



The Importance of Data in Government Accountability and How Auditors Can Help

MAMIAF/SWIAF/SEIAF Joint Meeting
Overland Park, Kansas
December 4, 2014

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Overview

- Good financial management in the public sector is predicated upon having sufficient, reliable, and meaningful data
- Auditors can help by understanding how data are used within their organizations and adjust their audit approaches accordingly

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Session Objectives

- Examine how federal legislation affects data transparency and reliability
- Give an overview of GAO's work to address data accountability in government

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Legislation

Digital Accountability and Transparency Act of 2014 (DATA Act)

- Creates standards for reliable and transparent data to increase accountability

Government Performance and Results Act Modernization Act of 2010 (GPRA Modernization Act)

- Requires quarterly assessments to evaluate agency performance and improvement, which generates measurable data to help agencies achieve goals

Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA)

- Increases efforts to identify, prevent, and recover payment error, waste, fraud, and abuse by promoting data sharing techniques amongst federal agencies

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Legislation

DATA Act of 2014

- Discloses agency expenditures and links certain information to federal programs
- Directs OMB and Treasury to work with agencies to create government-wide financial data standards
- Simplifies reporting for recipients of federal funds
- Holds agencies accountable for the completeness and accuracy of reported data
- Adopts approaches developed by the Recovery Accountability and Transparency Board (RATB) at the government-wide level

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Legislation

DATA Act of 2014 (continued)

- Treasury and the Office of Management and Budget (OMB) to develop government-wide financial data standards and issue related guidance
- OMB and Treasury to consult with public and private stakeholders in establishing data standards
- Treasury to establish a data analysis center to provide data and analytical tools for preventing or reducing improper payments and improving federal spending data transparency
- OMB to work with federal agencies, federal award recipients, including state and local governments, to improve and simplify federal award reporting
- Agency Inspector General (IG) to report on agencies' spending data quality and use of data standards
- GAO to review IG reports and assess agencies' data quality and implementation of the data standards

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Legislation

The GPRA Modernization Act of 2010

- OMB to publish an inventory of all federal programs identified by agencies on a central government-wide website
- Agencies also provide program-level funding and performance information
- Transparency of results achieved through web-based reporting
- On-going analysis and monitoring of performance by senior leadership at the government-wide and agency levels to identify and prioritize key performance and management issues
- Disclosure on the reliability and accuracy of performance information

OMB will merge implementation of the program inventory provisions with DATA Act transparency requirements to avoid duplicative efforts

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Legislation

IPERIA

- Latest in a series of laws addressing government-wide improper payments
- Requires that agencies verify benefit eligibility before making a payment to a person or entity by checking multiple existing databases
- Modifies requirements to promote computer matching activities that assist in the detection and prevention of improper payments

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GAO Work Related to Data Transparency

USASpending.gov

In our report evaluating the reliability of USASpending.gov data published in July (GAO-14-476) we found:

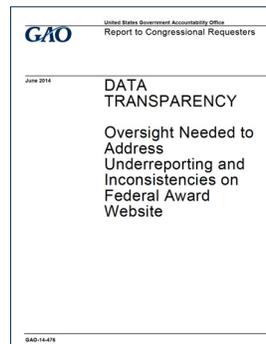
- Roughly 300 assistance programs representing \$619B in FY12 awards were not reported to USASpending by January 2013
- Information on reported awards was largely inconsistent with agency records. Only an estimated 2 to 7% of reported awards were fully consistent
- Information on the recipient's location, and the award's place of performance and description differed significantly from agency records
- Unclear guidance and weaknesses in oversight contributed to these issues



GAO Work Related to Data Transparency

USASpending.gov (continued)

- GAO recommended that OMB clarify its guidance and develop and implement improved oversight processes to regularly assess the consistency of information reported to USASpending.gov
- OMB generally agreed with GAO's recommendations
- These recommendations are consistent with actions to be taken to comply with the DATA Act





GAO Work Using Data

Supplemental Security Income

In our report (GAO-14-597) evaluating wages reported in the National Directory of New Hires (NDNH) we found:

- The Social Security Administration (SSA) made \$19 million in potential overpayments to 10,187 recipients through its SSI program in FY 2010
- About 70 percent showed indications of possible Social Security Number misuse – a company in one state reported wages for 22 SSI recipients in six other states
- Privacy and disclosure issues limited SSA's ability to share the information with Department of Homeland Security (DHS) who is responsible for enforcing employer compliance with immigration laws

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GAO Work Using Data

Supplemental Security Income (continued)

GAO used the following data:

- SSA file containing SSI recipients
- Matching income information from the quarterly wage and unemployment insurance component of the NDNH database with the state and federal portion of the SSI benefit separated

GAO then used the data to identify individuals who received SSI benefits and had records in NDNH indicating wages or unemployment insurance suggesting possible overpayments

Further analysis identified possible cases of SSN misuse

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GAO Work Using Data

Supplemental Security Income (continued)

- GAO recommended the Acting Commissioner of SSA work with the Secretary of DHS to identify data useful to DHS's work-site enforcement strategy and seek legislative authority to obtain the necessary information



Data and Risk Management

GAO's High Risk List – Overview



- First issued in 1990
- Used to identify and resolve serious weaknesses in areas that involve substantial resources and critical services to the public
- Report is issued every two years



Data and Risk Management

GAO's High Risk List - Criteria

- | | |
|---|---|
| <p>1. Individual Performance and Accountability Challenges</p> <ul style="list-style-type: none"> • A program or mission area having national significance or • A management function that is key to performance and accountability | <p>2. Quantitative Factors</p> <p>\$1 billion is at risk in areas such as:</p> <ul style="list-style-type: none"> • Value of impaired major assets • Revenue sources not realized • Major agency assets being lost, stolen, damaged, wasted, or underutilized • Improper payments • Contingencies or potential liabilities |
|---|---|



Data and Risk Management

GAO's High Risk List – Criteria (continued)

- | | |
|---|---|
| <p>3. Qualitative Factors</p> <p>Risk that is detrimental to:</p> <ul style="list-style-type: none"> • Health or safety • Service delivery • National Security and defense • Economic growth • Privacy or citizens' rights | <p>Risk that could result in:</p> <ul style="list-style-type: none"> • Significantly impaired service • Program failure • Significantly reduced effectiveness and efficiency • Injury or loss of life • Unreliable decision-making data • Reduced confidence in government • Unauthorized disclosure, manipulation, or misuse of sensitive information |
|---|---|



Data and Risk Management

GAO's High Risk List - Example

DOD Financial Management

- DOD responsible for more than half of federal discretionary spending with \$606 billion budgeted for FY 2014
- Significant financial and related business management systems and control weaknesses affecting the ability to control costs, ensure accountability, measure performance, and prevent fraud, waste, and abuse
- DOD cannot accurately account for spending and assets
- Management is unable to make sound decisions regarding operations because of unreliable data

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Data and Risk Management

GAO's High Risk List – Example (continued)

Medicaid Program

- Consists of 50 state programs with federal oversight
- Concerns about the adequacy of fiscal oversight to prevent improper payments
- Expenditures for federal and state governments is significant with about \$421.2 billion spent in 2012
- Improvements in data transparency to reduce improper payments have been made, however key data systems need to be improved to provide reliable and complete data to implement effective improper payment programs

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Data and Risk Management

Standards for Internal Control in the Federal Government (Green Book, 2014)

Management designs the entity's information system to obtain and process information to:

- meet each operation process's information requirements, and
- respond to the entity's objectives and risks

Information systems includes:

- People
- Processes
- Data
- Technology that management organizes to obtain, communicate, or dispose of information

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Data and Risk Management

Green Book, 2014 (continued)

Management also evaluates information processing objectives to ensure data is:

- Complete – transactions that occurred are recorded and not understated
- Accurate – transactions are recorded at the correct amount, right account, and on a timely basis at each stage of processing
- Valid – recorded transactions represent economic events that actually occurred and were executed

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Data and Risk Management

COSO Internal Control – Integrated Framework, 2013

The organization uses relevant, quality information to support internal controls and other objectives including risk management

Management should:

- Identify information requirements to distinguish information required to support needs
- Have information systems to capture internal and external data sources
- Process relevant data into meaningful information
- Maintain data quality by ensuring the data is timely, accurate, complete, current, accessible, protected, verifiable, and retained

Source: Committee of Sponsoring Organizations of the Treadway Commission

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Data and Risk Management

Ways Auditors Can Use Data

Auditors can use data to inform their risk assessment and planning process

- Reliable data – the auditor can choose audit areas to focus on
- Unreliable data – the auditor can base their audit on the data elements

Auditors can also use data to:

- perform substantive analytics to better understand the agency's environment
- improve audit quality
- detect fraud

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Data and Performance Management

Assessment of Implementation of GPRA

- GAO assessed implementation of GRPA Modernization Act of 2010 (GAO-13-518)
- GAO found the executive branch had taken steps to implement key provisions. For example,
 - OMB developed interim cross-agency priority goals
 - Agencies created priority goals
 - Agencies assigned performance management leadership roles and responsibilities
 - OMB developed a website (Performance.gov) to provide quarterly updates on cross-agency priority and agency priority goals

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Data and Performance Management

Assessment of Implementation of GPRA (continued)

- GAO also found the executive branch needs to do more to address governance challenges including:
 - Address issues that cross different programs and activities
 - Ensure performance information is useful and used by federal managers to improve results
 - Improve performance measurement across various programs and activities
 - Improve communication of performance information to meet users' needs
 - Improve performance information to meet congressional need for decision making

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Data and Performance Management

GAO's Use of GRPA

Strategic planning

- GAO's strategic plan provides a 6-year blueprint for how the agency will support the Congress and help shape a more efficient and effective government

Performance Plan

- Outlines the agency's strategic goals and objectives
- Presents targets for annual performance measures for the upcoming budget year
- Describes activities, strategies, and resources needed to achieve performance goals
- Provides an assessment on performance through GAO's Performance and Accountability Report

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Open Data Expected to Enhance Analytics at GAO

GAO is leveraging open data as part of its piloting of data analytic technologies

Pilot concepts include:

- Data mining for improper payments analysis
- Link analysis for fraud identification
- Document clustering and text mining for overlap and duplication analysis
- Network analysis for program coordination assessment

Preliminary indications include:

- A substantial decrease in labor and time inputs in analyzing documents and their content
- A possible increase in quality and number of findings
- Enhanced visualization for more efficient communication of key findings

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Forum identified data analytics opportunities and next steps

Recent GAO-Council of the Inspectors General on Integrity and Efficiency-RATB forum identified challenges in using data analytics

- Accessing and using data
 - Need for more awareness of data sources
 - Lack of incentives to design systems useful for oversight due to differing missions
 - Difficulties measuring results and prioritizing resources
- Sharing Data
 - Varying standards make interpreting and using others' data difficult
 - Intergovernmental challenges – such as costly access to certain federal data and perceptions that sharing is a “one-way street”



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Forum identified data analytics opportunities and next steps

Opportunities identified to enhance analytics efforts

- Attracting and retaining knowledgeable and skilled staff
- Garnering organizational support by demonstrating value and building credibility
- Supporting legislative updates to better balance privacy with data transparency

Forum next-steps

- Compile directories of data sources, known offenders, and open-source analytics, modules, and tools
- Explore and work to address any statutory issues related to data access and use
- Develop an ongoing community of practice focused on data-sharing challenges

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Data Analytics

How data analytics can be used: Improper Payments

Top 10 program improper payment estimates by dollar amount

Program	Agency	Reported Improper Payment Estimates	
		Dollars (in billions)	Error rate (percent of outlays)
Medicare Fee-for-Service	HHS	\$36.0	10.1%
Earned Income Tax Credit	Treasury	\$14.5	24.0%
Medicaid	HHS	\$14.4	5.8%
Medicare Advantage (Part C)	HHS	\$11.8	9.5%
Unemployment Insurance	Labor	\$6.2	9.3%
Supplemental Security Income	SSA	\$4.3	8.1%
Supplemental Nutrition Assistance Program	USDA	\$2.6	3.4%
Old Age, Survivors, and Disability Insurance	SSA	\$2.4	0.3%
Medicare Prescription Drug Benefit (Part D)	HHS	\$2.1	3.7%
National School Lunch Program	USDA	\$1.8	15.7%

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Data Analytics

Data Mining

- Computer-based control activity that analyzes diverse data for relationships not previously discovered
- “Data warehouse” stores and groups information logically
- Agency can query system to identify potential improper payments based on data elements such as payee and address

The Centers for Medicare & Medicaid Services (CMS) established a web portal (One Program Identity) to provide staff and contractors with a single source access to Medicare and other data to detect improper payments

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Data Analytics

Predictive Analytic Technologies

- Use to analyze and identify networks and patterns
- Analysis can identify unusual or suspicious patterns or abnormalities and can be used to prioritize additional review of suspicious transactions

CMS uses predictive analytic technologies to identify Medicare provider networks, billing patterns, and beneficiary utilization patterns to detect those at high risk for fraudulent activity

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Data Analytics

Data Sharing

- Allows entities that make payments to compare information from different sources to ensure payments are appropriate
- Can help to reduce risk of improper payments

Federal agencies use the Do Not Pay tool, which allows them to review multiple databases to determine a recipient's award or payment eligibility prior to disbursement

The Internal Revenue Service implemented an automated process for routinely updating the date of death information and deceased status in its master files using information from SSA

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Closing

- Having sufficient, reliable and meaningful data is important to good financial management
- When auditors have a good understanding of how data is used they can adjust their audit approaches and leverage the data to perform more substantial analyses
- Recent legislation requires data standards affecting transparency and reliability that can be used by state and local governments to help create meaningful information
- Reliable data is necessary to conduct risk and performance management activities