### **Guide to Performance Measurement**

for State Agencies, Universities, and Health-Related Institutions

(Condensed)

## □□□ Introduction □□□ 1995 Edition

The State's performance measurement system is an integral part of agency and statewide planning structures, evaluation and decision-making processes, and accountability systems. As such, it requires close, consistent, and coordinated attention in order to maintain its integrity and usefulness over time.

### What is the purpose of this guide?

This guide to performance measurement has been developed for state agencies by the State Auditor's Office (SAO), the Legislative Budget Board (LBB), and the Governor's Office of Budget and Planning (GOBP) to provide the following information:

- To explain the importance of performance measures within the Strategic Planning and Budgeting cycle (i.e., strategic planning, performance budgeting, and performance monitoring)
- To identify state leadership's expectations for management involvement with measures
- To provide information about measures, such as:
  - How and when changes to measures can be made
  - What roles the LBB, GOBP, and SAO play in the measures process
  - How the LBB and GOBP use measures to make budget recommendations
  - How the Legislature uses measures in developing the General Appropriations Act
- To provide detail on how agencies, universities, and health-related institutions can establish adequate internal controls in measurement systems

in order to assist them in reporting accurate information

• To provide information on what to expect during an audit of performance measures by the SAO

This publication will be expanded with additional information and examples as experience with performance measurement increases. Agencies, universities, and health related institutions may also refer to the following sources for State of Texas performance measurement-related information:

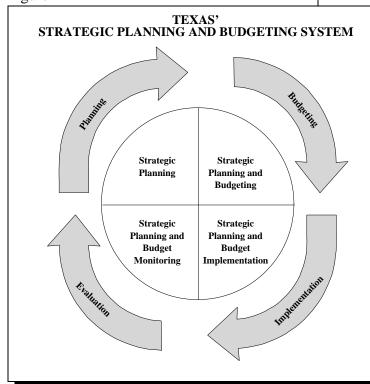
- Detailed Instructions for Preparing and Submitting Agency Strategic Plans
- Detailed Instructions for Preparing and Submitting Requests for Legislative Appropriations
- ABEST II -- Budget Submission for State Agencies
- Operating Budget Instructions
- ABEST II -- Performance Measure Reporting for State Agencies
- Strategic Goals for Functional Areas
- ABEST II -- Performance Measure Reporting for Institutions of Higher Education

## Strategic Planning and Budgeting and Performance Measures

## What is the Strategic Planning and Budgeting system?

Strategic Planning and Budgeting (SPB) in Texas is a system of mission/goal driven, results-oriented management in which funding and other decisions are based upon what an organization is accomplishing, rather than what that organization is doing. This system supports government accountability in the allocation of limited resources and provides better information to decisionmakers. The SPB system also helps direct government

Figure A-1



actions and allows performance measures to be used as effective monitoring tools.

As part of the SPB system, performance measures serve a variety of purposes for a variety of users. The overall purpose of the SPB system is to focus agency, university and health-related institution efforts on priority goals and to periodically assess agency, university, and health related institution progress in meeting those goals. Performance measurement is an essential part of this system.

Figure A-1 illustrates the four interrelated and overlapping phases of the SPB system. Strategic

planning, budget development, budget implementation, and performance monitoring and evaluation all involve performance measurement. The following are some of the detailed activities that occur during these phases.

### **Strategic Planning Phase**

- Agencies develop performance measures and propose changes (i.e., additions, deletions, name changes, content/definition changes) for their five-year plan.
- University and health-related institutions' performance measures are developed by the LBB and GOBP. Because of similarities in operations, many of the same performance measures are used across all universities and health-related institutions. Changes may be collectively proposed by all

universities and health-related institutions which report information for a particular measure (i.e., additions, deletions, name changes, content/definition changes).

- LBB and GOBP approve proposed measure changes.
- LBB and GOBP approve proposed changes to measure definitions.
- The Texas Higher Education Coordinating Board (THECB) updates its master plan for higher education. Most institutional strategic plans reference the master plan and provide further specificity to its goals

### Strategic Planning and Budgeting Phase

- Agencies, universities, and health-related institutions establish performance projections.
- LBB and GOBP use performance measures in making funding recommendations.
- THECB staff play a consultative role in developing the performance measures included in the General Appropriations Act.
- Legislature determines agencies', universities', and health-related institutions' key measures.
- Legislature determines final performance targets.

### Strategic Planning and Budgeting Implementation Phase

- Agencies project annual performance in operating budget.
- Agencies, universities, and health-related institutions measure and monitor agency performance.

## **Strategic Planning and Budget Monitoring Phase**

- Agencies provide quarterly information on actual performance.
- LBB and GOBP assess agency performance data (i.e., actual vs. targeted performance).
- Universities and health-related institutions provide fall/annual performance information.
- LBB, GOBP, and THECB assess university and health-related institution performance data (i.e., actual vs. targeted performance).
- SAO audits performance data for accuracy.

# What progress has been made in implementing the objectives for performance- and achievement-based budgeting?

Texas has used performance measures as an element of budgeting since 1974. However, since passage of the Lieutenant Governor's Budget Reform Proposal, as adopted by the LBB on November 18, 1991, state leadership has increased its emphasis on performance measurement in budgeting. In 1991, the LBB identified specific objectives for a new budget system. The following list identifies those objectives most closely related to performance measurement and gives the current status of each of these objectives.

## Objective: Focus the appropriations process on outcomes.

- The appropriations process has been changed to place greater emphasis on what a state entity accomplishes.
- Outcomes are increasingly being used by the Legislature and the Governor to make funding

decisions. Key measures (with targets) are displayed in the General Appropriations Act with the corresponding appropriation.

## Objective: Strengthen monitoring of budgets and performance.

- State leaders receive periodic assessments of agency, university, and health-related institution performance.
- The Legislature and the Governor are getting better performance information than ever before.
- Appropriations committees of the 74th Legislature referred to 1994 annual performance data for state entities in developing the General Appropriations Act.

### Objective: Establish standardized unit cost measures.

- Most strategies have at least one unit-cost measure.
- Standardized measures have been established for all occupational licensing agencies, universities, and health-related institutions.
- Standardized measures have been established for all universities and health-related institutions.

### Objective: Simplify the budget process.

- Overall, the quantity of performance measures has been reduced.
- Classification of measures has improved.

## Objective: Provide rewards and penalties for success and failure.

- The GOBP and LBB's budget execution powers have been increased, and their interim reward and penalty authority broadened.
- For **agencies**, the appropriations process is still the primary method by which rewards and penalties are used.
- The formula funding method is still the primary funding method used for universities. Funding for universities has not been based on performance data.
- "Justified need" continues as the primary funding method for **health-related institutions**. Funding for health-related institutions has not been based on performance data.

### Objective: Have the SAO certify the accuracy of measurement data.

- The importance of accurate performance measurement data increases with legislative and gubernatorial involvement.
- The SAO provides an independent assurance of measurement data accuracy.
- The SAO has reviewed 55 agencies, 6 universities, and 9 health-related institutions, auditing 859 measures, as of July 31, 1995.
- The LBB follows up by requiring plans for corrective action, when necessary, in response to SAO reports.

## Why should measures be important to agency management?

In 1991, the LBB mandated a new budgeting system of funding agencies based on accomplishments (performance) rather than efforts (workload).

The Legislature and Governor expect agencies, universities, and health-related institutions to focus on performance. Agencies are being held accountable for performance variances. In April 1994, the LBB made budget reductions as authorized by Section 110 of the General Appropriations Act. Information which explained these reductions included a "Performance-Based Budgeting Assessment." This assessment identified seven agencies, cited specific examples of targeted performance not realized, and identified corresponding budget reductions.

Funding decisions are being influenced by agencies' previous and projected performance.

Performance measures are being audited, and agencies are subject to additional scrutiny for non-certifiable measures. During the 74th Legislature, agencies appearing before the House Appropriations Committee were frequently asked to explain inadequacies in their measures documentation and reported data as well as conditions resulting in failure to perform as expected. Such information was also used by the LBB and GOBP during joint budget hearings in the fall of 1994.

Performance measurement can be an effective management tool by helping direct an agency, university, or health-related institutions toward high levels of performance and goal attainment.

Funding decisions for universities and health-related institutions could be based on performance data in the future. It should be noted that agencies have already been held accountable for performance variances and non-certifiable performance measures.

What is state leadership's expectation for the involvement of agency, university, and health-related institution management with performance measures?

Agency, university, and health-related institution management is expected to be meaningfully involved in developing, monitoring, and using performance measures in the following ways:

- Management ensures that a performance monitoring and evaluation system is developed by the agency, university, and health-related institution. Management should institute all necessary processes to ensure that performance measure information is accurate.
- Achievement of performance targets is among an agency, university, and health-related institution's highest priorities. Agency variances from performance targets are promptly identified and acted upon.
- Management understands the key factors that influence the agency, university, and health-related institution's primary performance areas and communicates the significance of these factors through the strategic plan and Request for Legislative Appropriations.
- Management identifies and affirms the agency, university, and health-related institution's key measures and requests revisions when necessary.
- Performance information is used in day-to-day agency, university, and health-related institution decision-making, formulating the Request for Legislative Appropriations, and allocating resources.

### **Agency Performance Measurement Systems**

## What constitutes a good performance measurement system?

A performance measurement system should provide information which is effective, reliable, and useful to all decisionmakers.

How do the GOBP and LBB determine whether to approve proposed changes to measures?

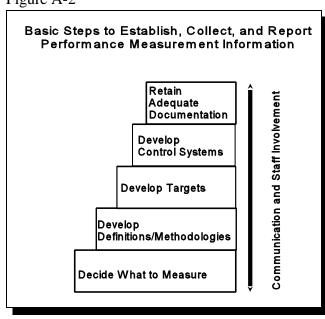
The GOBP and LBB evaluate and negotiate proposed changes using the criteria for an effective system and good individual measures (shown below). The Legislature and Governor's interest in particular measures must also be considered along with continuity of performance information.

- An effective measurement system should satisfy the following criteria:
  - results-oriented: focuses primarily on outcomes and outputs
  - <u>selective</u>: concentrates on the most important indicators of performance
  - <u>useful</u>: provides information of value to the agency and decisionmakers
  - <u>accessible</u>: provides periodic information about results
  - <u>reliable</u>: provides accurate, consistent information over time
- Good performance measures should meet the following criteria:

- <u>responsive</u>: reflects changes in levels of performance
- <u>valid</u>: captures the information intended
- <u>cost-effective</u>: justifies the cost of collecting and retaining data
- <u>comprehensive coverage</u>: incorporates significant aspects of agency operations
- <u>relevant</u>: logically and directly relates to agency objectives, strategies, and functions

What are the basic steps in establishing, collecting, and reporting performance measure information?

Figure A-2



The following is a discussion of the major steps involved in developing and maintaining a performance measurement system. These steps should be followed when developing a new system or individual measures. These steps can also be used to evaluate an existing performance measurement system. Figure A-2 illustrates that each step is dependent on the next in order to ensure an effective performance measurement system.

### 1. Foster Internal/External Involvement and Communication.

Meaningful internal and external communication throughout the entire process of developing a specific measure or measurement system significantly enhances the ability of an agency to provide a valued result. Clear and frequent communication with all parties involved can reduce the need for recurring changes in measures. The following are some techniques that can facilitate a smooth measure development process:

- Solicit management's comments in the early stages to provide direction to the process.
- Involve operational staff to help identify those measures which can provide timely and meaningful information at a reasonable datacollection cost.
- When possible, include an agency's budget staff early in the process since they will later work with and explain the measure data.
- Communicate early with LBB and GOBP staff to gain an experienced opinion on the proposed measure's usefulness to decisionmakers.
- Solicit comments from agency customers and other external parties to test measures' validity and relevance.

### 2. Determine the Area or Function That Needs to Be Measured.

In the strategic planning and measurement development process, it is crucial that agencies be mindful of the ultimate purposes for which measures are employed. The following questions can help agencies focus on the ultimate use for measures:

- What are the most direct effects of each strategy on the agency's "customers"?
- How are people's lives improved as a result of the agency's actions?

### How and when does an agency identify changes to performance measures?

Revisions to measures should be proposed in writing to the LBB and GOBP at the same time as other strategic plan revisions (i.e., in the spring of even-numbered years). Well coordinated, timely, and thorough strategic planning processes should identify whether there is a need for revisions.

An agency's justification for a proposed measure change should relate to a major policy change, a significant change in circumstances, or a substantial difficulty with the measure.

Effective proposals should:

- Focus on an agency's key measures since this is where decisionmakers' interest is centered.
- Facilitate review and comment, including, perhaps, a side-by-side layout of the current measures, proposed changes, and a column for explanations.
- Justify the loss of historical data, if necessary.
- Allow for dual reporting of current and proposed measures during a transition period.
- Ensure consistency of measurement name, content, and definition.

- What performance measures best indicate these effects?
- Do these performance measures clearly relate to the agency's mission, goals, objectives, and strategies?

As these questions imply, performance measures must relate directly to an agency's strategic plan elements and are generally externally oriented. Decisions regarding what needs to be measured as well as how it should be measured should be based on data. The internal/external assessment phase of an agency's strategic planning process can contribute to the kind of data required for effective performance measures development.

The Detailed Instructions for Preparing and Submitting Agency Strategic Plans, issued in the fall/winter of odd-numbered years, offers additional suggestions useful in the development of performance measures.

## How do the GOBP and LBB review proposed changes to measures' definitions?

The GOBP and LBB staffs seek to ensure that definitions are complete and reasonable. Definitions are reviewed for clarity and checked for the elements identified below. When the SAO recommends changes to definitions based on certification audits, definitions are checked for compliance with SAO recommendations.

## 3. Develop Definitions and Calculation Methodologies.

Agencies develop definitions for performance measures during the strategic plan revision process in the spring/summer of even-numbered years. A

## How does the Legislature set an agency's targets?

LBB recommendations on targets are made during the development of budget recommendations, with agency projections from its Request for Legislative Appropriations usually serving as the starting point. LBB modification of agency projections may relate to past performance, changes in funding levels, variances from external benchmarks, state or federal statutory or rule changes, issues identified by the LBB or GOBP, or other relevant factors. After hearings and deliberations, the Legislature's budget committees adjust targets as necessary. Targets are finally set through adoption of the General Appropriations Act.

### Does the LBB make changes to targets set in the General Appropriations Act?

The LBB is authorized by Article IX, Section 76, of the General Appropriations Act to make changes to targets established in the Act. In previous years, when the Strategic Planning and Budgeting system was new to state agencies, the Legislature, and the LBB, changes to targets were approved for a variety of reasons. Operating budget formats contained a section for agencies to request target changes.

However, as all entities in the process have become more familiar with the SPB system, the need to change targets established by the Legislature in the General Appropriations Act has been reduced. Agencies may still changes to targets be approved by the LBB. However, generally speaking, the LBB will not approve such changes.

performance measure's definition establishes both an explanation of the measure and the methodology for its calculation. It is important that the definition contain enough pertinent information about the measure that it can be clearly understood and a description of its calculation detailed enough to allow replication. A complete performance measure definition includes all of the following properties:

- It explains what the measure is intended to show and why it is important.
- It describes where the information comes from and how it is collected.
- It describes clearly and specifically how the measure is calculated.
- It identifies any limitations about the measurement data, including factors which may be beyond the agency's control.
- It identifies whether the data is cumulative or noncumulative.

## 4. Establish Performance Projections for Measures.

After measures have been established and changes made, an agency makes five-year projections for outcome measures as part of its strategic plan and forecasts all of its measures for the next biennium as part of its Request for Legislative Appropriations. The following are issues to be considered or techniques that can be used when developing performance projections:

- A trend analysis can establish a baseline projection if past data exist.
- An internal/external assessment can help identify influences on the projection.
- Agency priorities and available resources also need to be considered.

- Efficiencies from improved procedures or new technologies need to be included in the equation.
- A variety of formal benchmarking techniques can enhance an agency's projections and, ultimately, its performance.

### 5. Implement Effective Control Systems.

All systems that support performance measure data collection should have effective controls to provide reasonable assurance that the information is properly collected and accurately reported. An effective internal control system contains checks and balances to ensure the integrity and accuracy of the information produced and should be designed at the time measures are developed. For example, agencies should implement procedures for reviewing all performance data entered into the ABEST II system before it is "completed" (or submitted through ABEST II in its final form) to ensure that any typographical mistake made during data entry is corrected. The extent to which particular controls should be developed is determined through a balance of the controls needed to ensure accurate information and the cost of developing the controls.

Reliable performance measurement systems have several linked components which require strong control systems to deliver useful information to management and decisionmakers. Manual and automated systems require controls in three major areas: input, process, and review.

- Input controls verify the accuracy of the data submitted to the performance measurement system.
- Process controls ensure that the correct information is used and that the correct procedures are being followed to calculate the performance measure.
- Review controls verify that the person calculating the measure did it correctly and that the number reported to ABEST II is the correct performance measure result.

Controls will be discussed further in the Auditing Performance Measures section on page A-11.

### 6. Retain Adequate Documentation.

Adequate documentation should be retained to support the performance measure reported. These documents can be paper, microfilm, microfiche, or third-party computer tapes. Auditors should be able to obtain documents stored off-site when required.

## University Performance Measurement Systems

## What constitutes a good performance measurement system?

A performance measurement system should provide information which is effective, reliable, and useful to all decisionmakers.

## How do the GOBP and LBB determine whether to approve proposed changes to measures?

The GOBP and LBB evaluate and negotiate proposed changes using the criteria for an effective system and good individual measures (shown below). The Legislature and Governor's interest in particular measures must also be considered, along with continuity of performance information.

- An effective measurement system should satisfy the following criteria:
  - results-oriented: focuses primarily on outcomes and outputs

## How do the GOBP and LBB determine whether to approve proposed changes to measures?

The GOBP and LBB evaluate and negotiate proposed changes using the criteria for an effective system and good individual measures (shown below). The Legislature and Governor's interest in particular measures must also be considered, along with continuity of performance information.

- <u>selective</u>: concentrates on the most important indicators of performance
- <u>useful</u>: provides information of value to the university and decisionmakers
- <u>accessible</u>: provides periodic information about results
- <u>reliable</u>: provides accurate, consistent information over time
- Good performance measures should meet the following criteria:
  - <u>responsive</u>: reflects changes in levels of performance
  - valid: captures the information intended
  - <u>cost-effective</u>: justifies the cost of collecting and retaining data
  - <u>comprehensive coverage</u>: incorporates significant aspects of university operations

- <u>relevant</u>: logically and directly relates to university goals, strategies, objectives, and functions

## How and when should universities suggest changes to performance measures?

Changes to measures should be proposed in writing to the LBB and GOBP at the same time as other strategic plan revisions (i.e., in the spring of even-numbered years). Well-coordinated, timely, and thorough strategic planning processes should identify at an early stage that changes need to be proposed, leaving adequate time for discussion with other universities and with the LBB and GOBP prior to submission of strategic plans.

Standard measures are typically used for all universities, therefore, proposed changes should, preferably, be agreed upon by all involved institutions prior to submission to the budget offices.

The justification for a proposed measure change should relate to a major policy change, a significant change in circumstances, or substantial difficulty with the measure. Proposals for deletions should propose a comparable alternative measure. Institutions should anticipate a transition period for changed measures during which time data are collected for both the current measures and the changed measures.

## What constitutes a complete measure definition?

Although common definitions are established by the LBB and GOBP, each institution may provide additional information specific to the institution. Universities provide additional information for complete performance measure definitions during the strategic plan revision process in the spring/summer of even-numbered years. It is important that the definition contain enough pertinent information about the measure that it can be clearly understood and a description of its calculation detailed enough to allow replication. A complete performance measure definition includes all of the following properties:

- It describes what the measure is intended to show and why it is important.
- It describes where the information comes from and how it is collected.
- It describes clearly and specifically how the measure is calculated.
- It identifies any limitations about the measures data, including factors which may be beyond the institution's control.
- It identifies whether the data is cumulative or noncumulative.

## How are performance projections established for measures?

After measures have been established by the LBB and GOBP and completed definitions have been developed, universities formulate five-year projections for outcome measures as part of their strategic plan and forecast all measures for the next biennium as part of their Requests for Legislative Appropriations. The

following are issues to be considered or techniques that can be used when developing performance projections:

- A trend analysis can establish a baseline projection if past data exist.
- An internal/external assessment can help identify influences on the projection.
- University priorities and available resources also need to be considered.
- Efficiencies from improved procedures or new technologies need to be included in the equation.
- A variety of formal benchmarking techniques can enhance a university's projections.

## How are effective control systems implemented?

All systems that support performance measure data collection should have effective controls to provide reasonable assurance that the information is properly collected and accurately reported. An effective internal control system contains checks and balances to ensure the integrity and accuracy of the information produced and should be designed at the time measures are developed. For example, universities should implement procedures for reviewing all performance data entered into the ABEST II system before it is "completed" (or submitted through ABEST II in its final form) to ensure that any typographical mistake made during data entry is corrected. The extent to which particular controls should be developed is determined through a balance of the controls needed to ensure accurate information and the cost of developing the controls.

Reliable performance measurement systems have several linked components which require strong control systems to deliver useful information to

## How does the Legislature set a university's targets?

LBB recommendations on targets are made during the development of budget recommendations, with university projections from its Request for Legislative Appropriations usually serving as the starting point. LBB modification of university projections may relate to past performance, changes in funding levels, variances from external benchmarks, state or federal statutory or rule changes, issues identified by the LBB, GOBP, or THECB, or other relevant factors. After hearings and deliberations, the Legislature's budget committees adjust targets as necessary. Targets are finally set through adoption of the General Appropriations Act.

## Does the LBB make changes to targets set in the General Appropriations Act?

The LBB is authorized by Article IX, Section 76, of the General Appropriations Act to make changes to targets established in the Act. In previous years, when the SPB system was new to universities, the Legislature, and the LBB, changes to targets were approved for a variety of reasons.

However, as all entities in the process have become more familiar with the SPB system, the need to change targets established by the Legislature in the General Appropriations Act has been reduced. Universities may still request that changes to targets be approved by the LBB. However, generally speaking, the LBB will not approve such changes.

management and decisionmakers. Manual and automated systems require controls in three major areas: input, process, and review.

### **Accountability Modules**

- Input controls verify the accuracy of the data submitted to the performance measurement system.
- Process controls ensure that the correct information is used and that the correct procedures are being followed to calculate the performance measure
- Review controls verify that the person calculating the measure did it correctly and that the number reported to ABEST II is the correct performance measure result.

Controls will be discussed further in the Auditing Performance Measures section on page B-10.

## What are the documentation requirements for performance measurement systems?

Adequate documentation should be retained to support the performance data reported. These documents can be paper, microfilm, microfiche, or third-party computer tapes. Auditors should be able to obtain documents stored off-site when required.

## Health-Related Institutions Performance Measurement Systems

## What constitutes a good performance measurement system?

A performance measurement system should provide information which is effective, reliable, and useful to decisionmakers.

- An effective measurement system should satisfy the following criteria:
  - results-oriented: focuses primarily on outcomes and outputs
  - <u>selective</u>: concentrates on the most important indicators of performance
  - <u>useful</u>: provides information of value to the health-related institution and decisionmakers
  - <u>accessible</u>: provides periodic information about results
  - <u>reliable</u>: provides accurate, consistent information over time

- Good performance measures should meet the following criteria:
  - <u>responsive</u>: reflects changes in levels of performance
  - valid: captures the information intended
  - <u>cost-effective</u>: justifies the cost of collecting and retaining data
  - comprehensive coverage: incorporates significant aspects of health-related institution operations
  - relevant: logically and directly relates to health-related institution goals, objectives, strategies, and functions

How and when should health-related institutions suggest changes to performance measures?

### **Guide to Performance Measurement**

Changes to measures should be proposed in writing to the LBB and GOBP at the same time as other strategic plan revisions (i.e., in the spring of even-numbered years). Well-coordinated, timely, and thorough strategic planning processes should identify at an early stage that changes need to be proposed, leaving adequate time for discussion with other health-related institutions and with the LBB and GOBP prior to submission of strategic plans.

Standard measures are typically used for all healthrelated institutions, therefore, proposed changes should, preferably, be agreed upon by all involved institutions prior to submission to the budget offices.

The justification for a proposed measure change should relate to a major policy change, a significant change in circumstances, or substantial difficulty with the measure. Proposals for deletions should propose a comparable alternative measure. Institutions should anticipate a transition period for changed measures during which time data are collected for both the current measures and the changed measures.

## What constitutes a complete measure definition?

Although common definitions are established by the LBB and GOBP, each institution may provide additional information specific to the institution. Health-related institutions provide additional information for complete performance measure definitions during the strategic plan revision process in the spring/summer of even-numbered years. It is important that the definition contain enough pertinent information about the measure that it can be clearly understood and a description of its calculation detailed enough to allow replication. A complete performance measure definition includes all of the following properties:

• It describes what the measure is intended to show and why it is important.

- It describes where the information comes from and how it is collected.
- It describes clearly and specifically how the measure is calculated.
- It identifies any limitations about the measure data, including factors which may be beyond the institution's control.
- It identifies whether the data is cumulative or noncumulative.

## How are performance projections established for measures?

After measures have been established by the LBB and GOBP and complete definitions have been developed, health-related institutions formulate five-year projections for outcome measures as part of their strategic plan and forecast all measures for the next biennium as part of their Requests for Legislative Appropriations. The following are issues to be considered or techniques that can be used when developing performance projections:

- A trend analysis can establish a baseline projection if past data exist.
- An internal/external assessment can help identify influences on the projection.
- Health-related institution priorities and available resources also need to be considered.
- Efficiencies from improved procedures or new technologies need to be included in the equation.
- A variety of formal benchmarking techniques can enhance a health-related institution's projections.

## How are effective control systems implemented?

All systems that support performance measure data collection should have effective controls to provide reasonable assurance that the information is properly collected and accurately reported. An effective internal control system contains checks and balances to ensure the integrity and accuracy of the information produced and should be designed at the time measures are developed. For example, health-related institutions should implement procedures for reviewing all performance data entered into the ABEST II system before it is "completed" (or submitted through ABEST II in its final form) to ensure that any typographical mistake made during data entry is corrected. The extent to which particular controls should be developed is determined through a balance of the controls needed to ensure accurate information and the cost of developing the controls. Reliable performance measurement systems have several linked components which require strong control systems to deliver useful information to management and decisionmakers.

Manual and automated systems require controls in three major areas: input, process, and review.

- Input controls verify the accuracy of the data submitted to the performance measurement system.
- Process controls ensure that the correct information is used and that the correct procedures are being followed to calculate the performance measure.
- Review controls verify that the person calculating the measure did it correctly and that the number reported to ABEST II is the correct performance measure result.

Controls will be discussed further in the Auditing Performance Measures section on page C-10.

## What are the documentation requirements for performance measurement systems?

Adequate documentation should be retained to support the performance data reported. These documents can be paper, microfilm, microfiche, or third-party computer tapes. Auditors should be able to obtain documents stored off-site when required.

### **Performance Monitoring**

### What are agencies, universities, and healthrelated institutions expected to report for performance monitoring?

At a minimum, agencies, universities, and healthrelated institutions are expected to provide accurate performance information on a quarterly basis for key output and efficiency measures and on an annual basis for key outcome and explanatory measures.

- Explanations of variance are intended to describe the circumstances which cause an agency's actual performance to deviate from its performance targets.
  - Variance explanations provided by operational staff often provide important details.
  - Additional explanations are sometimes useful to provide information even when there is no variance.

### **Guide to Performance Measurement**

- Management reviews help ensure the accuracy and relevance of the variance explanations.

## How do the LBB and GOBP assess reported measures data?

The quarterly assessment process focuses primarily on variances over five percent between actual and targeted performance, asking questions such as:

- How does the reported performance compare to previous periods?
- Is the variance relevant to successful achievement of the goal or strategy?
- Do external factors affect performance to the extent that targets may not be met?
- Is the variance due to a faulty projection of performance?
- Are there unanticipated effects resulting from the variation?

How do the LBB and GOBP use measures to make funding recommendations and to conduct university and health-related institution program evaluations?

Overall, the budget offices rely heavily on performance measures in evaluating an agency's Request for Legislative Appropriations.

Currently, funding recommendations for universities and health-related institutions are not based on performance measurement results. However, measures are being used to conduct program evaluations.

Specific measures serve the following purposes:

- Agency Outcome measures Used to assess an agency's effectiveness in serving its key customers and in achieving its mission and goals. Used to direct resources to strategies with the greatest effect on the most valued outcomes.
- <u>University and Health-Related Institution Outcome</u>
   <u>measures</u> Used to assess a university and health related institution's effectiveness in serving its key
   customers and in achieving its mission and goals.
   Used to evaluate strategies with the greatest effect
   on the most valued outcomes.
- <u>Input and output measures</u> Used to assess agency, university, and health-related institution workload and demand for services as well as agency, university, and health-related institution efforts to address those demands.
- <u>Efficiency measures</u> Used to assess the efficiency of agency, university, and health-related institution operations and to weigh incremental investment options.
- Explanatory measures Used to define the agency, university, and health-related institution's operating environment and to explain factors which are relevant to the interpretation of other agency measures.

## How does THECB monitor performance and provide information to legislators for universities and health-related institutions?

- THECB's annual Statistical Summary is widely used by legislators and institutional administrators to compare performance of institutions with each other and over time.
- THECB staff prepare studies on various aspects of Texas higher education, and the focus of these is often on institutional performance.

 THECB maintains an extensive data base on Texas post-secondary educational activities, and this data base is used as a source of performance data in addition to performance related to the measures in the General Appropriations Act.

## How does the Legislature set a health-related institution's targets?

LBB recommendations on targets are made during the development of budget recommendations, with health-related institution projections from its Request for Legislative Appropriations usually serving as the starting point. LBB modification of health-related institution projections may relate to past performance, changes in funding levels, variances from external benchmarks, state or federal statutory or rule changes, issues identified by the LBB, GOBP, or THECB, or other relevant factors. After hearings and deliberations, the Legislature's budget committees adjust targets as necessary. Targets are finally set through adoption of the General Appropriations Act.

## Does the LBB make changes to targets set in the General Appropriations Act?

The LBB is authorized by Article IX, Section 76, of the General Appropriations Act to make changes to targets established in the Act. In previous years, when the SPB system was new to institutions, the Legislature, and the LBB, changes to targets were approved for a variety of reasons.

However, as all entities in the process have become more familiar with the SPB system, the need to change targets established by the Legislature in the General Appropriations Act has been reduced. Health-related institutions may still request that changes to targets be approved by the LBB. However, generally speaking, the LBB will not approve such changes.

### **Auditing Performance Measures**

## What is the role of the SAO in the Strategic Planning and Budgeting system?

The SAO's involvement in the SPB system is concerned primarily with the verification of the accuracy of performance data reported through ABEST II. The SAO performs the assessment so that reported performance can be relied upon by state leaders for decision-making and evaluating state entities. Additionally, the SAO verifies that the performance measures are a part of systems that have adequate internal controls to increase the probability that reported measure data will continue to be accurate. The SAO does not assess the adequacy or the appropriateness of a state entity's performance measures.

## What are the steps in the SAO certification of performance measures audit process?

Following are the steps the auditors will follow during an audit at an agency, university, or health-related institution.

### Step 1

Prior to beginning the audit, agencies (or universities, or health-related institutions) and measures to be audited are determined.

Agencies (or universities, or health-related institutions) and measures are selected for an audit based on a risk-assessment process. Agencies or specific universities or health-related institutions are recommended by the LBB based on the following risk factors:

- substantial changes in organizational structure or personnel
- expressions of concern by legislators

• patterns of unexpected performance

The SAO selects agencies, universities, and healthrelated institutions to be audited based on the following SAO risk factors:

- dollars appropriated to an agency, university, or health-related institution
- indications from previous audits that an agency, university, or health-related institution has potential performance measure control weaknesses

## How does the LBB determine an agency, university, or health-related institution's key measures?

Currently, about 3,000 of the approximately 10,000 measures used in strategic planning are identified as "key" for performance budgeting. These decisions are made at the time that the agency's funding recommendations are being developed.

- Usually each strategy has only a few key measures.
- Key measures are "budget drivers" and generally externally focused. Key measures are strongly related to an agency, university, or health-related institution's funding.
- Key measures closely relate to the goals identified in the statewide strategic plan.
- Key measures must meet the criteria for good performance measures.
- frequency with which an agency, university, or health-related institution's performance measures have been reviewed

The measures to be audited are selected from the measures as identified in the ABEST II data base. A combination of key outcome, output, and efficiency measures are selected. The LBB also provides input in the measure selection process. The SAO seeks to fulfill requests of the LBB regarding agency (or university or health-related institutions) and measure selection in order to meet the needs of the LBB and the Legislature. The SAO selects the following types of measures to be audited:

- measures that represent the activities associated with the largest appropriated dollars
- measures that represent significant activities of an agency, university, or health-related institution
- measures that have significant legislative interest
- measures associated with programs that have documented difficulties

### Step 2

The auditor will determine if the agency, university, or health-related institution can recreate the number reported in ABEST II.

This step requires the agency to produce summary documentation that supports the performance measure data reported. Summary documentation shows the final calculations that support the performance data reported in ABEST II. Examples of this

**Trouble Shooting Tips** 

- · Keep summary documents.
- Review summary documents to ensure that the numbers on them are the same as the numbers reported to ABEST II.

documentation are current computer printouts that reproduce summary calculations of the reported performance data, archived computer printouts produced at the reporting date which document the summary calculations, quarterly summary calculation documentation, spreadsheets, manual calculation sheets, etc. If the recreated performance data is not within a tolerable error range (+/- five percent), then the performance measure is considered inaccurate.

Agency Example:

An agency being audited reported 500 applications processed during the previous year. The following is part of the documented measure definition for "number of applications processed."

The number of applications is equal to the total number of four different application types (M, N, O, and P applications) processed. An application is considered "processed" when the reviewer closes a file for the applicant in the computer.

Figure A-3

|            | # of M<br>applications<br>processed | # of N<br>application<br>processed | # of O<br>applications<br>processed | # of P<br>applications<br>processed | Total #<br>applications<br>processed |
|------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| Quarter 1  | 20                                  | 30                                 | 10                                  | 45                                  | 105                                  |
| Quarter 2  | 40                                  | 30                                 | 35                                  | 30                                  | 135                                  |
| Quarter 3  | 30                                  | 30                                 | 35                                  | 60                                  | 155                                  |
| Quarter 4  | 10                                  | 10                                 | 20                                  | 65                                  | 105                                  |
| Year Total | 100                                 | 100                                | 100                                 | 200                                 | 500                                  |

Figure A-3 is an example of a document with supporting summary calculations.

If summary documentation for the number of applications processed supports between 475 and 525, the certification process will continue.

Example:

University A university being audited reported 1,000 undergraduate degrees awarded during the previous year. The following is part of the documented measure definition for "number of undergraduate degrees awarded": the number of degrees awarded at the baccalaureate level.

> To determine the number of undergraduate degrees awarded for the entire fiscal year, we must consider the number of degrees awarded each semester. The following is an example of a document with supporting summary calculations.

> If summary documentation for the number of applications processed supports between 950 and 1,050, the certification process will continue.

Healthrelated institution Example:

A health-related institution being audited reported \$100 million as the total gross charges for unsponsored charity care provided by faculty. If summary

| Semester      | Total #<br>undergraduate<br>degrees awarded |
|---------------|---|
| Fall          | 350   |
| Spring        | 500   |
| Summer I & II | 150   |
| Year Total    | 1,000                                       |

documentation for the number of applications processed supports between \$95 million and \$105 million, the certification process will continue.

### Step 3

The auditor will determine the method used by the agency, university, or health-related institution to collect and calculate the performance data.

This methodology should be consistent with the measure's definition. If the data collection methodology is not part of the definition, the auditor will seek other documentation that supports the collection and calculation process.

The auditor will determine the following:

- the event or events that begin the process of collecting data for the reporting of performance
- the events that occur from the beginning of the process until the measure is entered into ABEST II
- how and where the data is stored and maintained during the period of collection

All steps performed in the collection and calculation of the performance data should be clearly documented by the persons responsible for collecting and calculating the data.

Agency Example:

For the measure "number of applications processed," the auditor would want to know that the process begins when an application is received and stamped by the agency. The application is reviewed by those who process applications, and a record of the application is entered into a file in the agency's computer system. At the end of the quarter, the number of

applications closed is generated by the computer.

Example:

University For the measure "number of undergraduate degrees awarded," the auditor would want to know the following details concerning the process used by the university to generate this performance data.

> The process begins when a student applies for graduation in the Registrar's Office during the semester the student plans to graduate. The graduation advisor in the Registrar's Office compares the degree plan with the student's transcript to determine if all university requirements have been met for graduation.

> At the end of the semester, final grades for applicants are requested. Grades are posted to degree plans to determine if all requirements for graduation are met. Final clearance for graduation is given, and students are placed on the official graduation list.

An electronic tape of graduation data is sent to the THECB where information is compiled by a computer system. The university then receives a copy of THECB records and reports the information to ABEST II by the next reporting date.

Healthrelated institution Example:

For the measure "Total gross charges for unsponsored charity care provided by faculty," the auditor would want to know that the process begins when patient information is provided to the affiliated hospital. The hospital reviews the information and categorizes the patient's

### **Trouble Shooting Tips**

- Keep all calculation documents.
- Review the calculation for mathematical errors.
- The person responsible for the measure should determine the answers to the bullets listed in step 3.

pay status according to its criteria. Then the affiliated hospital enters the information into its computer system. A tape which has detailed information, including the total gross charges for unsponsored charity care, is submitted by the affiliated hospital to the health-related institution. The total gross charges for unsponsored charity care provided by faculty is then computed by the healthrelated institution.

(Note: This example addresses a healthrelated institution that does not own its own hospital; however, if auditing an institution that does own its own hospital, the auditor would want to know the steps in that process.)

### **Guide to Performance Measurement**

### Step 4

The auditor will determine if the agency, university, or health-related institution followed the measure definition.

The auditor will determine if the way the agency, university, or health-related institution calculates the measure is the same as the way the measure definition describes. The only exception is if the LBB and GOBP have given written approval allowing an agency, university, or health-related institution to calculate the performance measure data in a manner different from the performance measure definition. The following are the results if an agency deviates from the measure definition:

- If the auditor determines that the deviation causes a less than five percent difference between the performance reported to ABEST II and the correctly calculated performance measure data and the measure has no other problems, the measure will be certified with qualification.
- If the auditor determines that the deviation causes a greater than five percent difference between the number reported to ABEST II and the correctly calculated performance measure data, the measure is considered inaccurate.
- Because of the deviation from the definition, if the auditor cannot determine what the correct performance measure result should be, the measure will be identified as having factors that prevent certification.

Agency Example:

The ABEST II system shows that reported performance for "number of applications processed" is 300. Agency personnel informed the auditor that the "number of applications processed" is calculated by adding the total number of the three types of application (M, N, and O applications) processed. The measure definition (stated in the example in step 2) states that type P

applications should also be included when calculating the measure. By not including the P applications, 200 applications (from example in step 2) were not incorporated into the reported performance measure result; therefore, the measure is underreported by 40 percent. This measure would be considered inaccurate.

Health-Related Institution Example: For the performance measure "Total gross charges for unsponsored charity care provided by faculty," the measure definition is included in the General Appropriations Act. The most recent definition is explained in the General Appropriations Act, 74th Legislature, for fiscal years 1996 and 1997. The definition has several requirements; following is a summary of those requirements and the audit procedures to ensure that each requirement of the definition is followed.

University Example:

The ABEST II system shows that reported performance for "number of undergraduate degrees awarded" is 1,200. University personnel informed the auditor that the "number of undergraduate degrees

### **Trouble Shooting Tips**

- Ensure definitions are clear, specific, and not open to interpretation.
- Review measure definitions to ensure they are consistent with measure names.
- Train personnel to calculate the measure according to its definition.
- Communicate to staff the importance of providing information accurately and consistently over time.
- Designate specific cut-off times for reporting.
- Pay special attention to continuity of data collection and calculation during personnel changes.

awarded" is calculated by adding the total number of baccalaureate and masters degrees awarded.

The measure definition (stated in the example in step 2) states that only

baccalaureate degrees should be included when calculating the measure. Two hundred masters degrees were inappropriately included in the reported performance measure result; therefore, the measure is overreported by 20 percent. This measure would be considered inaccurate.

|    | quirement of Definition for "Total gross charges unsponsored charity care provided by faculty"   | Audit procedure to ensure each requirement of the definition is followed  |
|----|--|---|
| 1. | Financially Indigent: Unsponsored charity care shall include unreimbursed services to the financially indigent. Financially indigent shall mean uninsured or underinsured patients accepted for care with no obligation or a discounted obligation to pay for services rendered based on a teaching hospital or clinic's formal eligibility system.  | Review procedures of hospital and/or health-related institution to determine whether financially indigent classifications are made based on documented criteria which are consistent with the measure definition. If not, the definition is not being followed.               |
| 2. | Medically Indigent: Unsponsored charity care shall include unreimbursed cost of services to the medically indigent. Medically indigent shall mean patients who are responsible for their living expenses, but whose medical and hospital bills, after payment by third-party payers, exceed a) a specified percentage of the patient's annual gross income or b) the criteria for determining a patient's inability to pay as established by public health-related institutions. | Review procedures of hospital and/or health-related institution to determine whether medically indigent classifications are made based on documented criteria which are consistent with the measure definition. If not, the measure definition is not being followed.         |
| 3. | Charity Care Determination: The determination that a patient is financially or medically indigent should occur within 60 days of the patient's discharge from the hospital setting.  | Review the hospital and/or health-related institution's policy for determining indigent status. Determine whether every reasonable effort is being made to determine indigent status within 60 days of the patient's discharge. If not, the definition is not being followed. |
| 4. | Contractual Adjustments: The contractual adjustments to commercial contracts and Medicare for all public health-related institution's faculty physicians and hospitals shall not be counted as unsponsored charity care.   | Review the calculation of the number reported to determine whether contractual adjustments for commercial contracts and Medicare are included. If they are included, the definition is not being followed.  |

| Requirement of Definition for "Total gross charges for unsponsored charity care provided by faculty" (concluded)                 | Audit procedure to ensure each requirement of the definition is followed (concluded)  |
|--|---|
| 5. <u>Bad Debt</u> : Bad debts shall not be counted as unsponsored charity costs.  | Review the calculation of the number reported to determine whether bad debts are counted as unsponsored charity costs. If bad debts are counted, the definition is not being followed.  |
| 6. Other: Other categories not allowed by the definition should not be included in the calculation of unsponsored charity costs. | Review the calculation of the number reported to determine whether categories not allowed by the definition are included. If other categories are included in the calculation, the measure definition is not being followed. For example, amounts in the Medicaid pending holding category should not be included in the calculation. |

Below is a specific example of the audit results where the definition is not followed:

#### Example:

The ABEST II system shows that reported performance for "total gross charges for unsponsored charity care provided by faculty" is \$100 million. Health-related institution personnel informed the auditor that the "total gross charges for unsponsored charity care provided by faculty" is calculated by determining only financially indigent status of patients.

The measure definition (provided in the table above) states that both financially and medically indigent status of patients should be determined when calculating the measure. Since only financially indigent status was determined, the measure could not be certified.

Factors prevented certification because the dollar amount of medically indigent unsponsored charity care could not be determined if the hospital did not have a process for classifying patients into the medically indigent category.

### Step 5

The auditor will determine whether the measure data are kept on a manual or automated system.

A manual system uses paper files and/or microfilm files. If a computer is used in this system, it is mainly to count or keep track of the records. Detailed information from the records cannot be obtained from the computer. An automated system is one in which the computer, the major source of information, is the most feasible way to count and store records and the way most calculations are made.

### Step 6

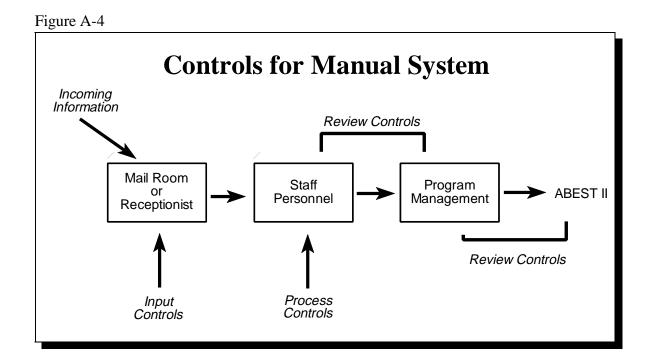
The auditor will determine whether adequate controls over performance measure data exist to ensure consistent reporting of accurate information.

### **Controls for a Manual System**

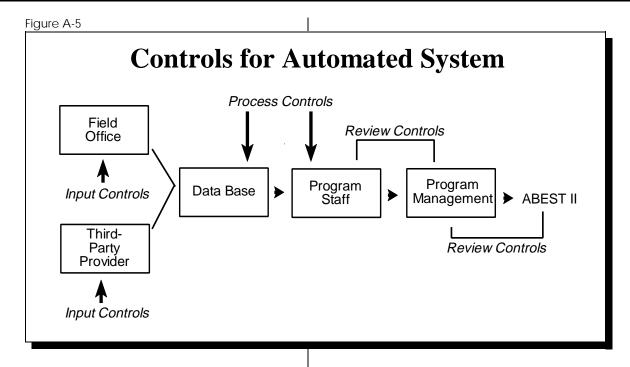
Almost all performance measures at universities and health-related institutions use automated systems. However, manual systems are used for certain components of most measures. The auditor will determine whether the necessary controls exist at each point in the data flow. Controls will be reviewed from the initial point that performance information is recorded until the accumulated measure information is entered into ABEST II. Figure A-4 illustrates areas where controls should be placed in a manual system. Listed below are the major areas that the auditor will examine to ensure some type of control structure exists in a manual system. The controls listed are some examples that have been used in many performance measurement systems. Each agency (or university or health-related institution) and performance measurement system is different and may need greater, fewer, or different controls to be effective.

### **Input Controls**

- The initial point that performance information is recorded should have written intake procedures and guidelines. Personnel should be trained on these procedures to ensure that they have a uniform understanding of what information is sought.
- Information gathered at the initial point that performance information is recorded (e.g., applications, forms, telephone complaints) should be date stamped or logged when received.
- A regular review of intake information should be conducted.



Texas State Auditor's Office, Methodology Manual



### **Process Controls**

 Written procedures for collecting and calculating the information should exist.
 Personnel should be trained on these procedures.

#### **Review Controls**

- A review of the measure calculations and summary documents should occur before performance information is reported.
- Information input into ABEST II should be reviewed by the person responsible for the accuracy of the data before the ABEST II submission is "completed."

Agency Example:

The event that is counted for the measure "number of applications processed" is the closing of an application by the agency. The agency should have written procedures detailing (INPUT

CONTROLS) who should open the applications received through the mail, what should be done to the applications upon receipt (i.e., date stamped, entered into a computer, etc.) (PROCESS CONTROLS), procedures detailing the steps taken to process an application, and what should be done with the application after it is closed (i.e., forward application to closed document file) (REVIEW CONTROLS), who is responsible for this process, and at what frequency reviews are to be performed.

## **Controls for an Automated System with Available Source Documentation**

If reported performance information is kept on an automated system and source documents are available for review, the auditor will determine whether the necessary controls exist at each point in

the data flow. An automated system is one in which the computer is the major source of information and is also the major source of calculations.

Controls will be reviewed from the initial event that begins the performance measure until the accumulated measure information is entered into ABEST II. Figure A-5 illustrates some areas where controls should be placed in an automated system. The auditor will examine the major areas listed below to ensure that an adequate internal control structure exists for each measure. The controls listed are some examples that have been used in various performance measurement systems. Each agency (or university or health-related institution) and

### **Trouble Shooting Tips**

- Internal control procedures should be documented.
- Evidence should exist to prove that reviews were conducted (i.e., initial/ date of the review).

performance measurement system is unique and may need greater, fewer, or different controls to be effective.

### **Input Controls**

- Input controls should be in place for data entry.
- Guidelines and procedures for data entry should be well documented.
  - Data entry personnel should be trained on which information to enter, how to enter the information, and the importance of accuracy.

- Information entered into the computer system should be reviewed by the data entry supervisor for accuracy.
- Controls should exist over third-party sources of information.
  - Agencies, universities, and healthrelated institutions should obtain written documentation of third-party controls when possible.
  - If the third party has no controls, the agency, university, or health-related institution should conduct necessary inquiries for assurance that the information received is accurate.

### **Process Controls**

- The person responsible for calculating the performance data should understand the origin of the information and stay current with any changes in the form of the information.
- Procedures should be in place to ensure that the computer program used to calculate any portion of the performance data is capturing the correct information and is performing the correct mathematical calculations.

### **Review Controls**

- The central office, university, or healthrelated institution should conduct periodic reviews of information submitted by field offices and third parties.
- A registrar or manager should review calculation of the performance data to ensure that the calculation is consistent with the measure definition and to check for mathematical errors.

### **Guide to Performance Measurement**

- Audits of the performance information conducted by the agency, university, or health-related institution are considered excellent controls. However, if audits are the only controls in place and they are not completed before the information is submitted to ABEST II, then the audit alone is not enough to satisfy the control requirements for certification.
- Information entered into ABEST II should be reviewed by the person responsible for reporting the measure data before the ABEST II submission is "completed."

If a number of performance measures come from the same data base, the following additional areas will be reviewed to better acquaint the auditor with the operations of the data base:

- data base security
- software/hardware controls
- data access controls
- data completeness controls
- data backup controls
- data output controls
- program and application maintenance

Example:

University This example includes the processes used to generate the number of undergraduate degrees awarded for a combined automated and manual system. This is an example that contains some ideas for a control structure surrounding this particular measure. The event that is counted for the measure "number of undergraduate degrees awarded" is the number of baccalaureate degrees awarded during the fiscal year. This process includes the submission of student grades and degree plan checks.

### **Input Controls**

Listed below are several input controls to help ensure the accuracy of the incoming data.

The university should have written procedures detailing who should submit grades to the registrar, how they are submitted, and reviews that are conducted to ensure that grades submitted are those entered into the system.

Another control is a second review of Scantron sheets containing student grades. This can be accomplished by a second machine reviewing grades that are recorded on Scantron sheets by professors.

### **Process Controls**

The following are examples of controls used to ensure that the data for the number of undergraduate degrees awarded is captured correctly.

Written procedures detailing the steps taken to process an application for graduation should exist.

The student information system does a comparison check of the grades provided by the two Scantron machines to ensure that they are consistent.

The student information system in the Registrar's Office compares the degree plan with the student's transcript to determine if all university requirements have been met for graduation.

A checklist is printed by the system for each student applying for graduation

with remaining degree requirements listed. At the end of the term, final grades are posted to degree plans in the system.

After all requirements have been met for graduation and all reviews have been conducted (all review controls have been implemented), flags are set on the student summary screen to indicate that requirements are met, and a degree is issued.

#### **Review Controls**

Review controls are the final check to ensure that the data is accurate. The following are examples of review controls.

Written guidelines should detail who is responsible for reviews and at what frequency reviews are to be performed.

The checklist (generated in process controls) is reviewed, signed and dated by the Registrar's Office staff person checking the student for graduation.

The Registrar's Office student information system compares each degree plan, final grades, and checklist to determine if all graduation requirements are met.

After performance data has been entered into ABEST II, it should be reviewed before the information is "completed."

The following example includes a combination of manual and automated controls for **health-related institutions**:

Example:

The event that is counted for the measure "total gross charges for unsponsored charity care provided by faculty" is the amount of charity care provided by faculty for financially indigent and medically indigent patients. It shall not include contractual adjustments to commercial contracts and Medicare, and it shall not include bad debts.

Input Controls Example: The hospital should have written guidelines detailing procedures and criteria for patients being categorized as financially or medically indigent. The criteria should include a table or methodology for determining financially indigent status and medically indigent status.

Procedures should include forms to be completed by patients and calculation worksheets for computing the charity care amount.

Data entry personnel at the affiliated hospital should be trained to enter the correct charity care information into the hospital's computer system.

The health-related institution should obtain documentation of the procedures and criteria used by the hospital for determining medically indigent status.

The health-related institution should periodically conduct audits of the affiliated hospital's determination of charity care to ensure reliability.

Process Controls Example:

Written procedures should detail the steps taken to compute the "total gross charges for unsponsored charity care provided by faculty."

The patients' indigent status and amount of charity care in the affiliated hospital's computer system is usually provided to the health-related institution on electronic tape (where the affiliated hospital is not owned by the healthrelated institution). The person using the electronic tape information to calculate the charges for unsponsored charity care should understand the exact form of the data on the tape. The person calculating the charges should also understand the measure definition and ensure that the information computed is consistent with the definition.

Review Controls Example: Written guidelines should describe who is responsible for the review process, the frequency of reviews, and the steps of the review to be conducted.

Reviews of the information received from the hospital and reviews of the calculation should be conducted.

Audits of patient information kept at the affiliated hospital should be conducted periodically to ensure that patients are categorized correctly.

## Controls for an Automated System with Limited or No Available Source Documentation

If the reported performance information is kept on an automated system and source documentation is limited or not available for review, the auditor will determine whether the necessary controls exist at each point in the data flow. "Source documents limited or not available" means that a great deal of the system is paperless and, as part of this system, documents are not kept or are kept only in a limited form. Controls will be reviewed from the initial event that begins the performance measure until the accumulated measure information is entered into ABEST II.

This review becomes more important because controls become the major factor when assigning a certification category. Controls required for this environment are the same input, process, and review controls listed in the previous section. The auditor will also review the controls for the data base. Additionally, a computerized audit trail showing all changes made to the records must exist in order to proceed with the certification process.

### Step 7

The auditor will obtain a list of items to be sampled.

The auditor will request a list that contains all instances of the performance being measured for the reporting period. A data base should be capable of producing a list of all items counted for a particular measure for the current or a previous reporting period. There must be a traceable link between the total number reported to ABEST II and the total of the individual items that make up that number. If these items are numerous, the agency, university, or health-related institution may be asked to write a program to select a random subset of the records from which the auditor can choose a sample.

### Step 8

The auditor will choose a sample.

If controls appear to be adequate, an attribute sample

### **Trouble Shooting Tips**

If data bases write over existing information, supporting information should be archived to document information reported during the reporting period. Examples of ways to store this data are:

- electronic tapes
- microfilm/microfiche
- paper files

of 22 will be chosen from the list obtained in step 7. If one exception (error) is noted, the sample is expanded to 52. If controls appear to be inadequate, a sample of 52 will be chosen. If more than two exceptions are noted in a sample size of 52, the control procedure is not in place; therefore, the measure will be considered inaccurate.

### Step 9

The auditor will test the source documentation for accuracy.

Adequate source documentation should be available for testing. Adequate source documentation consists of the following:

- documents that support the number reported to ABEST II and
- documents that are associated with the events that prove the activity occurred

Source documents kept in remote locations, field offices, or third-party sources will be obtained for

review. This will be accomplished by having the documents shipped in, having the responses faxed to the auditor, or having the auditor go to the source documents.

It is possible that during the course of an audit, auditors will need to view documents that are considered confidential by the agency, university, or health-related institution. SAO working papers are not subject to the Open Records Act as noted in Government Code, Chapter 552.116. Additionally, the SAO has the authority to view all documents necessary to complete an audit as noted in the State Auditor's enabling legislation, Government Code, Chapter 321.013(e).

If source documentation is not available, controls will be tested using current data. Unavailable source documentation means that the system tracking the performance measure does not start from a document or produce source documents. It does not mean that the documents were available and destroyed. Testing controls means that the current fiscal year's data will be used to ensure that the controls work properly. This gives the auditor confidence that the fiscal year's information being audited was collected using the same controls. If the controls and calculations are verified, this type of measure would be "certified."

#### Step 10

Finally, the auditor will determine the certification

### **Trouble Shooting Tips**

- Determine the location of the source documents for all of the measures.
- Source documents need to prove that the activity was performed.
- Inform field offices or third-party sources that documentation may be required to support the information reported.

category for each performance measure.

Measures are designated as either "certified," "certified with qualification," "factors prevented certification," "inaccurate," or "not applicable." These categories are assigned based on a combination of the adequacy of the controls over a measure and the results of testing a sample of source documents. Following are explanations of the five certification categories used in the certification process.

- A measure is certified if reported performance is accurate within +/- five percent and if it appears that controls to ensure accuracy are in place for collecting and reporting performance data.
- A measure is certified with qualification (CQ) when reported performance appears accurate but the controls over data collection and reporting are not adequate to ensure continued accuracy. A measure is also certified with qualification when controls are strong, but source documentation is unavailable for testing. A measure is also certified with qualification if agency, university, or health-related institution calculation of performance deviated from the measure definition but caused a less than five percent difference between the number reported to ABEST II and the correct performance measure result. Findings may be issued for these measures if qualifications are significant.
- Factors prevented certification (FPC) is given if documentation is unavailable and controls are not adequate to ensure accuracy. Factors prevented certification is also given when there is a deviation from the measure definition and the auditor cannot determine the correct performance measure result. Findings are issued for these measures.
- A measure is inaccurate when the actual performance is not within five percent of reported performance, or there is a greater than five percent error in the sample of

- documentation tested. A measure is also inaccurate if the agency, university, or health-related institution calculation of performance deviated from the measure definition which caused a greater than five percent difference between the number reported to ABEST II and the correct performance measure result. Findings are issued for these measures when a complex or system-wide problem exists.
- Certification for a measure is not applicable
  when performance is justifiably not reported for
  a given year. This category is rarely used. A
  measure is usually put into this category if it is
  new and information is not yet available for
  reporting.

Results of the performance measures audit are published in a public report to be used by the LBB, GOBP, and the Legislature. These results are presented in a matrix. The matrix contains the reference for the related objective or strategy, measure name, classification of measure, results reported in ABEST II, certification results, and comments. These comments detail the reason a measure is not certified. The comments do not have a published management's response; however, the auditors will entertain any suggestions the agency has in relation to the factual accuracy of the comments. Findings and agency, university, or health-related institution responses will be published following the agency, university, or health-related institution's matrix.

### How do other related reviews affect the performance measures certification audit?

Reviews conducted prior to the certification audit are useful and will be used as they are applicable. If an internal audit review has been conducted, the

working papers and supporting documentation will be reviewed, and additional work will be done as needed. If external audit work has been conducted, audit reports will be relied upon to the extent they are relevant.

### Glossary

**ABEST II** The Automated Budget and Evaluation System of Texas. The system contains data on

> performance measures, including measure definition, classification (output, outcome, etc.), targeted and actual performance, and explanation of variances greater than five percent between targeted and actual performance. Most performance data is entered by

state entities directly into ABEST II.

Certification

Audit

A review by the State Auditor's Office to determine the accuracy of a state entity's

reported performance data.

**Control System** See Internal Control System.

**Cumulative** A measure for which one quarter's performance can be added to a previous quarter's performance to obtain year-to-date performance; otherwise, a measure is non-Measure

cumulative.

**Efficiency** A quantified indicator of productivity expressed in unit costs, units of time, or other

Measure ratio-based unit.

**Explanatory** Measure

A quantifiable indicator of factors which affects a state entity's performance.

Goal A general end toward which a state entity directs its effort.

**Input Controls** Processes developed by a state entity to provide reasonable assurance that the data

introduced into the performance measurement system is accurate.

**Input Measure** A quantifiable indicator of the resources used by a state agency to produce its goods or

services.

**Internal Control** 

**System** 

All procedures developed by state entities to ensure the accuracy of reported data,

including input controls, process controls, and review controls.

Non-Cumulative

Measure

A measure which, in order to determine year-to-date performance, must be calculated for the entire reporting period and not on the basis of adding together the performance

from separate reporting periods.

Outcome Measure A quantifiable indicator of the public benefits from a state entity's actions.

**Output Measure** 

A quantifiable indicator of a state entity's goods or services produced.

Performance Measure A quantifiable indicator of state entity achievement that includes the specific types:

outcome, output, efficiency, and explanatory/input.

Performance Measure Definition A description of a performance measure that includes: 1) what the measure is intended to indicate and why this is significant, 2) where the data comes from and how it is collected, 3) how the measure is calculated, 4) any limitations about the data, and 5)

whether the data is cumulative or non-cumulative.

Performance Variance The difference between actual entity performance during a time period and the performance targeted for that measure by the General Appropriations Act.

**Process Controls** 

Mechanisms developed by a state entity to provide reasonable assurance that its performance measurement system uses the appropriate information and follows

procedures established for calculation of each measure.

**Review Controls** 

Procedures developed by a state entity to verify that an activity occurred to provide

reasonable assurance that accurate data is reported.

**Source** 

**Documentation** 

Materials maintained by a state entity to substantiate the accuracy of reported

performance data.

Strategic Planning

A long-term, iterative, and future-oriented process of information gathering, goal

setting, priority determination, and decision-making.

Strategic Planning and Budgeting System A system of goal-driven, results-oriented management in which funding and other decisions are based on what an organization is accomplishing, rather than what the

organization is doing.

**Strategy** A method by which a state entity seeks to accomplish its goals.

Target An expected level of performance established for a particular performance measure by

the Legislature in the General Appropriations Act.

### Ideal Performance Measurement System

Controls are an important part of a performance measurement system. The purpose of controls is to ensure that accurate data will be continually reported. In an ideal world, each agency would have all of the following controls surrounding each of their performance measures. The following are the controls for a performance measurement system that the SAO believes would ensure performance data is reported accurately and efficiently.

Controls are related to the numbers next to the boxes on the chart in Figure A-6. The chart is broken into three major sections: *input controls*, numbers 1 through 3; *process controls*, numbers 4 and 5; and *review controls*, numbers 6 through 9.

### **Input Controls**

### **Number 1 - Field Offices**

The field offices have the following controls:

- Guidelines and procedures for data entry are developed and consistently used.
- Data entry personnel are trained on which information to enter, how to enter the information, and the importance of accuracy. Additionally, it often increases accuracy if the personnel are told how the information is being used and that this information could ultimately affect agency funding.
- Information received through the mail or by telephone (e.g., applications, forms, telephone complaints) is date stamped or logged when received.

• Information entered into the computer system is reviewed by the data entry supervisor for accuracy.

### **Number 2 - Third-Party Sources**

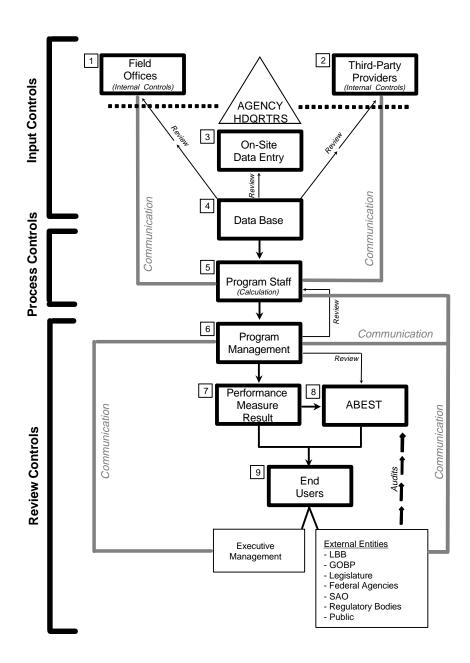
The third-party sources of information have all of the controls listed under agency controls. Additionally, the agency should perform the following activities to ensure that it is receiving accurate information:

- The agency should obtain written documentation of the control structure from third-party providers.
- The agency should conduct inquiries concerning the third-party provider's operations to ensure that the information received is accurate.
- The agency should institute any type of joint control structure necessary to verify controls.
   For example, the agency could be on the mailing list as a client of the third party to ensure that services are being provided as contracted.

### Number 3 - On-Site Entry

The on-site data entry personnel should implement the same controls as listed for the field offices. Measure Types, Utilization, and Examples

Figure A-6



#### **Process Controls**

### Number 4 - Data Base

The data base should contain elements of both input and process control structures. The input control that should surround the data base is:

 The main office should conduct a periodic review for accuracy of information coming into the data base from the field offices, third-party providers, and on-site data entry personnel.

The process controls that should surround the data base include the following:

- The computer program used to calculate any portion of the performance data should be reviewed to ensure it is capturing the correct information.
- The data base should have all of the basic computer controls such as edit checks, logic checks, edit totals, access controls, etc.

### **Number 5 - Program Staff**

Program staff in this model are the people who are responsible for collecting and calculating the performance measure information. These staff members (or program management depending on agency organization) should be communicating with the field-offices, third-party providers, and on-site data entry personnel to express the importance of receiving accurate data and to inform the personnel of how they are using the data. The following are the controls that apply to the program staff:

• The personnel should understand the origin of the information and stay current with any changes in the form of the information. For example, a measure is

tracking the number of complaints resolved per 100 complaints received. The program staff should determine if the computer divides the initial inputs or if the staff needs to do it manually.

 Written procedures for collecting and calculating the information should exist.
 Personnel should be trained on these procedures.

#### **Review Controls**

### **Number 6 - Program Management**

Program management are the people who are the supervisors of the program staff. The managers should communicate results to executive management and end users. Communication with executive management should occur to ensure that information they want measured is being measured or is capable of being measured. The following is the review control that should be performed by managers:

 A manager should review calculation of the performance data to ensure that the calculation is consistent with the measure definition and to check for mathematical errors.

### **Number 7 - Performance Measure Results**

These are the final numbers for the performance measure. These numbers are input into ABEST II and used by executive management to make decisions concerning the organization. Audits of the performance information conducted by the agency are considered excellent controls. However, if audits are the only controls in place and they are not completed before the information is submitted to ABEST II, then the audit alone is not enough to satisfy the control requirements for certification.

#### Number 8 - ABEST II

ABEST II is the final destination of the performance measurement data. ABEST II allows performance data to be used and accessed by external parties. Management should ensure that information input into ABEST II is reviewed for accuracy before the ABEST II submission is "completed."

#### Number 9 - End Users

Anyone who is not directly involved with the production of the measure is considered an end user. Executive management's role in performance measurement controls is to ensure that the organization has an adequate and functional control structure. Other outside entities such as the LBB, SAO, and Federal Government will monitor and audit the performance measurement results.

### **Executive Check List for Good Performance Measures**

The following is a check list that can be used as a quick reference to determine if each of the following areas have been considered for each performance measure. If the answer to any of these questions is "no," then this is an area that needs to be investigated and addressed by agency, university, or health-related institution personnel for each measure.

| Test  | Yes | No |
|---|-----|----|
| Does the performance measure meet the criteria for a good performance measure?              |     |    |
| Do the summary document totals support the number reported to ABEST II?                     |     |    |
| Does the measure definition contain the elements of a complete measure definition?          |     |    |
| Is the measure definition methodology followed to calculate the performance measure result? |     |    |
| Does the measure have the appropriate input controls?                                       |     |    |
| Does the measure have the appropriate process controls?                                     |     |    |
| Does the measure have the appropriate review controls?                                      |     |    |
| Are there source documents to support the number reported to ABEST II?                      |     |    |

### Types of Measures, with Examples

| Type                  | Measure  | Examples   |
|-----------------------|--|--|
| Outcome               | measures the actual impact<br>or public benefit of an<br>agency, university, or<br>institution's actions                                 | AGENCIES - percentage of clients rehabilitated - percentage of entities in compliance with requirements - percentage of licensees with validated complaints UNIVERSITIES  HEALTH-RELATED INSTITUTIONS - total number of graduates going into a family practice |
| Output                | counts the goods and<br>services produced by an<br>agency, university, or<br>institution (workload)                                      | residency  AGENCIES - number of clients served - number of inspections conducted - number of license applications processed UNIVERSITIES  HEALTH-RELATED INSTITUTIONS - total number of graduates  |
| Efficiency            | measures the cost, unit cost, or productivity associated with a given outcome or output  | - total number of minority graduations  AGENCIES - average cost per client served - average cost per inspection - average time to process license applications UNIVERSITIES AND HEALTH-RELATED INSTITUTIONS - space utilization rate of classrooms             |
| Explanatory/<br>Input | shows the resources used to<br>produce services and<br>displays factors that affect<br>agency, university, or<br>institution performance | AGENCIES - number of clients eligible for services - number of entities subject to inspection or regulation - number of license applications received UNIVERSITIES  HEALTH-RELATED INSTITUTIONS - total number of dental student admissions                    |

### **Utilization of Measure Categories**

| How a Measure is Used   | Key | Non-Key ABEST II | Non-Key Non-ABEST II |
|---|-----|------------------|----------------------|
| In Appropriations Request?  | Yes | Yes              | No                   |
| In General Appropriations Act?  | Yes | No               | No                   |
| In Operating Budget?  | Yes | Yes              | No                   |
| Reported Quarterly/Annually or Fall/Annually?                         | Yes | No               | No                   |
| Subject to Certification?   | Yes | No               | No                   |
| Used by Legislature?  | Yes | Intermittently   | No                   |
| Used by Budget Offices?   | Yes | Yes              | No                   |
| Used by Agency, University, or Health-related institution Management? | Yes | Yes              | Yes                  |

### Examples of Performance vs. Workload Measures

| Performance Measure (outcome)   | Workload Measure (output)   |
|---|---|
| Percentage of MHMR discharged patients who are successful in independent living | Number of MHMR patients who are treated and discharged                              |
| Incidence of low birth weight babies born in Texas                              | Number of women served by the Women, Infants and Children's Nutrition (WIC) program |
| Percentage of students exiting bilingual/ESL programs successfully              | Number of students participating in bilingual/ESL programs                          |
| Release and generation of solid waste in Texas as a percent of 1987 levels      | Number of solid waste permits issued in Texas                                       |

Note: At the beginning of strategic planning, outcome measures constructed as "percentage change" were encouraged; outcome measures constructed as "percentage performance" are now preferred.

### Calendar of Performance Measurement Events May 1995 - December 1997

| Year | Month  | Strategic Planning  | Performance Budgeting  | Performance Monitoring  |
|------|--------|---|--|---|
| 1995 | May    |   | FY 1996-1997 General<br>Appropriations Act enacted   | Targets set for FY 1996 and 1997  |
|      | June   | Agencies, universities, and institutions begin preliminary strategic planning efforts | Agencies, universities, and institutions plan for budget implementation  |   |
|      | July   |   |  | 3rd Qtr, FY 1995 Report due<br>(ABEST II) (agencies only)                 |
|      | August | Guide to Performance<br>Measurement issued  |  |   |
|      |        | FY 1996   | FY 1996-1997 BIENNIUM BEGINS   |   |
|      | Sept.  |   | LBB and GOBP issue FY 1996 operating budget instructions for agencies. Universities and institutions submit operating budgets for FY 1996. |   |
|      | Oct.   | LBB and GOBP issue instructions for strategic planning                                |  | FY 1995 Annual Report due<br>(ABEST II) (Agencies only)                   |
|      | Nov.   | Biennial Performance<br>Measurement Conference  | Agencies submit operating<br>budgets for FY 1996   | FY 1995 Annual Report due (ABEST II) (Universities and Institutions only) |
|      | Dec.   |   |  |   |
| 1996 | Jan.   | GOBP and LBB issue<br>Strategic Goals for Functional<br>Areas                         |  | 1st Qtr, FY 1996 Report due<br>(ABEST II) (Agencies only)                 |
|      | Feb.   |   |  |   |

| Year | Month  | Strategic Planning   | Performance Budgeting  | Performance Monitoring   |
|------|--------|--|--|--|
| 1996 | March  |  | LBB and GOBP issue Request<br>for Legislative Appropriations<br>instructions           | Fall Semester, FY 1996<br>Report due (ABEST II)<br>(Universities and institutions<br>only) |
|      | April  | Agencies, universities and institutions propose changes to structures/measures |  | 2nd Qtr, FY 1996 Report<br>due (ABEST II) (Agencies<br>only)                               |
|      | May    |  |  |  |
|      | June   | Agencies, universities, and institutions submit strategic plans                |  |  |
|      | July   |  | Agencies submit Requests for<br>Legislative Appropriations                             | 3rd Qtr, FY 1996 Report due<br>(ABEST II) (Agencies<br>only)                               |
|      | August |  | Joint Budget Hearings begin  |  |
|      | Sept.  |  | Universities and Health-Related<br>Institutions submit operating<br>budget for FY 1997 |  |
|      | Oct.   |  |  | FY 1996 Annual Report due (ABEST II)   |
|      | Nov.   |  |  |  |
|      | Dec.   |  |  |  |
| 1997 | Jan.   |  | 75th Legislature begins  | 1st Qtr, FY 1997 Report due<br>(ABEST II) (Agencies<br>only)                               |
|      | Feb.   |  |  |  |

| Year | Month  | Strategic Planning  | Performance Budgeting   | Performance Monitoring  |
|------|--------|---|---|---|
| 1997 | March  |   |   | Fall Semester, FY 97 Report<br>due (ABEST II) (Universities<br>and Health-Related<br>Institutions only) |
|      | April  |   |   | 2nd Qtr, FY 1997 Report due (ABEST II) (Agencies only)  |
|      | May    |   | FY 1998-1999 General<br>Appropriations Act enacted  | Targets set for FY 1998 and 1999  |
|      | June   | Agencies, universities, and institutions begin preliminary strategic planning efforts | Agencies, universities, and institutions plan for budget implementation   |   |
|      | July   |   |   | 3rd Qtr, FY 1997 Report due (ABEST II) (Agencies only)  |
|      | August | Guide to Performance<br>Measurement, 2nd<br>Edition issued                            |   |   |
|      |        | FY 1996   | FY 1996-1997 BIENNIUM ENDS  |   |
|      | Sept.  |   | LBB and GOBP issue instructions for FY 1998 operating budget- Agencies. Universities and institutions submit operating budgets for FY 1998. |   |
|      | Oct.   | LBB and GOBP issue instructions for strategic planning                                |   | FY 1997 Annual Report due (ABEST II) (Agencies only)  |
|      | Nov.   |   | Agencies submit operating<br>budgets for FY 1998  | FY 97 Annual report due (ABEST II) (Universities and institutions)                                      |
|      | Dec.   |   |   |   |

| Appendix A                  |             |
|-----------------------------|-------------|
| <b>Guide to Performance</b> | Measurement |

**Accountability Modules**