The New Age of Accountability:  
Linking Activities to Outcomes and Cost

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Abstract

Within the arena of grants management, buzzwords such as accountability, responsibility, transparency, and cost-effectiveness are receiving increasing attention and significance. These core concepts represent a shift in how grants are managed, tracked, and reported to funders. This shift may be intimidating to many grant managers who are not confident about how this trend may affect their current methodologies and systems for tracking grant activities, budgets, and outcomes.

This article outlines standard regulations and provides a practical framework for compliance. The step-by-step process provides much needed support to grant managers for successfully operating and managing an open, cost-effective program.
Introduction

With performance and accountability as hot topics in the grant community, grant managers can no longer afford to simply “keep track” of their data. Administrators must manage program activities to ensure alignment with grantor requirements and budgets, to determine the cost-effectiveness of specific service types/activities, and ultimately to substantiate the success of the program’s goals and objectives over time. Effective evaluation requires grant managers to analyze the impact of activities relative to the specific costs incurred to bring about those results.

This is important because federal regulations stipulate that grantees must relate cost to performance. New standardized reporting formats issued by the Federal Office of Management and Budget (OMB) require grantees to show accountability in this area. Several federal agencies have adopted the new formats and others are following suit. It is only a matter of time before these new reporting standards become the mandated norm.

At the April 2010 National Grants Management Association (NGMA) conference, Jeanette M. Franzel, Managing Director of Financial Management and Assurance (FMA) at the Government Accountability Office (GAO) made it clear that grantees have significant stewardship responsibilities for the effective use of federal funds to achieve intended program and performance results. Ms. Franzel went on to describe activities that both the GAO and the OMB are working on to advance accountability and performance at the grantee level. Grantees can expect further policy development and guidance on this topic from the OMB over the next year.

The impact of this change applies to federal grants but may set an example for other grantors looking to make sure that their grant funds are spent in the most cost-effective manner. With the economic climate as it is today, grantees must accomplish more with less. Competition for these funds is becoming increasingly intense. It is imperative that grantees understand what it means to manage a cost-effective program, and they must prepare to track and to share this information with their funders in a clear and concise manner.

To illustrate how the regulations, reporting forms, and increased attention to performance and accountability may affect a grant manager, this article will describe:

Why a framework is so important
- What are the regulations?
- Interpreting the regulations
- Upcoming changes to grant management reporting
How a grant manager defines and assesses compliance data

- Logic models
- A Cost-Effectiveness Model
- Determining effectiveness of activities
- Calculating unit cost of activities
- Integrating cost and effectiveness data

Why a framework is so important

Within the arena of grants management, buzzwords such as accountability, responsibility, transparency, and cost-effectiveness are receiving increasing attention and significance. These core concepts represent a shift in how grants are managed, tracked, and reported to funders. This shift may be intimidating to many grant managers who are not confident about how this trend may affect their current methodologies and systems for tracking grant activities, budgets, and outcomes.

Understanding standard regulations and using a practical framework for compliance can provide much needed support to grant managers for successfully operating and managing an open, cost-effective program.

What are the Regulations?

The most logical way to gain a thorough and working understanding of the regulations is to actually read the regulations. However, since many grant managers feel the formal language of the regulatory documentation is tedious, this article strives to highlight the most significant sections and present the key message points in a format that is both concise and accessible.

To get a clear understanding of grantee responsibilities as fiscal agents, grant managers must turn to grantor regulations and program requirements. From a federal standpoint, the Circular A-110, titled Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-Profit Organizations, (located in Code of Federal Regulations Chapter II (2 CFR) - Office of Management and Budget Circulars and Guidance, Section 215), becomes a primary guiding document.

The highlights of Section 215.21 Standards for Financial Management Systems include the following*:

*Disclaimer: This information is to be used as a general guideline only and is not meant to be all inclusive. For more explicit details specific to your organization, please reference the appropriate Office of Management and Budget (OMB) Circulars or your Grantor’s General Administrative Regulations. For more information go to http://www.whitehouse.gov/omb/assets/omb/circulars/a110/2cfr215-0.pdf
a) Federal agencies shall require recipients to relate financial data to performance data and develop unit cost information whenever practical.

b) Recipients’ financial management systems shall provide for the following:
   1) Accurate, current and complete disclosure of the financial results of each federally-sponsored project or program in accordance with the reporting requirements set forth in § 215.52.
   2) Records that adequately identify the source and application of funds for federally-sponsored activities.
   3) Effective control over and accountability for all funds, property and other assets.
   4) Comparison of outlays with budget amounts for each award. Whenever appropriate, financial information should be related to performance and unit cost data.

Interpreting the regulations

Regulations are not designed to create bureaucratic red tape. These rules are purposeful and ultimately lend themselves to a higher level of governmental accountability. It is on the basic premise that federal funds originate from taxpayer's money that the regulations organize around four main goals.

Accountability and responsibility

Regulations state that grantees must maintain control and demonstrate accountability over all funds and that it is necessary to have accurate, current, and complete disclosure of financial results. Grant managers must be diligent in safe-keeping and accounting for these funds on a regular basis, not just when it is time for reporting.

   Systems need to show a comparison of actual expenditures vs. budget projections. This level of detailed accountability is meant to ensure grantees do not overspend. The ability to monitor in this way helps in program management, specifically ensuring that funds are expended within the confines of the pre-determined grant period.

Transparency

Records are required to include the source and application of funds for federally-sponsored activities. The source of the funding must be clearly identified, whether it is federal, matching, or cost-share. For the application of funds, it is necessary to capture how much has been spent, from all sources and on individual activities, as this represents the total cost required to provide the service.
Cost-effectiveness

Note that the first requirement listed above in Section 215.21 (a) is that grantees are to relate financial data to performance data, and develop unit cost information whenever practical. For grant managers, this means that costs must be tied to a specific service or activity, and those services or activities must have measurable results. The relationship between costs and results becomes transparent. The funders should be able to see exactly how much it cost to achieve desired results.

Additionally when “cost per” measures are tracked, such as cost per recipient or cost per activity hour, then a comparison of these unit costs for similar activities from period to period can be made. Based on this information, grant managers can make informed decisions as to which activities make the most sense to continue into future periods.

The final stipulation of the regulations listed above in Section 215.21 (b) (4) again states that, whenever appropriate, financial information should relate to performance and unit cost data. Since the importance of relating cost to performance is mentioned twice in this short section, it is evident that regulators are sending a clear message: understanding the cost-effectiveness of a grant program is critical to proper grants management.

Upcoming Changes to Grant Management Reporting

To illustrate how important government agencies think cost-effectiveness is, one must only look to the Performance Progress Report (SF-PPR) (The White House Office of Management and Budget, n.d.). The SF-PPR is a standard, government-wide performance progress reporting format used by federal agencies to collect performance information from recipients of federal funds awarded under all federal programs that exceed $100,000 or more per project/grant period, excluding those that support research (which has its own standard report).

The SF-PPR consists of the following sections:

- SF-PPR and SF-PPR-2: Cover Pages
- SF-PPR-A: Performance Measures (lists goals, objectives, and performance measures)
- SF-PPR-B: Program Indicators (lists activities and their status)
- SF-PPR-C: Benchmark Evaluations (lists benchmarks, outcomes, evaluation and measurement tools)
- SF-PPR-D: Activity Results (lists activity outcomes)
• SF-PPR-E: Activity Based Expenditures (lists budget vs. actual by activity)

• SF-PPR-F: Program/Project Management Questions

Sections SF-PPR-E and SF-PPR-F are highlighted below, however, a thorough review of the entire report (available at http://www.whitehouse.gov/omb/grants_forms) is strongly recommended.

Section E represents a significant shift in accountability because most grantees are not accustomed to creating budgets and tracking expenditures at an activity based level of detail. While tracking expenditures by activity has always been mandated, most grantees were required to report financial data by category: ex: Salaries and Wages, Employee Benefits, Travel, Equipment, Contractual, etc. This restructuring represents a significant change for grantees from past reporting requirements. Many grant managers will need to develop new processes to capture and report this information efficiently and accurately (White House Office of Management and Budget, n.d.).

![PERFORMANCE PROGRESS REPORT](image)

**Figure 1. Section E of the SF-PPR**

Section F directly addresses cost-efficiencies. For example, question F-1c asks, “Do you link your budgets to program/project activities and make adjustments to achieve cost-efficiencies? If the answer is yes, please describe what efficiencies are achieved. If the answer is no, explain and provide a plan to put in place to improve cost-effectiveness and efficiency.” Simply stated, managing budgets for cost-effectiveness is not an option, it is a requirement. (White House Office of Management and Budget, n.d.).
How a grant manager defines and assesses compliance data

A practical approach to managing a cost-effective program begins with an understanding of logic models for grants management. Logic models provide the basic foundation for the more detailed Cost-Effectiveness Model used for understanding and managing cost-effective grant programs.

**Logic model**

A logic model is a framework for describing the relationships between *Investments*, *Activities*, and *Results*. It provides a general approach for integrating planning, implementation, evaluation, and reporting for a grant program.

In the most basic sense, the purpose of any grant-funded program is to improve a particular situation. Improvement requires *input* – most often in the form of money or other resources. With that input in place, program managers can deliver *output* – such as activities or services. Output is meant to achieve *outcomes* – which are measured in short-, mid-, or long-term results that ultimately improve the situation. Results are analyzed and evaluated to prove *impact*. Impact is reported back to the grantor.

**Cost-effectiveness model**

In order to see the practical relationship between inputs (cost), outputs (activities), and outcomes (performance measures), four basic parameters must be defined and their interconnectivity identified.
• **Goals, Objectives, and Benchmarks** – the outline of what the project will accomplish, how it will accomplish it, and the measures of its success

• **Activities** – the tasks that lead to the accomplishment of objectives

• **Performance** – measurement of the achievement of benchmarks, by which evaluations help to determine the actual benefits of activities

• **Cost** – outlay of resources to provide activities and data on participation in those activities are used to develop unit cost data

These parameters, and their interrelationships, can be described with simulated data as in the example to follow. These data can be divided into two broad categories: how much it cost, and whether it was effective. These data can then be viewed through a Cost-Effectiveness Model (Shontz, 2009), shown in Figure 3.

![Figure 3. The Cost-Effectiveness Model](image)

The Cost-Effectiveness Model shows that by analyzing the data and the relationships of the goals, objectives, benchmarks, activities, performance, and cost, identification of those activities that are *most* and *least* cost-effective can be identified. Following are step-by-step instructions for using the Cost-Effectiveness Model to analyze individual activities for regulatory compliance.

**Performance**

There are two very practical issues to consider when it comes to the topic of performance. First, when identifying activities intended to accomplish
a particular objective, grant managers must estimate to what degree the activity will impact that objective. A number value can be assigned to help organize the data for comparison.

As an example, would a grant manager be very certain (3), somewhat certain (2), or only slightly certain (1) that an activity such as math tutoring would have a direct impact on whether students pass pre-algebra by the end of 7th grade? Chances are that most people would respond “very certain” because it seems logical. However, not all degrees of impact may be this simple. It is recommended that grant managers estimate their best guess at the time and, as additional data become available, modify the number as needed.

Second, grant managers must gather evidence to prove whether or not an activity had the expected impact. There are two types of evidence. Each of these, and their respective subtypes, carry discrete weight in demonstrating impact.

• Theoretical: A grant director’s knowledge of the population that has not yet been tested

• Empirical:
  • Qualitative Data: Observations; Interviews; Focus Groups (Good)
  • Quantitative Data: (Better)
    • Descriptive Statistics: Helps to organize and summarize the data. Ex: Showing if benchmarks were met.
    • Inferential Statistics: Helps to interpret the data gathered. Ex: Regression and Correlation Analysis used to determine if variables are associated with one another.
  • Integrated Data: The use of both Qualitative and Quantitative evidence to prove impact. (Best)

**Sample process to determine cost-effectiveness**

With performance and budget information, grant managers can determine the cost-effectiveness of their programs, and use this analysis in their Performance Progress Reports. The following steps describe one method for determining cost-effectiveness, but keep in mind that there are many ways to calculate effectiveness.

**Step 1: Identify which activities are intended to meet objectives**

In Step 1, grant managers can easily collate objectives and specific activities using a matrix similar to the one shown in Figure 4. The Figure 4 example indicates that both the activities of “Tutoring” and “Homework Helpline” are theoretically associated with Goal 1.
Figure 4. Objectives/activities association matrix (Shontz 2009)

**Step 2: Determine if you have met your benchmarks using descriptive statistics**

In Step 2, the grant manager uses descriptive statistics to organize and summarize the data for comparison. The example compares benchmarks with results, the variation, and indicates if the objectives have been met based on that data. As shown in Figure 5, this example's results exceeded its benchmark for the percentage of students passing pre-algebra by end of 7th grade. This is empirical evidence and quantitative data.

![Figure 5. Benchmark/results worksheet (Shontz 2009)](image)

**Step 3: Use inferential statistics to explore relationships between activities and objectives**

In Step 3, inferential statistics are used to interpret the data gathered. Regression and correlation analysis were used to determine if variables are associated with one another. The example shown in Figure 6 indicates that an in-depth statistical analysis revealed a correlation between hours participated in tutoring and the opportunity to achieve the objective. The conclusion from this sample is: “For each hour of tutoring, the likelihood of a student passing pre-algebra by the end of the 7th grade increases by 5%.” This is empirical evidence and quantitative data.

Grant managers can use statistical calculators, spreadsheets, or statistical software to perform the calculations of regression and correlation analysis.
Figure 6. Objectives/activities statistics worksheet (Shontz 2009)

Experienced grantees should have at least a basic understanding of the evaluation concepts outlined in Figures 5 and 6.

**Step 4: Develop “unit cost” data for each activity**

By dividing the total project cost by the number of recipients, the average cost per recipient can be determined. By dividing total cost by quantity of service hours, the average cost per service hour can be identified. In this particular example the collective data was used to calculate cost per recipient and cost per activity hour. The same concept can also be used for other types of unit cost measurements such as cost per site or cost per item. These costs can and should be summarized for periodic analysis.

Figures 7 and 8 indicate that a variety of data calculations can be run to generate cost per unit figures such as cost per recipient or cost per service hour. Unit costs are summarized for analysis.

Figure 7. Unit cost worksheet (Shontz 2009)
Figure 8. Activity Summary grid (Shontz 2010)

Step 5: Determine where activities fall – “HIGH” cost or “LOW” cost per service hour

In Step 5, a comparison of the unit costs for various activities can be conducted and average cost per activity hour for all activities can be identified. Those activities that fall below the average will be classified as “LOW” cost and those that fall higher than the average will be considered “HIGH” cost. Grantees can use this measure as a starting point and revise the defining cost point based on what is reasonable.

Figure 9. Relative cost worksheet (Shontz 2009)
Figure 9 shows an example of a report that further helps grant managers evaluate if the resulting cost per service hour falls into “HIGH” or “LOW” determinations.

**Step 6: Integrate data – cost and effectiveness**

In Step 6, each activity has been associated with either “HIGH” or “LOW” cost and effectiveness evaluations. Figure 10 is an integrated data spreadsheet which provides a quick glance at cost and effectiveness data based on earlier grant manager input.

Looking at “Tutoring” from Figure 10, data reveals that “Tutoring” is considered “LOW” cost and has proven to be “HIGH” ly effective. Therefore, “Tutoring” should be placed in quadrant (Q1) of the Cost-Effectiveness Model.

The next step will translate these evaluations to the Cost-Effectiveness Model, where each activity is assigned a quadrant within the model matrix.

![Figure 10. Cost/effectiveness integration worksheet (Shontz 2009)](image)

**Step 7: Place activities in the cost-effectiveness model for analysis and decision making**

In Step 7, each activity is placed within the Cost-Effectiveness Model. Grant managers can quickly identify those that are most cost-effective (Q1-upper left quadrant) or least cost-effective (Q4-lower right quadrant.) Activities falling in the “LOW” Effectiveness quadrants (Q3 and Q4) may indicate the need for additional data and evidence to illustrate impact.
Similarly, those activities in the “HIGH” Cost quadrants (Q2 and Q4) may suggest additional analysis on cost measures is required.

![Diagram illustrating the Cost-Effectiveness Model](https://example.com/diagram.png)

**Figure 11. Using the Cost-Effectiveness Model (Shontz 2009)**

Figure 11 illustrates that tutoring represents the most cost-effective activity. Comparatively, the Afterschool Computer Program was both costly and did not meet its objectives.

**Conclusion**

Through deliberate identification and thorough understanding of a grant program’s goals, objectives, benchmarks, activities, performance and costs, grant managers can comply with the regulations and increased scrutiny, and also systematically analyze the cost-effectiveness of their efforts.

Grant managers can compare the cost-effectiveness of each activity utilizing the Cost-Effectiveness Model. Activities that prove cost-effective could be retained or repeated in future programs. Activities that were not so successful could be restructured or eliminated. This information is a powerful tool in planning for existing programs and applying for future funding.

As with any statistical analysis, the conclusions of the Cost-Effectiveness Model are not guaranteed. For example there could be reasons such as unusual circumstances or initial investments that may warrant a higher unit price for an activity. Or perhaps the activity did
not begin as planned; and consequently, it was impossible to meet the benchmarks.

By reviewing the data and accounting for peripheral circumstances, grant managers may more easily come to an evidence-based conclusion that an activity did or did not have the intended impact and how the costs compare to the other activities. While the model is sound, a grant manager’s professional experience and common sense are crucial in final planning decisions.

Additionally, this application of the Cost-Effectiveness Model can be utilized within a grant program and also across multiple sites, multiple programs, and even other grants.

Grant managers can use a variety of tools to accomplish these tasks; from spreadsheets to grant management software. For this article, simple spreadsheets and the grant management software Grant Maximizer Solution™ were utilized. Grant managers should research what works for their program and use appropriate technology to simplify the process as much as possible.

In closing, attention to accountability, responsibility, transparency, and cost-effectiveness will continue to increase at the grantee level over time. As Jeanette Franzel from the GAO stated at the recent NGMA annual conference, more policy guidance it is on its way. It can only benefit grant managers to stay informed and be prepared.

References


Biographical information

Gloria Shontz, CPA, CVA is the founder of Capital Management Group, a Certified Public Accounting firm located in Long Beach, California. Ms. Shontz has been working with the grant community since 2002 and has over 10 years accounting and auditing experience. Her experience auditing boards of education, governmental agencies, and non-profit organizations fuels her aspiration to simplify and improve financial management within the grant community. Ms. Shontz can be reached at (800) 641-1409 or gshontz@capmgmtgroup.com.