action:

- Finding what works
- Finding what works better
- Understanding the situational variations affecting the effectiveness of better practices

To support these lines of inquiry requires analyzing data and the findings of measured trials and using that information to decide what to do next. This can be done via the use of randomized control trials, well-designed trials integrated into operations, and a range of other research methods. Caution, however, is necessary since what works in one situation may not be effective in others.

Finding what works, what works better, and the situational variations affecting effectiveness is not a “one-and-done” enterprise. Nor is it linear in nature. These three activities work best applied in an iterative, integrated way. Grant program leaders (and outcome brokers, once designated as proposed by the author) will want to use all three approaches together supported by ongoing analyses of relevant data and findings of well-designed trials. Based on these analyses, grant leaders will then have data and evidence that can guide them on decisions that can improve performance that in turn improves outcomes.

In addition, finding what works and what works better requires successfully communicating with the frontline and those supporting them in the field such as regional offices and technical assistance providers. One approach gaining increased attention is the development of continuous learning and improvement communities within and across grant programs.

Finally, policy makers and program leaders have to be willing to invest in measurement, analytic, and research capacity to support the development of the evidence needed to inform the best course of action for program and outcome improvements.

**Search for What Works, What Works Better, Why, and When**

Grant program policy makers and implementers are always looking for what works and what works better—comparatively more effective, cost effective, and equitable. They do this in a variety of ways and at a variety of times. They learn from analysis of past experience and well-designed trials. They use well-designed trials to find what works, what works better, and why. They also use well-designed trials to understand the situational differences that affect effectiveness. Grant programs and grantees can use data analyses to inform decisions about what to do next and to inform the design of new trials. They can also use analyses to find those with lower performance who may need help.

Finding those with better and less effective performance is not the end of the improvement process, however. After better performers are found, follow-up is needed to discover the reasons for their better performance. Interestingly, many grant programs—often by law—seem to pay more attention to finding lower performers than to finding better ones. The previous version of federal K-12 education law, for example, focused on finding and penalizing schools without “adequate yearly progress” just as the initial design of the Head Start Designation Renewal System (since revised) focused on finding and penalizing the bottom 10 percent. Neither law, however, seemed to give as much attention to encouraging the search for positive outliers among existing providers with lessons that might be worth sharing.
Once practices suspected of contributing to better performance are found, the next step is to try replicating practices believed to be better to see if doing so yields similarly good results. The kinds of practices that may be worth replicating can be as varied as a curriculum, inventory management or scheduling software program, outreach campaign, or a regulatory program interaction. Grant programs can look across their grantees but also in other places for better practices worth promoting for broader adoption.

**Well-Designed Trials.** Useful trials to determine which practices or interventions work, or work better, can take the form of randomized control trials. They can also take the form of less formal but well-designed trials integrated more seamlessly into operations.

Randomized control trials (RCTs) are considered the gold standard for finding what works. RCTs randomly assign a group of people (or things) to a treatment or a control group that does not receive the treatment. These treatments (that in many programs take the form of a practice or suite of practices but can also be a product) are what grant programs and grantees use to affect outcomes. The conditions of those in each group are compared before and after the treatment to assess if and how much the post-treatment condition of those in the treatment group differed from the concurrent condition of those in the control group.

Useful RCTs can be large or small. They can be rapid-cycle or long term. While RCTs are the gold standard of trials, they are not always feasible nor appropriate. Designing a good RCT can be difficult, for example, when the number of people with a problem to be treated is small. In that case, a single-armed trial that can reveal if a treatment did not work even without a control group can be a more feasible place to start. RCTs can also be difficult when unobservable treatment delivery is not possible and awareness of treatment receipt is likely to trigger a placebo effect among treatment providers or those treated.

However, the findings of an RCT may apply only to the kinds of people or things involved in the trial or only to the kinds of conditions similar to what existed when the RCT was done. For that reason, once an initial RCT identified an effective treatment, best practice calls for running additional RCTs to assess effectiveness for different population groups and different situations than those in the initial RCT.

For example, the highly touted Nurse-Family Partnership program36 was first tested using a randomized control trial in a white, rural U.S. community in the 1970s. It proved to be a successful collection of practices. The program was subsequently successfully replicated in a black, urban community and then in a Latino community in the 1990s.37 Efforts to replicate the program in the United Kingdom were not, however, as successful, while gains in the Netherlands and Germany were far more modest than those seen in the United States.38 One possible reason for the difference is that the mothers in the U.K. control group, and possibly in the other two countries, were able to access better health care services than could low-income mothers in the United States. Nurse-Family Partnership studies have also found

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variations in outcomes related to both mother and provider characteristics. More recent research has found that some programs generated weaker gains for children (at least in the short run) than previously found. Some speculate the reason for this apparent decline in program impact is the greater availability of medical and social services to those in the control group than when the prior studies were conducted.

Other kinds of well-designed trials can also be used to find what works, what works better, and the situational differences affecting effectiveness if data systems allow fair comparisons to see meaningful difference in outcomes before and after practice changes. Good data systems make it possible to integrate well-designed trials very practically into operations, especially when a grant program has a continuous learning and improvement culture that encourages a “scientific mind” on the frontline and supports the frontline with useful data. A regional office of the U.S. Coast Guard, for example, found that attention to patterns in time of day, day of week, and week of year revealed more oil spills happening at night than during the day when inspectors were on the job. Changing inspection schedules reduced the number of oil spills. Similarly, when EPA set the goal of making the Charles River swimmable in 10 years, monthly data collected at 37 points along the 80-mile stretch of the river revealed previously unknown illicit hook-ups were sending untreated waste streams directly into the river. A frontline worker suggested lifting manhole covers over the storm sewers on dry days to look for running water. This accelerated discovery and removal of illicit hook-ups and rapidly improved water quality.

Be Aware of Situational Variations That Can Affect Effectiveness

Practices found to be effective on average through an RCT may not, in fact, work well for everyone or every situation. For this reason, it helps when those reporting RCT results discuss the distribution of results as well as the average result. This enables grant programs, grantees, and others who want to use the findings to ask more focused questions before deciding whether or not to adopt a practice, program (collection of practices), or product for everyone.

Outcome brokers and outcome-improvement teams, if designated as proposed by the author, might want to ask if certain characteristics distinguish those for whom a treatment did not work well from those for whom it did work well. If those distinguishing characteristics can be found, a grant program and grantees might want to screen before giving a treatment to people for whom it is unlikely to work well. This might especially be advisable if the subset for whom a practice did not work well are different in some noteworthy way, perhaps the lowest income or otherwise most vulnerable.

For example, a first-grade literacy program, Reading Recovery (RR), was found effective for most children, including for English language learners. According to its website, RR is comparatively more effective than all other early reader programs reviewed. RR was considered so

effective it was awarded a scale-up grant from the U.S. Education Department under its Investing in Innovation (I3) program. However, the research also showed that Reading Recovery does not work as well for a substantial number of students. What is unclear is whether researchers had identified the characteristics distinguishing students for whom RR worked well from those for whom it worked less well. Also, those interested in improving the RR program face decisions about whether to allocate funds to discover effective practices for those for whom effective reading practices have not yet been found.

Conversely, an RCT found ineffective on average may, in fact, work for some. In other words, despite being called by some a failed trial, a trial may instead reveal an effective practice that benefits a subset of people. In this case, too, decisions are needed about whether to allocate funding to find a way to screen for those for whom such a treatment is likely to work to benefit them.

For example, The New York Times in a June 2017 story about the drug pembrolizumab (now marketed as Keytruda) wrote: “The drug is the happy result of a failed RCT. A nearly identical drug was given to 33 colon cancer patients, and just one showed any response—but his cancer vanished altogether.” Because at least one doctor took the time to follow up on the patient for whom the otherwise ineffective treatment worked to detect characteristics that distinguished that patient from others, the doctor was able to identify others whom the drug might help, run a trial on a sample of them, and develop a drug projected to help 60,000 cancer patients annually in the United States alone.

Similarly, a well-designed trial that did not work for any person, place, or thing is not really a failed trial if it produced useful information that gets shared in ways that inform future trials.

**Analyze Data and Trials to Decide What to Do Next**

Grant programs need analyses as well as the findings of prior trials to inform decisions about what to do next and to inform the design of new trials, whether RCTs or well-designed trials integrated into operations. Grant program managers can encourage grantees to work closely with researchers to look at data to suggest and test new trials iteratively. This has been done successfully with the University of Chicago Consortium working with teachers and administrators in the Chicago Public Schools and with community colleges participating in the Carnegie Math Pathways networked improvement community, both resulting in significant performance gains.

Grant programs can also look for and support analyses by others to find positive outliers, as the U.S. Education Department has done with the Stanford Educational Opportunity Project and before that with Education Trust’s *Dispelling the Myth* project. Following up with a subsequent search to look for replicable practices of positive outliers contributing to their better performance is then essential. Where appropriate to inform future recruitment, hiring, education, and training decisions, grant programs can also support the search for characteristics of the people who contribute to better performance including the programs that trained them.

In addition, grant programs can conduct analyses to look for correlations that may point to better practices, causal factors to be influenced, warning signs such as a freshman off track, predictive indicators, and clusters and other patterns possibly relevant to implementation design.

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For example, University of Chicago researchers concluded that ninth graders who failed more than one semester of one course almost always dropped out of high school. Armed with this insight, Chicago Public Schools (CPS) created a new goal, “FreshmanOnTrack,” for every high school starting in the 2008-2009 school year. CPS provided every high school real time data on their freshman and expected every school to make progress on the goal, allowing them to choose how to do that. Citywide, on-track rates for freshman reached 89 percent in 2017 after being in the mid-50s for years.46

“Bright spot” nominations by third parties can also be a useful way to identify better practices, provided they are validated through well-designed trials. For example, in the Education Trust’s Dispelling the Myth project in the early 2000s that created a data base with report generators that identified positive outlier schools outperforming their demographic peers, it also reached out to chief state school officers and asked them to identify “high-flyer” schools in their states to inform the search for better practices. Newspapers such as The New York Times and the trade press, such as Education Week and The Hechinger Report, often carry stories about promising practices that could be validated.47

The work of grant outcome brokers and their teams (once designated as proposed by the author) would not stop after better performers are found. They must turn their attention to the search for the practices, products, and sometimes provider characteristics that explain the performance differences. It is this information that is useful for deciding what to try and what to buy. For example, after finding positive outliers using data collected by the Office of Head Start, Bellwether Education Partners then looked for their distinguishing practices. Its finding about better practices proved consistent with findings of other large-scale early childhood research about practices with sustained impacts on children’s learning. Moreover, once those practices are found, grant programs need to communicate the information to practitioners in a manner that catches their attention and is readily accessible and written in a language that practitioners (not just researchers) can readily understand and appropriately apply.

To Improve Outcomes, Clear Communication Is Essential

Policy makers and policy implementers need timely, understandable, and relevant information to inform where to focus and find ways to improve. This first requires timely, understandable, and relevant communication of data and other feedback from the field. Clear communication is essential to improve outcomes—whether managing implementation of the Recovery Act, the Covid-19 response, the clean-up of the Charles River, or (as described below) a community college networked improvement community. It often falls to someone serving in the role of an outcome broker to make sure this communication happens successfully in user-appropriate ways.

Grant program leaders use many communication methods to support outcomes improvement. These include:

- **Knowledge**—Evidence repositories containing relevant research about what has worked well in different situations and what has not, as well as outreach and training/technical assistance
- **Know-how**—Resource centers sharing models and tools
- **Networks**—Support for networks, catalyzing their creation where needed, that help people working on the same outcomes or dealing with similar outcome-improvement processes collaborate with and learn from each other

The number of people involved in each grant’s management ecosystem can be large. The number of moving parts in the grant outcomes-improvement process is also large, as this report describes. Providing a timely, coherent picture of how the pieces fit together and who is doing what and why helps decision makers figure out what to do next. Communicating this may not be easy, but it is important. For example, after positive outliers have been identified along with their practices believed to contribute to better results, decision makers in the field would presumably benefit knowing if efforts are underway or planned to try to replicate those practices in other places to see if they generate similarly good results. The learning agendas now required by the Foundations of Evidence-Based Policymaking Act of 2019 are likely to create greater coherence around these sorts of efforts, especially if they as well as evidence-repositories embrace user-centered design principles and treat frontline grant-funded workers as priority users.

A governmentwide improvement opportunity: Jointly find, build, and share examples of measurement and useful means for structuring and analyzing data

Just as grant programs can learn from each other and from evidence about sensible approaches to goal-setting, use, and communication, grant programs can similarly learn from research and each other ways to improve their measurement methods, data systems, and analytic capacity to improve outcomes. They can also collaborate jointly on projects to improve measurement and analytic methods.

Grant programs have many useful insights they can share to help each other improve their measurement methods. Finding relevant lessons from each other will become more feasible if data standards are adopted making it possible for grant programs to find grant programs with similar goal types and possibly with similar causal chain patterns (e.g., vectors) and intermediate outcome objectives (e.g., queue management, recruitment). For example, programs that manage risk as a mission objective have learned much from each other over the years about different ways to measure for higher or lower frequency events and for more or less visible risks.

The Grants Playbook points to several useful models for measuring and managing mission risk, as does the federal Enterprise Risk Management Playbook. Programs managing discrete accomplishments can learn useful measurement and analytic methods from other programs managing discrete accomplishments, such as NASA’s mission management and efforts to map the human genome.
Grant programs can also share lessons learned about:

- When and how to collect and structure data, as well as when and how to share it. The timing of when outcome and other information is collected can be very important. Indeed, several rigorous studies of several programs, including the Move to Opportunity program that tested the effect of moving low-income families to higher income neighborhoods, have found that the timing of outcome measurement substantially affected aspects of program effectiveness. Programs with long lag times may be able to learn from each other ways to handle this challenge.

- How to think about the frequency, timeliness, and granularity of data collected.

- Useful ways to characterize outcomes data collected. The Haddon matrix used for traffic fatalities, for example, asks states to capture information for 12 dimensions of every traffic fatality—about operator, equipment, physical conditions, and jurisdiction before, during, and after each fatal accident.

Grant programs can also share methods, as well as tools and even platforms, for analyzing and visualizing the data they collect. Breakthrough developments in data visualization are opening up unprecedented opportunities for analyzing and communicating analyses to make it more useful to policy makers and policy implementers. Grant programs can help each other learn these methods so each grant program does not have to master the possibilities and techniques on their own.

In addition to sharing measurement know-how, grant programs can find, build, and share relevant evidence about using measurements to motivate, inform choice, and for other purposes—for example:

- When, and for what purpose, is ranking likely to work well and when is it likely to backfire?

- For what purposes are multi-dimensional comparisons conducted by experts such as those done by Consumer Reports likely to work well, and when are other methods likely to work better?

Grant programs can find answers to these kinds of research questions on their own, but joint, governmentwide initiatives would be more cost effective.

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**Build Continuous Learning and Improvement Communities**

Some grant programs and others, including researchers and nonprofit organizations, are starting to build a stronger continuous learning and improvement culture among grantees by creating and supporting continuous learning and improvement communities. These communities—largely voluntary to date—bring practitioners and researchers together to build and use evidence to make progress on the grant program’s outcome objectives in continually learning and improving ways.

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In the words of one of the founders of several networked improvement communities, “At the core of improvement research are the rapid iterative cycles of testing possible change ideas against data, revising, retesting, and refining. And then to tackle the larger, more complex and persistent problems we confront, we join together in improvement networks. While our individual capacities may be modest, working together we can achieve much more.” Following are examples of different types of communities:

**Networked Improvement Communities.** Carnegie Math Pathways is an example of a “networked improvement community” (NIC). It is comprised of more than 90 educational institutions. It is dedicated to improving community college student success rates in developmental math courses by combining research-based knowledge, feedback from extensive conversations with key stakeholders, and the NIC’s on-the-ground investigations of the experiences of actual community college students. This NIC is able to claim some successes. As of September 2020, more than 40,000 students across 21 states had gone on to complete their introductory college math requirements at triple the rate of their peers and transferred to and graduated from four-year colleges at significantly higher rates.

**University-hosted executive sessions.** University-hosted executive sessions bring leading researchers and practitioners together multiple times over several years to identify priority needs and knowledge gaps, find and build evidence to fill the gaps, test new practices, and share what is learned.

**Grant recipient-organized communities.** The Nevada Department of Education required its subgrantees, local school districts, to undertake rigorous needs assessment to determine root causes of underperformance; select interventions backed by evidence of effectiveness; and engage in ongoing monitoring and evaluation of intervention impacts. It simultaneously supported local school districts with a list of pre-vetted external providers with evidence-using skills that local school districts could tap if they lacked their own experts. The state even arranged a “speed-dating” event so school district leaders could “interview” each pre-vetted provider to find the one that best fit their students’ and schools’ needs.

**Communities organized by grantee professional associations.** The Data Design Initiative of the National Head Start Association supports Head Start grantees in understanding how to use their data and other evidence to find ways to do better. The American Association of State Highway and Transportation Officials runs a Transportation Performance Management Portal “to showcase best practices, foster collaboration, and serve as a repository for TPM [Transportation Performance Management] resources.”

**Communities organized by nongovernmental groups.** Leaders of the Nevada school effort participated in the State Education Fellows program run by Results for America. Fellows share ideas and evidence with each other. They can also turn to each other to find someone who has dealt with a problem similar to one they face and to brainstorm ways to deal with issues that arise.

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In some ways, continuous learning and improvement communities apply a design thinking approach to grants management. As one enthusiast describes design thinking:

“It is an iterative process in which we seek to understand the user, challenge assumptions, and redefine problems in an attempt to identify alternative strategies and solutions that might not be instantly apparent with our initial level of understanding. At the same time, design thinking provides a solution-based approach to solving problems. It is a way of thinking and working as well as a collection of hands-on methods.”

Invest in Measurement, Analytic, and Research Capacity

Federal grant program leaders (and their outcome brokers once designated as proposed by the author) need to build good data systems or find good data sources to inform where to focus, find ways to improve outcomes, and communicate progress and challenges. Most grant programs also need to invest in or find allies with analytic and evaluation capacity to help policy makers and implementers. Sophisticated measurement methods may not always be needed. General purpose library grants, for example, could map the location of each grant recipient and show what each grantee did with federal support. This would complement information already reported on the federal one-stop inventory of grant programs, beta.SAM.gov, about total grant spending and the number of program grantees. Other grant programs, however, need more sophisticated measurement methods and analytic capacity to facilitate the kinds of trend comparisons and other analyses described above to inform where to focus and find ways to improve.

Building useful data systems requires grant programs to think carefully, working with grantees, about what information to collect, when and how to collect data, and when and how to share it. K-12 teachers, for example, have long complained that student assessments done at the end of the year don’t help them help their current students. They want mid-year data that show pattern variations for each student and subsets of students broken down by question and learning domain. They would love this information linked to relevant, understandable evidence about effective practices for addressing learning problems identified. A child’s end-of-year data may help a current year teacher and supervisor see weaknesses in teaching methods that inform professional development decisions but will not help that teacher help current-year students. Even more problematic, strong evidence suggests that sending end-of-year data to next year teachers could trigger what is called a Pygmalion effect, where teachers lower their expectations and teaching approach for a student whom they think is a low performer. This, in turn, problematically lowers the student’s performance.

Grant programs can learn from their own experience what and how to measure, build useful data systems, and analyze data to harvest actionable insights. They can learn when and how to share data and when not to. They can also learn about these important management challenges from other grant programs.


Increase Adoption of Better Practices
Once a grant program identifies better practices, it can use a range of adoption mechanisms to encourage their use while discouraging use of less effective practices. These mechanisms (and examples) include:

- **Community building and nurturing support**—Camaraderie, coaching, network creation and nurturing
- **Research and resource repositories**—Evidence-based “what works” repositories, models, tools
- **Push-based communication**—Training and technical assistance, campaigns, messaging
- **Formal program requirements**—Maintenance of effort, matching, reporting, mandating adoption of specific practices, fidelity
- **Incentives and motivational mechanisms**—Organizational and individual rewards/punishments, intrinsic/extrinsic motivators, feedback, goal selection, monitoring and oversight
- **Negotiations**—Joint planning, waivers

The question is: how effective, cost effective, and equitable are these various adoption mechanisms in encouraging the use of better practices or discouraging the use of ineffective practices? Are some better than others and how might that vary by situation and the way the mechanisms are used? Also, are there ways to make effective adoption mechanisms work even better, such as with different framing, timing, visualization, and placement?

**Build Grant System Capacity to Learn from Experience**

Grant programs have achieved many successes over the years, but also stumbled many times. To what extent might those stumbles have been avoided if more attention had been given to learning from them, say about incentive structures, before crafting a new grant program’s legal language? Similarly, what evidence exists about the benefits and costs of not allowing grant funds to roll over to a second year? As data standards are being set for grant programs, it might be a good time to pause to think about if and how to collect information about grant program mechanisms to make it more feasible to study the impact and cost of those mechanisms.

The better-practices adoption mechanisms listed above can be adjusted and added to over time. GAO has occasionally examined the approaches grant programs use to improve outcomes over the years, and occasionally tried to summarize some of the lessons learned. Working with GAO might be a good place to start thinking more systematically about useful ways to categorize and tag better-practice adoption mechanism information to include in existing grant data bases to support research on more and less effective adoption mechanisms and ways to improve them.

**Start Framing the Questions**

As agencies develop their learning agendas, they should include research questions for which it would be good to know answers. For example, evidence repositories have evolved significantly over the last decade. Some are much easier for frontline practitioners to use than others. What has been learned about what makes an evidence repository more or less useful? What still needs to be learned? Where do those trying to improve their grant program’s evidence repositories look to find ways to improve their repository? Has anyone run focus groups with grant recipients about the usefulness of one or more evidence repositories and what have they learned? Is anyone in the federal government using user-centered design principles to maintain and update their evidence repository and what have they learned?
Find and Share Relevant Evidence

A rich body of research relevant to the mechanisms grant programs use already exists. The evidence team at OMB and the Office of Evaluation Sciences at the General Services Administration (GSA) may already have much relevant research. How can it be packaged to be more useful to outcome brokers and their teams, once they are designated as proposed by the author? Research from the communications and behavioral science field is filled with insights about message framing, timing, and placement. Similarly, valuable research has been done on feedback for motivation and negotiations, some of which is likely to be useful to some grant programs. The published research on the use of data visualization is still pretty young but growing rapidly. It does not seem cost effective for every grant program to search for this kind of information on its own. Is it time to organize the information to meet the needs of the outcome-focused members of grant management teams?

Share Web-Based Platforms and Other Capacities Across Agencies

Grant programs are also starting to share web-based platforms. This has the potential to improve the functionality of the information-sharing platforms while reducing the cost of operating and improving them. For example, as the Grants Playbook points out, NASA has arranged for the researchers it funded and who published in peer-reviewed publications to post their research using the PubMed Central platform run by the National Institutes of Health's National Library of Medicine. This simplifies public access to the findings of studies funded by federal grants, such as theirs. It also saves NASA money by not having to create and maintain its own web-based repository. Likewise, the U.S. Department of Agriculture has extensive experience sharing evidence. ClinicalTrials.gov provides a platform to recruit study participants, while also opening a window on research underway but not yet published. Both PubMed.gov and ClinicalTrials.gov make outcome-focused searches relatively easy. They also often link to posted evidence in other relevant studies.

As discussed earlier, the format of HealthyPeople.gov could be a very useful platform for communicating the grant program outcome story for its initiatives if information about contributing grant programs were added, something that may be a sensible next step as the Federal Performance Inventory moves beyond the pilot stage.

Blueprint for Managing Federal Grants to Improve Outcomes
The following blueprint describes actions different participants in the grants management ecosystem can take to improve grant program outcomes by increasing their emphasis on the use of data analytics, well-designed trials, and joint learning to find ways to improve. It also describes actions to begin rebalancing an ecosystem that currently tilts its attention heavily to financial accountability and compliance with myriad procedural requirements at the expense of generating and communicating insights to improve outcomes.

What Leaders of Individual Grant Program Can Do to Improve Outcomes

Grant program leaders need to devote time, resources, and other types of support to helping grant recipients and other outcome-focused partners find ways to make progress on outcome objectives. Once better practices are identified, grant program officials need to better serve their outcome-focused partners by successfully encouraging and supporting increased uptake of better practices and reduced use of less effective ones.

Grant program leaders should also communicate grant information in ways that help themselves and their grantee partners think in more informed ways about where to focus within the scope of the larger federal grant program and within the scope of the specific grant, and better understand factors currently affecting those problems and opportunities or possibly affecting them in the future. Plus, federal grant program leaders, working with their grant recipient partners, can also look for and pursue opportunities to improve outcomes by investing in products and services that help grant recipients take advantage of economies of scale.

The alternative—not doing this work or doing it in fragmented manner—makes no sense. Individual grant programs need to determine who will lead and who will contribute to the following kinds of activities and how those activities will be coordinated to support continual improvement, applying principles of design thinking as appropriate. They also need to figure out who will communicate coherently to the public and policy makers and with outcome-focused partners about grant program goals, strategies, progress, problems, planned next steps, and the reasons these goals and strategies were chosen.

Recommendation One:

To improve program outcomes, grant program officials must define outcome objectives and coordinate with other federal programs able to help advance these objectives. To do that, those working in and with grant programs need to:

- **Designate an “outcome broker.”** Identify the person or people leading efforts to make progress on each grant program’s outcome objectives and coordinating with the collection of programs contributing to progress on those outcome objectives. What follows are some of the activities that person would coordinate or more directly manage.

- **Organize and analyze.** Collect, organize, and analyze data and other information from grantees and other sources to inform where a grant program should focus and what its outcome and other goals, targets, and key performance indicators should be. This could include the creation of outcome improvement teams to work with grant managers and outcome brokers.

- **Use.** Discuss data and analyses relevant to where to focus with grantees and other outcome-focused partners to refine and communicate what national purpose objectives and key performance indicators are, build understanding of why they were chosen, and support sub-national priority-setting by grantees.
• **Communicate.** Communicate objectives in ways that make them understandable, resonant, motivating, and actionable and, where relevant, to reach agreement with outcome-focused partners on objectives and who will take the lead on different objectives and sub-objectives.

• **Coordinate.** Look for and connect with other offices in the federal government working on the same or related purpose objectives and figure out how best to coordinate with them to find and share relevant evidence, find and fill knowledge gaps, and make progress on outcome objectives.

### Recommendation Two:
**To improve program outcomes, grant program officials need to find what works and what works better.** They—with the help of an outcome broker in or outside the grant program—should:

- **Organize and analyze.** Collect, organize, analyze, and communicate data and analyses from grantees and others not just to help grantees decide where to focus at the sub-national level, but also to inform the design of program action and learn from experience what works better and what has been less effective as well as how that effectiveness varies by situation.

- **Test and assess to find outcome-improving practices.** Run well-designed trials to determine if past practices identified as promising by positive outlier and other analyses result in improvements when replicated in similar and different situations and to test new practices to find those that generate better results than the best results of past practice.

- **Communicate and converse.** Communicate with grantees and others in the field in ways that encourage a strategic and a scientific mindset, establishing routines with grantees and other outcome-focused partners to review data and experience to inform where to focus next, find ways to improve learning both from successful and from failed trials, and increase adoption of better practices.

- **Connect.** Connect practitioners and researchers to focus on solving problems and advancing opportunities, not just “managing programs,” using iterative improvement research cycles to discover ways to do better.

### Recommendation Three:
**To improve program outcomes, grant program officials, along with outcome brokers, need to increase adoption of better practices.** They should:

- **Communicate strategies.** Create, communicate, and continually update a strategy map helping outcome-focused partners and the public understand the strategies and actions a grant program and its outcome-focused partners are using (as well as theories of change, evidence, and logic supporting those strategies and planned next steps) to enable grant recipients and others interested to sort out how best to contribute to progress on grant program outcome objectives.

- **Communicate evidence.** Increase awareness of better and less effective practices and uptake of better ones with evidence repositories, tool-sharing resource centers, training and technical assistance, coaching, practice-adoption campaigns, and other means.

- **Apply and build evidence about successful practice spreading.** Build and use evidence to improve the effectiveness and comparative effectiveness of the mechanisms grant programs use to increase adoption of better practices and to reduce the use of less effective ones, considering questions such as whether evidence repositories are well known and their contents relevant, easy and affordable to access, and understandable.

- **Create and nurture.** Nurture improvement communities, creating them where needed.
Recommendation Four:

To improve program outcomes, grant program officials and outcome brokers need to strengthen communication to, from, with, and among grant recipients and other outcome-focused partners to explain how efforts to advance progress on grant program outcome objectives fit together and to support collaboration and learning:

- **Coordinate.** Coordinate, continually and frequently, with grant recipients and other outcome-focused partners to decide who will do what when and get timely feedback from the field to sense when planned actions need adjusting in a way that supports continuous learning and improvement to realize better outcomes, but not in a one-and-done nor a fragmented way.

- **Communicate.** Communicate coherently to grant recipients and other outcome-focused partners the information they need to inform their own actions, including information about grant program objectives and why they were chosen, grant program strategies and why they were chosen (theories of change), relevant and timely data analytics and evidence, knowledge gaps and plans to fill them, findings of past measured trials and other evaluations as well as trials and other evaluations underway, planned next steps, and how they all fit together.

- **Collect and analyze.** Collect information from the field to identify positive outliers as well as problems needing attention, find causal and other relationships as well as pattern similarities and differences to inform treatment design, test replicability of promising past practices in other locations, assess impact of replicated practices rolled out to the field, and identify features of the operating environment that could productively inform the design of program practices.

- **Enlist.** Communicate in ways that reach and enlist interested outcome-focused partners and those with relevant expertise, knowledge, and skills willing and able to contribute to progress on purpose and other objectives.

- **Network.** Nurture continuous-learning-and-improvement communities that convene researchers and practitioners doing similar work to contribute, collaborate, and coordinate to solve problems, pursue opportunities, and find ways to do better.

Recommendation Five:

To improve outcomes, grant program officials and outcome brokers need to find, prioritize, and fill knowledge gaps:

- **Identify and prioritize.** Informed by questions from the field as well as from policy makers and researchers, identify and prioritize knowledge gaps in the context of existing evidence, as well as what is known about problems, opportunities, and past and predicted changes in the world affecting the grant program.

- **Build knowledge.** Fill priority knowledge gaps with analyses, measured trials, and other research.

- **Communicate.** Communicate knowledge gaps to be filled and federal government plans to fill them in a way that enlists the effort and funding of others to fill important knowledge gaps and in a way that is dynamic and continually evolving to invite the identification of new knowledge gaps that become apparent or important while also communicating previously identified knowledge gaps filled.
Recommendation Six:
To improve outcomes, grant program leaders, with the support of outcome brokers, need to build staff and systems capacity:

- **Educate, train, and recruit.** Build federal agency staff knowledge, skills, and understanding to analyze grant program and other data to inform where to focus and to find what works better and what is less effective and the situational characteristics and causal factors affecting outcomes of interest and treatment effectiveness.

- **Enhance data systems.** Build and upgrade data, databases, and information systems in ways that help grant programs find relationships, outliers, anomalies, and pattern similarities and differences across subsets of what is measured to figure out where to focus, inform action design, and find what works better.

- **Encourage collaboration.** Search for, develop, and provide access to collaborative tools to grant program staff, including analytic and visualization tools provided to grant recipients to help them deliver in more effective and cost effective ways than they could developing these tools on their own.

To improve outcomes, grant program leaders and outcome brokers need to embrace the sets of practices described above. This may seem overwhelming for grant program leaders and staff to undertake in the near term. However, grant program leaders do not need to do this on their own. They can work with their outcome-focused partners within the federal government, as well as with grantees and others, to adopt these practices. Not doing them, however, runs a high risk of unclear as well as less progress on outcomes. Grant programs do not need to undertake all of these practices immediately, but it would be good to get started and continuously get better.

What the Office of Management and Budget and Agencies with Governmentwide Grant Responsibilities Can Do to Support Outcomes Improvement

Leaders in every grant program can make progress becoming more results oriented by working on their own, but their efforts can be greatly enhanced with support from and collaboration across agencies, especially with support, action, and encouragement from the Office of Management and Budget (OMB), Grant Cross-Agency Priority (CAP) Goal leaders, the Grants Management Quality Service Management Office at the Department of Health and Human Services (HHS), and other agencies already providing cross-agency support and services. This report urges the White House to again adopt a grant-focused cross-agency priority goal. It also urges the federal government—more specifically central policy and mission-support agencies such as the Domestic Policy Council, OMB, the General Services Administration, and the Office of Personnel Management, along with departments such as Treasury and HHS and agency components such as the Census Bureau—to step up to provide economies of scale to support improvements in grant management and communication processes. This can be done by using the cross-agency priority goal mechanism as well as other cross-agency approaches, such as White House initiated interagency task forces.

OMB and others with cross-agency leadership roles should undertake a strong, supportive and stimulative role rather than a directive, command-and-control or compliance-compelling role while at the same time, as effective regulatory agencies do, keeping stronger enforcement and other persuasion tools readily at hand to change the practices of the truly recalcitrant.
Cross-agency action led by OMB and the Grant CAP Goal Executive Steering Committee will continue to be needed to identify, organize, and share examples that help federal agencies learn from each other’s experience, identify areas where agencies can constructively cooperate to build new knowledge and capacity, and flag areas where policy changes may be needed. More specifically:

Recommendation Seven: To improve outcomes, the White House, OMB, and others performing cross-agency grant management roles need to communicate more broadly and continually the need to rebalance the federal grants management system to give far more attention to informing where to focus and finding ways to improve outcomes:

- **Adopt a Grant Management Cross-Agency Priority Goal.** Re-adopt a grant-focused CAP Goal that includes re-envisioning the roles and responsibilities of grant program leaders to include a more proactive, evidence-informed focus on improving outcomes, as described in this report.

- **Revise grant lifecycle charts.** Revise grant lifecycle graphics to convey the kinds of analytic, management, and communication activities that grant programs and other parts of the federal government need to undertake in order to improve outcomes.

- **Talk about improvement.** Use language in all grant communications that emphasizes improvement and not tracking or monitoring or compliance for their own sake but to find ways to improve as well as to inform where to focus.

- **Simplify and modernize grant guidance.** Simplify the content and modernize the structure of grant and performance guidance so that the guidance serves more as a resource for than just as a directive to federal agencies and so that it reaches and is useful not just to those working on compliance and fiscal accounting but also and especially to those leading and contributing to the outcome-improving aspects of grants.

- **Sustain and strengthen the Grants Playbook.** Build on the strong start of the Grants Playbook, continually updating its content with categorized examples of effective grants management mechanisms likely to be useful to multiple grants programs and creating and continually improving the online functionality of the Playbook. Update it in ways that make it a ready resource for federal grant officials performing all aspects of federal grant program management, helping them find relevant examples and “how-to’s” informed by experience and more rigorous research about which grant management mechanisms work well and which are less effective as well as the situational differences likely to affect the effectiveness of different grant management practices.

- **Adjust accountability expectations.** Clarify that grant program and grant recipient accountability is about continually using the full scope of evidence (data, analytics, well-designed trials, feedback from the field) to inform where to focus, find ways to improve, and increase uptake of better practices and reduced use of less effective ones while also coherently and successfully communicating in user-tailored ways key aspects of the grant story to outcome-focused partners, policy makers, and the public. Communicate, also, that grant program accountability is not about meeting targets, outperforming others, nor even demonstrating results or funding what works and defunding what does not.
Recommendation Eight:
To improve outcomes, OMB and others performing cross-agency grant information sharing and management roles need to help grant program managers find, collaborate with, and learn from others in the federal government with similar or related outcome objectives:

- **Support outcome-focused collaboration in the development and use of grant data systems.** Facilitate sorting, filtering, and analysis to find and collaborate with other grant programs working on the same or similar outcomes by adding information in all federal grant data systems (e.g., beta.SAM.gov, Federal Audit Clearinghouse, HHS Payment Management System, Federal Program Inventory) indicating the outcome objectives to which each grant program contributes, possibly starting with budget function and sub-function categories used by USAspending.gov and updating outcome categories as experience is gained.

- **Support outcomes-focused collaboration via outcomes-focused websites.** Facilitate sorting, filtering, and analysis to support collaboration with other grant programs working on the same or similar outcomes by adding information to Performance.gov and other agency and cross-agency outcomes-focused websites such as HealthyPeople.gov and ChildStats.gov information identifying grant programs contributing to each outcome objective.

- **Cascade outcome goals up and down.** Use strategy mapping techniques to update Performance.gov to show not just Cabinet-level departmental strategic goals and objectives but also the strategic goals and objectives of major agencies/components of Cabinet-level departments as well as of independent federal operating units and which grant programs contribute to federal agency and cross-agency outcome goals and objectives.

- **Facilitate data sharing.** Collect data from grantees, design data systems, and share data in ways that facilitate analyses across grant and other programs with shared outcome objectives and serving the same beneficiaries.

- **Facilitate knowledge sharing.** Add outcome objective and sub-objective information and contributing grant program information to evidence repositories, learning agendas required by the Foundations of Evidence-based Policymaking Act, outcomes-focused websites such as HealthyPeople.gov, and USAspending.gov.

- **Organize evidence repositories and learning agendas around outcomes.** Encourage creation of shared evidence repositories and learning agendas organized around outcome objectives, starting by linking existing outcomes-focused evidence repositories and learning agendas focused on related outcome objectives.

- **Encourage outcomes-focused collaboration.** Using executive orders, presidential memora-ndanda, cross-agency priority goals, interagency task forces, informal agency collaborations around outcomes and other objectives, and more formal intergovernmental and intersec-toral cooperative agreements, explicitly encourage agencies to collaborate with other parts of the federal government to make progress on shared and related outcome objectives.

- **Identify and network people.** Identify and network people in the federal government working on shared and related outcome objectives so that they can collaborate with and learn from each other to improve outcomes tapping evolving online networking platforms as well as old-fashioned outreach and networking methods.
Recommendation Nine:
To improve outcomes, OMB and others performing cross-agency grant information sharing and management roles can help grant programs learn which grant program mechanisms work better overall and in different situations—as well as which were less effective, and which do not work at all. Specifically, they should:

- **Capture and categorize the different types of grant goals.** Make it easier for grant programs to find better ways to measure, analyze data, run well-designed trials, and communicate about them by creating and noting grant goal type categories in beta.SAM.gov and possibly in other federal data sets and websites. These categories might include distinguishing grant goals that try to grow good outcomes from those that try to slow bad ones, goals that are conditions or incidents or threshold to be attained and sustained, grant objectives that are immediate or long term or both, and whether progress continually accrues or is one-time.

- **Capture and categorize grant practices.** Facilitate filtering and sorting on grant program mechanisms to find programs with similar features and to support evidence building about the effectiveness and comparative effectiveness, as well as the cost and equity, of the mechanisms grant programs use to improve outcomes. To do this, possibly capture information in the descriptive data each grant program enters into the federal grant one-stop website, beta.SAM.gov, about mechanisms the program uses to influence grantee practices.

- **Build and share knowledge about effective grant program practices.** Conduct ongoing analyses across grant and outcome data systems, complemented by well-designed trials, to harvest lessons about more and less effective grant practices and the situational differences that affect the effectiveness of these different practices. Generate focused follow-up questions to guide deeper analytic dives and well-designed trials to build and share evidence about more and less effective practices multiple grant programs use.

- **Identify and remove barriers to outcomes progress.** Use problem-solving task forces and tools such as Mythbusters to clarify what is and is not allowed and to find and reduce real and assumed barriers—such as barriers to grantees collecting and sharing data across multiple grant programs serving the same population.

Recommendation Ten:
To improve outcomes, central management agency initiatives need to align incentives and other motivational mechanisms in the federal government to encourage federal employees and grantees to manage for continuous outcomes improvement:

- **Find, build, and share evidence about effective motivational mechanisms.** Find, build, and share evidence about effective organizational and personnel incentives and other motivational mechanisms relevant to grant programs and promote use of that evidence broadly across the federal government.

- **Encourage participation in outcome-focused teams.** Structure agency and personnel rewards to encourage teams that work together to figure out where to focus, find what works and what works better, and increase uptake of better practices.

- **Update guidance.** Revise governmentwide personnel policy guidance to encourage leadership and participation in outcome-focused teams that meet regularly to improve outcomes informed by well-structured data and well-designed trials.
How Oversight Entities Can Support an Outcomes Focus and Improvement

The focus and activities of the many entities across the federal government that play an oversight role can make or break efforts to rebalance federal grant management to focus more on improving outcomes. These oversight entities can change their practices in a number of ways to make sure compliance does not come at the expense of improving outcomes.

- **Analyze and apply insights.** To inform grant program design and implementation, code sections of past and future reports from inspectors general, GAO, and other oversight entities by type of grant outcome objective and types of grant management mechanisms used to make it easier to analyze and organize past findings to find what works better and less well.

- **Use governmentwide data standards.** Work with central and cross-agency efforts to set data standards for grant goal outcome categories and for grant goal types to incorporate into grant, outcome, GAO, inspectors general, and other websites containing grant program information systems.

How Those Outside Government Can Contribute to Outcome Improvement

A wide variety of organizations outside government—including outcome advocates, grantee and outcome-focused networks, good government networks and organizations, transparency experts, academics and other researchers, consulting firms and other businesses, and others—can also contribute to improvement efforts in many ways. Those outside government can play many constructive roles, including helping federal outcome brokers and outcome allies:

- **Build knowledge.** Collect, organize, analyze information to inform where to focus, find what works better and what works less well, and increase adoption of better grant management practices and reduced use of less effective ones.

- **Network.** Build and support continuous learning and improvement grant management communities to improve outcomes.

- **Innovate.** Build analytic, visualization, and online tools to support communication and coordination to support improvement efforts.

- **Advocate.** Identify, communicate, and advocate for grant programs to do what they need to do that is not already being done to improve outcomes.

- **Feedback.** Provide feedback on grant program objectives, progress indicators, and strategies, to support outcomes improvement.
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This report builds on earlier IBM Center reports written by this author that readers may also find useful:


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Shelley H. Metzenbaum leads The BETTER Project and works with governments and other organizations to help them use and communicate goals, data, analyses, and research in ways that improve outcomes and other dimensions of performance and that avoid triggering discouragement and dysfunction. She currently co-chairs the Standing Panel on Intergovernmental Systems of the National Academy of Public Administration. Metzenbaum teaches and writes about and is a recognized international expert in public sector performance and evidence-informed management.

Metzenbaum headed the Office of Performance and Personnel Management at the U.S. Office of Management and Budget during the first term of the Obama administration. In that role, she headed the administration’s work with Congress to craft the language of the Government Performance and Results Act Modernization Act of 2010 and federal efforts to implement federal performance law. During her tenure, the federal government launched Performance.gov to provide a single portal to federal goals with quarterly updates of progress and planned next steps on all priority goals and annual reviews on all agency goals and objectives.

Metzenbaum subsequently served as founding president of The Volcker Alliance, an organization launched to increase attention to and excellence in government policy implementation, not just policy formulation. Prior to serving at OMB, she served as associate administrator of the U.S. Environmental Protection Agency for Regional Operations and State/Local Relations, where she steered the launch and implementation of the National Environmental Performance Partnership System and the Sustainable Development Challenge Grant program. Before that, she served as Undersecretary of Environmental Affairs in the Commonwealth of Massachusetts, where she initiated several permit reform efforts. She also previously served as Director of Capital Budgeting in Massachusetts and headed the City of Boston’s Washington office. She ran the Environmental Compliance Consortium housed at the University of Maryland bringing state environmental agencies together to find better ways to measure and manage their compliance and enforcement programs. She also ran the Harvard Kennedy School’s Executive Session on Public Sector Performance Management.

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