DEVELOPING PERFORMANCE MEASURES IN A SOCIAL SERVICES AGENCY

BY P. NEAL RITCHEY

ASSOCIATE PROFESSOR

DEPARTMENT OF SOCIOLOGY

UNIVERSITY OF CINCINNATI

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ABSTRACT

Human service agencies are developing ***performance measures systems*** as part of their management process. However, not all performance measures systems are created equal. This paper discusses the role of performance measures in human service agencies, emphasizing some possible directions in their evolution, and offers a view of their connection to other agency elements and their potential in the management process. A performance measures system requires an agency to acquire and align agency assets necessary to gather and update the required data and calculate the indicators' values on a timely basis. Where a performance measures system is more integrated into the management process, performance measures are viewed differently and used more fully in management decisions.

The adoption of performance measures is becoming as common for human service agencies as for private sector corporations. The development of performance measures accessible to the public via the internet (and perhaps additional measures to employees via an intranet) signals that an agency has established a new management orientation. The management orientation may aspire to comprehensive systemic change, i.e., change inclusive of every element of the agency — departments and offices at state and county / local levels. At minimum, the orientation aspires to establish indicators to track some of the agency objectives (strategic outcomes) and raise the conscientiousness of the agency management to strive to improve the indicators or maintain them at levels established as goals. This paper discusses the role of performance measures in human service agencies, emphasizing some possible directions in their evolution. The accompanying figure presents a summary view of the connection of performance measures to other elements of a human service agency and provides the context for their role.

PERFORMANCE MEASURES IN HUMAN SERVICE AGENCY MANAGEMENT PROCESS

Resources
Human / Social Capital
Personnel
Other Stakeholders
Capital

Mission - Strategic Goals
Agency / Department / Office
State / County / Local

External Factors
Needs Assessment
External Stakeholders

Strategic Outcomes

Activities / Mobilized Resources
Building Capacity
Empirical-Based Best Practices
Tried Solutions (and Failed Efforts)
System Development
Structural Change
Teams (Internal Stakeholders)
Liaisons w/ External Stakeholders
Accountability
Organizational Culture
Leadership
Continuous Improvement
Value of Assessment
Data Systems Development

Performance Measures
Outcomes Target Levels and External Data
Strategic and Intermediate Outcomes
Segmentation
Qualitative Analysis - Process Assessment

Properties of Performance Measures
Commitment to Improve
Validity
A Matter of Degree
Measurement Bias
Complex Measures
Special Approach Measures
Composite Measurement Models

The Basic Role

We will start with 'the short version' of an agency starting up a performance measures system and present variations and elaborate the version below. Initially, an agency considers its mission, viewing its mission as guiding its service to the public. The task is to develop some actionable, measurable objectives from the gestalt of its mission — some strategic outcomes for the agency to achieve. The agency chooses performance measures — indicators of these strategic outcomes — to track its progress and often sets goals or target levels for many indicators. Two additional tasks are now necessary. One is the acquisition and alignment of agency assets necessary to 1) gather and update the required data and calculate the indicators' values on a timely basis and 2) make these performance indicators accessible to agency personnel and the public in a format that is meaningful and easy to understand. (Performance indicators that are timely and readily available to the public, particularly available via the internet, contribute to the public's sense that the agency is "accountable.") The second task is to begin to mobilize agency resources to affect the strategic outcomes and monitor the indicators as feedback on the efficacy of the collective actions.

Strategic Outcomes

Of course, there are many variations that occur with performance measures systems. An agency may have a multi-faceted mission and departments so distinct in their activities that each department may be allocated even the task of developing strategic goals. For example, an agency may have statewide responsibilities and separate departments related to unemployed workers, adoptions, abused and neglected children, and community mental health services.

Typically, a team / committee develop their strategic outcomes from strategic goals. Because decisions arrived at by a group have greater buy-in than fiats from above, a department might wisely get a head start on mobilizing resources by forming a team inclusive of the variety of stakeholders. Stakeholders include employees of different ranks, different functions, and different geographic levels; even representatives from external, potential-partner organizations; and representatives of client groups. For example, a state adoption department might establish a team with the ***state*** agency and department heads, and key IT personnel and data analyst; representatives of ***county*** office heads, analysts, and caseworkers, including representatives of counties with a variety of population sizes; representatives of private adoption organizations; and representative ***adoptive parents***. Or a state department overseeing child (day) care agencies and homes might establish a team that, in addition to key state employees, includes representatives of the management and workers of day care centers; owners of day care homes; parents receiving Temporary Assistance to Needy Families, for whom day care availability is mandated; and representatives of other parents who are or could be using day care. To maximize the contribution to ideas and maximize buy-in for the team members, the team may also use techniques that minimize status differences.

Alternatively, on occasions, strategic outcomes may be mandated by legislation and tied to funding. Teams are formed to focus some of the agency or department resources on an efficient way to comply with the requirements of creating a system to generate and present performance measures. Agencies develop additional strategic outcomes; the mandate is expanded on and turned into an opportunity for more sweeping change.

Mobilizing Resources

A performance measures system requires organizational development — structural changes and changes in organizational culture — that mobilizes resources to achieve strategic outcomes. Often teams are created to formulate and shepherd the changes that are reasoned to most effectively advance the strategic outcomes. There may be a team of internal stakeholders per strategic outcome and the team often cuts across traditional units and traditional hierarchies. Importantly, the team has a "go to" person who represents the team's accountability for a strategic outcome. Because an agency often shares strategic goals with external organizations, a team may have liaisons with external stakeholders and garner external resources to reach strategic outcomes.

A team may suggest new activities for traditional units; often the team encourages empirically-based best practices — solutions that have been shown in similar organizations to be most effective for tasks. Internet sites devoted to best practices for types of public agencies are a growing resource. The team may develop new programs for traditional units or programs that require new structures.

As well, a team may have to promote changes in the organizational culture of traditional units. Two key elements of a performance measures system are 1) an active orientation towards finding ways to improve the agency's programs and practices and 2) a strong commitment to assessing programs and practices through reasoned review and by relying on analyses of data.

A growing reliance on data about programs and practices, data analysis, and the sharing of findings requires change in elements of the organization charged with data management and analysis and with intranet and internet development. New technologies, software designed for analysis and presentation of data on the web, and more employees with these specialized skills are required. Often, new units are created composed of specialist providing these activities for the organization. Sometimes aspects of these activities are outsourced, i.e., vendors are contracted to do them. Amalgamation of data requires increased coordination among the units of the agency.

Building capacity is a crucial dimension of changes with real scope. The agency or department must truly add or reallocate resources, both human and social capital and finances, and accept that change will take time. Change that only specifies additional tasks to existing positions is programming failure. Change is altering the way things are done. Change includes replacing some existing skills and tasks with new skills and tasks; altering entire jobs; and altering sections of the organization. Management, including the highest levels, must lead the organization to embrace the challenges of change and facilitate change by providing tangible support to employees. Building capacity means employees being properly lead, supported, and retooled.

PERFORMANCE MEASURES

Deciding strategic outcomes and developing and monitoring their indicators are the defining elements of any performance measures system. Often the strategic outcomes relate to quality and quantity of services. As suggested, an agency or department sets goals or target levels for many indicators. Short-term target levels of the indicators may be constrained by the present capacity of the departments and agency priorities assigned to particular strategic outcomes. Long-term targets, particularly for quantity-related indicators, often require assessments of community / client needs or critical properties of the community. For example, a strategic outcome of an adoption services department may involve increasing the number of prospective adoptive parents. Because new initiatives require building capacity, a target increase of 2% and 4% are set for years 1 and 2 based on extrapolations of in-house data. A realistic, long-term target for annual new prospective parents, though, will require data from sources outside the agency, e.g., information on family characteristics that shape those likely to seek to adopt and who meet the department's *quality* criteria. Similarly, a strategic outcome of a state department concerned with adult community mental health services might be to increase the number of adults with a serious and persistent mental illness in the community being served by the department. Extrapolation of in-house data might provide target increases for a couple of years after startup of the performance measures system, but a needs assessment throughout the state's communities is required for truly informed targets for the local communities and for the state as a whole.

Establishing intermediate outcomes and developing and monitoring their indicators are features of more articulated performance measures systems. ***Intermediate outcomes*** refer to programmatic outcomes that are thought to be mechanisms through which the organization influences its strategic outcomes. The adoption department may develop a program to encourage foster parents to adopt (an intermediate outcome) in order to increase the number of adoptions (a strategic outcome). To insure that this program is contributing to the strategic outcome as expected, both the number of adoptions and those children adopted by foster parents are quantified and monitored. The program might not have resulted in more foster-to-adoptive parent transitions, but other programs or even external factors may have led to increases in adoptions. The department has feedback and knows to examine its foster-to-adoptive parent program. Similarly, a department charged with providing adult substance abuse treatment services may have a strategic outcome of improving the effectiveness of treatment and monitor the trend in the performance indicator, the percent of adults who are drug free during the 12 months following treatment. They may also monitor the trend in the intermediate outcome, the percentage of adults who complete their designed treatment course, to assess if it is the treatment program affecting the trend in sobriety.

Segmentation is another important feature of more articulated performance measures systems. When an outcome established for the agency or department can be examined for each relevant organizational subunit, it is a powerful management tool for assessing the degree of change for various subunits – learning the changes that work and those requiring more resources. For example, the quarterly number of adoptions may be a performance indicator for a state department's strategic outcome. The ability to examine this indicator for regional administrative divisions and their constituent counties allows the division heads and county heads to track their unit's progress relative to other comparable units. Indeed, performance systems often stress sharing such disaggregated / segmented indicators with all employees and other stakeholders. These *transparent* performance systems are thought to increase buy-in by stakeholders.

The ability to disaggregate a performance indicator by service areas, when combined with realistic target values that are shaped by the realities of differences among service areas, allows for gap analysis to identify possible best practices. For example, the quarterly total amount of payments collected may be a performance indicator for the department responsible for insuring that required child support payments are made. The department would be able to track the direction and gap between performance and targets by service areas and investigate the practices in service areas where performance has consistently outpaced targets.

Segmentation can also take the form of constructing performance indicators so that they can be disaggregated in other ways. For example, the quarterly number of adoptions could be refined to provide the numbers distributed by race, age, gender, or health needs of adoptive children. Or the quarterly number of disabled adults provided in-home services may be a performance indicator for one of the strategic outcomes of a state's adult protective services. A performance measures system could permit this number to be disaggregated by race, age, gender, type of disability, or combinations of these characteristics of the disabled adults being served. Or the quarterly number of elders receiving long-term care assistance may be a performance indicator for a strategic outcome of a state department charged with senior services. This performance measure might be disaggregated by race, age, gender, or by whether the assistance is received at home or at an institution. This type of segmentation could provide insight into needed programmatic emphases and lead to certain categories becoming defined as measures of intermediate outcomes.

While performance measures systems are most closely identified with the idea of quantifying outcomes, performance measures systems include both quantitative and qualitative aspects. Process assessment is also a feature of more articulated performance measures systems. Process assessment includes keeping track of the changes and the processes of change that occur in resource mobilization and of programmatic changes. Process assessment can learn and share the lessons of effective techniques of change and hopefully help the department to avoid pitfalls in future change. Process assessment is useful also when an outcome is not being met. A careful, logical examination of the plans and their execution is in order. Is the issue that the plans were not executed, because promised resources did not come through or the organization changes did not fully occur? Or were the changes carried out as planned and the program just did not work as expected?

PROPERTIES OF PERFORMANCE MEASURES

Performance measures are **indicators** of strategic and intermediate outcomes and, to varying degrees, imperfect. At any point in time, the state of an indicator's measurement properties should be recognized and considered when interpreting the performance measure. The measurement properties of our performance measures are always subject to improvement and an outlook and efforts to improve them should be part of the system.

To fail to make the distinction between an outcome and its measure is the fallacy of **reification**. An outcome is a concept, with theoretical meaning; a measure is factual. A measure is **valid** to the extent that it captures the meaning of the concept and validity is a matter of degree. Some outcomes appear concrete and tempt reification. For example, take the annual number of adoptions. If we look back to the department's mission to provide a sense of the meaning of the outcome, we may decide that dissolved adoptions are **not** the success that the department is trying to achieve. Thus, our indicator should not include those adoptions. Also, the entry of information into the data system may not be timely, throwing our indicator off. An indicator that contains a systematic error is biased. Routine delay in entry of adoptions into our data base by a month or so after the event creates a downward bias in the most recent month's number of adoptions. On the other hand, the inclusion of adoptions that have or later will be dissolved is an upward bias on our indicator. Of course, the department can make changes to improve the entry of information and exclusion of dissolved adoptions. Still, for the most current data, dissolutions will affect the indicator because some have not yet occurred for the most recent adoptions. An organization's analysts have to study indicators to establish their validity and thus the degree to which conclusions based on the indicators are qualified.

Social, psychological, and business research has a substantial knowledge base about measurement. Special approaches are needed for some types of phenomenon, e.g., measures relating to time to events require survival analysis (sometimes called hazard analysis or more generally, event history analysis). Frequently straight-forward procedures appear correct, but are biased. For example, consider an outcome of time to adoption for children for whom permanent custody to the state was rendered within the past two years. A measure takes the average number of days between date of permanent custody and date of adoption for children who were adopted during the past two years. This would be an accurate procedure only when all the children adjudicated to permanent custody within the past two years were adopted. Otherwise, the measure ignores the children at risk of adoption during the period who were not adopted. (Consider the case where only 5 of 200 children were adopted where the 5 were infants adopted within days. The average of a few days is meaningless for 97.5% of the children at risk.) Survival analysis involves more complicated calculations, but it uses all the time at risk of adoption for all the children at risk during the period.

Another example is length of time receiving temporary assistance for needy families (TANF) for first time recipients of TANF within the past two years. This performance measure would be misestimated if, as in the example above, it was the average number of days for those beginning and ending receipt of TANF with the last two years. It would also be misestimated if calculated for those beginning receipt in the past two years as the difference between the day of calculation and the first day of receipt. In this case, the measure ignores those who began TANF within the past two years, but ended TANF before the day of calculation. Again, the special procedure of survival analysis is needed to correctly estimate length of time measures.

Developing a composite indicator of an outcome is a viable option. There are two common forms of underlying measurement models for the typical *composite* indicators. A ***formative*** model measures a whole (the outcome of interest) by summing its (major) parts; the parts form the measure. Logically, the validity of formative model depends 1) on our ability to comprehensively define the parts — in measurement terms, define the domain of content, and 2) how representative our measure is of the domain of content, i.e., does our measure cover the parts and properly weight the parts in our composite measure. If we omit a major component of our outcome, our measure is biased. If we count a less important aspect as equal to a more important aspect, our measure is biased. A very simple example might be a department developing an end-of-year summary measure of how well each local office did reaching in its five strategic outcome targets. The set of strategic objectives defines the parts and each objective was met or not met. We must also decide if the objectives were equally important. If one was twice as important as each of the other four, it should have twice the weight in a summed composite as the other four.

A benefit of a formative measure is that we can examine parts to understand the behavior of the whole. Another simple, but important performance measure would be an agency's total administrative costs. The department or other agency subunits are parts that contribute to the whole. Which subunits have the largest administrative costs?

Sometimes there are implicit, natural weights to the parts that we should be aware of when viewing the whole. For example, if our performance measure (the whole) was total agency administrative costs as a ***percent*** of total agency costs, each subunit's administrative costs as a ***percent*** of the subunit's costs (the parts) are implic-

itly weighted in their summing to the whole. The implicit weight is a subunit's total costs as a proportion of total agency costs. Also, we might view the parts as intermediate outcomes and the whole as the strategic outcome.

A ***reflective*** measurement model has a different logic and is often used to measure outcomes that are difficult theoretical constructs. A good example of this type of performance measure is client satisfaction with a state's employment services among unemployed workers. Often, a sophisticated statistical tool, confirmatory factor analysis, is used to help in the measure's construction and to some extent assess the measure's validity during its development. A reflective measurement model is based the idea that the outcome causes the values on each of the several different instruments used to measure it, i.e., the instruments reflect the outcome. There are different forms of reflective measurement models. They range from measures in which 1) each instrument is an independent, alternative measure of the outcome; to 2) none is a direct measure, rather each instrument is a measure of another (proxy) phenomenon, but the outcome being measured is the ***only*** common cause of the several instruments. The most common version of a reflective model falls between types 1 and 2, where each instrument to some degree is a measure of the outcome, but each has other specific causes in addition to the outcome -- their sole common cause. Importantly, the several instruments of a reflective model are not parts of the whole as they are in formative models. It can be very misleading or counterproductive to study the instruments as separately informing you about only the outcome of interest or to treat them as intermediate outcomes.

CONCLUSION

This paper began by noting that human service agencies are developing ***performance measures***. A performance measures system requires the agency to acquire and align agency assets necessary to gather and update the required data and calculate the indicators' values on a timely basis. It must also make these performance indicators accessible to agency personnel and the public in a format that is meaningful and easy to understand. The growing reliance on data about programs and practices, data analysis, and the sharing of findings requires change in elements of the organization charged with data management and analysis and with intranet and internet development. New technologies, software designed for analysis and presentation of data on the web, and more employees with these specialized skills are required. These efforts are ***part*** of capacity building and require employees being properly lead, supported, and retooled.

Also, this paper presented the broader management process that shapes the more articulated performance measures systems. Presently, the performance measure system may differ substantially from one agency to another, even if the agencies have similar missions and are comparable in size and in geographic scope. Some agencies have embraced the broader view of performance measures systems. Some embraced it sooner than others. For representatives of those agencies, we hope this paper reminds you of useful considerations. For others, we hope this paper has been found thoughtful and thought provoking.

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