PERFORMANCE INDICATORS FOR GPRA: INITIAL ASSESSMENT OF HRSA PROGRAMS FINAL REPORT

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Prepared by:

Lewin-VHI, Inc.

Prepared for:

***The* Health Resources and Services Administration**

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EXECUTIVE SUMMARY

A STRATEGY TO PREPARE HRSA TO MEET REQUIREMENTS OF THE GOVERNMENT PERFORMANCE AND RESULTS ACT IS BASED ON ADDRESSING BASIC PERFORMANCE QUESTIONS

In recent years, a variety of economic and political forces have produced increased emphasis on greater effectiveness, efficiency and accountability, in both the private and public sectors. Many private-sector companies have restructured themselves, focusing on increased attention to the needs and desires of their customers, discovering ways to "re-engineer" their operations and administrative processes to save time and cut costs, and in the process shedding operations, organizational elements and staff that do not add value to their rediscovered core businesses or strategic objectives.

In the public sector, these activities have become known under the general description of reinventing government, which includes a number of legislative and executive initiatives. The specific initiative which gave rise to this study is the Government Performance and Results Act (GPRA) of 1993, that requires each agency to develop comprehensive strategic plans, annual performance plans that set specific performance goals for each program activity, and to report annually on the actual performance achieved compared to the performance goals.

To prepare for the near term and future responsibilities under GPRA, the Health Resources and Services Administration (HRSA) engaged Lewin-VHI to assess HRSA's ability to develop and implement a system of performance measurement and management. The specific objective of the project was to provide HRSA management with information about the:

- Current status of the development of performance indicators in the four HRSA bureaus and the Office of Rural Health Policy;
- Adequacy of data and data sources for applying the indicators; and
- Potential for individual Bureau or program efforts to support initiatives (e.g., strategic planning, aggregated indicator development, data strategies) that respond to the strategic objectives of HRSA as a whole, objectives that cut across the boundaries of the formal HRSA program and organizational structure.

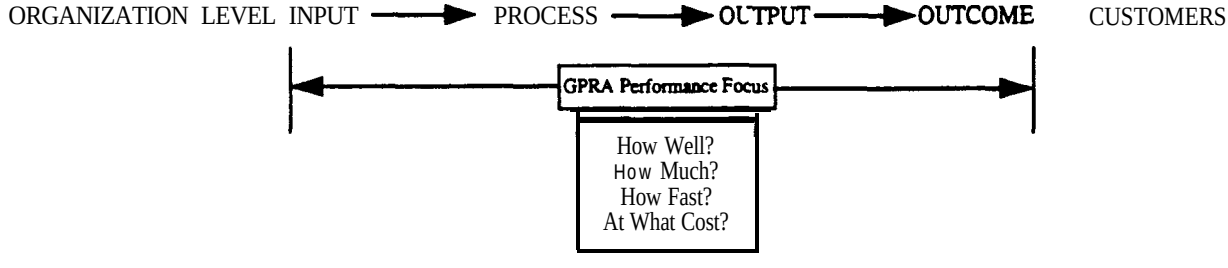
We focused our assessment on answering what we consider to be the central assessment question of organizational performance:

> *Can this organization, with a given set of resources, through a series of actions and **decisions**, produce outputs that have the desired **effects** and outcomes for the intended audience or beneficiaries?*

Exhibit 1 depicts its components.

Exhibit 1
The Essential Performance Question

Can *this [organization]*...	...*with these resources*...	...*through these actions, processes and decisions*...	...*yielding these products*...	...*have these effects*...	...*for these people?*
Department Agency Bureau **Program** Activity	Legislative Authority Budget Authority Staff Equipment Supplies Information and Data Systems	Data Collection Research/Analysis Problem/Needs Assessment Methods Development Standard Setting Grant-making Contract Awards Program Coordination	Service Delivery Training Technical Assistance Demonstrations/ Experiments Knowledge/ Awareness Skill/Capacity **Guidelines**	**Access to Care** improved Utilization Improved Quality of Life Lower Mortality/ Morbidity **Increased** Life **Expectancy** Improved Health **Status**	**- Vulnerable Populations** **- Medically Underserved** - Persons in Border **Communities** **- Persons with** HIV/AIDS - Homeless Persons **- Others**



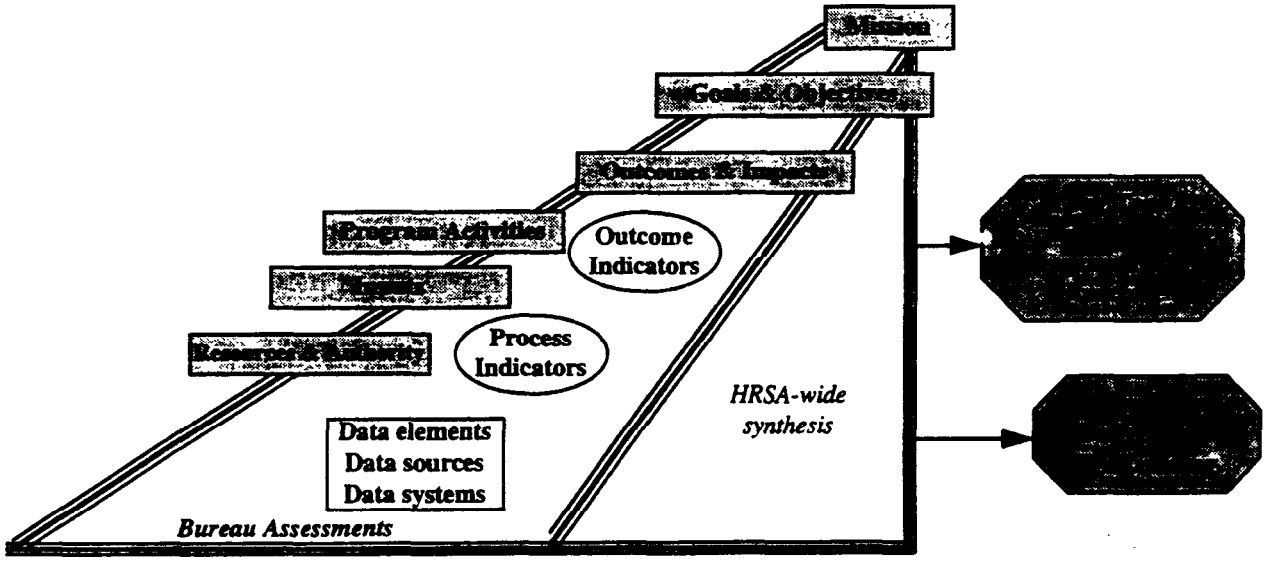
From our experience, we have found that the question is appropriate independent of the organizational level to which it is addressed, i.e., it can be used to assess the **performance** of program elements or activities, programs, and the formal organizations in which the programs reside. At each level, the answers are not a simple yes or no, but rather should address the performance dimensions of effectiveness and quality (how well), quantity (how much), timeliness (how fast), and efficiency (at what cost). GPRA and our findings and recommendations of necessity **emphasize** developing the ***analytic* components** of a performance management system to answer this question in the short term. However, the *behavioral aspects* of the organizational change associated with this new approach are in some respects even more important to develop if this change is to be sustained over time.

To be successful in demonstrating the effectiveness of both its individual programs and its overall value as an agency of government, HRSA must combine both the technical ability to explicitly manage and measure performance, and the discipline, motivation and leadership to first undertake this change, and then reinforce, encourage and sustain it when the inevitable difficulties in implementation arise. In short, HRSA, as do all agencies facing the demands of the new environment, must integrate the *skill* to change with the ***will*** to change. This is the challenge facing the leadership of HRSA.

THE ASSESSMENT INVOLVED ACTIVE PARTICIPATION OF THE OFFICE OF PLANNING AND EVALUATION AND THE FOUR BUREAUS AND OFFICE OF RURALHEALTH

As shown in Exhibit 2, the tasks in the assessment were designed to provide a HRSA-wide synthesis based on the individual budget line items.

Exhibit 2
The Overall Assessment Approach



The project consisted of the following tasks:

- **Preliminary Design Activities. This** phase involved a review of the literature, background research, and meetings with the Project Officer, other OPEL staff, external experts, and liaisons in each HRSA Bureau and the Office of Rural Health Policy (ORHP). We also conducted a presentation and discussion with the HRSA leadership at their Bureau Director's meeting.

- **Data Collection and Analysis.** We focused our data collection on the FY 19% budget line items in each of the four HRSA Bureaus and the ORHP. Working with each of the identified liaisons in these units, Lewin-VHI teams developed specific

plans for the data collection effort. An interview protocol was prepared to guide discussion and provide a common framework for the effort.

We used the interview protocol to elicit information about the program's objectives and purposes, its relationship to the budget, the program inputs, processes outputs, outcomes, impacts and the linkages between them, data collected and used, and the current use of performance measures and indicators. In addition, a wide variety of program materials were collected and reviewed to complete the assessments. The draft assessments were shared with the respective Bureaus/Offices to ensure that the information was complete and accurate. The feedback process also served as an important step in better defining technical assistance needs.

A key to the assessments was to make the rationale, structure and division of labor of each program explicit in a program logic model, i.e., a representation of the interactions and relationships among a program's objectives; the flow of inputs, activities, outputs, outcomes and impacts required to achieve the objectives. This approach allows one to distinguish activities at the Federal level from the effort that occurs at other levels, such as state and local governments, educational institutions, or service providers.

- **Analysis and Synthesis of Findings. The** information from the interviews and background research was compiled into assessments of the program clusters/programs/budget line items, as appropriate; summary assessments for each cluster/bureau/office; and matrices which provide a preliminary synthesis of HRSA-wide findings.

- **Final Report and Technical Assistance Plan. This final** report includes the findings of our assessment and a technical assistance plan that identifies what is needed to further assist HRSA, its Bureaus and Offices in developing and implementing the HRSA performance system.

RESULTS OF THE ASSESSMENT HIGHLIGHTS COMMONALITIES IN CURRENT HRSA PERFORMANCE EFFORTS AND TARGET AREAS FOR POTENTIAL IMPROVEMENT

- Review **of Performance Measurement Efforts and Status of Current HRSA Programs Provide a Basis for Shaping a HRSA-wide Effort**

  0 Although HRSA programs have multiple objectives, target diverse populations, and use different organizations to carry out a wide variety of activities, we find that it is both feasible and desirable to use a standard approach to measuring the performance of HRSA programs.

- Many of the budget line items have made substantial progress in identifying and specifying the necessary components of a performance management system. However, our assessment also indicates that there is a wide variance across HRSA programs/clusters in the current status of their performance measurement efforts. Within most programs, there is inadequate linkage along the continuum of performance measurement; in general programs emphasize producing outputs rather than evaluating program performance or outcomes.

- Staff are aware of the need to systematically address performance measurement but require both management reinforcement of its importance and technical assistance in developing and implementing a system to do so.

- **HRSA Data and Data Sources Are Not Currently Sufficient to Meet the Requirements for Performance Measurement**

  - Data are not treated as strategic HRSA resources. The approach to specification, collection, and use of data varies widely from program to program.

  - Programs face a potential conflict in government policy regarding collecting essential performance measurement information that should be addressed comprehensively at the HRSA level rather than on a program-by-program basis.

  - Resources for data collection and evaluation are not provided in the budget process and unit costs for these are not available.

- **Existing Efforts Have Not Linked HRSA-wide Strategic Priorities and Reinvention Efforts to Performance Measurement**

Our findings in this section are preliminary and based on the **individual** assessments of each program.

- Current HRSA programs support multiple and diverse populations, organizations, and activities.

- Recent efforts to conduct HRSA-wide strategic planning have been useful to prepare for GPRA implementation; however, the resulting strategic goals emphasize current program concerns rather than potential HRSA opportunities.

- HRSA programs are not currently linked to the budget process in the manner envisioned by GPRA.

DESIGN AND IMPLEMENTATION OF HRSA'S PERFORMANCE MANAGEMENT STRATEGY REQUIRES IMMEDIATE AND SUSTAINED COORDINATION, INVESTMENT, AND LEADERSHIP

Lewin-VHI's recommendations are intended to address two critical issues for HRSA and its Bureau/Office-based programs: the short-term issues resulting from current budget efforts and the longer term issues involved in improving HRSA's ability to address the fundamental performance question identified earlier.

Our recommendations are grounded in the concept of HRSA-wide *performance management*, which includes the measurement of individual program performance as an essential component, but extends *more* broadly to the management and performance of HRSA as a whole. This broader, agency-wide focus is clearly indicated by both the GPRA legislation itself and its implementing guidance from OMB, although the particulars of how program performance will be translated into agency performance are not specified. The objective of the HRSA performance management strategy should be to develop the supporting infrastructure and resources required to implement an effective system of managing HRSA-wide organizational performance.

Our recommendations are based on the research, interviews and discussion conducted as part of this initial assessment. Because of relatively limited time available for conducting the assessment, and the large number and wide variety of HRSA programs involved, our recommendations should be regarded as preliminary. We believe, however, that they are valid with respect to the overall direction and initial prioritization of the actions needed to develop an effective performance management strategy.

- **The Proposed Performance Measurement Strategy is Based Upon Underlying Principles and Assumptions about HRSA and its Programs**

Our assessment efforts identified several issues regarding HRSA as a whole that had the Potential to affect the development of performance management efforts at the Bureau, Office and program levels. Resolving these issues was not included within the scope of the initial assessment; however, an assumption about how they would be resolved was necessary to provide a clear direction for the performance management strategy. These assumptions provide guiding principles for refining the strategy in subsequent phases of the project. Briefly, these principles are as follows:

- HRSA's future vision and strategic planning efforts will emphasize a coordinated, interdependent system of health care resources rather than a disparate, independent collection of programs.

- The HRSA performance management strategy will be clearly linked to its strategic planning process.

0 Effective linkages between strategic planning, program activity and the budget process are essential to the ability of HRSA leadership to meaningfully develop and implement its strategic priorities.

0 The HRSA performance management strategy is evolutionary; it responds to the GPRA requirements that are most feasible to implement first, and will progressively adapt and incorporate others as they become available.

♦ **The Proposed HRSA Performance Management Strategy Requires Both Short and Long Term Actions**

The development of a HRSA performance management strategy is a complex process that requires both a short-term component to address more immediate needs and a longer-term component that focuses on the investment in measurement development and data systems that will support a vigorous and useful performance measurement system. Underlying both the short and long term strategies is the concern for how best to apply limited resources to the complex set of activities that will be required.

For purposes of this report, we are considering the short-term period to extend roughly from the present to the beginning of internal planning for the FY 1998 budget, i.e., from May/June 1995 until January/February 1996. Those actions which we recommend for the short-term are those we believe to be essential for HRSA to undertake and/or substantially complete to both respond to its immediate GPRA requirements and to prepare for full GPRA implementation in the FY 1998 budget. Our recommendations for longer-term development build on those actions begun or completed in the short-term, but will require more time to complete and fully implement the strategy.

♦ **Recommendations for the Short-Term Action Focus on the Need to Effectively Respond to GPRA and Department Requirements**

Next steps for the short-term include the establishment of priorities for action, development of appropriate organizational structures for conducting activities, linkages to other HRSA functions, and the necessary activities to move forward during this current budget planning cycle and prepare for the next one.

0 **Establish priorities for short term action on performance management We** recommend that these programs be selected based on current &liberations and preparations for the FY 1997 budget response.

0 **Identify HRSA focal point(s) for GPRA efforts.** A central coordinator should be established within the Office of Planning, Evaluation and Legislation to be responsible for the overall coordination of performance management efforts.

- **Establish intra-agency working groups to carry out specific design and implementation activities in a four areas:** Input and output measurement, outcome measurement, data collection and support strategies, and customer involvement.

- **Develop an evaluation strategy that supports resource investment in performance management efforts.**

- **Conduct technical assistance to bring all programs/Bureaus to specified minimum levels of performance management.**

- **Recommendations for the Long-Term Are Intended to Help HRSA Develop an Effective Management Infrastructure**

  - **Continue and refine the HRSP strategic planning process** The next round of HRSA strategic planning should be designed to coordinate the development of Bureau-specific plans with HRSA-wide and individual program planning efforts, and involve broader participation in an explicit process to identify HRSA-wide strategic priorities.

  - **Initial efforts to revise the structure of HRSA programs should continue and be expanded.** We recommend that an internally consistent, HRSA-wide approach to program structure should be developed to facilitate aggregating and comparing performance of individual programs and Bureaus, evaluating program performance in light of HRSA-wide strategic priorities, and succinctly communicating the overall performance of HRSA to HHS, OMB and the Congress.

  - **The HRSA performance management strategy should be linked to the budget process, evaluation efforts, information resource management, and grants and contract management.**

  - **HRSA should invest the information management resources sufficient to develop and sustain coordinated and cost-effective measurement and data collection strategies.**

  - **HRSA should systematically incorporate feedback and data from its "customers," i.e., its grantees and the populations served, into the design and management of its programs.**

- **Technical Assistance Will Be Necessary to Assist HRSA and Its Bureaus to Make the Transition into a GPRA Environment**

The technical assistance that we anticipate providing in the short-term falls into two categories: HRSA-wide and Bureau/Office/program specific. We expect that the focus for the HRSA-wide technical assistance will be the HRSA central GPRA focal point and the working

groups that we identified as part of our recommended short-term actions. Technical assistance to programs within the four Bureaus and the Office of Rural Health Policy will be tailored to the specific needs of each program, Bureau, and Office. These needs will be identified based on additional discussions with program staff about the specific findings of this report and our individual program assessments.

CHAPTER 1:
INTRODUCTION AND BACKGROUND TO STUDY

The Impetus for the Development of Performance Measurement is Based on the Requirements of the Government Performance and Results Act

In recent years, a variety of economic and political forces have produced increased emphasis on greater effectiveness, efficiency and accountability, in both the private and public sectors. Many private-sector companies have restructured themselves, focusing on increased attention to the needs and desires of their customers, discovering ways to "re-engineer" their operations and administrative processes to save time and cut costs, and in the process shedding operations, organizational elements and staff that do not add value to their rediscovered core businesses or strategic objectives.

In the public sector, these activities have become known under the general description of "reinventing government," after the title of a popular book by David Osborne and Theodore Gaebler. At the Federal level, reinventing government includes a number of specific legislative and executive initiatives:

- The National Performance Review (NPR), a government-wide effort led by Vice President Gore, aimed at streamlining the budget process, decentralizing personnel policy, revamping the procurement process, and eliminating unneeded layers of audit and regulatory review. The NPR has produced both broad recommendations and agency-specific implementation plans to accomplish these objectives;

- The Chief Financial Officers (CFO) Act of 1990, that mandates preparation of an Annual Financial Statement by each department and agency, incorporating efficiency and effectiveness indicators; Executive Order 12389, that requires each agency to set standards for customer service;

- Streamlining, a management effort to improve customer service and the efficiency of agency operations while reducing staffing to achieve the overall government-wide levels recommended by the NPR;

- Separately-negotiated performance agreements with specific agencies, most notably Defense; and

- The Government Performance and Results Act (GPRA) of 1993, that requires each agency to develop comprehensive strategic plans, annual performance plans that set specific performance goals for each program activity, and to report annually on the actual performance achieved compared to the performance goals.

The Health Resources and Services Administration has commissioned Lewin-VHI to assist HRSA as it prepares for its near-term and future responsibilities under GPRA. In so doing, HRSA is recognizing the length of time required to address the complex set of issues involved in developing and implementing a system for performance measurement tied to the budgetary process. Although GPRA does not begin to be fully implemented until FY 1998, recent discussions suggest that the process is likely to be accelerated and that *OMB will begin expecting* to see evidence related to these efforts. Concern with GPRA implementation has also been expressed by members of the House Appropriations Committee, who in recent hearings expressed interest in receiving information regarding HRSA's performance measurement efforts.

GPRA represents a government-wide effort, under the aegis of the Office of Management and Budget, to establish measurable goals of performance that can be reported as part of the budgetary process, thus linking funding decisions with performance. Its intent is to fundamentally change the way the "business" of government is perceived and carried out. The primary objectives of GPRA are to:

- Create a customer-driven government;
- Assure that Federal investments are linked to defined missions and strategic goals;
- Improve effectiveness and efficiency of Federal programs and spending;
- Focus on the relationship between program outputs and outcomes;
- Increase managerial accountability for results; and
- Improve the emphasis on quality and customer satisfaction

GPRA also identifies the fact that the current state-of-the-art is not sufficiently advanced to define highly specific guidances or regulations for implementation of its provisions. As a consequence, the law provides that a series of pilot tests be developed to provide knowledge regarding the issues involved in the implementation of a performance measurement system tied to the budgetary process. The pilot projects reflect the pragmatic, evolutionary development approach to implementing GPRA that is emphasized in both the law and the implementing guidance from OMB and HHS (HRSA's Bureau of Health Professions is currently engaged in a GPRA pilot program). It is recognized that GPRA implementation must be gradual, because there are no standard, widely-accepted definitions of key performance concepts such as output and outcome; that difficulties exist in measuring the performance of some activities (e.g., policy advice and leadership); and that there is a lack of data and supporting data systems readily available for use in the assessment of program effectiveness on a routine basis.

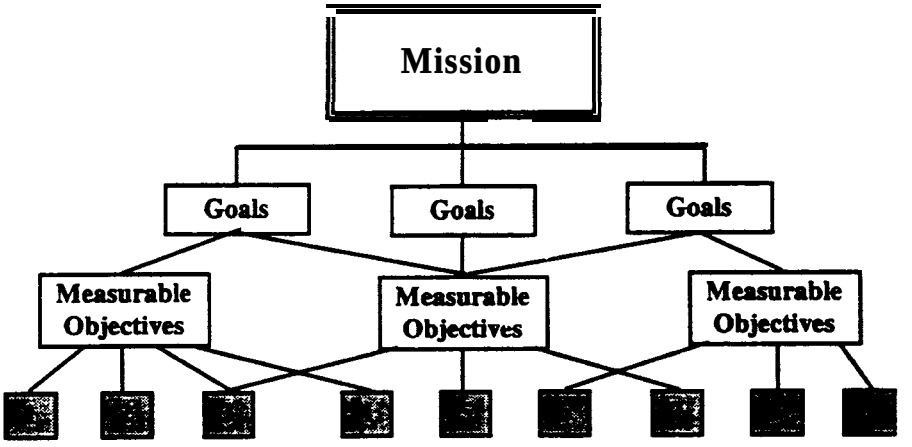
Preliminary information is now available on some aspects of the pilot projects, although much still remains to be developed and synthesized. In the meantime, numerous efforts have been initiated to further develop the knowledge base and to share experiences in this new undertaking. Such efforts include formal and informal internal government work groups, technical assistance and support groups as well as an array of private initiatives ranging from

specific training and conferences to such efforts as brown bags sponsored by educational institutions and associations. All of these efforts attest to the complex nature of implementing GPRA.

While the pilots are not fully completed yet, OMB and subsequently DHHS have moved to speed up the process. The recently revised OMB Circular A-l 1 encourages all agencies to include performance-based information in the development of their budgets at the earliest opportunity. Secretary Shalala's guidance for preparing the FY 1997 budget directs that ***measurable goals*** for each HHS program be identified in the budget requests of each HHS agency. Performance indicators-particular values or characteristics used to measure output or outcome-are necessary to identify the degree to which these goals can be achieved Informal discussions with OMB personnel further stress the interest in moving quickly with an expectation that some highlights of effective programs (based on performance measurement efforts) will be presented in the President's FY 1997 budget.

Responsiveness to GPRA Requirements and Other Critical Events Have Guided the Focus and Scope of This Study

The framework for defining this study was originally articulated in relationship to the anticipated timing of GPRA implementation and to the key concepts explicitly identified in the GPRA requirements. One of the critical concepts in developing our approach to assessing HRSA's efforts was the specification of linkage of the strategic planning process and performance measurement as depicted below and clearly articulated in the GPRA materials.



HRSA has been engaged in a strategic planning process that has resulted in a mission statement and a set of strategic goals and is now addressing the more **detailed process of** articulating measurable objectives. Therefore, this critical prerequisite for performance measurement activities was already underway. This assessment was therefore viewed as an important step in assisting HRSA to identify and assess the extent to **which their** constituent programs had developed performance measures and data to support these measures.

A second critical concept of this assessment is the recognition that the efforts required need to be coordinated and directed at the Agency level and that such an approach will enhance the capacity of individual Bureaus and Offices to satisfactorily meet their GPRA obligations. This project was initiated with the full understanding that HRSA, with the wide range of its internal and external activities, target audiences, and substantive policy areas, faces significant challenges in developing appropriate and measurable performance indicators for its programs. The proposed tasks for the effort included:

- Assess the current status of the development of performance indicators in the four HRSA bureaus and the Office of Rural Health Policy;
- Provide a preliminary review of the adequacy of data and data sources for applying the indicators;
- Assess the need for technical assistance to program staff to increase the use of output and outcome based performance information in the preparation of the FY 1997 budget;
- Conduct GPRA orientation sessions for HRSA staff on GPRA requirements and HRSA's readiness to implement them; and
- Communicate the results of the above tasks to senior HRSA management

Since these tasks were identified, there have been several developments that Lewin-VHI and the HPSA project staff have had to recognize and incorporate into the approach to project execution. These developments have affected the time available for completing the initial assessment of the four HRSA bureaus and the Office of Rural Health Policy; the availability of the staff in these offices for interviews and data collection; and the visibility, anticipated use and importance of the results of the initial assessment. These developments include:

- *HRSA Program Clustering in the FY* 1996 *Budget.* As part of its ongoing response to government-wide reinvention efforts, HRSA proposed a consolidation of 50 categorical programs into 9 "clusters" in its part of the Administration's FY 1996 budget request. These consolidations, primarily affecting health services delivery and health professions education and training programs, are intended to provide grantees with greater flexibility in managing their programs and streamline the need for Federal administrative resources. The organizational and management relationships between current budget line items, HRSA Bureaus and offices, and the new clusters were not clearly identified prior to beginning the assessment.
- *Phase II of the National Performance Review* (NPR *2* or RIGO 2 (Re-Inventing Government). NPR 2, announced in January 1995, is directed toward determining what the Federal government should do, and contains six initiatives, two of which are significant for purposes of this project:

Agency Restructuring Initiative: Each agency was asked to identify its basic Federal mission; its long-term objectives and the major programs necessary to meet these objectives; and opportunities to restructure, consolidate, terminate or devolve functions that are not directly related to their primary mission and their key program objectives.

Federalism Initiative: Where states and localities can perform functions more effectively than the federal government, the federal government should devolve as much authority as possible to states, localities, and individuals for the operation of programs. They will be judged on the quality of their services and whether programs achieve agreed upon results. To execute this initiative, teams comprised of OMB/NPR/White House/Treasury staffs were to develop overall guiding principles, and agencies would use these principles to develop proposals to realign federal, state, and local responsibilities as part of their restructuring efforts. The potential effects of this initiative on measuring the performance of HRSA programs are discussed in more detail in Section 3, below.

- ***OMB Spring Review. In*** early March OMB announced a Spring Review on Program Performance. Intended to build on NPR 2, the Spring Review focuses on how to build more and better performance information into the FY 1997 budget decision-making progress. The Spring Review is intended to identify what is known about the actual performance of key programs, what is not known, and what performance information can be reasonably expected to be available to the FY 1997 budget and appropriation processes. The Spring Review is expected to produce an assessment of performance information in key areas; agreement between OMB and each agency about the specific performance information to be provided for key programs with the FY 1997 budget submission; and identification of actions that would improve performance in key program areas.

- ***Proposed Congressional FY 1995 rescissions. In*** February the new Congress proposed rescissions to FY *1995* funding levels of approximately $17 billion. HRSA's share of the original rescission amount was approximately $95 million; in the latest rescission proposal (as of May 18, 1995) this has been reduced to approximately $41 million: These actions would severely curtail (or in some cases, eliminate entirely) the National Health Service Corps, Healthy Start, the Health Professions cluster, Rural Health, Health Facilities, and Trauma Care programs. While these rescissions have not yet been enacted, the threat of program elimination made it difficult in some cases for program staff to focus on performance when they were preoccupied with survival.

- ***Congressional action on the FY 1996 budget. The*** ongoing debate on methods to Balance the Federal budget also affected the FY 1996 HRSA budget. Prior to conference action, the FY 1996 Budget Resolution Incorporated proposed cuts of 35% of more in **HRSA** programs. In addition, the exchange between members of the Appropriations Committee and representative of HRSA has resulted in the request for information regarding HRSA efforts to implement GPRA requirements.

Together, these developments led to several changes in the guidance and approach for completing this project. The time available for the initial assessment of the four HRSA bureaus and the Office of Rural Health Policy was severely limited and redirected to focus specifically on the FY 1996 budget line items. Further, although GPRA provides the general context and agenda for the project, the information developed as part of the assessment would be used to inform HRSA's preparation of its FY 1997 budget submission. Finally, operational issues associated with the budget clustering and issues associated with the appropriate Federal role of and within HRSA programs would also need to be identified and addressed as part of the assessment process whenever feasible.

Although circumstances of the assessment were changed, the objective remained the same: to provide HRSA management with information about the:

- Current status of the development of performance indicators in the four HRSA bureaus and the Office of Rural Health Policy;
- Adequacy of data and data sources for applying the indicators; and
- Potential for individual Bureau or program efforts to support initiatives (e.g., strategic planning, aggregated indicator development, data strategies) that respond to the strategic objectives of HRSA as a whole, objectives that cut across the boundaries of the formal HRSA program and organizational structure.

We understand that this assessment will continue to be used as it was originally intended: to assist HRSA in preparing the FY 1997 budget witn better performance information. The assessment will also be used to support HRSA's ability to respond to its responsibilities under the OMB Spring Review and to Congressional inquiries on its performance measurement activities. Finally the assessment results will be used to identify the support and technical assistance needed to assist HRSA and its operating units in the systematic development of performance measures and related activities.

The remainder of this report reviews the work that was conducted as part of this effort. Chapter II provides an overview of the approach taken to this assessment, identifying key concepts of GPRA and performance measurement that helped inform the design of the effort. Chapter III reviews the results of the assessment, highlighting the cross-program and cross-Bureau/Office findings and critical issues. The more detailed results of the individual budget-line item assessments have been placed in separate Appendices. The final chapter, Chapter IV, discusses implications of the findings and provides recommendations for next steps.

CHAPTER 2:
THE APPROACH TO ASSESSING THE STATUS OF PERFORMANCE MEASUREMENT FOR HRSA PROGRAMS

Our approach is based upon our preliminary analytic framework that includes an articulation of what we consider to be the central assessment question of organizational performance:

> *Can this organization, with a given set of resources, through a series of actions and decisions, produce outputs that have the desired effects and outcomes for the intended audience or beneficiaries?*

We developed this question to succinctly capture the available information on the concepts underpinning GPRA and pragmatically relate the concepts to real-world organizations. Exhibit 2-1 shows how the essential performance question can be broken out into its analysis elements (e.g., resources, actions and decisions, etc.); provides specific examples for each element (e.g., resources = legislative authority, budget authority, staff, etc.); and aligns the question with the supporting GPRA performance concept (e.g., resources = input).

Exhibit 2-1
The Essential Performance Question

Can *this [organization]...*	...*with these* resources...	...*through these actions, processes and decisions...*	...*yielding these products...*	...*have these* effects...	...*for* these *people?*
Department Agency Bureau Program Activity	Legislative Authority Budget Authority Staff Equipment Supplies Information and Data Systems	Data Collection Research/Analysis Problem/Needs Assessment Methods Development Standard Setting Grant-making Contract Awards Program Coordination	Service Delivery Training Technical Assistance Demonstrations/ Experiments Knowledge/ Awareness Skill/Capacity Guidelines	Access to Care Improved Utilization Improved Quality of Life Lower Mortality/ Morbidity Increased Life Expectancy Improved Health Status	- Vulnerable Populations - Medically Underserved - Persons in Border Communities - Persons with HIV/AIDS - Homeless Persons - Others

ORGANIZATION LEVEL INPUT → PROCESS → OUTPUT → OUTCOME CUSTOMERS

GPRA Performance Focus

How Well?
How Much?
How Fast?
At What Cost?

Our experience indicates that the question is appropriate independent of the organizational level to which it is addressed, i.e., it can be used to assess the performance of program elements or activities, programs, and the formal organizations in which the programs reside. At each level, we expect the answers not to be a simple yes or no, but rather to identify the performance dimensions of effectiveness and quality (how well), quantity (how much), timeliness (how fast), and efficiency (at what cost).

Additionally, the exhibit shows that the focus of current GPRA efforts to improve performance is on linking organizational inputs, processes, and outputs to desired policy outcomes, with particular emphasis on clarifying the assumptions and mechanisms for how organizational outputs produce policy ***outcomes.*** When these mechanisms are made explicit, it is relatively straightforward to identify the leverage points of policy; to determine what elements of performance are related to one another and therefore what indicators are appropriate; and to forecast how quickly-or how slowly-changes in the outputs might be expected to produce different outcomes.

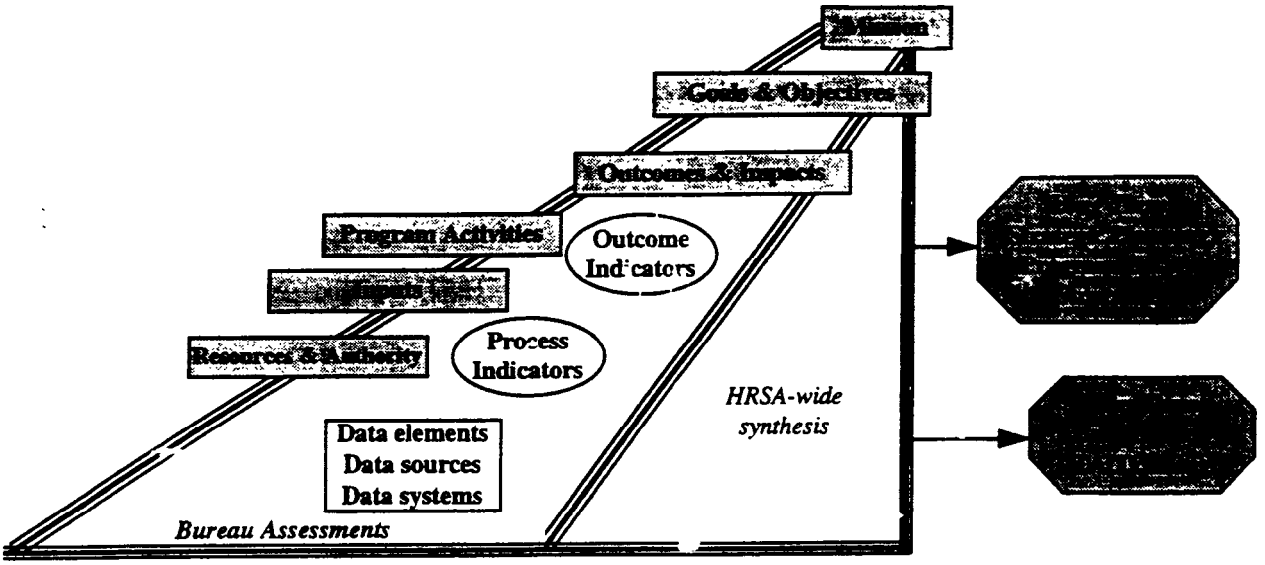
The rest of this chapter describes the approach we have taken to build on this framework as well as to consider three factors that are critical to meeting the needs of HRSA:

- The need to collect as much information as rapidly as possible;
- Balancing the desire to identify information that could be useful to the next phase of budget preparation while thinking more strategically about the future; and
- The evolutionary nature of detailed guidance from OMB and the Office of the Secretary, HHS on GPRA implementation.

These factors resulted in the primary focus of the data collection effort on the assessment of FY 1996 budget line items which represent a significant departure in some cases from the way in which HRSA programs have been organized or focused. The results of this effort are described in Chapter 3 and in more detail in the Appendices.

Exhibit 2-2 displays the relationship of the overall framework to the specific activities involved in this effort as well as the linkage to next steps. The remainder of this chapter discusses the major steps involved in this project.

Exhibit 2-2
The Overall Assessment Approach



- Preliminary Design Activities: This phase involved a review of the literature, meetings with the Project Officer and other OPEL staff, and a presentation and discussion with the HRSA leadership at their Bureau Director's meeting.

  Background research: An important component of the approach was the collection of information to identify the current state-of-the-art and other information on the evolutionary process and activities related to federal GPRA efforts. This effort included a brief review of the literature and of the various materials prepared by government agencies on performance measurement, selected meetings with the Assistant Secretary for Management and Budget (ASMB) and OMB staff involved in GPRA, and attendance at several outside workshops and conferences.

  HRSA meetings: Preliminary meetings with HRSA staff helped shape the focus of the assessment and also identified liaisons within each of the Bureaus and ORHP to assist the project team in conducting the data collection effort.

- Data **Collection and** Analysis:

The focus of the assessment was defined as the FY 1996 budget line items in each of the four HRSA Bureaus and the Office of Rural Health Policy. Working with each of the identified liaisons in these units, Lewin-VHI teams developed specific plans for the data collection effort An interview protocol was prepared to guide discussion and provide a common framework for the effort. The interviewing effort was assigned to four teams, each team headed by an experienced member of the Lewin-VHI senior staff. Because of the limited availability of staff due in particular to their involvement in responding to Congressional recession and budget actions, initial meetings were held with liaison staff in each Bureau to develop an overall understanding of the issues facing each

Bureau, and to further focus the list of informants and program materials for review. The subsequent data collection process varied across the four Bureaus and ORHP based on the number of budget line items, the nature of changes resulting from congressional action or the FY 1996 budget, the status of activities related to performance measurement, and the operating unit's organizational structure.

The information from the interviews and background research was compiled into assessments of the program clusters/programs/budget line items, as appropriate; summary assessments for each cluster/bureau/office; and matrices which provide a preliminary synthesis of HRSA-wide findings. These work products are described in more detail in the next chapter. The individual cluster/programs assessments are located in the appendices.

The representation of HRSA programs in the FY 1996 budget request indicated changes—explicit and implicit—in the organizational and management relationships between budget line items and existing HRSA bureaus and offices. While some major programs and line items were clustered, especially in the Bureaus of Health Professions and Primary Health Care, others were not. Consequently our assessments are organized by both budget cluster and Bureau/Office as appropriate. For the Health Professions cluster, we assessed each of its five proposed clusters; for the Health Services cluster we assessed both the Health Centers and Special Populations cluster with the programs in the other Health Services clusters included with the Bureau or Office in which the activity is located. All other assessments are at the budget line item level organized by their current assignments to Bureaus and the Office of Rural Health Policy.

Line Items Included in Analysis

Line Item	FY 1996 Cluster/ Budget Cluster	HRSA Bureau/Office
Health Centers	Health Services	BPHC
Special Populations	Health Services	BPHC
Rural Health	Health Services	ORHP
♦ State Offices of Rural Health	"	"
♦ Rural Health Outreach	"	"
Emergency Medical Services	Health Services	BHRD/MCHB
♦ Trauma Care	"	BHRD
♦ Pediatric EMS	"	MCHB
Workforce Development	Health Professions	BHPr/BPHC
Enhanced Area Health Education	Health Professions	BHPr
Minority/Disadvantaged	Health Professions	BHPr
Primary Care/Public Health Training	Health Professions	BHPr
Nurse Education & Practice	Health Professions	BHPr
Rural Health Research		ORHP
Organ Procurement & Transplantation		BHRD
Maternal & Child Health Block		MCHB
Healthy Start		MCHB
Ryan White, Titles I & II		BHRD
Ryan White, Title III		BPHC
Ryan White, Title IV		MCHB
Health Facilities		BHRD

We used the interview protocol to elicit information about the program's objectives and purposes, its relationship to the budget, the program's inputs, processes outputs, outcomes, impacts and the linkages between them, data collected and used, and the current use of performance measures and indicators. In addition, a wide variety of program materials were collected and reviewed to complete the assessments. The draft assessments were shared with the respective Bureaus/Offices to ensure that the information was complete and accurate. The feedback process also served as an important step in better defining technical assistance needs.

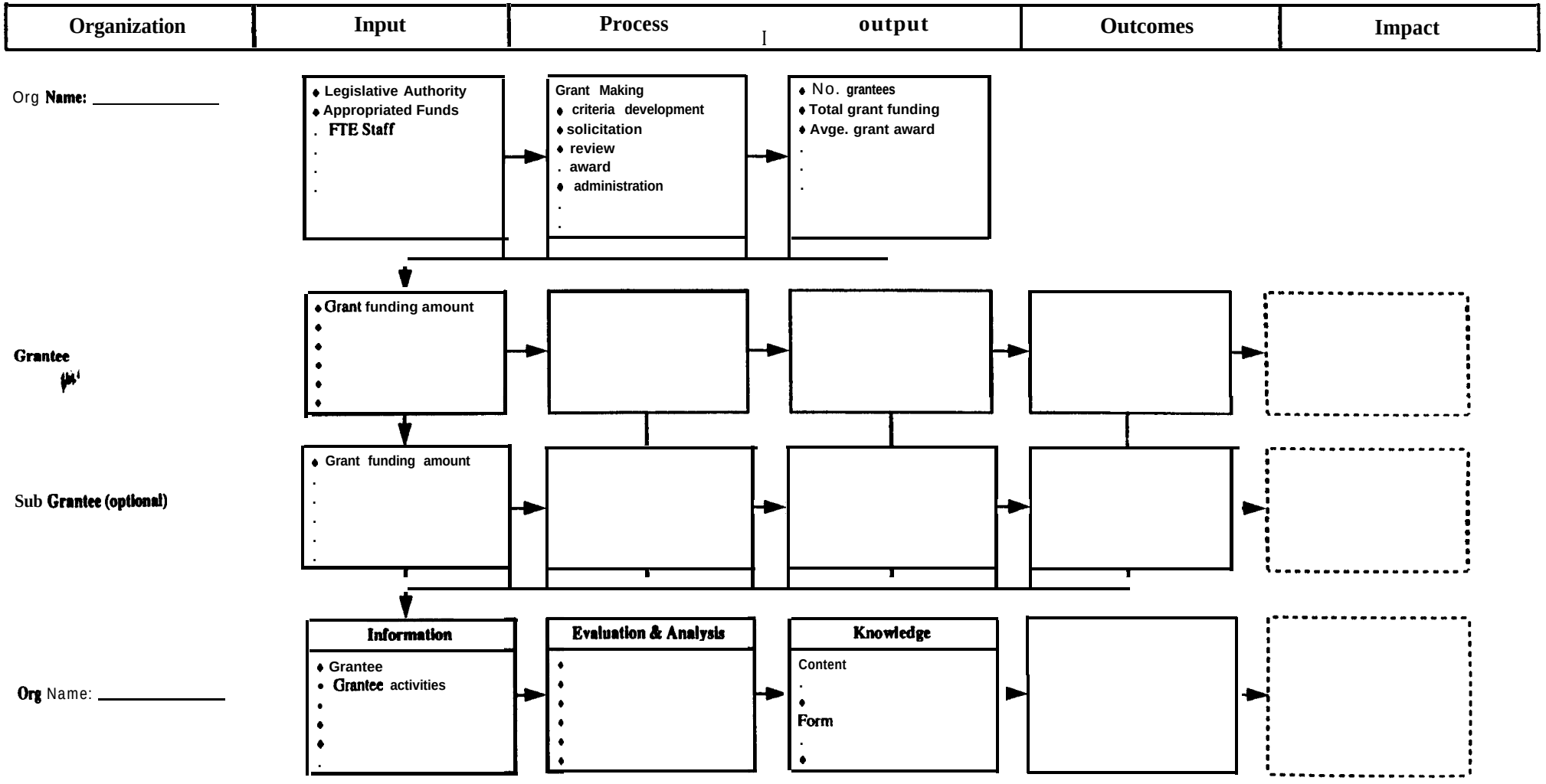
A key to the assessments was to make the rationale, structure and division of labor of each program explicit in a program logic model, i.e., a representation of the interactions and relationships among a program's objectives; the flow of inputs, activities, outputs, outcomes and impacts required to achieve the objectives. Our approach to this logic model is an attempt to clarify these inputs, activities, outputs, outcomes and impacts according to the specific organizational entity that is responsible for the associated performance. This approach allows one to distinguish what is done by the federal entity responsible for a given budget line item from the effort that occurs at each of the subsequent levels/entities involved in implementation of activities that constitute that program.

A prototype logic model appears as Exhibit 2-3 while the specific logic models we have developed are located in the Appendix as part of each of the individual assessments. As can be seen in the Exhibit, this approach allows one to either focus on the specific organizational level or each of the specific components of measurement (e.g., outputs, outcomes). These distinctions can help clarify what needs to be measured and what the appropriate sour&level for data collection is. In addition, use of this logic model can help define the boundaries of appropriate questions related to performance.

The logic model we have employed uses the following definitions for performance indicators. These include:

- Input: tion and resources given to a program (e.g., legislative authority, dollars and FTEs assigned to a training program)
- Process: A program's internal activities (e.g., training approach used)
- Output: ram's direct products or services (e.g., number of people/trained) including product/service characteristics such as timeliness, quality and efficiency (e.g., trainee satisfaction, cost per trainee)
- Outcome: Results of program output (e.g., number of trainees that find an3 retain work)
- Impact: ate effect attributable to a program (e.g., number of trainees who would not have found comparable work without the program)

Exhibit 2-3
Prototype of Logic Model



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The program's logic model represents a baseline, "should be" program structure, against which we assessed the actual activities that have been specified for a given program and areas for performance measurement. The construction of these models also provided us with information about the array of functions performed at the Federal program level that can be used to help capture key features of performance by Federal staff in a given program area. Finally, the program logic models provide a mechanism to communicate our understanding of programs, in a performance measurement context, to HRSA staff, to orient them to GPRA concepts in the specific context of their programs, and to identify opportunities for HRSA-wide synthesis of functions and performance measurement.

In addition to the program assessment process described above, the Lewin-VHI project team also conducted interviews with key individuals within the Department and at OMB to ensure that this effort would be informed by the latest information and thinking within government regarding the GPRA effort. This was further supplemented by involvement in efforts outside government to further develop the state of the art. The project team also met periodically with HRSA staff (the Project Officer and other OPEL staff) to discuss the process underway and to obtain more explicit direction and focus as circumstances impacting HRSA and its programs changed.

- **Analysis and Synthesis of Findings**

The information from the interviews and background research was compiled into assessments of the program clusters/programs/budget line items, as appropriate; summary assessments for each cluster/bureau/office; and matrices which provide a preliminary synthesis of HRSA-wide findings. These work products are described in more detail in the two sections that follow. The individual cluster/programs assessments are located in the appendices.

The individual assessments as well as information obtained from other interviews and meetings with HRSA staff, DHHS and OMB, and GPRA materials helped guide the development of the "HRSA-wide" analysis that is described in Chapter 3. Given our time constraints and the primary emphasis on the individual line item assessments, we view this analysis as a first step. The approach taken here lays out the elements of the analysis and some preliminary assessment with a series of recommendations (in Chapter 4) that relate to the additional steps required to more fully assess the HRSA-wide issues related to the development and implementation of a performance measurement strategy.

- **Final Report and Technical Assistance Plan**

The final aspect of this project is to prepare a final report that reviews the findings of our assessment and a technical assistance plan that identifies what is needed to further assist HRSA, its Bureaus and Offices in developing and implementing the HRSA performance system.

The planned input process to this report includes:

- Dissemination of the individual assessments to the respective Bureaus and *ORHP* for discussion and input

- A working session with the Project Officer and other OPEL staff to review the assessments, discuss the fmdings and recommendations, and obtain input to the development of a more explicit technical assistance plan

- Conduct of a briefing and discussion session with senior HRSA staff for the same purpose

Based on these inputs, this draft report will be revised and a more detailed technical assistance plan developed. The final report will then be submitted and a final briefing with the HRSA Project Officer and other HRSA staff held to focus on the implications for the next phase of effort.

CHAPTER 3: ASSESSMENT AND FINDINGS

In this chapter we summarize and synthesize the findings from our assessments of individual HRSA programs in the four Bureaus and the Office of Rural Health Policy. These findings are intended to provide HRSA management with information about the current status of the development of performance indicators; the adequacy of data and data sources for applying the indicators; and indicate the potential for individual Bureau or program efforts to support and respond to the strategic objectives of HRSA as a whole.

We believe that describing the current status of performance measurement efforts is a critical first step in enabling HRSA to demonstrate progress in achieving its current substantive mission objectives, and to respond organizationally to reporting and analysis requirements imposed by a rapidly changing and evolving environment. As described in Chapter 1, these requirements include the need to incorporate performance information into the FY 1997 budget process; respond to the requirements of the OMB Spring Review; prepare and educate HRSA staff for full GPRA implementation with the FY 1998 budget process; refine and revise program consolidation and clustering initiatives; and assist in the effort to integrate and consolidate HRSA and its programs with other agencies.

Detailed assessments of each budget line item, organized by Bureau and Office (and, where appropriate, program cluster), are contained in the appendices. Exhibit 3-l provides a list of each of the line items included in this analysis. We have used this information to assess the current status of performance measurement in HRSA programs and to identify and examine cross-program and HRSA-wide issues. These findings are described in the sections that follows. We have organized the findings by the three topics areas contained in the project objectives:

- Status of HRSA performance management efforts;
- Adequacy of data and data sources; and
- Potential support for HRSA-wide strategic objectives and management efforts

Exhibit 3-1
Line Items Included in Analysis

Line Item	FY 1996 Cluster / Budget Cluster	HRSA Bureau/Office
Health Centers	Health Services	BPHC
Special Populations	Health Services	BPHC
Rural Health	Health Services	ORHP
♦ State Offices of Rural Health	"	"
♦ Rural Health Outreach	"	"
Emergency Medical Services	Health Services	BHRD/MCHB
♦ Trauma Care	"	BHRD
♦ Pediatric EMS	"	MCHB
Workforce Development	Health Professions	BHPr/BPHC
Enhanced Area Health Education	Health Professions	BHPr
Minority/Disadvantaged	Health Professions	BHPr
Primary Care/Public Health Training	Health Professions	BHPr
Nurse Education & Practice	Health Professions	BHPr
Rural Health Research		ORHP
Organ Procurement & Transplantation		BHRD
Maternal & Child Health Block		MCHB
Healthy Start		MCHB
Ryan White. Titles I & II		BHRD
Ryan White, Title III		BPHC
Ryan White. Title IV		MCHB
Health Facilities		BHRD

Performance Measurement Efforts and Status of Current HRSA Programs

- **Although HRSA programs have multiple objectives, target diverse populations, and use different organizations to carry out a wide variety of activities, we find that it is both feasible and desirable to use a standard approach to measuring the performance of HRSA programs.**

The mission of HRSA focuses on assuring and/or providing quality health care to underserved vulnerable populations and on promoting a primary care and public health workforce. To accomplish this mission, HRSA programs have evolved over time into a complex set of enterprises, with multiple objectives, targeting diverse populations, and using different organizations to carry out a wide variety of activities. Additionally, the role of the federal government and the extent of its involvement—i.e., the authority, functions and resources of the federal government, the degree of its participation, and whether any of these factors should be changed-also vary from program to program.

The NPR 2 guidance identifies several illustrative methods or tools- requirements and standards, financing, direct or indirect service delivery, and information provision-by which the federal government affects outcomes that are ultimately at the state, local, or even individual level. We have expanded this illustrative list into a more comprehensive typology of governmental functions, and have listed examples of objectives, output measures, and intermediate and ultimate outcome measures with each function. We used the typology, shown in Exhibit 3-2, as a generic and common reference for examining the structure and operations of each specific HRSA program, to allow each program to be described, and their federal roles and potential performance measures identified, using common terminology.

To examine federal roles across HRSA programs, we used the typology of functions to categorize how programs go about achieving their objectives. For each of these functions, federal involvement can theoretically range from zero to significant; HRSA programs include both strongly centralized federal and strongly decentralized state/local program roles. In addition, mixes of functions are typical in most HRSA programs; we found that it was not unusual that the federal role in a given HRSA program might involve a combination of financing, policy development and coordination, standard-setting, technical assistance, information development and dissemination and compliance monitoring. HRSA grantees typically carried out the functions of delivering services and building capacity; grantees in turn would have a mix of functions associated with the outputs and outcomes they were trying to achieve. Moreover, such mixed federal roles can range from uncoordinated collections of programs to carefully designed shared responsibilities.

For this reason we endeavored to make the rationale, structure and division of labor of each program explicit in a program logic model, i.e , a representation of the interactions and relationships among a program's objectives; the flow of inputs, activities, outputs, outcomes and impacts required to achieve the objectives; and the responsibilities assigned to organizations/individuals for performance in any of these areas. A program's logic model represented a baseline, "should be" program structure—relationships among HRSA grant-making and other initial outputs; grantee and subgrantee activities and expected outputs and outcomes, and evaluation and monitoring-against which both actual federal roles and program performance could be assessed.

We found that the standardized terminology combined with the logic models provided a workable, common analytic framework to both describe and analyze the performance measurement efforts of all programs, despite differences among programs in their objectives, target populations, organizations used, activities conducted, outputs produced, and outcomes expected. While every program is unique, the various budget items and programs across HRSA also share in the approaches and activities they conduct to meet HRSA strategic goals and objectives. The analytic framework provided by the logic models is a necessary first step in more effectively synthesizing and linking these shared characteristics of individual program performance to HRSA strategic planning efforts. The logic models can be used to identify, compare and contrast the relative advantages, disadvantages, strengths and weaknesses of specific program contributions to meeting these strategic goals and objectives.

Exhibit 3-2
Key Governmental Functions and Associated Performance Measures

Key Governmental Functions	Objectives	Output Measures	Intermediate Outcome Measures	Ultimate Outcome Measures/Impact
Intervening to correct market failures (e.g., uninsured populations; underserved communities; inadequate supply of providers; orphan drugs; services that are not cost effective at a local or state public or pnvate basis)	♦ Fill gap in market directly ♦ Creating new incentives to fill gap in market ♦ Create leveraging mechanism to encourage investment to fill gap in market	Depending upon the type of market failure. increase/decrease in: ♦ number of services provided ♦ number of providers participating ♦ number of individuals and families insured ♦ number of persons receiving services ♦ number of professionals trained and practicing in target areas	Depending upon the type of market failure: ♦ entrance of new providers to market by type ♦ increased competition in market ♦ non-Federal dollars leveraged per dollar of Federal funding ♦ in-kind resources leveraged per dollar of Federal funding	Depending upon the type of market failure, correction of the market failure including: • increased access to services/benefits by selected populations ♦ enhanced benefits relative to costs of intervention ♦ decreased need for Federal support ♦ better fit between supply and demand for providers and services
Intervening to improve service delivery to hard-to-reach/vulnerable populations (e.g., risk for HIV transmission, substance abuse, teen pregnancy, high risk pregnancy, rural, impoverished, cultural minorities)	♦ Decrease barriers to access ♦ Increase coordination of multiple services needed by populations ♦ Eliminate duplication of effort related to eligibility for services, case management, and other "access/gatekeeping" mechanisms.	Depending on target population, increase/decrease in: ♦ numbers of services provided ♦ number of persons/families receiving different services ♦ point of intervention by disease stage ♦ level of outreach and prevention services/activities	Depending on target population: ♦ decrease impact of specific access barriers on target population in cost of services, preventable illness/disability, opportunity costs to client (e.g., lost work time) ♦ eliminate duplication of effort in specific service areas ♦ decrease waiting times for critical services ♦ decrease inappropriate use of emergency rooms	Depending on target population: ♦ decrease difference in service profiles between target population and mainstream/insured population ♦ change balance in services toward early intervention (e.g., increase proportion of dollars for prevention services relative to inpatient services) ♦ decrease hospitalization for preventable illness and other critical incidents • increase health status for target population

Exhibit 3-2: Key Governmental Functions a ssociated Performance Measures (Continued)

Key Governmental Functions	Objectives	Output Measures	Intermediate Outcome Measures	Ultimate Outcome Measures/Impact
Intervening to increase service delivery capacity of local governments (e.g., state/local planning, coordination of service/funds)	♦ Increase state activity to meet Federal objectives ♦ Improve productivity and efficiency in use of Federal and other funds ♦ Decrease dependence on Federal funds ♦ Increase responsiveness to local constituencies ♦ Increase investment of private sector in prevention of and solutions for local health problems ♦ Increase the development of integrated source systems	Depending upon the state/local govt. (e.g.,)...: ♦ improved accountability for use of Federal funds and performance related to Federal objectives ♦ decreased state administrative cost per unit of service delivery (e.g., per case), or per client served ♦ increased leverage of Federal dollars in state/local/private dollars invested in service delivery ♦ expansion of service delivery to new high priority problems/populations ♦ perception by local constituencies that service delivery is improved	Depending upon the state/local govt. (e.g.,)...: ♦ decreased dependence upon Federal funds ♦ decreased market failures at state/local level ♦ improved health status at state/local level ♦ improved productivity and efficiency at state/local level	
Intervening to regulate states and providers (e.g., state plan requirements, certification requirements, reporting requirements)	♦ Ensure that minimal standards are met ♦ Ensure equity in minimum quality standards for all consumers ♦ Minimize liability and litigation related to incompetence/negligence/ malfeasance/fraud ♦ Require market to internalize costs associated with negative consequences of doing business ♦ "Level the playing field" to enhance competition/ minimize monopoly situations	Depending on type of regulation,- ♦ type of entity regulated and number ♦ services provided and populations reached by regulated entity ♦ cost of regulation/service unit or client served ♦ compliance and sanctions associated with regulation	Depending on type or regulation: ♦ increased compliance and decreased sanctions associated with regulation ♦ acceptance of/agreement with standards by regulated groups ♦ demand for/agreement with standards by consumers/professions ♦ decreased cost of enforcement ♦ decreased cost of services or decreased rate of cost increase associated with catastrophic costs prevented by regulation ♦ decreased litigation ♦ decrease in negative events targeted by regulation	Depending on type of regulation: ♦ increased voluntary compliance and/or self-regulation or industry takeover of responsibility for enforcing standards • efficiency and lack of duplication of effort in regulation and enforcement ♦ maximize benefit given cost of regulation ♦ correction of market failure ♦ equity in access to services across consumer groups

Exhibit 3-2: Key Governmental Functions a. ssociated Performance Measures (Continued)

Key Governmental Functions	Objectives	Output Measures	Intermediate Outcome Measures	Ultimate Outcome Measures/Impact
Intervening to disseminate knowledge (e.g., best practices, research findings, model programs, guidelines, standards)	♦ Increase access to state-of-the-art knowledge across nation ♦ Increase quality of practice based on disseminating current practice guidelines and best practices ♦ Increase rate of technology transfer ♦ Improve coordination of services across professional specialties and categorical service systems through enhanced communication	Depending on type of information to be disseminated: ♦ type of information disseminated and frequency of dissemination activity ♦ vehicles for dissemination, frequency of use ♦ persons reached with dissemination strategy (demographics) ♦ guidelines, protocols and new knowledge conveyed through dissemination activities ♦ number of requests for information and response rates, types of respondents ♦ appearance of information in press/media coverage	Depending on type of information to be disseminated: ♦ extent to which any dissemination activity reaches target audience ♦ extent to which target audience uses information disseminated ♦ change in practice or behavior resulting from recipient contact with information ♦ extent of secondary dissemination of Federally disseminated information (e.g., via use in training programs)	Depending on type of information to be disseminated: ♦ extent of conformance of local practice with practice guidelines ♦ extent of incorporation of best practices and guidelines in professional education ♦ improved health status targeted by new best practice or guideline
Intervening to deliver direct services (e.g., VA facilities, Military Hospitals, IHS)	♦ Meet the health care needs of persons related to their service to the Federal government ♦ Assure access to health care services for Native Americans, particularly on reservations	Depending on service delivery system: ♦ number and characteristics of persons served ♦ number and type of services delivered ♦ cost of services delivered	Depending on service delivery system: ♦ improved access to services designed to meet special need of target population ♦ enhanced responsiveness of service delivery system to unique needs of target population	Depending on service delivery system: • improved health status of target population using services ♦ dec ease in preventable disability, institutional-ization, morbidity

Exhibit 3-2: Key Governmental Functions & Associated Performance Measures (Continued)

Key Governmental Functions	Objectives	Output Measures	Intermediate Outcome Measures	Ultimate Outcome Measures/Impact
Intervening to develop new knowledge (e.g., medical research, demonstration programs, best practice studies)	♦ Increase nation's capability to solve health problems ♦ Stimulate markets and providers to improve practice ♦ Mobilize resources to address major public health problems not of adequate interest to the private sector ♦ Create incentives for the private sector to invest in research and knowledge development	Depending on type of effort: ♦ publications ♦ consensus panel, juried, and peer reviewed findings ♦ new products or technologies ♦ improvements in products or technologies ♦ institutions engaged in knowledge development ♦ professionals engaged in knowledge development	Depending on the type of effort: ♦ estimated benefit of implementation of new finding ♦ technological and other improvements that emerge as result of knowledge development in addition to target outcome of effort ♦ stimulated activity of private market to invest in related inquiry	Depending on the type of effort: ♦ extent of incorporation of new knowledge into practice • benefit associated with implementation of new knowledge (e.g., decreased hospitalization, decreased disability and associated costs) • improved health status as related to the new knowledge ♦ acceptance of research costs by private sector
Developing Policy	♦ Identify high priority problems of national significance ♦ Identify stakeholders and interests, conflicts and consensus ♦ Utilize data to define and quantify problems and analyze solutions ♦ Develop guidelines and priorities for allocation of governmental resources ♦ Utilize feedback to improve responsiveness of government to diverse constituencies	Depending on policy area: ♦ needs assessment findings ♦ evaluation findings ♦ public comment ♦ new regulations ♦ new legislation ♦ position papers ♦ appropriations ♦ executive branch decisions ♦ court decisions • policy studies	Depending on policy area: ♦ improved data resources to support policy making ♦ increased opportunities for public vetting of policy debates ♦ increased range of policy options to choose from ♦ policy formulations that increase opportunities and basis for building consensus and resolving conflict	Depending on policy area: ♦ increased public support for policy ♦ increased coordination of policy across Federal agencies and office,: ♦ increased participation by public in policy making ♦ decrease in time needed to implement policy

For example, we noticed a great deal of overlap and redundancy across individual programs in the goals, objectives, data, and activities needed to implement the logic models systematically. Many programs target the same populations; staff are often monitoring the same types of organizations (and in some cases quite possibly the same organization) that receive HRSA grant funds. This suggests that increased use of common approaches by programs with common needs and requirements could reduce inefficiency at both the Federal and grantee level and implies some degree of program structure change within HRSA e.g., budget clustering, program consolidation, or changes in the assignment of line items to the Bureau/Office management structure. Developing a sustainable and effective HRSA-level strategy of performance management is dependent upon a revised HRSA-wide approach to program management.

The basis for these findings is a set of matrices that summarize and describe those specific aspects of input, activities and processes, outputs, and outcomes required to implement the logic model for each budget line item we examined. Exhibits 3-3 through 3-9 display the key input, activity/process, output, outcome and impact variables of HRSA budget items and programs that contribute to meeting HRSA strategic goals and objectives.

The critical link between budget and implementation activity is documented by collecting and analyzing ***input*** variables. Examples of inputs that appeared in the logic models and were used to complete the program level assessments are summarized in Exhibits 3-3 and 3-4 for the Federal and state/local/grantee levels respectively. It should be noted that the ***inputs*** for the state/local/grantee levels consist primarily of ***outputs*** from the Federal level and other sources.

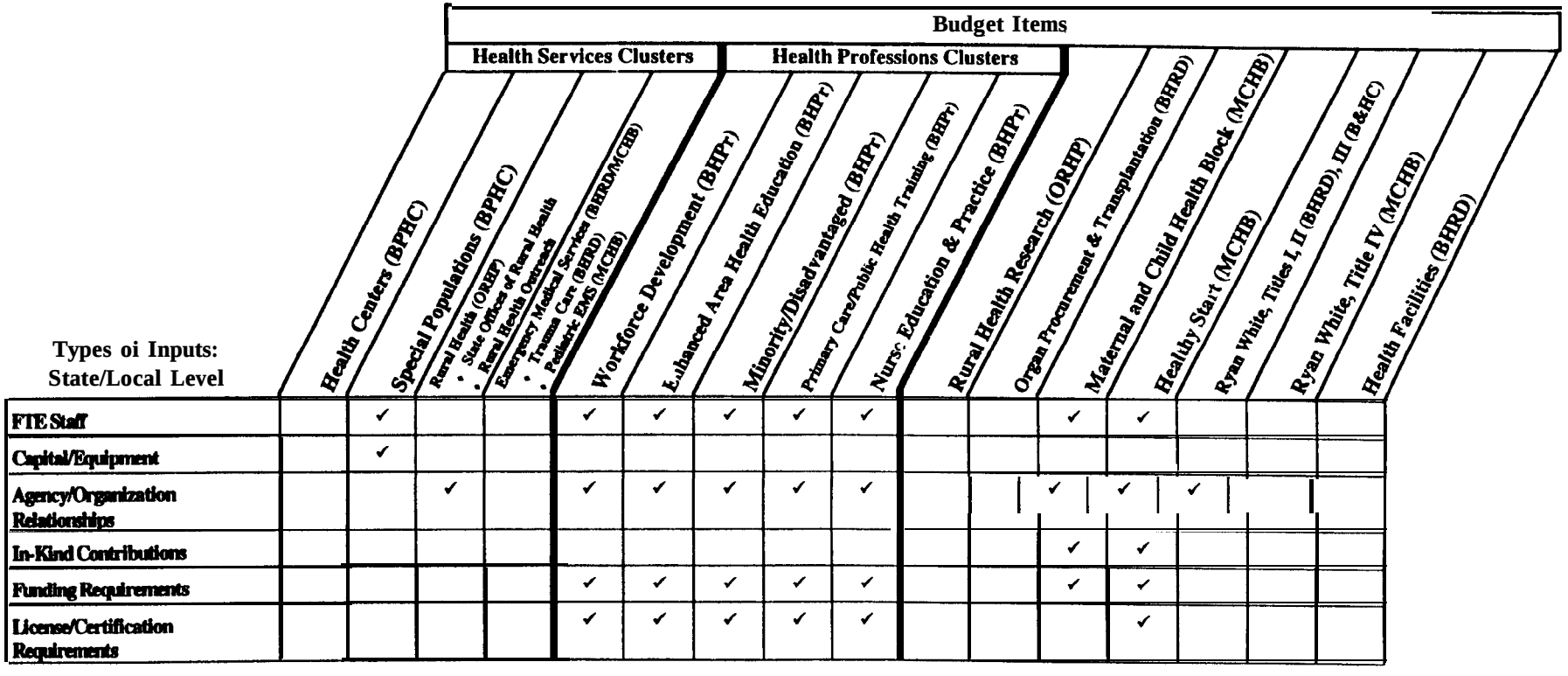
Exhibit 3-3
Linking Performance to Budget Requires Documentation of Inputs to Activities Supported by Budget Items: Types of Inputs at the Federal Level (examples)

Types of Inputs: Federal Level	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BHRD/MCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care/Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Legislative Authority	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
Appropriated Funds	f	f	f	f	f	f	f	f	f	f	f	f	f		f	
FTE Staff	f	f	ff	f	f	f	f	f	f	f	f	f	f	f	f	f
Capital/Equipment	f	f		f	f	f	f	f	f	f		f	f		f	✓
Administrative Support	f	f	ff	f	f	f	f	f	f	f	f	f	f	f	f	✓

Exhibit 3-4
Linking Performance to Budget Requires Documentation of Inputs to Activities Supported by Budget Items: Types of Inputs at the State and Local Level (examples)

Types of Inputs: State/Local Level	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC): Rural Health (ORHP); • State Offices of Rural Health; • Rural Health Outreach; Emergency Medical Services (BHRD/MCHB); • Trauma Care (BHRD); • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care/Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Grant Funds	✓	✓	✓✓ ✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Loan Guarantee					✓	✓	✓	✓	✓					
Loans					✓	✓	✓	✓	✓					
Cooperative Agreements			✓		✓	✓	✓	✓	✓					
Contracts											✓			
Technical Assistance			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Program Guidance	✓	✓			✓	✓	✓	✓	✓		✓			
Regulation	✓	✓									✓			
Needs Assessment Findings	✓	✓			✓	✓	✓	✓	✓		✓	✓		
Information/Research		✓	✓✓		✓	✓	✓	✓	✓	✓	✓	✓		

Exhibit 3-4
Linking Performance to Budget Requires Documentation of Inputs to Activities Supported by Budget Items: Types of Inputs at the State and Local Level (examples) cont.



Another important element in performance measurement is the ability to document interventions and key activities and processes of these interventions. Often output and outcome data cannot be interpreted in a meaningful manner because this information is lacking. Exhibits 3-5 and 3-6 display the process or activity data that are commonly used to describe interventions and implementation efforts, again at the Federal and state/local/ grantee levels, respectively. Typically this information may be collected in progress reports and a variety of other means, but is not integrated with other types of data as part of a performance measurement system.

Exhibit 3-5

Linking Performance to Budget Requires Documentation of Interventions and Implementation Types of Federal Level Process Data (examples)

Federal Level Process Data	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BHRD/MCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Criteria Development (grants/loans/contracts)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solicitation Process	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	
Review Process	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Award Process	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Schedule Progress Reporting	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	
Project Monitoring/Enforcement	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓
Standards Development				✓	✓	✓	✓	✓	✓			✓				
Planning	✓			✓	✓	✓	✓	✓	✓			✓	✓		✓	
Data Collection	✓			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Evaluation Process			✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fiscal Administration	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	
Fiscal Reporting	✓			✓	✓	✓	✓	✓	✓			✓	✓		✓	
Policy Development	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓				
Engaging Expert Input												✓	✓			
Dissemination of Findings			✓		✓	✓	✓	✓	✓	✓		✓	✓			
Inter-Agency/Office Cooperation					✓	✓	✓	✓	✓			✓	✓			

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Exhibit 3-6

Linking Performance to Budget Requires Documentation of Interventions and Implementation Types of State and Local Level Process Data (examples)

State/Local Level Process Data	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BHRD/MCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Health Professions Clusters: Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care/Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&RC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Organization & Individuals Involved	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Roles & Responsibilities			✓✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Project Schedule				✓	✓	✓	✓	✓	✓			✓	✓	✓		✓
Project Goals & Objectives	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Description	✓			✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	
Training/Education Curriculum				✓	✓	✓	✓	✓	✓							
Activities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
External Events That Influence Project				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
Policy Context			✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	
Funding Context				✓	✓	✓	✓	✓	✓			✓	✓		✓	
Data Collection	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Barriers Encountered	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
Facilitating Factors	✓			✓	✓	✓	✓	✓	✓			✓	✓		✓	
Lessons Learned			✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	

Output variables may be defined and supported with data collection efforts, but are often not linked adequately to specific activities. There is a great deal of overlap across budget items in the need to collect the same or similar output data. Exhibits 3-7 and 3-8 provide examples of common output variables at both the Federal and state/local/grantee levels, respectively, and their applicability to HRSA budget items.

Finally, outcomes and impacts represent the performance management components that are both the most difficult to measure and the most emphasized. Outcomes are the measurable results that can be traced to a program's outputs; impacts are the more elusive measures of the broad societal effects attributable to the existence of the program. Together, outcomes and impacts constitute the "bottom line" of program performance; the challenge in developing outcome and impact measures is to select those that are both measurable and clearly linked to program activities. Program level outcomes are likely to be defined with much greater specificity than those for meeting HRSA strategic goals. However, the types of program level outcome measures displayed in Exhibit 3-9 provide a starting point for developing meaningful measures of broader, HRSA-wide outcomes.

Exhibit 3-7

Linking Performance to Budget Requires Documentation of Outputs Resulting From Activities Supported By Budget Items: Types of Outputs at the Federal Level (examples)

Types of Outputs: Federal Level	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Office of Rural Health • Rural Health Outreach Emergency Medical Services (BEMS/MCHB) • Trauma Care (BEMS) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Number/Type of Grants Awarded	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number/Type Contracts/Cooperative Agreements											✓	✓				
Amount of Funding	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number of Loans Made					✓		✓									✓
Amount of Loans					✓		✓									✓
Number of Scholarships					✓		✓									
Amount of Scholarships					✓		✓									
Duration of All Types of Funding	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Number/Type of Entities Receiving Funds	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Reports	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Publications	✓		✓	✓						✓	✓	✓	✓		✓	
Conferences			✓							✓	✓	✓	✓		✓	
Training Events	✓	✓				✓	✓	✓	✓			✓	✓			
Technical Assistance Contracts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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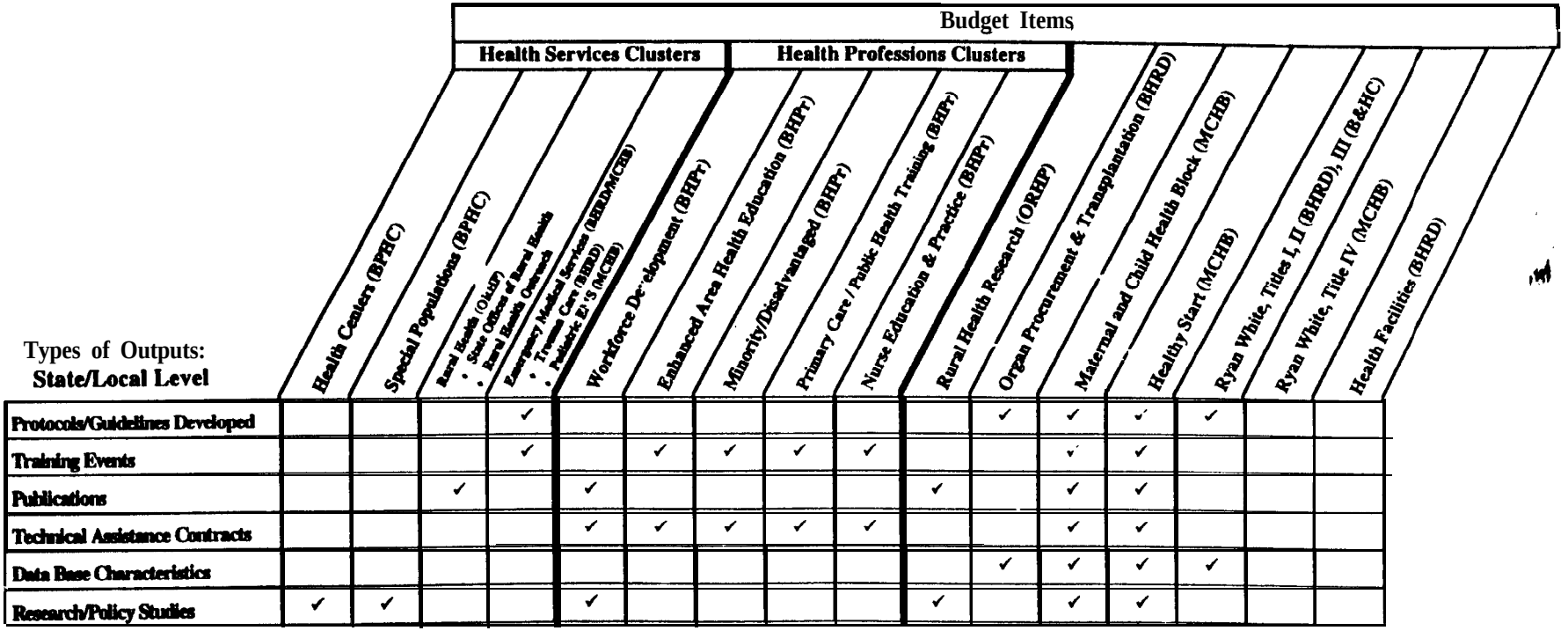
Exhibit 3-8

Linking Performance to Budget Requires Documentation of Outputs Resulting From Activities Supported By Budget Items: Types of Outputs at the State and Local Level (examples) cont.



Types of Outputs: State/Local Level	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (OAHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (MCHB/DMCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
	Budget Items: Health Services Clusters					Health Professions Clusters										
Protocols/Guidelines Developed				✓							✓	✓	✓	✓		
Training Events				✓		✓	✓	✓	✓			✓	✓			
Publications			✓		✓					✓		✓	✓			
Technical Assistance Contracts					✓	✓	✓	✓	✓			✓	✓			
Data Base Characteristics											✓	✓	✓	✓		
Research/Policy Studies	✓	✓			✓					✓		✓	✓			

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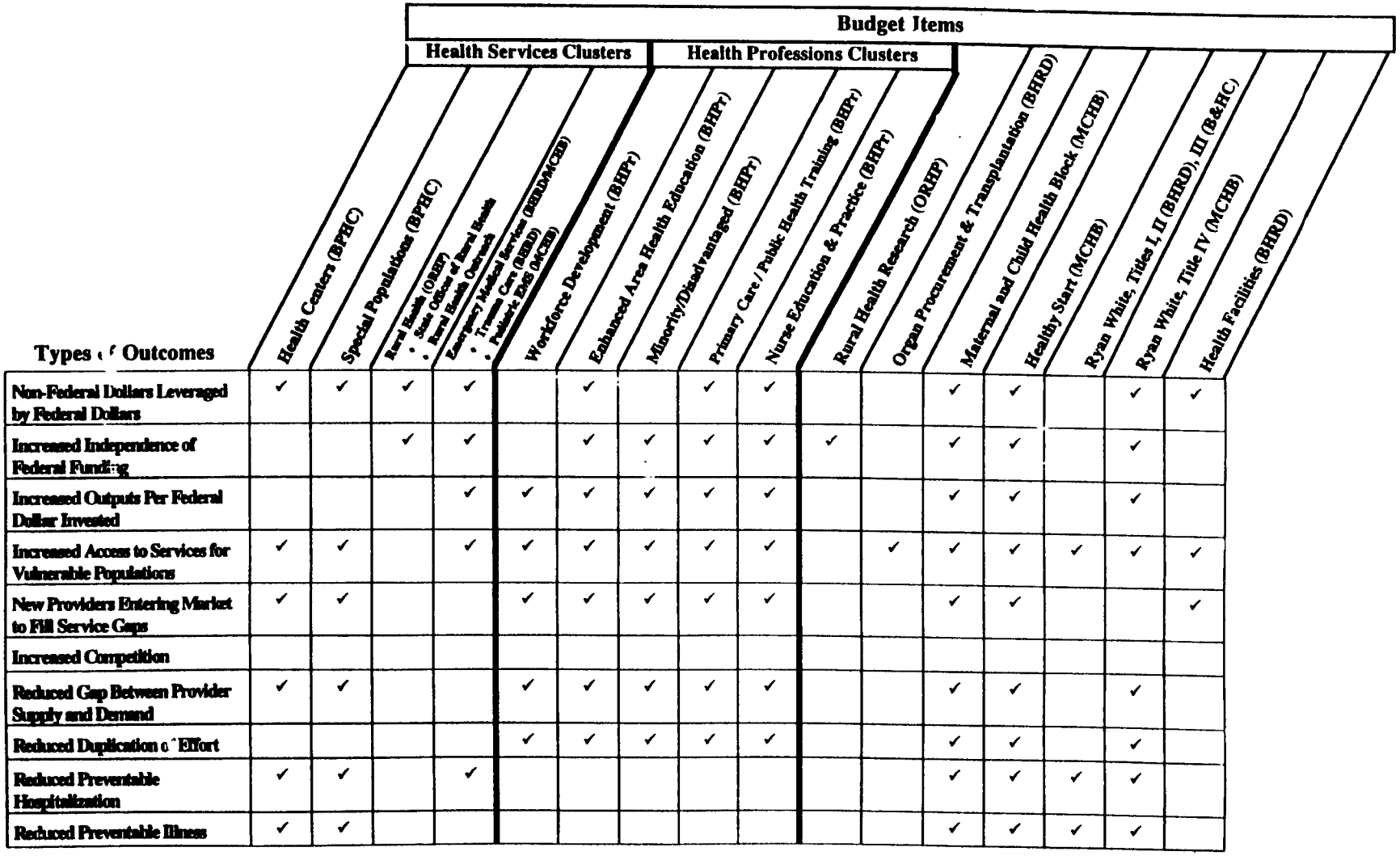
Exhibit 3-9

Linking Performance to Budget Requires Documentation of Outcomes and Impact Resulting From Activities Supported By Budget Items: Types of Outcomes (examples)



Types of Outcomes	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (OAHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (MCHB/DMCHB) • Trauma Care (BHPr) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD); III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
	Budget Items: Health Services Clusters					Health Professions Clusters											
Non-Federal Dollars Leveraged by Federal Dollars	✓	✓	✓	✓		✓		✓	✓			✓	✓		✓	✓	
Increased Independence of Federal Funding			✓	✓		✓	✓	✓	✓	✓		✓	✓		✓		
Increased Outputs Per Federal Dollar Invested				✓	✓	✓	✓	✓	✓			✓	✓		✓		
Increased Access to Services for Vulnerable Populations	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
New Providers Entering Market to Fill Service Gaps	✓	✓			✓	✓	✓	✓	✓			✓	✓			✓	
Increased Competition																	
Reduced Gap Between Provider Supply and Demand	✓	✓			✓	✓	✓	✓	✓			✓	✓		✓		
Reduced Duplication of Effort					✓	✓	✓	✓	✓			✓	✓		✓		
Reduced Preventable Hospitalization	✓	✓		✓								✓	✓	✓	✓		
Reduced Preventable Illness	✓	✓										✓	✓	✓	✓		

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Exhibit 3-9

Linking Performance to Budget Requires Documentation of Outcomes and Impact Resulting From Activities Supported By Budget Items: Types of Outcomes (examples) cont.

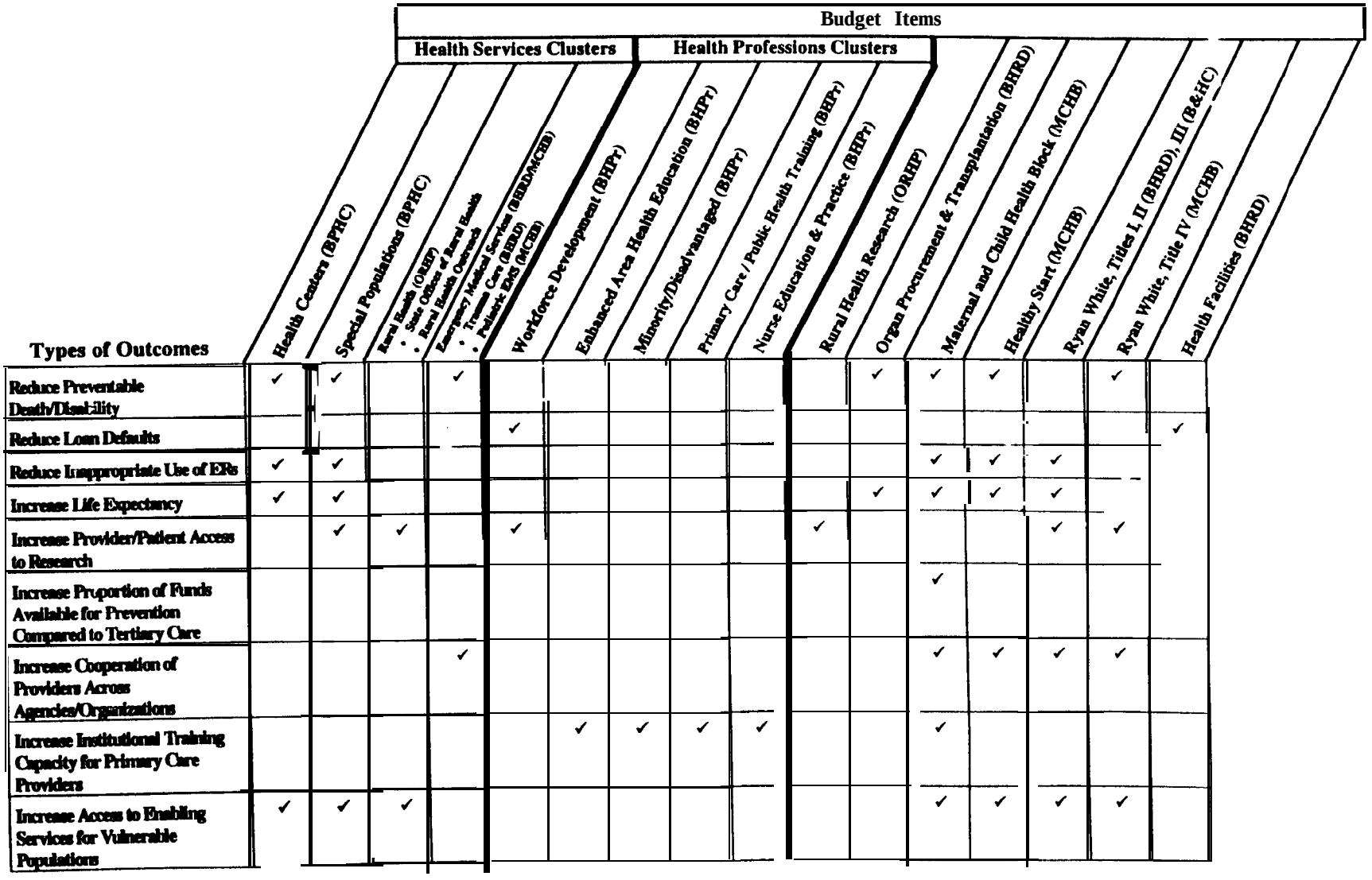

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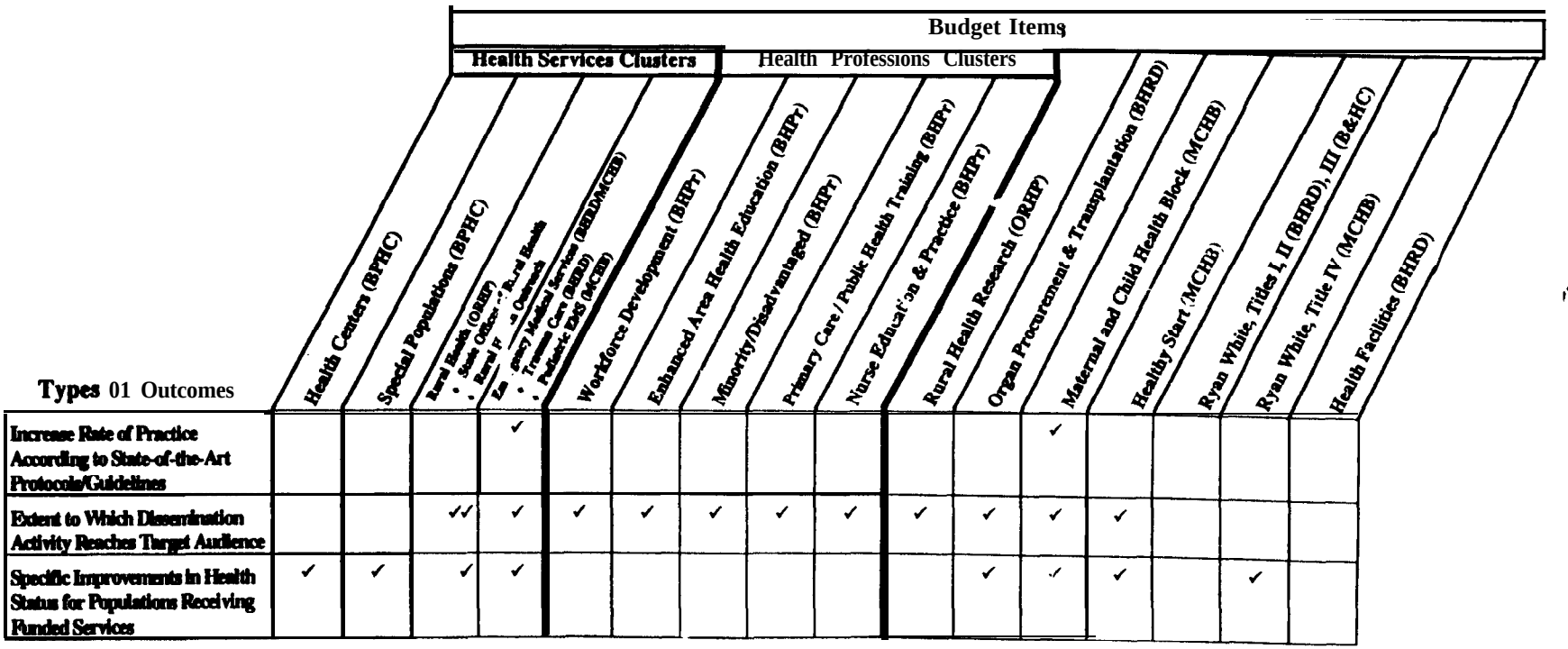
Exhibit 3-9
Linking Performance to Budget Requires Documentation of Outcomes and Impact Resulting From Activities Supported By Budget Items: Types of Outcomes (examples) cont.



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- **There is a wide variance across HRSA programs/clusters in the current status of their performance measurement efforts. Within most programs, there is inadequate linkage along the continuum of performance measurement; in general programs emphasize producing outputs rather than evaluating program performance or outcomes.**

In the previous section we described, for each budget line item, the requirements-the "should be"— of the logical relationships among a program's objectives and the flow of inputs, activities, outputs, outcomes and impacts required to achieve the objectives. In this section we present our assessment of the current status-the "as is"-of performance measurement for the programs and clusters corresponding to the line items we examined.

The first component of our summary assessment addresses the specification of goals and objectives to which specific program activities and requested budgets must ultimately be linked. The second area of assessment concerns specification and measurement of inputs to **program performance,** including the legislative authority and resources. Direct output of program efforts is the next key element of GPRA monitoring. This includes the specification of expected outputs, defined measures or plans for measuring outputs and whether these indicators are currently used to manage programs. Progress in outcome measurement includes the current status of outcome measure specification, whether data are currently collected, or whether data collection is planned for these measures, and, if data are collected, whether the measures are being used.

Overall, ***identification and specification of the necessary components of a performance measurement system has been accomplished*** for many of the budget line items included in this analysis. This includes both identifying and defining the logical relationships among goals, inputs, outputs, etc. We attribute the progress on goals/objectives to the recently completed HRSA strategic planning process. Progress diminishes, however, moving towards outcomes. For example, the newly-formed Health Professions clusters have made less progress in the development of performance measures and procedures. This reflects both confusion about definitional issues, which may be resolved through technical assistance, and the current developmental and still transitional state of addressing performance management within **HRSA.**

In general, ***progress in measuring and collecting performance data is quite varied across programs, though a few budgeted activities are considered to have completed this.*** Smaller or more narrowly focused program efforts providing more readily measured interventions, **such as** services (e.g., Community Health Center inputs and outputs, Emergency Medical Services inputs and outputs, and Health Facilities inputs) have generally made the greatest progress in these areas. Well-developed systems for individual program input-tracking within the Nursing Education and Practice, and Minority and Disadvantaged Health **Professions clusters will provide** a very good starting point for cluster-wide tracking but the transition to clusters will now require additional efforts in these areas.

For **other** programs and clusters, the status ***of current and planned measurement and data collection activities ranges from some progress to substantial progress. Programs*** **with some** progress typically collect some but not all of the data needed to effectively monitor their

programs' performance. Programs with substantial progress typically have rather comprehensive systems planned or in place. The degree of progress is a function of both the level of effort devoted to measurement and monitoring in the past, and the scope and difficulty of the monitoring task. In general, ***larger*** programs (e.g., higher dollar volumes, greater geographic scope, etc.), with activities and outputs that are ***more varied*** in nature, that are trying to obtain results that are both ***more difficult to measure and take longer*** to achieve, will make less progress in measuring their performance than other programs for the same investment of effort.

The use of specified measures in management and planning of the activities corresponding to budget line items is currently limited. Most striking is the disparity between the advanced state of progress in specifying goals and objectives for funded activities, compared with the very limited use of these measures in budget development and budget decision processes. Although the reasons for this may vary by program and cluster, there is a common perception that, in the past, program budget decisions were dominated by extraneous political factors, and had little to do with demonstrated program effectiveness or other measures of performance. Use of output and outcome measures are also somewhat limited and tied to progress made in measuring and collecting the data. Of the four Bureaus and ORHP, BHPr and BPHC appear to have done the most work in identifying performance measurements and in linking their data collection/ evaluation efforts to these. Selected ORHP and BHRD programs also have demonstrated good progress in this regard. Output measurement and use is generally further advanced than outcome monitoring, since output measures are often observable at the site of the intervention during the period of funding.

- **Staff are aware of the need to systematically address performance measurement but require both management reinforcement of its importance and technical assistance in developing and implementing a system to do so.**

Our discussions with program staff indicate that there is widespread understanding of the need to demonstrate the effectiveness and efficiency of HRSA programs. In the past this understanding has been largely theoretical; there has been little effort to systematically implement a system of performance measurement and evaluation. Staff indicated that there has been no "market" for this kind of information. Apart from the one percent set aside funds for evaluation, resources for program evaluation and measurement are not identified and supported in the budget process; the current emphasis is on getting the program dollars out to the field, no? getting information and data back in. Where data have been available, it has not been demonstrably effective in budget justifications.

Recent and anticipated Congressional action on HRSA budget line items (e.g., rescissions, reauthorizations) and the continuing efforts of the Administration to streamline and downsize have changed this climate somewhat. For various reasons, staff are increasingly convinced that the current climate represents a significant and lasting change in the management of government organizations, and arc aware of the need to be able to respond to questions, "tell the program story," and be persuasive in efforts to continue the existence of the program or in justifying resource levels. This represents an opportunity for implementing an effective performance management system in HRSA.

Regardless of the technical characteristics of the performance management system ultimately implemented, HRSA management must continually reinforce the importance of the system and demonstrate its utility on a day-to-day basis. Measuring program and organizational performance must become an integral and routine part of program planning and management, not a separate activity conducted in addition to "normal" operations. Because this represents a significant change to the current HRSA way of doing business, plans should be developed for technical assistance, education and training to support and sustain performance management over the long-term.

Adequacy of Data and Data Sources

- **Data are not treated as strategic HRSA resources. The approach to specification, collection and use of data varies widely from program to program.**

As described above in the section on performance measurement, we noticed a great deal of redundancy across individual programs in their approach to collecting and using data to measure performance. Many programs target the same populations; staff are often monitoring the same types of organizations (and in some cases quite possibly the same organization) that receive HRSA grant funds. Currently many programs are trying to use and improve a small set of existing information sources, such as the HRSA grant files, to systematically collect information. At the same time, different programs may be trying to obtain different information, in different formats and at different times, from the same source, thereby increasing the reporting burden at the grantee level.

At present, HRSA does not (and probably cannot) consolidate available data from different programs to address HRSA-wide issues. We observed some program-specific data standardization efforts that might serve as useful building blocks for an improved and more comprehensive HRSA-wide effort. (e.g., the Uniform Data Set in the BPHC, the Aggregate Annual Report for Ryan White programs).

We suggest that increased use of common, structured and standardized data strategies is necessary to both implement an effective system of performance management and to reduce inefficiency associated with data collection and reporting at both the Federal and state/local/grantee levels.

- **Programs face a potential conflict in government policy regarding collecting essential performance measurement information that should be addressed comprehensively at the HRSA level rather than on a program-by-program basis.**

As we have indicated earlier, an improved system of performance measurement places more emphasis on the evaluation components of programs. Data on program performance is essential to an effective system of performance measurement. However, HRSA programs, as described above, are typically not engaged in directly delivering services or conducting research, but rather rely heavily on grantees at the state and local level (who may, in turn, rely on their own grantees, vendors, or contractors to perform the necessary work). Thus improved performance

measurement activities for HRSA programs, to the extent they require greater data collection from organizations or individuals outside the federal government, necessitates resolving or modifying the current effects of OMB clearance requirements for certain types of data collection.

These effects have two aspects. The first is that in attempting to reduce the data collection and reporting burden on outside groups, OMB clearance procedures and the long delays associated with completing them (6-9 months for approval of a data collection instrument is typical), have created an internal burden for government programs. Staff cite this burden as one reason why some data collection and evaluation activities are not undertaken at all, or are conducted on a program-by-program basis rather than more systematically on a HRSA-wide basis.

The second effect is that even when clearance packages are submitted, OMB may not approve specific questions or types of reporting that are essential to either substantive or program performance evaluation. For example, OMB removed some data collection requirements from MCHB's application guidance for its state grantees, requirements that OMB felt were too burdensome, but that would have allowed better and more specific identification of the target populations receiving services.

The policy conflict between the need for specific and more comprehensive performance data to implement GPRA, and the need to reduce the burden associated with participation in federal programs, needs to be resolved. GPRA authorities at OMB acknowledge that OMB clearance requirements are not going to be removed ("GPRA does not and wasn't intended to repeal the Paperwork Reduction Act"). However, these same authorities acknowledge that GPRA-acceptable agency and department performance measures, especially for programs like those at HRSA, must go beyond aggregate population-based measures and use client-level data to identify the effects of federal programs on specific, targeted populations of interest. Resolving this conflict must be part of a continuing GPRA implementation dialogue between OMB and each agency; this process may be able to develop GPRA-specific exceptions to normal clearance requirements for particular types of audiences, e.g., federal grantees. This activity should occur at the HRSA level, rather than at the Bureau or program level, and depends on a well-thought out HRSA-wide data strategy on which to justify any potential exceptions.

- **Resources for data collection and evaluation are not provided in the budget process and unit costs for these activities are not available.**

Another reason why data are not collected for evaluation is the additional resources required, resources that are not typically included in program line item budgets. Even if resources were to be included in individual programs, or allocated from HRSA-wide one-percent evaluation funds, HRSA lacks adequate information on the costs of collecting different types of input, activity, output and outcome data from which to estimate the level of resources necessary.

As described above, HRSA programs are carried out by grantees at the state and local level, grantees who often use subgrantees, vendors, or contractors to perform the necessary work. We found that this system is not structured to produce a routine flow of information on grantee

and subgrantee inputs, activities and outputs from which to develop cost and performance information that would be useful in program and HRSA-wide budgeting and resource allocation. Between service delivery and obtaining information, the emphasis is decidedly on the former—delivering funds, services and assistance to organizations who will make use of them.

HRSA also needs to develop a data collection strategy that develops the cost factors necessary to identify acceptable ratios of the cost of data and information collection to total program costs, and the range of tradeoffs between expensive, long-term outcome and impact data and reliance on more affordable, nearer-term surrogate measures. HRSA should include data collection and cost reporting in any performance partnerships it enters into with state and local partners, and identify agreed-upon divisions of labor and responsibilities for these activities.

Support for HRSA-wide Strategic Priorities and Reinvention Efforts

Our findings in this section are preliminary and somewhat less detailed than in the section on performance measurement. They are based on the individual assessments of each program, which was the focus of this first phase of the project; a comprehensive review of HRSA-wide issues has not been accomplished as part of this phase.

- **Current HRSA programs support multiple and diverse populations, organizations and activities.**

HRSA programs have multiple objectives, target diverse populations, and use different organizations tc carry out a wide variety of activities. To assist identification of potential redundancies and gaps, we have prepared an inventory of HRSA programs, in a series of matrices, to summarize and demonstrate how the individual budget items intersect with populations, organizations, and activities:

- Exhibit 3-10 shows how the budget items target diverse populations of concern to HRSA;
- Exhibit 3-11 displays the types of organizations that receive HRSA funding through each of the budget items, to conduct activities to meet key objectives for these target populations; and
- Exhibits 3-12 and 3-13 illustrate the types of activities that are carried out under each budget item at both the Federal and state/local/grantee levels.

The information contained in the exhibits reflects commonalities and differences across the variety of HRSA programs that have implications for the development of performance measures. For example, where HRSA programs share or have in common activities, grantees, or populations served, then it may be possible to quickly and cost-effectively develop a robust array of process, output, and outcome measures, respectively. Further, identifying organizations or groups that receive grant funds or other outputs from multiple HRSA programs is also essential information needed to develop cost-effective HRSA-wide data strategies.

Exhibit 3-10
HRSA Budget Items Strive to Improve the Health Status of Diverse Populations

Target Populations	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (EMSD/MCHB) • Trauma Care (EMSD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
	Budget Items															
	Health Services Clusters							Health Professions Clusters								
Women	✓	✓						✓	✓			✓	✓		✓	
Infants and Children	✓	✓		✓				✓				✓	✓		✓	
Adolescents	f			f				f				f	f		f	
Adult Males	f	f											f			
Families	f							f					✓		f	
Pregnant Women	f	f						f				f	f		f	
Elderly		f				f			f							
Persons with Disabilities		f				f			f			f				
HIV / AIDS	f	f				f			f			f	f	f	f	
Mental Illness	f	f		f		f						f	f			
Substance Abuse	f					f			f				f			
Racial / Ethnic Minorities	f	f				f	f		f			f	f		f	
Rural Populations	f	f	ff	f	f	f		f	f	f		f	f			
Urban Populations	f	f				f		f				f	f			
Low Income	f											f	f			f

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Exhibit 3-11
HRSA Budget Items Fund Diverse Organizations to Accomplish HRSA Goals and Objectives

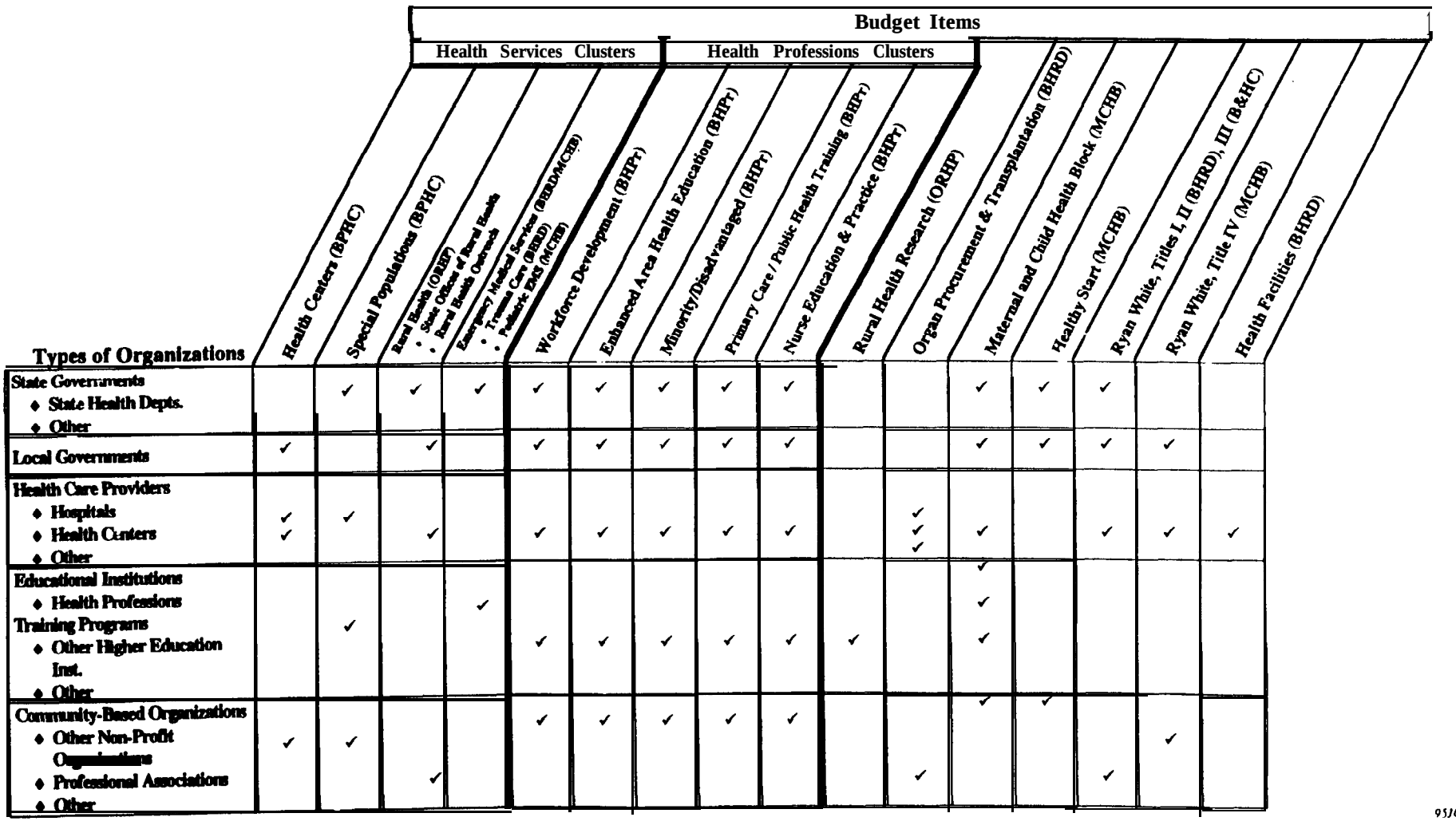

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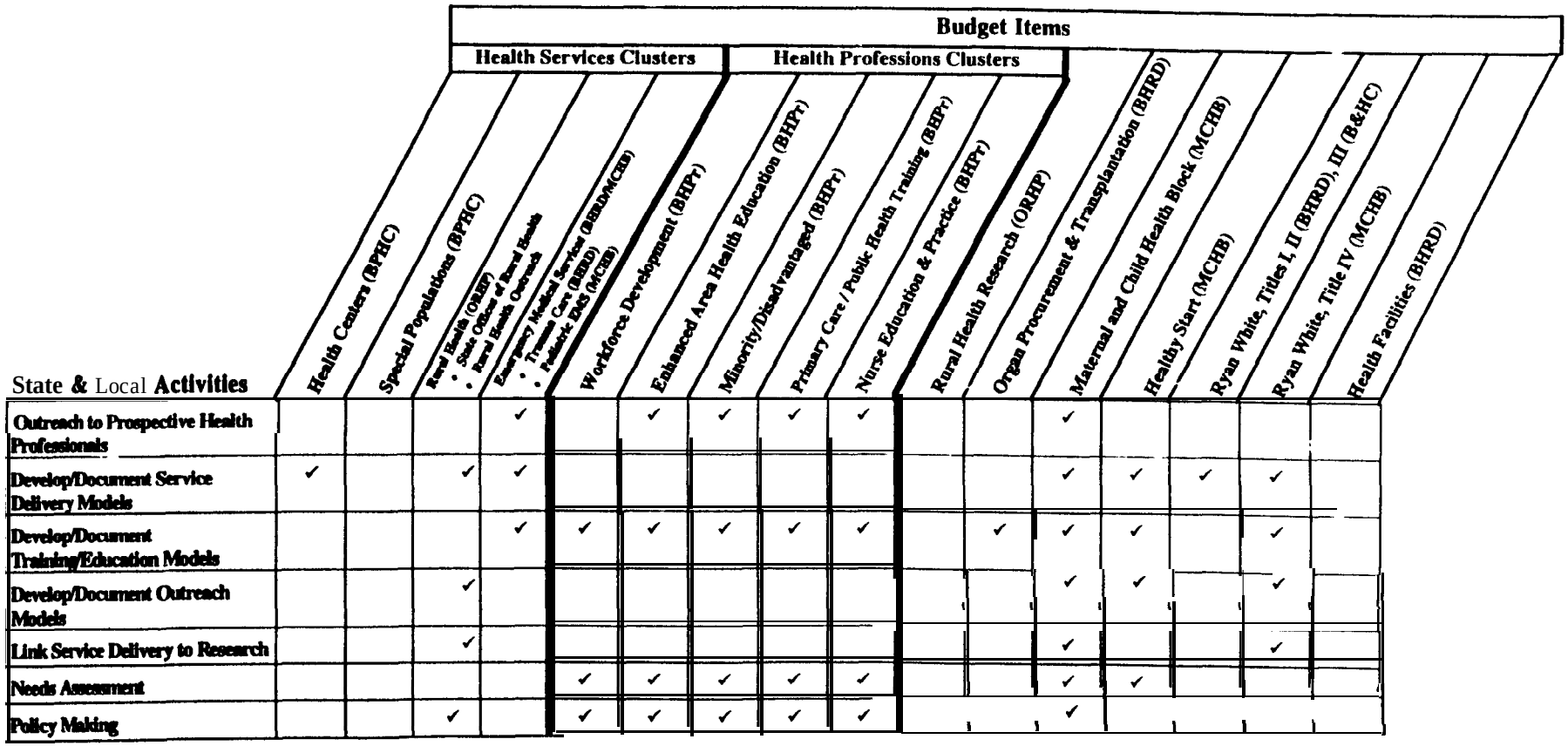
Exhibit 3-12
HRSA Budget Items Support Diverse Activities Designed to Implement HRSA Goals and Objectives: Federal Level Activities (examples)

Federal Level Activities	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (HRSA/MCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Grant Making	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Facilitation/Convening Experts	✓	✓								✓		✓	✓			✓
Develop/Set Program Guidance/Policy/Regulation	✓	✓			✓	✓	✓	✓	✓			✓	✓		✓	
Monitor Use of Funds	✓	✓			✓	✓	✓	✓	✓			✓	✓		✓	
Monitor Populations Reached	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
Monitor Funded Service Delivery	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
Provide Technical Assistance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Disseminate Information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Evaluate Programs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Conduct Research to Support Policy Making	✓	✓			✓	✓	✓	✓	✓	✓		✓	✓			
Enforce Regulation/Policy	✓	✓			✓	✓	✓	✓	✓							
Needs Assessment	✓	✓			✓	✓	✓	✓	✓			✓	✓			

Exhibit 3-13
HRSA Budget Items Support Diverse Activities Designed to Implement HRSA Goals and Objectives: State and Local Activities (examples)

State and Local Activities	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (EEEDMCHB) • Trauma Care (BEEDD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHPD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Service Delivery System Development	✓	✓	✓	✓								✓	✓	✓	✓	
Facilitation of Interagency/ System Linkage/Coordination	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	
Outreach to Vulnerable Populations	✓	✓	✓	✓								✓	✓	✓	✓	
Service Delivery to Vulnerable Populations	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓	
Information Dissemination to Providers			f	f						f		f	f		f	
Information Dissemination to Public			f	f						f	f	f	f		f	
Training/Education		f		f		f	f	f	f		f	f	f	f	f	
to Educate Health Professionals					f	f	f	f	f	f		f				

Exhibit 3-13
HRSA Budget Items Support Diverse Activities Designed to Implement HRSA Goals and Objectives: State and Local Activities (examples) cont.



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- **Recent efforts to conduct HRSA-wide strategic planning have been useful to prepare for GPRA implementation; however, the resulting strategic goals emphasize current program concerns rather than potential HRSA opportunities.**

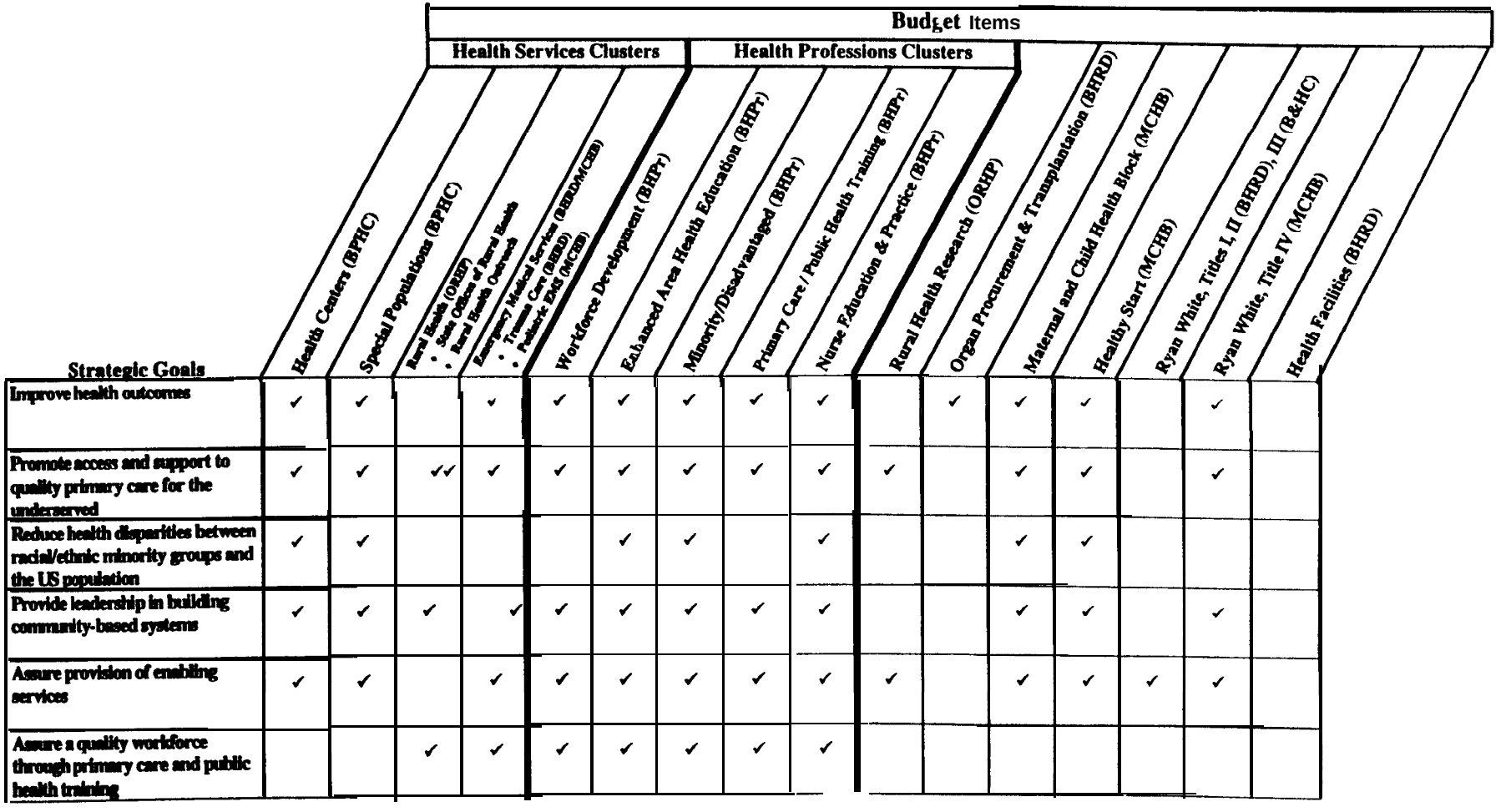
GPRA will eventually require each agency and department to develop an annual performance plan as an outgrowth of a five-year strategic planning cycle. In reviewing the recent strategic planning efforts of each Bureau and the ORHP, we found that these efforts, to the extent they were taken seriously and not treated as a "paper exercise" provided a good foundation and introduction to basic concepts of performance management. However, staff were skeptical that their efforts would have a demonstrable effect on the status quo and the relationship among programs within HRSA. The generally different results from each Bureau and Office were cited as evidence that protection of existing program prerogatives and structures was deemed to be of more concern than effective, HRSA-wide change.

We found some support for this perspective when we aligned current programs with the HRSA-wide strategic goals that emerged from the planning process. Exhibit 3-14 reflects the alignment of each budget line item with specific HRSA-wide strategic goals. At this level, programs generally align with and support the HRSA-wide strategic goals. Exhibits 3-15 through 3-20 reflect the program alignment with the objectives underlying each goal.

As one might expect, the large-dollar, high visibility programs (e.g., MCHB block grant, Ryan White, health centers and health professions clusters) align well with many of the HRSA-wide goals. Smaller, less visible programs appear to have fewer points of intersection (some BHRD and ORHP programs). However, some smaller programs that we believe provide effective rrodels for Federal-State-local partnerships and collaboration, e.g., "how to do business," appear not to have been included in establishing these goals.

New methods of governmental activity such as performance partnerships, and program and agency consolidations represent a completely new environment for HRSA programs. The next round of HRSA strategic planning should emphasize the opportunities reflected by this environment. HRSA strategic goals, program objectives, structure and performance requirements should be developed in a logical manner from this starting point, rather than being overly constrained by the programs that exist at that time.

Exhibit 3-14
HRSA Strategic Goals Linked to Budget Line Items



Strategic Goals	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (EMSD/MCHB) • Trauma Care (EMSD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Improve health outcomes	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	
Promote access and support to quality primary care for the underserved	✓	✓	✓✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	
Reduce health disparities between racial/ethnic minority groups and the US population	✓	✓				✓	✓		✓			✓	✓			
Provide leadership in building community-based systems	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	
Assure provision of enabling services	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	
Assure a quality workforce through primary care and public health training			✓	✓	✓	✓	✓	✓	✓							

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Exhibit 3-15
HRSA Strategic Goal: Improve the Health Outcomes of All Populations Served

Objectives	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (EMSD/MCHB) • Trauma Care (EMSD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Increase proportion receiving preventive & screening services	✓	✓						✓				✓	✓	✓	✓	
Increase proportion of pregnant women served who receive prenatal care in the first trimester	✓	✓										✓	✓			
Increase proportion of women who know their HIV infection status													✓		✓	
Increase proportion of women who know are given information about latest treatment among HIV-positive and at-risk women, and increase access to latest treatment													✓		✓	
Decrease number of preventable deaths				✓							✓	✓	✓			
Increase health status		✓									✓	✓	✓			
Increase quality of life											✓		✓			
Increase life expectancy													✓			

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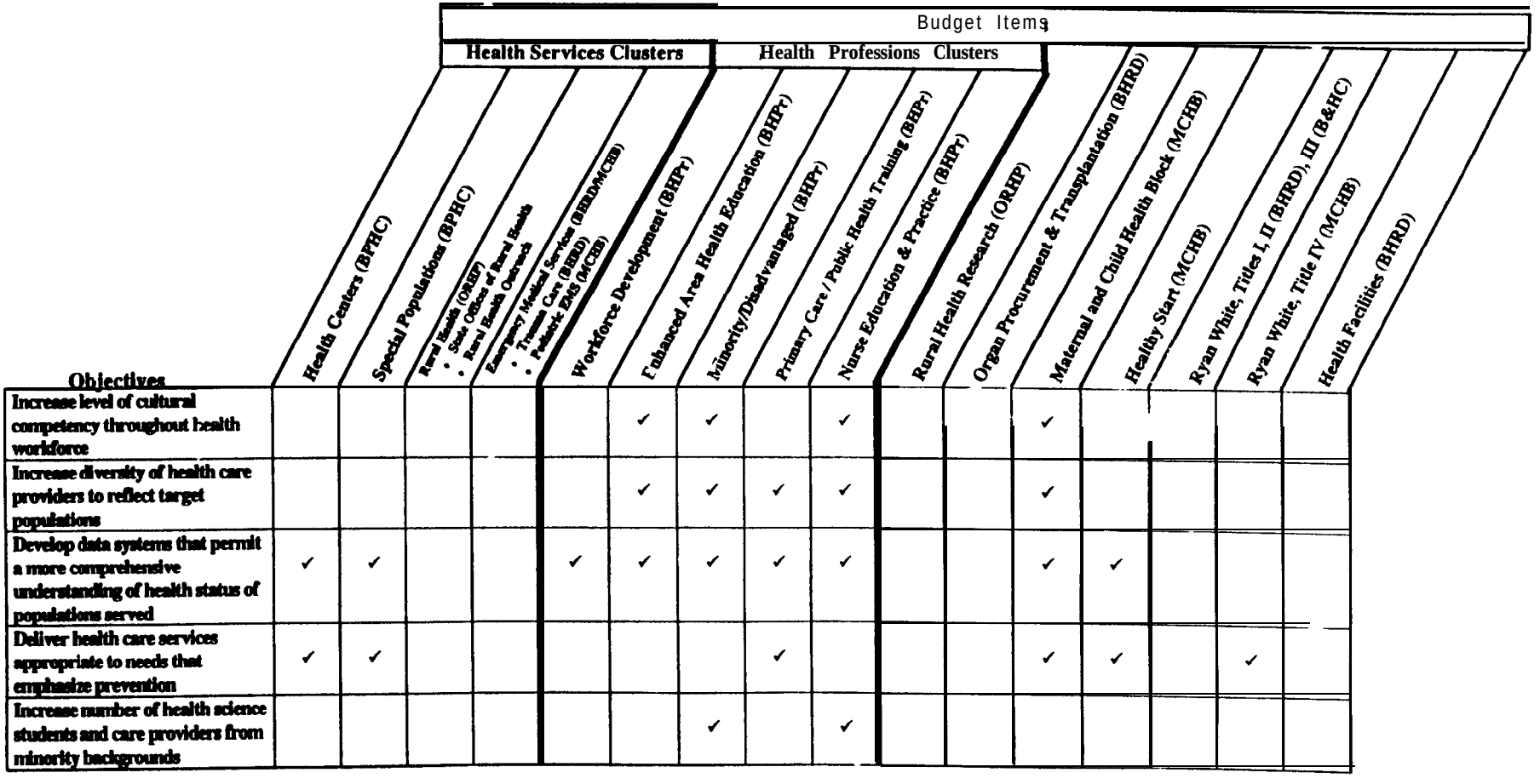
Exhibit 3-16
HRSA Strategic Goal: Promote Access to Quality Primary Care and Related Support Services to All Who are Underserved or Disadvantaged

Objectives	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (EEMSD/MCHB) • Trauma Care (BEMSD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Increase number of grantees who establish partnerships for improving access for underserved and vulnerable populations	✓	✓	✓		✓	✓	✓	✓	✓				✓		✓	
Increase number of grantees who establish partnerships to improve quality of care for underserved and vulnerable populations	✓		✓	✓	✓	✓	✓	✓	✓				✓			
Increase number served among underserved and vulnerable populations	✓	✓	✓✓		✓	✓	✓	✓	✓			✓	✓	✓		
Increase access points for primary care among underserved and vulnerable populations	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓	
Increase scope of services to underserved and vulnerable populations	✓	✓	✓		✓	✓		✓	✓			✓	✓		✓	
Develop coordinated systems of planning that identifies gaps & establishes standards for access for underserved and vulnerable populations	✓		✓✓	✓	✓	✓		✓				✓	✓	✓		

Exhibit 3-17
HRSA Strategic Goal: Reduce Health Status Disparities Between Racial/Ethnic Minority Groups and the US Population



Objectives	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BEMDMCHB) • Trauma Care (BEMD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Increase level of cultural competency throughout health workforce						✓	✓		✓			✓				
Increase diversity of health care providers to reflect target populations						✓	✓	✓	✓			✓				
Develop data systems that permit a more comprehensive understanding of health status of populations served	✓	✓			✓	✓	✓	✓	✓			✓	✓			
Deliver health care services appropriate to needs that emphasize prevention	✓	✓						✓				✓	✓		✓	
Increase number of health science students and care providers from minority backgrounds							✓		✓							

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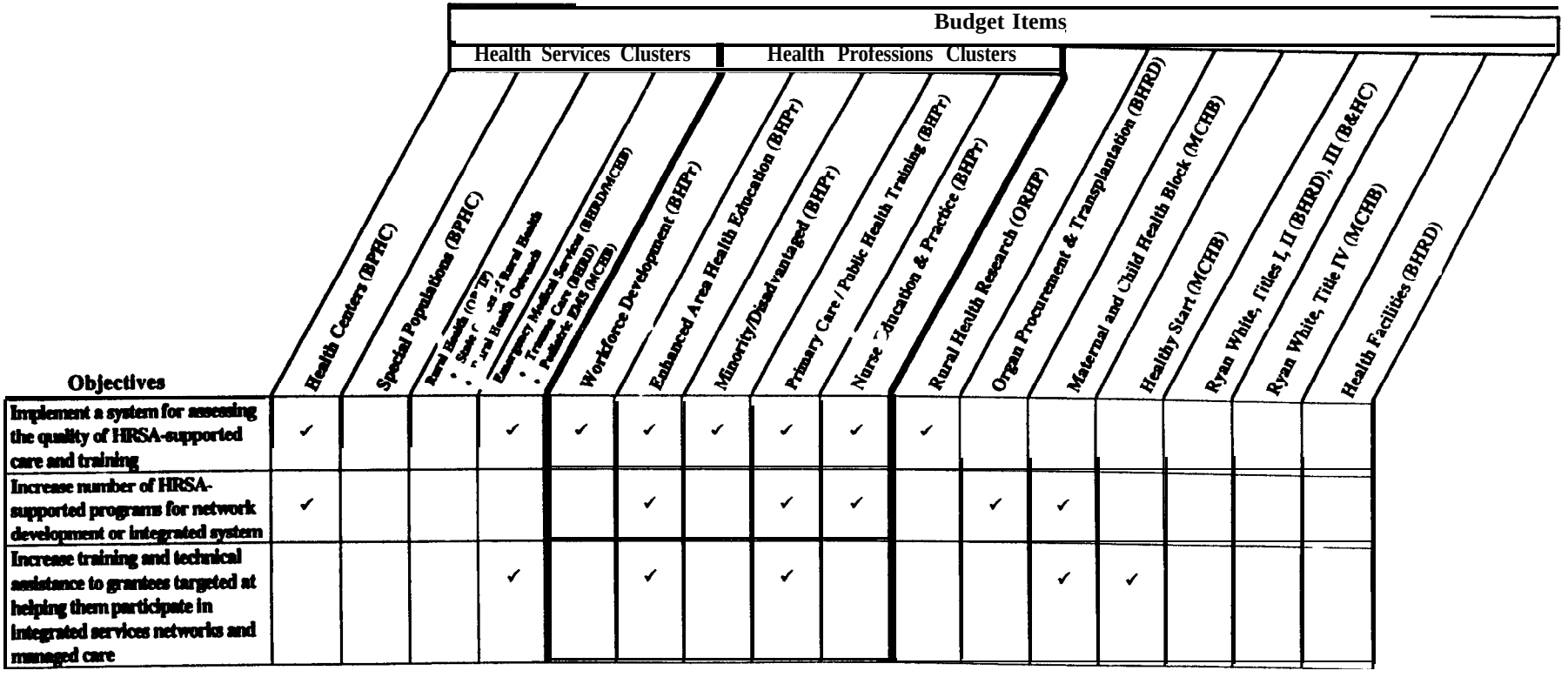
Exhibit 3-18
HRSA Strategic Goal: Provide Leadership in Building. and Strengthening Community-Based Systems of Care



Objectives	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (O[illegible]) • State [illegible] • [illegible] Rural Health Outreach	Emergency Medical Services (BHDP/MCHB) • Trauma Care (BHDP) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse [illegible]ducation & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
	Budget Items: Health Services Clusters					Health Professions Clusters										
Implement a system for assessing the quality of HRSA-supported care and training	✓			✓	✓	✓	✓	✓	✓	✓						
Increase number of HRSA-supported programs for network development or integrated system	✓					✓		✓	✓		✓	✓				
Increase training and technical assistance to grantees targeted at helping them participate in integrated services networks and managed care				✓		✓		✓				✓	✓			

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Exhibit 3-19

HRSA Strategic Goal: Assure the Provision of Enabling Services to Overcome Barriers through HRSA-Supported Services, Training Programs, and Systems

Objectives	Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BHCMCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
	Budget Items															
	Health Services Clusters						Health Professions Clusters									
Utilize patient protocols to identify barriers to care				✓												
Conduct outreach to assure target population is aware of benefits and services	✓		✓✓			✓		✓			✓	✓	✓		✓	
Assure providers and services are appropriate for racially and ethnically diverse populations, and that services are delivered in culturally competent manner	✓	✓					✓		✓			✓	✓		✓	
Provide increased knowledge, understanding of differences/ similarities among groups, and promote systems that meet unique needs	✓					✓	✓	✓	✓			✓				
Support development and delivery of enabling services	✓	✓		✓							✓	✓	✓	✓	✓	
Encourage financial support for enabling services			✓								✓	✓	✓			

Exhibit 3-20
HRSA Strategic Goal: Assure a Quality Workforce that Meets the Health Needs of the Nation through Primary-Care and Public Health Training

Objectives	Budget Items: Health Services Clusters: Health Centers (BPHC)	Special Populations (BPHC)	Rural Health (ORHP) • State Offices of Rural Health • Rural Health Outreach	Emergency Medical Services (BHRD/MCHB) • Trauma Care (BHRD) • Pediatric EMS (MCHB)	Workforce Development (BHPr)	Enhanced Area Health Education (BHPr)	Minority/Disadvantaged (BHPr)	Primary Care / Public Health Training (BHPr)	Nurse Education & Practice (BHPr)	Rural Health Research (ORHP)	Organ Procurement & Transplantation (BHRD)	Maternal and Child Health Block (MCHB)	Healthy Start (MCHB)	Ryan White, Titles I, II (BHRD), III (B&HC)	Ryan White, Title IV (MCHB)	Health Facilities (BHRD)
Develop national health workforce policy with targets for primary care and public health supply and distribution			✓		✓	✓	✓	✓	✓							
Strengthen recruitment to increase number of primary care providers serving underserved and vulnerable populations			✓		✓	✓	✓	✓	✓							
Increase number of primary care providers who remain in practice in primary care					✓	✓	✓	✓	✓							
Expand the number of students/ residents in activities focusing on community practice, cultural sensitivity and interdisciplinary teams					✓	✓	✓	✓	✓							
Increase support for prevention and public health in clinical training of all health professionals					✓	✓	✓	✓	✓							

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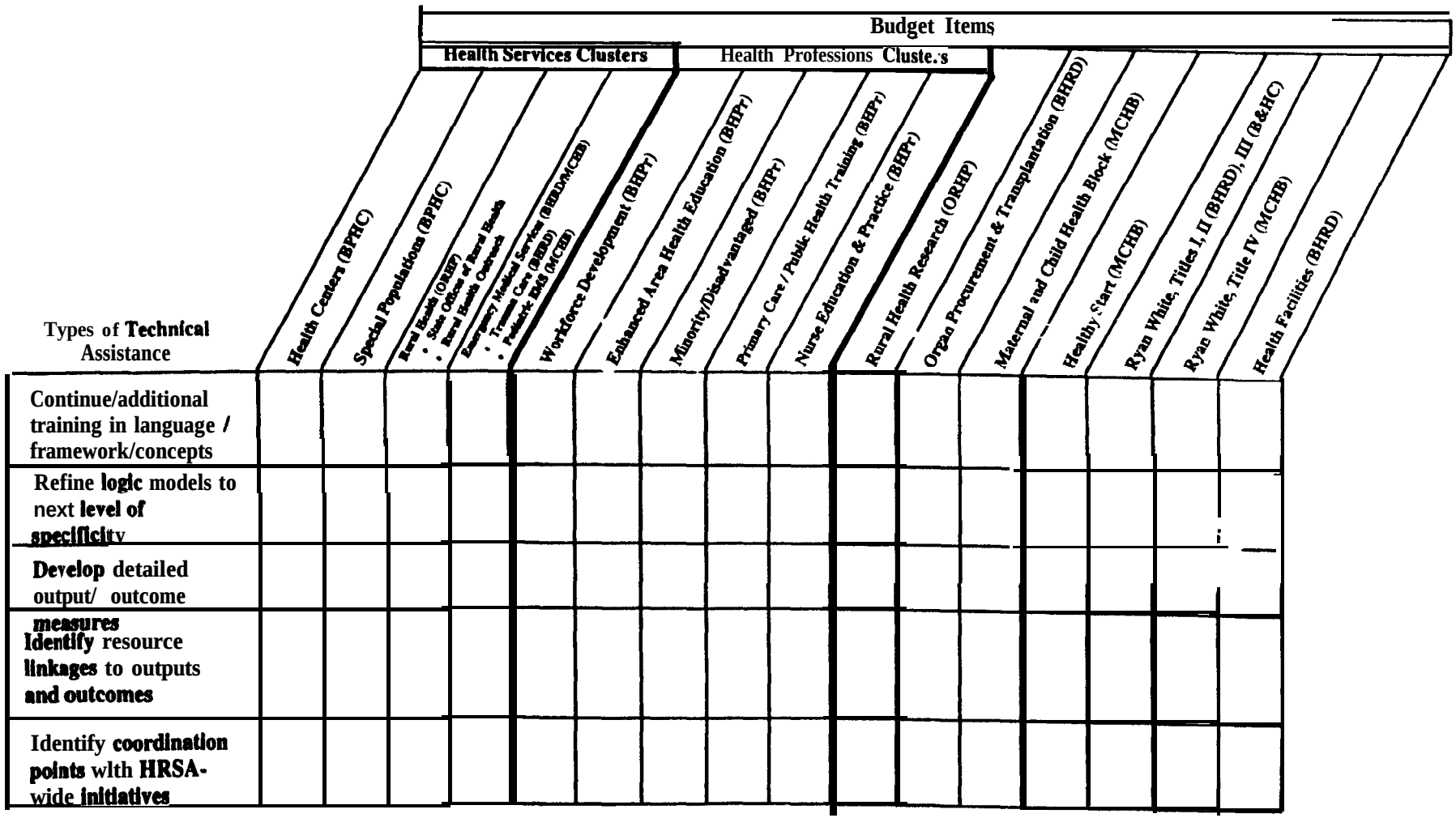
Preliminary Technical Assistance Requirements



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- **HRSA programs are not currently linked to the budget process in the manner envisioned by GPRA.**

Currently, there is little if any linkage between program performance measurement efforts and the budget process. The funding available for most HRSA programs is set externally as a result of the budgeting process between HRSA, the Department, OMB and Congress. In general, programs do not develop a requirements-based, bottom-up estimate of the budget needed to meet its goals and objectives. Rather, the emphasis is on managing programs within the funding levels established elsewhere. Consequently, there is no process at the program level in which to insert better program performance information, a key objective of the GPRA initiative.

The disconnect with the budget process also de-emphasizes the contribution of and effort devoted to the array of federal functions that are rarely measured (as reflected to some degree in Exhibit 3-2). Resources within budget line items as wel! as in the separate "program management" line item provide for staff time that is expended on important value-added activities (e.g., technical assistance, centralized coordination, policy and standards development, etc.), in addition to providing funds through grants and contracts. OMB interviews indicated that agencies need to consider how and whether to take any of this into account, and that given concern with streamlining and redefining federal roles, it would be important to more explicitly identify the resources associated with these activities as part of an improved program performance measurement strategy.

CHAPTER 8: RECOMMENDATIONS

The prior chapter and the related appendices have assessed the current status of performance management efforts within the HRSA budget line item areas. The results of the assessment suggest that significant building blocks are in place to move forward with a more comprehensive and coordinated HRSA-wide effort to meet the requirements of GPRA. In addition, while there has been considerable activity related to the various aspects of performance measurement within the various Bureaus, the current status of these efforts are preliminary and there is room to quickly intervene in these individual efforts to create an agency-wide approach. This chapter provides an initial set of recommendations based upon the work we have completed. These recommendations reflect our assessment as well as the current environment related to both GPRA and reinvention.

The following recommendations are intended to address two critical issues for HRSA and its Bureau/Office-based programs: the short-term issues resulting from current budget efforts and the longer term issues involved in improving HRSA's ability to address the fundamental performance question identified earlier: *Can HRSA, with a given set of resources, through a series of actions and decisions, produce outputs that have the desired effects and outcomes for the intended audiences or beneficiaries? The* approach that we feel is necessary to address this ultimate question involves both individual budget line item approaches as well as a cross-program approach to performance measurement. This chapter contains Lewin-VHI's recommendations for those fictions We believe are necessary to begin implementing a system of performance management and measurement for HRSA—essentially, to outline a HRSA strategy for responding effectively to the requirements of the Government Performance and Results Act (GPRA).

The strategy we recommend is grounded in the concept of HRSA-wide *performance management*, which includes the measurement of individual program performance as an essential component, but extends more broadly to the management and performance of HRSA as a whole. This broader, agency-wick focus is clearly indicated by both the GPRA legislation itself and its implementing guidance from OMB, although the particulars of how program performance will be translated into agency performance are not specified. The objective of the HRSA performance management strategy should be to develop the supporting infrastructure and resources required to implement an effective system of managing HRSA-wide organizational performance, a system we describe as a continuous and iterative process of:

- *Monitoring* the status of an organization's system of outputs that are intended to produce changes in the environment, the actual changes in the environment, and the nature of the interactions between the outputs and the environment;
- *Analyzing* the data and information collected;

- Comparing the analysis results to desired levels of performance established by indicators or evaluation methods, and establishing the boundaries of the problem for management decision;

- *Deciding,* by developing appropriate courses of action consistent with the nature of the problem, assessing the advantages, disadvantages and feasibility of each, establishing criteria, and selecting the best course of action to correct the situation; and

- *Acting* to implement the selected course of action, to change the organization's outputs and start the cycle anew.

Our recommendations are based on the research, interviews and discussions conducted as part of this initial assessment. Because of relatively limited time available for conducting the assessment, and the large number and wide variety of HRSA programs involved, our recommendations should be regarded as preliminary. We believe, however, that they are valid with respect to the overall direction and initial prioritization of the actions needed to develop an effective performance management strategy.

We have organized this chapter into three sections:

- A discussion of the guiding principles and assumptions that support our recommendations on developing a HRSA performance management strategy;

- The recommended actions needed to develop the strategy, sub-divided into long-term and short-term actions; and

- A discussion of technical assistance planned for HRSA as a whole, and individual Bureaus, Offices and programs.

Principles and Assumptions

Our assessment efforts identified several issues regarding HRSA as a whole that had the potential to affect the development of performance management efforts at the Bureau, Office and program levels. Resolving these issues was not included within the scope of the initial assessment; however, an assumption about how they would be resolved was necessary to provide a clear direction for the performance management strategy. These assumptions provide guiding principles for refining the strategy in subsequent phases of the project. Briefly, these principles are as follows:

- ***HRSA's future vision and strategic planning efforts will emphasize a coordinated, interdependent system of health care resources rather than a disparate, independent collection of progmms.*** *Key* to the issue of developing an organizational performance strategy is the fundamental vision of the organization it is intended to serve. We found some tension between competing concepts of HRSA's organizational identity-i.e., whether it is the architect of a coordinated, interdependent ***system*** of health care resources

and developer of the programs to support this system, or the manager of a disparate, independent collection of programs developed elsewhere. We believe this tension needs to be expeditiously resolved by the HRSA leadership. A performance strategy designed to support an independent program concept might be quite different than one developed with the more interdependent program concept in mind. Traditionally, we believe HRSA could be described as a collection of relatively autonomous programs. In our assessment of individual programs and line items, however, we found some overlap and potential redundancy in the goals, objectives, target audiences served, data used and collected, and activities conducted across programs. This suggests the need for a degree of interdependence and coordination among HRSA programs that has not typically been the case in the past. In developing our recommendations for a HRSA performance strategy, we assume that the future vision of HRSA and its agency-wide planning efforts will be clearly articulated by the HRSA leadership, and will emphasize HRSA-wide coordination and integration and program interdependence, rather than stand-alone efforts. The recent clustering of programs in the FY 1996 budget is an example of this new and fundamentally different direction.

- ***The HRSA performance management strategy will be clearly linked to its strategic planning process.*** GPRA clearly defines strategic planning as a critical preliminary step in the performance management effort. The HRSA strategic planning process is underway; however, as we indicated in our findings, the initial results appear to emphasize current program concerns rather than HRSA-wide opportunities. Strategic planning and the measurement of program performance exist at opposite ends of the organizational performance spectrum, but neither can be effectively accomplished in isolation from the other. We take it as a given that the HRSA leadership will provide the direction and emphasis necessary to clearly and explicitly link these two components of overall organizational performance through a series of iterative, incremental steps that integrate strategic and program planning and management.

- ***Effective linkages between strategic planning, program activity and the budget process are essential to the ability of HRSA leadership to meaningfully develop and implement its stmtegic priorities.*** While the current environment emphasizes limiting the resources available for federal programs, prudent management of these programs at all times requires allocating resources to those programs with the best "return" on the resources invested. Identifying these effective and efficient programs is a key objective of the GPRA initiative and the performance management systems it is trying to develop. The components of an effective HRSA-wide performance management system include improved strategic planning, links between program planning, execution, and budgeting, and an improved system of cross-program evaluation and performance measurement. Developing such a system is essential to enabling the HRSA leadership to identify and set its strategic priorities during the strategic planning process, to allocate resources to higher priority programs during the budget process, and to follow through and implement its strategic **priorities by monitoring program execution and performance.**

- *The HRSA **performance management strategy is evolutionary; it responds to the GPRA requirements that are most feasible to implement first, and will progressively adapt and incorporate others as they become available.** **By*** design, GPRA is based on an evolutionary concept. Through its emphasis on pilot programs and seeking out "what works best," the GPRA initiative is attempting to develop a repertoire of performance management techniques, and the willingness to use them, in planning and managing government programs. But GPRA's developmental approach does not preclude or obviate HRSA's requirement to begin addressing, as soon as possible, the fundamental performance question we identified at the beginning of this Chapter: ***Can** HRSA, **with a** given set of resources, through a series of actions and decisions, produce outputs **that have** the desired effects and outcomes for the intended audiences or beneficiaries? As the* most recent appropriations hearing suggests, HRSA needs to be in a better position to answer questions such as "are we making significant headway in meeting or addressing major health concerns and problems?" By carefully crafting a performance management strategy that integrates both immediate and developmental components, the HRSA leadership should be able to answe-. such questions as "what did our programs do?" (through measures of inputs and process/activities) and "what difference did our programs make?" (through measures of outputs and outcomes)—now and in the future.

Developing a HRSA Performance Management Strategy

The development of a HRSA performance management strategy is a complex process that requires both a short-term component to address more immediate needs and a longer-term component that focuses on the investment in measurement development and data systems that will support a vigorous and useful performance mea. urement system. Underlying both the short and long term strategies is the concern for how best to apply limited resources to the complex set of activities that will be required.

For purposes of this report, we are considering the short-term period to extend roughly from the present to the beginning of internal planning fc. the FY 1998 budget, i.e., from May/June 1995 until January/February 1996. Those actions which we recommend for the short-term are those we believe to be essential for HRSA to undertake and/or substantially complete to both respond to its immediate GPRA requirements and to prepare for full GPRA implementation in the FY 1998 budget. Our recommendations for longer-term development build on those actions begun or completed in the short-term, but will require more time to complete and fully implement the strategy.

Recommendations for Lone-Term Development

- **Continue and refine the HRSA strategic planning process**

  Effective strategic planning should be reflected in individual program efforts that respond to and carry out agency-wide goals and objectives. As noted earlier, the Bureau-specific and HRSA-wide strategic planning activities appear to have been conducted as separate efforts, rather than as a deliberate and coordinated effort.

We recommend that the next round of HRSA strategic planning should be designed to coordinate the development of Bureau-specific plans with HRSA-wide and individual program planning efforts, and involve broader participation in an explicit process to identify HRSA-wide strategic priorities. All plans at all levels should reflect a basic consistency of approach, to facilitate monitoring of the execution of the plans.

Additionally, new methods of governmental activity such as performance partnerships and program consolidations represent a completely new environment fcr HRSA programs. The next round of HRSA strategic planning should also emphasize as a starting point the opportunities reflected by this environment; HRSA strategic goals, program objectives, ***structure*** and performance requirements should be developed in a logical manner from this starting point, rather than being overly constrained by the programs that exist at that time.

- **Initial efforts to revise the structure of HRSA programs should continue and be expanded.**

Developing a sustainable and effective HRSA-level strategy of performance management is dependent upon a revised HRSA-wide approach to its program structure. Our discussions with HRSA staff and especially with external GPRA informants at OMB and HHS indicated that program structure is the organizational "indexing mechanism" that links strategic planning, program management, and the budgeting process. We ***recommend that an internally consistent, HRSA-wide approach to program structure should be developed to facilitate aggregating and comparing performance of individual programs and Bureaus, evaluating program pe rformance in light of HRSA-wide strategic priorities, and succinctly communicating the overall performance of HRSA to HHS, OMB and the Congress.***

The current HRSA program structure reflects an accumulation of a variety of responses to the needs of vulnerable populations, and multiple approaches to the delivery of health care services and the education of health professionals. In our assessments, we found a great deal of potential redundancy across individual programs in their goals, objectives, data, and activities. Many programs target the same populations;. staff are often monitoring the same types of organizations (and in some cases quite possibly the same organization) that receive HRSA grant funds. Increased use of common approaches by programs with common needs and requirements could reduce inefficiency at both the Federal and grantee level and implies some degree of program structure change within HRSA e.g., budget clustering, program consolidation, or changes in the assignment of line items to the Bureau/Office management structure.

This is not to suggest that all programs should have the same structure, but rather that there is a limited number of structural arrangements that can be used to describe and aggregate the performance of the wide array of HRSA programs. Clustering a good first step in this regard; staff are waiting to see if the clusters represented in the FY 1996 budget are translated into changes in program management or accountability to HRSA-wide strategic priorities_ We think this follow-through is needed to convey the message that HRSA is committed to managing performance on a HRSA-wide basis.

- **The HRSA performance management strategy should be linked to the budget process, evaluation efforts, and to grants and contract management.**

  We recommend that HRSA develop an overall strategy to integrate these key enabling component: of performance management. **The** entire thrust of the GPRA effort is to create linkages between strategic planning, program activity and budget processes to support the ability of the Federal government to develop and implement strategic priorities. ***Our*** assessment of HRSA programs has shown that very weak linkages, if any, exist between current performance measurement activities and the budget process. In addition to the critical linkages between program and budget, there is also a need to link the performance measurement strategy (and activities) to other HRSA functions including evaluation and grants and contract management.

  The current preparation of the FY 1997 budget is an ideal starting point for joint efforts with regard to program-budget staff linkages. Some of this effort is already underway and should be further supported by providing opportunities for common learning and a forum for sharing perspectives and developing an integrated process that supports the different but mutually supporting objectives of the program and budget staffs with resource allocation and performance management.

  The grants and contracts processes, especially those related to program monitoring provide an important resource for data collection, especially in the area of input and output measures. As our discussion in Chapter 3 suggests, there are many common elements across programs in these two measurement areas. The development of a working group that includes representatives of program, grants, and contracts staff could address the development of common procedures for the collection of these data.

  HRSA also needs to broaden the focus of its program evaluation efforts to include information to support the design and implementation of the performance management strategy. The measurement of all aspects of program performance in a balanced manner is the basic intent of program evaluation. Evaluation efforts should not be limited to or focus disproportionate emphasis on relatively narrow substantive areas, or those in which measurement is methodologically difficult and/or expensive. Nor **should evaluation efforts** focus on producing interesting but marginally useful **outcome or** impact measures while ignoring more mundane process and output measures that would support linking and attributing the outcomes to the results of federal activity.

- **HRSA should develop coordinated, sustainable and cost-effective measurement and data collection strategies.**

  We recommend that HRSA develop *an overall* ***strategy for investing in the collection,*** *analysis* ***and*** *management of program and HRSA- wide* ***performance-related data This strategy*** should include efforts to provide a comprehensive and systematic inventory of current HRSA data sources and data bases; develop common data definitions across programs; develop appropriate data collection instruments; and identify and develop linkages

to current data sources and data collection programs external to HRSA (e.g., NCHS, NHIS) for which HRSA may be a customer or potential supplier of performance-related data.

The long-term data strategy should build upon short term efforts to identify specific types of performance measures that apply to more than one program where data collection can be concentrated cost-effectively. These common areas of needed data can be extended to justify HRSA and eventually Department-wide investment in the research and evaluation efforts needed to develop additional measures, primarily those linking outputs and outcomes.

The data strategy also should include the development of the cost factors necessary to identify acceptable ratios of the costs of data and information collection to total program costs, and the range of tradeoffs between expensive, long-term outcome and impact data and reliance on more affordable, nearer-term surrogate measures.

Finally, the data strategy must be coordinated with and be responsive to the evolving government-wide GPRA implementation policy. For example, GPRA informants at OMB acknowledge that OMB clearance requirements are not going to be removed to facilitate GPRA ("GPRA does not and was not intended to repeal the Paperwork Reduction Act"). However, these same authorities acknowledge that GPRA-acceptable agency and department performance measures, especially for programs like those at HRSA, must go beyond aggregate population-based measures and identify the effects of federal programs on specific, targeted populations of interest. Resolving this conflict must be part of a continuing GPRA implementation dialogue between OMB and each agency. This process may be able to develop GPRA-specific exceptions to normal clearance requirements for particular types of audiences, e.g., federal grantees. This activity should occur at the HRSA level, rather than at the Bureau or program level. A well-thought out HRSA-wide data strategy will be needed to provide the strong evidence required to justify any potential exceptions.

- **HRSA should systematically incorporate feedback and data from its "customers," i.e., its grantees and the populations served, into the design and management of its programs.**

Throughout the public and private sectors, there has been increased emphasis on an organization's learning how to do things better by listening to its customers. HRSA's ultimate customers are those individuals for whom HRSA's efforts make a difference in the quality of their lives, Other parties who influence, effect, or are affected by HRSA programs and who may also be included as "customers" at one time or another include Congress, the Department, OMB, special interest, policy and advocacy groups, and HRSA grantees and contractors. HRSA should build upon short term efforts to identify and involve customers (as recommended below) and more systematic methods of evaluating program performance (as recommended above) to expand efforts to collect and analyze information from these customers about how the programs can or should be improved upon. In selected cases, direct participation of customers in initial program design may appropriate, particularly as HRSA programs evolve into performance partnerships with grantees at the state and local level.

Recommendations for Short-Term Action

Next steps for the short-term include the establishment of priorities for action, development of appropriate organizational structures for conducting activities, linkages to other HRSA functions, and the necessary activities to move forward during this current budget planning cycle and prepare for the next one.

- **Establish priorities for short term action**

  An essential first step in designing and implementing HRSA's performance management strategy is to set priorities for the use of its limited resources. Consideration of priorities includes selection of critical overall activities as well as specification of target programs for more in-depth effort.

  We recommend that these programs be selected based on current deliberations and preparations for the FY 1997 budget response. The most recent HRSA budget guidance prescribes use of the program clusters outlined in the FY 1996 budget, and requires that proposed program increases be tied to the eight HRSA program priority areas. Be-cause of the importance that we believe is involved in both continued efforts to revise the HRSA program structure and link performance to strategic planning and priorities, programs selected for intensive performance management effort in the short term should be representative of one or both of these thrusts. In addition, HRSA should consider as a basic priority criterion, those programs or activities that it views as central to carrying out its mission. Based upon the work done on selected programs, HRSA can then review the "lessons learned" and prepare a plan to expand its efforts to all programs for the FY 1998 budget planning process.

- **Identify HRSA focal point(s) for GPRA efforts**

  We recommend that a central coordinator be established within the Office of Pluming, Evaluation and Legislation to be responsible for the overall effort. Currently there is no focal point for performance measurement activities. Everyone is "doing their own thing." However, as our assessment demonstrates there are many common features and issues that each Bureau, Office, and program are facing in their individual efforts. Therefore establishing both a focal point for coordination of efforts as well as appropriate cross-program/cross-bureau efforts would create greater efficiencies in the use of resources as well as the potential for the development of common measures and data collection efforts.

  The Coordinator (and associated staff) would be responsible for developing the short and long term strategies, recommending particular strategies for implementation to the HRSA leadership, and for monitoring the implementation of the specified strategies. Regular reporting to the Office of the Administrator will be essential to ensure that the effort receives the highest visibility and support, including the approval of the necessary resources to carry out these efforts, The central coordinator should also report to the regular meetings of the Administrator and the Bureau Directors on progress and issues to be resolved.

We also recommend rhat a Performance Management Committee (PMC) be established to support the HRSA coordinator. This committee should include representation from each Bureau and Office. It would be desirable that the representatives hold similar responsibilities in their respective unit. This would help ensure coordination and consistency across all HRSA unit efforts. Like the HRSA coordinator, it is desirable that the Bureau and Office committee members have similar reporting responsibilities within their Bureau and Office.

The PMC's first responsibility would be the development of a workplan to carry out the short term activities. The workplan should include a clear set of tasks, assignment of responsibilities, a time frame for their completion, and identification of needed resources. Decision points should be clearly identified so that no untoward delays are encountered. In addition, the PMC would be responsible for developing common/uniform definitions and procedures for program planning and performance measurement that would guide the overall effort.

- Establish **working groups to carry out specific design and implementation activities.**

We recommend that intra-agency workgroups be used as a mechanism for these efforts. While the Committee's role is primarily leadership and coordination, there are a number of next steps that require specific development activities. The workgroups can also be supported by outside assistance as needed. As a result of our program review, we identified input and output measurement, outcome measurement, data collection, and customer involvement as major areas for common efforts. Other similar efforts could be organized around various categories of the more complex output measures as well as for outcome measures. We recommend the following workgroups be established as soon as possible:

- Input and Output Measurement. ***We recommend a Workgroup on input and output measurement be established. As the*** Chapter 3 exhibits show, many of these measures are the same or similar across programs/budget line items and the primary source of information -- program monitoring and required reporting -- is fairly consistent. A work group in this area could further articulate those similarities and develop common approaches for data collection that focus on grant/contract requirements. Therefore an appropriate cross-section of program, grants and contract management staff should be included as part of this work group. Building on our assessment, early efforts of the work group should include: review of current report requirements and data collection tools to determine the most appropriate for use in revising and expanding current efforts; development of common definitions and procedures where appropriate; and identification of the more difficult areas of input and output that might require more targeted design/development work.

- Outcome Measurement. We ***recommend that an overall work group be established to identify critical areas for outcome (and impact) measurement and that once priorities are set, separate subgroups be established as appropriate.*** For the most part, outcome measurement will require considerably more investment than those of inputs **and outputs** and therefore building on work already developed will help increase the efficient use of

resources. Potential subgroup topics wouid be 1) health status related measures and 2) organizational related measures (such as collaboration and coordination measures). ***Specific consideration should be given to those measures that are critical to the priority programs identified by HRSA. The*** subgroups formed would include representatives of the various program areas involved in these common areas. Such cooperative efforts would build on work that one or more groups may have been engaged in independently. Again, development of common measures and data collection approaches would be a goal of the effort.

- Data Collection Strategy. ***We recommend the establishment of a work group to develop and participate in the implementation of a data collection strategy. While we*** have identified the data strategy as part of the long-range effort, there are a number of short term actions that could be taken to support the current efforts. Our work suggests that there are already a set of specific data concerns that are cross-cutting. These include issues related to use of existing secondary sources as well as specific primary data collection issues. This Workgroup should be responsible for the longer term strategy as well as implementation of some short term actions. The short term actions might include review and assessment of current data sources, development of approaches to sharing secondary sources, and development of common approaches for overlapping areas. This Workgroup would provide support for the other two groups and should include persons with a range of expertise related to data issues.

- Customer Involvement. ***We recommend establishing a Workgroup to systematically identify HRSA customers and explore ways to involve them more directly in HRSA programs. As indicated*** above, HRSA's customers are as diverse as HRSA's programs. The Workgroup should identify selected classes of customers (e.g., grantees receiving multiple awards) to use as a basis for obtaining short-term feedback information quickly and effectively. The Workgroup would also test approaches for obtaining feedback (e.g., focus groups) and identify potential long-term strategies for both obtaining feedback and direct participation in the choices and management of HRSA programs.

- **Develop an evaluation strategy that supports** resource investments **in performance management efforts**

We recommend that current efforts related to evaluation planning place a high priority on those activities needed to support HRSA's performance management strategy. HRSA has used the so-called "one-percent" evaluation funds to support selected performance measurement and database development efforts in some Bureaus (e.g., BHPr, BPHC, BHRD). Since evaluation funds are a primary resource for performance measurement activities, it is critical that careful consideration be given to the increased use of evaluation funds to support these efforts more systematically. This includes data strategy development as well as specific projects designed to develop and/or test out various measures. In addition, broader evaluation efforts may be supportive of the longer-term development of outcome and impact measures and should, therefore, be carefully coordinated. Part of this coordination and information sharing should result from the' expected overlap in the individuals involved

in evaluation planning and management and those who will serve on the PMC and the workgroups.

- **Conduct technical assistance to bring all programs/Bureaus to minimum levels of performance management**

One objective of the early efforts to implement the HRSA performance measurement strategy should be to bring all programs up to a minimum level of measurement. We recommend *that the following criteria be used to define "minimum:"*

- all programs (line items) should have measurable objectives
- all programs should have a set of input and output measures and data collection procedures in place to assure the availability of data for the budget process
- the input and output measures should become part of program monitoring systems and efforts. These measures could be incorporated into grant/contract awards up front so requirements and expectations are clear.

The short-term technical assistance strategy articulated in the next section is intended to support these minimum requirements.

Technical Assistance

The technical assistance that we anticipate providing in the short-term falls into two categories: HRSA-wide and Bureau/Office/program specific. We expect that the focus for the HRSA-wide technical assistance will be the HRSA central GPRA focal Point and the working groups that we identified as part of our recommended short-term actions. Technical assistance at the HRSA-wide level will include, but not be limited to:

- Developing a HRSA-wide common language and analytic framework for Performance management activities. We think this can be accomplished relatively quickly by refining and building upon the terms and concepts in the program logic models contained in the individual program assessments;
- Analyzing the performance information and concepts from HHS and OMB guidance documents as they evolve, and synthesizing them for incorporation into the HRSA performance management language and framework;
- Identifying opportunities and providing facilitation for ongoing collaboration and coordination between program, budget and evaluation staffs; and
- Training HRSA staff in performance management language and associated Performance concepts.

Technical assistance to programs within the four Bureaus and the Office of Rural Health Policy will be tailored to the specific needs of each program, Bureau, and Office. These needs will be identified based on additional discussions with program staff about the specific findings of this report and our individual program assessments. **Types** of assistance that will be provided include:

- Continuing/additional training in the common performance management language and framework and associated performance concepts;
- Refinement of the program logic models to the next tier/level of specificity, e.g., developing a detailed input/activity/output model at the grantee level;
- Developing more detailed/specific output and outcome measures, and specifying the linkages between them;
- For selected programs, identifying potential methods of allocating resources based on outputs and outcomes, to begin developing "bottom up", requirement-based, budget preparation skills; and
- Identifying potential points of program coordination and collaboration with HRSA-wide data and evaluation strategies.

Summary

A variety of economic and political forces have produced increased emphasis on performance in both the public and private sectors. This larger societal phenomenon has produced converging political, budgetary and management environments that collectively result in a systematic search for effective federal programs-and implicitly or explicitly, for those programs that are not. One of the basic underlying purposes of the Government Performance and Results Act (GPRA) is to provide information about the comparative performance of the many federal programs and agencies competing for budgetary resources, so that these resources may be allocated to those with the better return on the nation's investment.

In this report we have provided an assessment of HRSA's current capacity to respond to what we believe to be the basic question of this government-wide search for greater effectiveness: Can ***this organization, with a given set of resources, through a series of actions and decisions, produce outputs that have the &sired effects and outcomes for the intended audiences or beneficiaries?*** GPRA and our findings and recommendations of necessity emphasize developing the ***analytic*** components of a performance management system to answer this question in the short term. However, the ***behavioral aspects*** of the organizational change associated with this new approach are in some respects even more important to develop if this change is to be sustained over time.

From the general organizational development literature, and from specific GPRA implementation lessons-learned that are beginning to become available, we emphasize the need for the commitment and support of senior management as an essential prerequisite for successful

organizational change. Many in government have experienced numerous, analytically sound efforts to reform the practice of public management (e.g., PPBS, MBO, ZBB, etc.) that have foundered for lack of or insufficient sustained emphasis on the behavioral requirements of the reform initiative. This has led to a realistic skepticism about any reform effort unaccompanied by leadership support-and the HRSA staff is no exception in this regard. To be successful in demonstratmg the effectiveness of both its individual programs and its overall value as an agency of government, HRSA must combine both the technical ability to explicitly manage and measure performance, and the discipline, motivation and leadership to fist undertake this change, and then reinforce, encourage and sustain it when the inevitable difficulties in implementation arise. In short, HRSA, as do all agencies facing the demands of the new environment, must integrate the *skill* to change with the *will* to change. This is the challenge facing the leadership of HRSA.

APPENDIX A: BUREAU OF HEALTH PROFESSIONS (BHPR)

HRSA BUDGET LINE ITEM ASSESSMENTS

BUREAU OF HEALTH PROFESSIONS: THE HEALTH PROFESSIONS CLUSTERS

The Health Professions Clusters included in the FY 1996 budget represent a continuation of HRSA's efforts to strengthen, reshape and consolidate the role of the Federal government in addressing health professions shortages and issues of critical need. Taken as a group, the clusters span activities currently carried out in two different Bureaus: the Bureau of Primary Health Care (BPHC) and the Bureau of Health Professions (BHPr). However, programs administered by the Bureau of Health Professions comprise most of those included in the Health Professions Clusters. It should be emphasized, moreover, that the clusters are still in a developmental stage. Formal implementation of the proposed program consolidations will be possible only upon action by the Congress to authorize the cluster approach, which is still uncertain.

In the assessment of the Bureau of Health Professions' current status with regard to performance tracking and assessment, we have focused on the five proposed program clusters. These clusters represent BHPr activities that are most clearly related to its overall mission and goals. Because plans for implementation of the newly formed clusters are evolving as potential legislative changes become known, the assessment of performance measurement by yet-to-be implemented clusters is not feasible. This analysis therefore attempts to assess the degree to which future performance tracking can be supported by past efforts at the individual program level. In the discussion that follows we provide an overview of Bureau program and performance efforts that applies to all of the developing clusters. This is followed by separate assessments of efforts specifically related to one of the five Health Professions Clusters.

The cluster concept represents a logical next step in the evolution of BHPr efforts to identify common thrusts and strategic directions for program activities. BHPr programs have been directed toward enhancement of the education, utilization, distribution and quality of the nation's health personnel, to ultimately improve the health status of all Americans, particularly the underserved. Within this context, BHPr provides key functions such as: funding interventions, workforce intelligence, information dissemination and research demonstration, strategic supplementation of the workforce (i.e., location, utilization, composition), and other support.

To accomplish the overall goal of improved health status, Congress has, in the past, approved legislation authorizing over 55 programs with specific directives related to the health professions. These programs are administered through seven Divisions within the Bureau. In recent years, however, BHPr has studied ways to potentially combine some of these efforts to achieve greater efficiency and program effectiveness. An earlier effort to identify cross-cutting themes resulted in the development of seven strategic directions to be pursued in order to accomplish its overall mission. These are:

- Promoting primary care education;
- Strengthening and expanding public health education and practice;
- Expanding the capacity of nursing and allied health professions to meet the increasing demands for services;

- Increasing the numbers of health providers from minority/disadvantaged backgrounds;
- Promoting educational strategies to recruit and retain health care providers for underserved populations;
- Advancing continuous quality improvement in health professions education and practice; and
- Strengthening health professions data, information systems, and education research.

The Health Professions Clusters represent BHPr's most current development to streamline administrative functions and enhance program effectiveness. This consolidation and refocusing of BHPr health professions education programs specifically responds to the recommendations of the Vice President's National Performance Review task force. Under the proposed 1996 budget, existing multiple categorical grant and contract programs under Titles VII, VIII and several under Title III of the PHS Act would be replaced by consolidated programs addressing special health workforce needs and initiatives. Existing legislative authorities would be consolidated into 5 clusters:

- Health Professions Workforce Development
- Enhanced Area Health Education Centers
- Minority/Disadvantaged Health Professions
- Primary Care Medicine and Public Health Training
- Nursing Education/Practice

The Bureau of Health Professions also has under its management other programs not included in the above clusters. These are: AIDS Education and Training Centers (AETCs); HIV/AIDS - Dental Reimbursement Program; Health Education Assistance Loans (HEAL), which includes the Student Loan Insurance Account (SLIA); and the National Vaccine Injury Compensation Program. The AIDS related programs have been included in the AIDS program cluster of the 1996 budget justification. The HEAL program and the National Vaccine Injury Compensation program are treated separately at the end of the justification.

In planning for changes that would occur contingent upon Congressional authorization of the proposed clustering, Bureau programs are in the midst of shifting from many individual grant programs, with distinct but related foci, to a few larger program clusters that consolidate resources and activities in certain key areas. The organization, focus, and implementation of Bureau programs may change during this process. While much work has been done in the past to develop indicators and data strategies for individual programs, Bureau representatives view the current status of their individual programs and clusters as somewhat transitional with respect to the elements of GPRA reporting. The Bureau is cognizant that many of its current Division/ Program-based indicators and measures may need to be discontinued, and it is taking proactive steps to revise these indicators so that they are more applicable to performance tracking at the cluster level.

Many of the programs included in the clusters presented in the 1996 Budget justification are from more than one BHPr Division. The grouping of the programs within clusters is only "on paper" and not in practice at this point; the details of cluster implementation are still under

development and will be subject to change, as legislative authority for consolidation is still uncertain.

Despite the fact that the programs in these Divisions are in transition, however, the work that has already been done at the individual program level might be used to support GPRA monitoring. To illustrate how individual program information could be used to develop a collective set of data for grantee reporting, some examples of work that programs have done in the past are included in the inventory of cluster-level performance indicator efforts to reflect work done in the past. In some cases, the program-level indicators and data sources could provide a key component of future cluster-level tracking. In other instances, the program-level' indicators and data sources would likely become less relevant to performance tracking at the cluster level, as the cluster approach to grant awards, performance tracking and evaluation was fully implemented.

Once the proposed consolidation is established, the Bureau will be able to move forward with more detailed performance monitoring plans, consistent with Congressional intent and the input of those in the field, who are an integral part of Bureau efforts. Several priority areas have already been identified by BHPr senior management as critical needs for future technical assistance in implementing the cluster approach:

- Grantee program output and outcome measures will need to be refined and, in some cases, developed. Specification of grant award criteria will help ensure that indicators are applied consistently in program evaluation, and will provide grantees with an UT derstanding of the performance expectations they will need to meet to demonstrate the "value-added" of larger and more flexible grants.

- Bureau internal processes and staffiig will likely need to be streamlined, and efficiency gains documented. The Bureau is currently developing strategies for consolidating activities related to grant processing, grantee tracking, technical assistance, analysis, and information dissemination. For example, the Bureau is engaged in a number of efforts directed at merging systems and processes that currently support the individual programs. These include related forums and initiatives that provide experience and support, such as: the Grants Process Improvement Team; implementation of a GPRA OMB pilot; activities related to RIGO II; and the Bureau Quality Council.

- Grantee reporting requirements will need to be clarified and standardized after the clusters are authorized for implementation. A minimum reportable set of data elements should be collected for all cluster grantee inputs, processes, outputs, outcomes, and impacts. Reported data elements should include some that track unique characteristics of a cluster, but may also include quantitative measures that can be tracked across all Bureau grantees.

- Data systems infrastructure for maintaining the data required of and reported by grantees will need to be enhanced and developed where necessary. Approaches and strategies for

data collection and tracking might include using current systems as vehicles for cluster-level collection.

A special challenge that has historically presented difficulties for most of the Bureau's training programs has been the need for more comprehensive, routine collection of input, process, output and outcomes data. In most cases, direct inputs (i.e., dollars! and a few measures of output may be collected. However, the ultimate outcomes of the interventions funded by grant programs are generally not tracked. Outcomes are often more difficult to track because of the extended time period between Bureau-sponsored interventions (e.g., provider professional training) and service delivery-related outcomes; the mobility of program graduates, limited resources for data collection, statutory limitations on private sector reporting burden, and laws protecting individuals' privacy by restricting access to routinely reported Federal income and employment information.

The effort to specify a unified set of data to be collected is likely to be supported by future legislation that will permit more flexibility to define data elements. An example of currently standardized program-level information collection that might be expanded (in current or some revised form) to other programs within clusters would be that collected for programs subject to the Statutory Information Requirement and General Funding Preference under Public Law 102-408. The Medically Underserved Community General Funding Preference provision directs that designated grant programs give preference to any qualified applicant that has either a high rate for placing graduates in practice settings having the principal focus of serving residents in MUCs, or has achieved a significant increase in the rate of placing graduates in such settings during the previous two years. Program applicants who have been recommended (through peer review of applications) for funding and who meet the legislated General Funding Preference are funded first, in order of technical merit. This provides the affected programs with a mechanism to link at least some measures of outcomes for grantees with future/continued funding (i.e., key inputs) of their programs.

The Statutory Information Requirement specifies that awards and contracts can be made only if the applicant for the award submits the specified six items of information related to the training experience offered, program faculty practice pattern, demographic background of recruited, enrolled and graduated students, career choice and practice patterns of recent graduates, and the program's anticipated ability to continue operations without reliance on Federal financial assistance. This reporting requirement (or a more flexible variant) could also provide a valuable set of indicators of the effectiveness of a grantee's program in achieving desired outputs and outcomes, to be monitored more broadly across grantees within clusters.

In the assessment for each proposed cluster, the programs currently affected by this legislation are noted. Also provided are measures identified in earlier health professions program work, and those proposed as potential results of cluster-level activities as described in the FY 1996 budget justification. Objectives suggested in BHPr's seven strategic directions are also included where relevant for use as indicators.

The cluster level budgets presented in the 1996 justification are a work-up of program level budgets for those programs to be included in this cluster. In general, the budget amounts requested are based more on extrapolation from the previous year's budget than based on the resource requirements to achieve specific goals. Program budgets are based on historic levels with some adjustment upward for inflation or downward to meet program downsizing requirements specified at higher agency and department levels.

The Bureau's programs currently do not use a narrowly specified set of objectives to work back to resource requirements and implied program budget needs. The authorizing legislation for many of the Bureau's programs provides very specific direction about the activities that should be funded and data that should be collected. These required results would be described as "inputs" in GPRA terminology (e.g., numbers of grants awarded, numbers of students recruited, number enrolled, etc.).

The foregoing discussion has addressed issues pertaining the performance tracking for all five clusters. The descriptions provided next focus on what is unique about each cluster. In each of these individual assessments, a "logic model" is provided to illustrate the rationale, structure, and division of labor for each cluster. This model is included to attempt to clarify the flow of inputs, activities, outputs, outcomes, and impacts required to achieve cluster objectives, according to the specific organizational entity that is responsible for the associated performance.

The logic models use the following definitions for performance indicators:

- Input: Direction and resources given to a program (e.g. legislative mandate, dollars and FTEs assigned to a training program)
- Process: A program's internal activities (e.g. training approach used)
- Output: A program's direct products or services (e.g. number of people trained) including product/service characteristics such as timeliness, quality and efficiency (e.g. trainee satisfaction, cost per trainee)
- Outcome: Results of program output (e.g. number of trainees that find and retain work)
- Impact: Ultimate effect attributable to a program (e.g. number of trainees who would not have found comparable work without the program)

It should be noted that we have applied these narrower, technical definitions when specifying logic models, in order to be consistent with GPRA terminology. Consequently, some of the performance indicators referred to in the budget justification may be represented differently in our logic models. For example, some of the outcomes listed in the budget justification appear in our models as outputs. This distinction is made to address the different levels of accountability required by GPRA for the various performance indicators. While in non-GPRA terms little difference may exist between measures referred to as outputs, outcomes, and

impacts, it is important to specify how these indicators are measured uniquely because the performance expectations will vary for each area.

Program/Budget Line Item: Health Professions Work Force Development Cluster

1. Overvieu

The Health Professions Work Force Development Cluster is the only Health Professions cluster that includes programs from more than one HRSA Bureau. This cluster includes programs in both the BHPr and BPHC. The BHPC programs involving service-conditional loan repayment and scholarships for training of health professionals offer the dual function of improving utilization and distribution of health care personnel -- goals of chief concern to BHPr -- and increasing service capacity and access to primary care for underserved communities -- goals of greatest concern to BPHC. Research and data collection on the health professions has traditionally been a focus of BHPr effort.

a. Overview of the Cluster

The proposed cluster would establish an integrated system of financial assistance and field service for students in high priority health professions. It would provide benefits to individuals linked to the extent of service obligation. Major scholarship and loan repayment benefits would be provided to students in exchange for primary care service in a health professional shortage area. Placement of individuals obligated to serve through the National Health Service Corps Field program would continue. The programs in this cluster include:

- NHSC Scholarship and Loan Programs, authorized under Section 338A and B.(exp. 9/30/2000) Title III;
- NHSC Field program, authorized under Section 331ff, Title III (exp. 9/30/2000);
- State Loan Repayment program, authorized under Section 3381 (exp.9/30/95), Title III;
- Community-based Scholarship program, authorized under Section 338L, Title III (exp.9/30/93); and
- Nursing Loan Repayment program, authorized under Section 846, Title VIII (exp. 9/30/94).

This cluster will also fund research and data activities. There would be authority for Federal initiatives to increase knowledge about health professions needs and resources, **including** support for research and analytical capabilities of non-Federal entities. This includes the previously authorized Research on Certain Health Professions Issues and Health **Professions** Data System, authorized under Section 781, 792, 793 of the Public Health **Service Act,** and Section 95 1 of Public Law 94-63.

b. Cluster Logic Model

In our analysis of current program measurement and monitoring we have adapted a common "template" of the "logic model" to apply to all programs and clusters we examined. However, GPRA is relatively new legislation and the logic model is not common to all performance monitoring efforts. It is not currently used within the Bureaus.

Although no model is explicitly used by BPHC and BHPr in reference to this cluster, one can be proposed (see Figure A-l). The basic components of the primary care service-conditional loan repayment and scholarship activities in the cluster are:

- Funding is provided to selected individuals who apply, in the form of service-obligated loans and scholarships. These individuals receive training in an identified set of primary care professions. Measures of their completion of study represent the direct output, as would the rate of completion of service obligation. In return for financial assistance, obligors provide health care services in designated care settings in shortage areas. The additional primary care capacity made available through this mechanism can be viewed as an outcome of this service/training intervention. Increased access/use of primary care services should have the ultimate impact of better health and reduced use of acute care services.

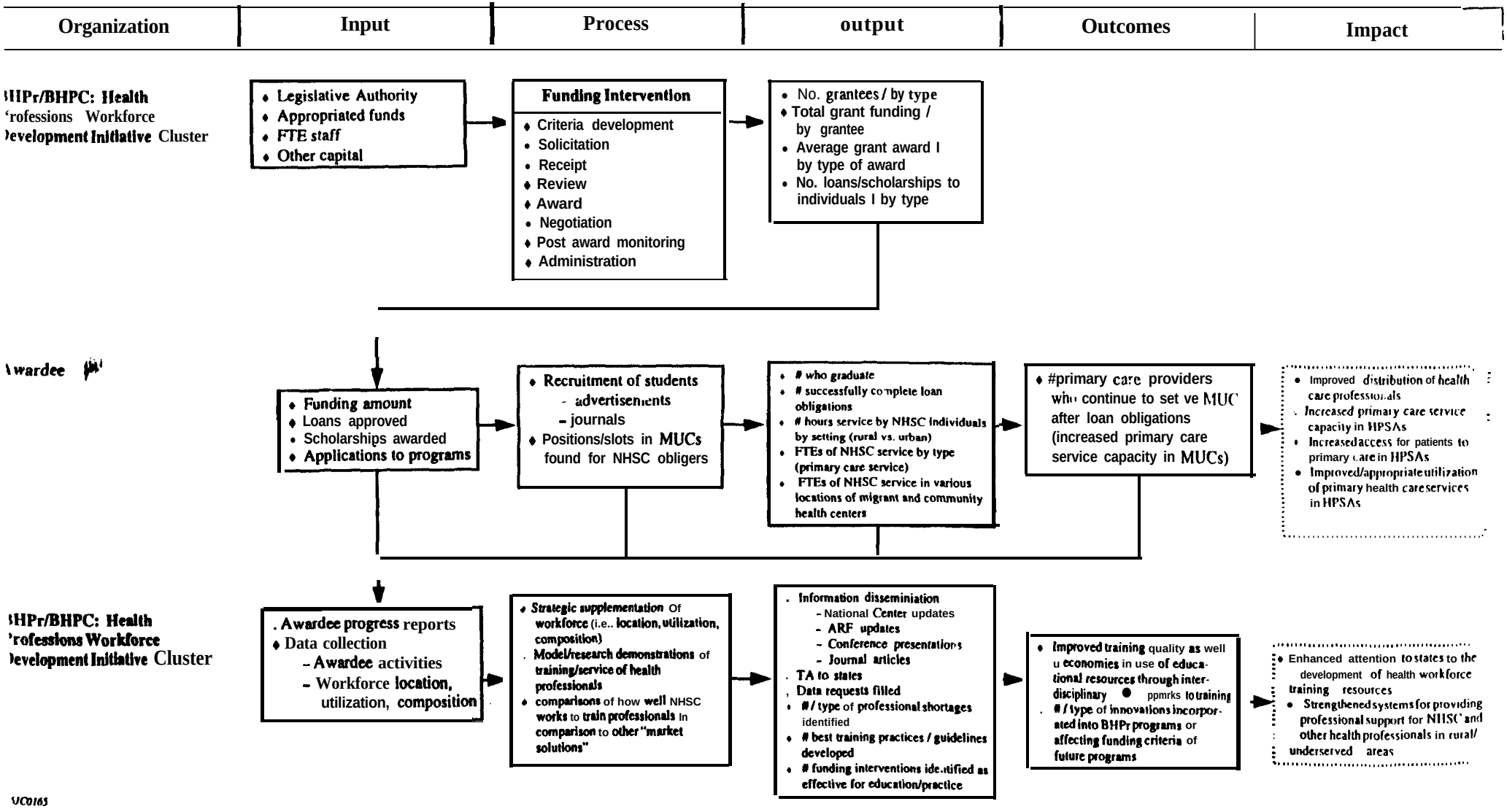
- Award activity, where funding is provided to states, institutions, and facilities providing services in Medically Underserved Communities (MUCs). This activity supports the State Loan Repayment and Community Scholarship programs, and involves Bureau staff efforts to process grants. The outputs at this level are measured in terms of grants awarded and amount awarded per grant.

- The basic activities of health professions research and data collection are captured in the bottom row of the cluster logic model. Data are received from the NHSC and other training grantee programs, as well as other sources. This data is analyzed and evaluated to identify innovations to improve quality and service capacity, and to identify future areas of training need. These products of research and analysis are disseminated to other government decisionmakers, and to the training and practice communities.

c. Cluster Measurement Activities

In terms of the components of the logic made1 template, some systematic tracking is currently being performed that could be implemented at the cluster level if the cluster approach is approved by Congress. The degree of tracking of various components of the implied set of activities differs for the NHSC loan repayment and scholarship subcluster and the health professions research subcluster. The service-conditional loan repayment and scholarship programs have rather good information about Bureau award inputs and outputs. These are tracked in contract/award data systems but are not explicitly used to actively manage or plan program efforts. The process component of grant making is not tracked and used at the program or cluster level now, but could be developed using currently available data.

Figure A-l
BHPr/BHPC: Health Professions Workforce Development Cluster



At the awardee level, inputs, process and output measures for programs are tracked rather systematically through the Bureau Common Reporting Requirements (BCRR) and the BHCDA databases. Some outcome measures, such as placements in MUCs are also collected in these systems. The information is used only for reporting in budgets and in response to external information requests; it is not actively used to guide programs.

In the health professions research and data collection subcluster, the inputs including data from research and training efforts performed by others are tracked to a limited extent, but the systems such as the ARF are accessed externally through NIH. Research and analytic processes are not explicitly tracked and reported on, but the outputs are tracked. No electronic system was described for tracking outputs but major paper outputs/documents are tracked. Even in the cases where information is tracked, it does not appear to be used to actively manage research and analysis efforts, nor to plan future internal agendas for research and analysis.

2. Assessment of Inputs

The inputs to this proposed cluster currently include the individual authorizations for programs that are comprised by the cluster and the requested overall budget. Currently, the only authorizing legislation is that cited above for individual programs.

Other inputs to the processing of loans and scholarships to students and other health professionals in return for obligated service include facilities and equipment of the Bureau staff who administer programs. The staffing specifically required for efforts within this cluster is currently not tracked, but could be. The monies to pay for those resources are provided through the Department's operations management/administrative budget, however, and are not included in the funds requested for this cluster.

3. Assessment of Outputs

The outputs associated with the National Health Service Corps programs and the Health Professions Research and Data initiatives are different. The Bureau of Primary Health Care currently tracks the number of scholarships and loan repayment contracts awarded each year by type of award, amount of award, type of health professional receiving the award, affiliated institution and community/migrant health center (if any), whether the service obligation was met in an urban or rural setting, and the number of loan repayors. The health professions tracked include: Medical Doctors and Doctors of Osteopathy; Dentists; Nurse Practitioners; Physician Assistants; and Certified Nurse Midwives.

This data provides a good linkage between dollars spent and numbers of obligors providing service (in terms of FTEs). The actual hours of service and the "productivity" of those hours in terms of delivery of appropriate care to targeted needy populations is less well documented. This is related to limits on resources and rights to demand data from providers.

Output measures for the Health Professions Research and data sub-cluster are not as readily counted as the NHSC outputs. These could include measures such as: the number of data queries received, processing time, reports issued, conference presentations made, and the number of published journal articles discussing supported research.

Research and data collection, which currently occur throughout programs and Divisions within BHPr and related areas in BPHC, track some of these performance indicators to varying degrees. With the implementation of a consolidated research and data effort within this cluster, development of a comprehensive, meaningful and manageable set should be undertaken. A method must also be devised for reliable collection and reporting of information to develop the measures.

4. Assessment of Outcomes

Similar to cluster outputs, the outcomes associated with the two subclusters will be rather different. Neither of the subclusters have specified and carried out consistent collection of outcome measures. Outcomes tend to move beyond the immediate impact of program resources, or are subject to influences of other factors besides Bureau program funding. These and other issues will make outcome measurement challenging for programs in this cluster.

The service-conditional support programs do not track ultimate outcomes. They consider the outcomes to be increased access to providers in the MUCs where NHSC participants perform their service obligation. This is not currently measured and reported, but BPHC staff thought this outcome could be inferred by using participant service time by location relative to the size of population in those service areas to look at the increase in provider-population ratios. The difficulty they anticipate is getting whole population estimates that correspond to health center service areas.

Several outcomes are listed in the 1996 budget justification. A number of them appear to be more related to the process of research and data collection (i.e., measures of direct outputs) than to the outcome of such activities. Some could be readily measured. These are:

- Projections of supply of physicians by specialty, nurses by work setting and advanced practice nurses and physician assistants.
- Projections of requirements for physicians by specialty, nurses by work setting and advanced practice nurses and physician assistants.
- A current comprehensive database on the nursing workforce.
- Data from the Area Resource File to be used by federal and other administrators.
- An agenda for health workforce private and public research activities.

- Development of information about issues such as the international medical school graduate supply and distribution, managed care staffing, and advanced practice nurse education.

- Maintenance of three national centers for medical education research.

- Development of special studies on diversity of the health workforce and geographic distribution of health professionals.

Other measures included in the list of beneficial outcomes for health professions research and data are currently too broadly specified to be quantitatively measured, and may also better represent cluster outputs. These are:

- Technical assistance to States and regions involved in local health workforce planning and support of data infrastructure development.

- Integrated (MD, DO, PA and NP) health workforce requirements for primary care.

- Formal and informal networking of workforce researchers, industry representatives, and policymakers, including conferences and advisory group meetings.

Part of the Technical Assistance effort for this cluster could focus on refinement of measures of outcomes in these areas that could be reliably observed and reported, and strategies for collecting this data on an ongoing basis.

5. Overall Assessment

Overall, the Workforce Development cluster is well advanced in the process of performance measurement, largely due to the progress made in the service-obligated student assistance subcluster. This subcluster, consisting of programs currently run through the BPHC, has rather well-developed data systems to track grantee inputs, processes and outputs for a large number of their grantees. Efforts for this cluster now need to address better tracking of grantees who provide service at sites other than those tracked in the BCRR and identification and tracking of outcome data for former grantees.

The other, smaller subcluster, addressing health professions research and data collection will need to further develop measures and tracking mechanisms that address inputs, process, outputs and outcomes. Outcomes identified as too broad to reliably measure can be further specified to enable tracking.

1. Overview

The proposed cluster would provide authority to support Area Health Education Centers (AHECs) and related community-based educational partnerships to improve health workforce quality and distribution. Projects supported could: provide community-based training of public health and primary care providers to serve rural or inner-city medically underserved communities; provide education on the special health care needs of the elderly and the disabled; train health workers in skills to function in integrated delivery systems and managed care settings; and develop new approaches to interdisciplinary training of health workers.

a. Brief Description of Program

The proposed cluster would comprise ten programs currently administered by either the Division of Medicine (DM)or by the Division of Associated, Dental, and Public Health Professions (DADPHP). Programs included in the proposed cluster had all been authorized under Title VII of the Public Health Service Act. They are:

- Allied Health Special Projects, authorized under Section 767
- AHECs, authorized under Section 746
- Chiropractic Demonstration Projects, authorized under Section 782
- General Dentistry Training, authorized under Section 749
- Geriatric Education Centers (GECs), authorized under Section 777(a)
- Geriatric Medicine and Dentistry Faculty Training, authorized under Section 777(b)
- Geriatric Optometry Training, authorized under Section 777(c)
- Health Education and Training Centers (HETCs), authorized under Section 746(f)
- Podiatric Primary Care Residency Training, authorized under Section 75 1
- Rural Health Interdisciplinary Training, authorized under Section 778.

Under the proposed authority, eligible public and private nonprofit entities would compete for awards to plan or carry out cooperative arrangements to develop health professions infrastructure at the regional, State or local level.

Projects would be required to involve at least one academically based health professions school, training programs in at least two other health professions disciplines, at least one organization that provides or arranges to provide health care services, and at least one community-based organization. The range and flexibility of the types of collaborative arrangements and interventions that could potentially be funded make the specification of reporting requirements all the more necessary for the Enhanced Area Health Education Centers Cluster.

b. **Cluster Logic Model**

A logic model of funding interventions has not been specified for this cluster. The following model (see Figure A-2) could be used to depict the proposed activities within the cluster. The three key areas are:

- Funding intervention processes within the Bureau of Health Professions, perhaps performed with a coordinated/consolidated effort between the two divisions whose programs are subsumed into the cluster. One of the key areas of performance improvement with the clustered approach should be a reduction in total inputs and streamlining of processes to award grants. Grants will be fewer and larger in amount than pre-cluster program grants.

- Grantee activities include the purchase of inputs to training made possible by EAHEC funds, the proposed interventions to enhance community-based training, direct outputs, such as graduates, and outcomes. The cluster authority would seek to support "cooperative arrangements" to develop infrastructure, but the activities needed to achieve this impact are still somewhat abstract.

- Within the Bureau, a third area of activity involves tracking of the performance of grantees through collection and analysis of reported information. This could provide the basis for program management and development and dissemination of new knowledge about effective training interventions in this cluster.

c. **Cluster Measurement Activities**

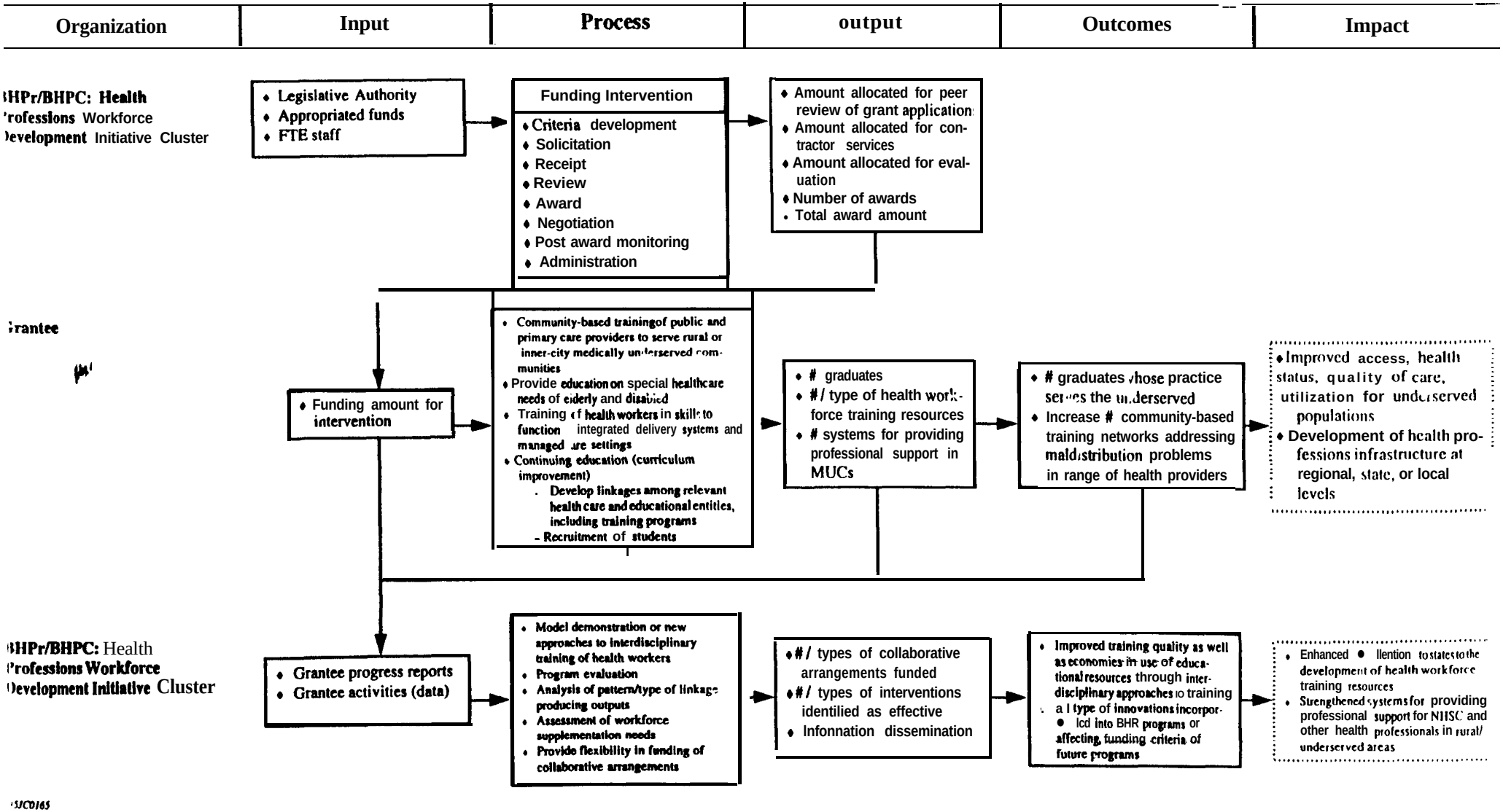
Measures and data for activities at the cluster level will be developed and implemented contingent upon Congressional authorization of the cluster approach. At the individual program level the existence of information for tracking performance in these areas varies. Listed below are some key issues to be resolved for cluster tracking:

- Within the funding intervention, a system exists to track funding of overall cluster funds and awarded grants, but a grant making process coordinated between DM and DADPHP that streamlines and reduces overall staff resources and improves effectiveness and efficiency needs to be developed. The new process should include development of a set of process and outcome measures and a strategy for tracking them.

- The cluster grants would be awarded to consortia with likely different mixes of public, private and disciplinary focus. The flexibility of the proposed cluster allows wide variation in the proposed intervention process. These factors, to support collaboration and innovation, create real challenges for consistent performance monitoring.

- The ability to effectively monitor and analyze cluster grantee processes will depend on resolution of the issues described above.

Figure A-2
BHPr: Enhanced Area Health Centers (EAHECs) Cluster



Since the clusters are still in the proposal stage, the discussion that follows characterizes the current status of tracking at the individual program level. Overall, comprehensive tracking efforts ongoing at the program level will be developed as part of the cluster implementation process if the consolidation is approved.

2. **Assessment of** Inputs

The inputs to this cluster consist of the legislative authorization for potential cluster-based activities and the amount budgeted for those grant programs. The funding for these programs is almost entirely allocated to grantees, although a small portion of the funds is used to pay for peer review of grant applications, contractor services supporting grant processing and one percent evaluation funds and other contracts. The legislative authority for the programs currently consists of legislation for individual programs, cited above. Program grantees are tracked through the NIH grant tracking system called IMPACT. This system keeps track of grant amounts, by grantee institution and by HRSA/Bureau program.

Additional information about inputs to the program varies by individual program and can be characterized in general terms by Division. Division of Medicine has some detailed information about AHEC grantees. Information about specified inputs to DADPHP programs in this cluster is more variable.

3. **Assessment of Outputs**

The outputs of the funding intervention process is tracked through the IMPACT system, as described above. Outputs associated with individual programs that are being subsumed into the proposed clusters have been identified in earlier work on program indicators for the Bureau of Health Professions. Some of these measures may also prove applicable to the cluster grantee performance tracking. Earlier identified measures included student enrollment, graduation and placement rates (by type of student and training), and training linkages to service sites.

Also, the Allied Health Special Projects, General Dentistry Training and Podiatric Primary Care Residency Training programs are included in the General Funding Preference legislation (Section 791(a)). This requirement provides a mechanism for linking grantee output/outcomes to future grant awards and continued support by HRSA. These programs are also subject to the Statutory Information Requirements in Section 791(b) of the Public Health Service Act. This specifies the provision of certain information about programs of the grant applicants (described in the Bureau overview), as a condition for further processing of the application. As the ciuster-based approach is further developed, some of these information elements may be identified as desirable to collect for all cluster grantees.

Outputs of cluster-levels have not been specified at this point since this organization of Bureau grant activities is still in the proposal stage. If accepted, the Bureau will develop specific goals and objectives based on legislative guidance, and identify specific outputs on that basis.

4. Assessment of Outcomes

There is currently no systematic tracking of outcomes at the individual program level. This is partly because of the limits of funding and feasibility of collecting such information after trainees have left the training program. Under the proposed cluster authority, BHPr anticipates a smaller number of larger grants, contracts, and cooperative agreements awarded in FY 1996. The Bureau expects to see outcomes in the following areas:

- Increase in the number of community-based training networks addressing problems of maldistribution in the range of health care providers.
- Enhanced attention among States to the development of health workforce training resources to meet needs of underserved populations.
- Strengthened systems for providing professional support for NHSC field program participants and other health professionals serving in rural or other remote areas'.
- Demonstration of ways to improve training quality as well as effect economies in use of educational resources through interdisciplinary approaches to training.

Some of the outcomes described above may better describe impacts according to GPRA terminology. Measures such as "enhanced attention" and "strengthened systems" must be further specified to be reliably measured and compared to target levels of impact, based on Bureau resources being spent. Further development of these measures and strategies for ongoing and systematic measurement is needed, and might be addressed in the technical assistance phase of this HRSA performance measurement project.

5. Overall Assessment

Although a substantial amount of thought and planning has been devoted to the proposed program cluster, much remains to be done to implement performance measurement and tracking at this level. The existing systems for individual programs within this cluster are likely to offer only limited support. A few systems should be developed to directly address the challenges of performance measurement and tracking identified in the discussion of a logic model and measurement activities. To gain both consistency and flexibility, a report format combining structured text descriptions with a small set of key quantified measures should be developed Without specific, early guidance on reporting, data provided describing inputs, processes and outputs may vary and be difficult to compare across grantees. A uniform, robust set of reporting requirements that will be applicable to all potential grantees under this cluster, and rules for assigning reporting responsibilities within the multi-entity grantee "team" should be developed. This set of requirements should provide suffkient detail for a health professions cluster grantee database to be developed in parallel, to capture data reported by grantees, beginning with that supplied in the grant application.

Program/Budget Line Item: Minority/Disadvantaged Health Professions Cluster

1. Overview

The Minority/Disadvantaged Health Professions Cluster would consolidate eight programs designed to achieve two main goals: (1) an increase in the number of minority/disadvantaged health professionals, and (2) improvements in minority health through support of institutions that provide training to minority and disadvantaged students.

a. Brief Description of Cluster

The proposed cluster would provide authority to support targeted, outcome oriented activities that increase the number of minority and disadvantaged health professionals. This cluster will help address the President's Executive Order to strengthen the capacity of institutions that have a demonstrated commitment to training minority health professionals. Projects supported would plan or conduct cooperative arrangements to provide for innovative demonstrations or strategic workforce supplementation activities. The cluster also provides grants to schools in certain high-priority health professions for school-based nonservice-conditional scholarships to financially needy students from disadvantaged backgrounds. In addition, linkages would be developed among relevant health care and educational entities, including training programs for several disciplines as feasible. Existing training activities would continue.

The cluster is comprised of eight programs authorized under Title VII of the Public Health Service Act, and currently administered by either the Division of Student Assistance or by the Division of Disadvantaged Assistance. These are:

- Centers of Excellence Program, authorized under Section 739;
- Health Careers Opportunity Program (HCOP), authorized under Section 740;
- Loan Repayments and Fellowships regarding Faculty Positions Program, authorized under Section 738(a) and 738(b);
- Exceptional Financial Need Scholarships, authorized under Section 736;
- Financial Assistance to Disadvantaged Health Professions Students, authorized under Section 740 (d) (2) (B);
- Loans for Disadvantaged Students, authorized under Section 724; and
- Scholarships for Disadvantaged Students, authorized under Section 737.

b. Cluster Logic Model

An explicit logic model that links expected cluster goals and outcomes to its activities and outputs is currently not available for the Minority/Disadvantaged Health Professions Initiative. However, given the information collected during our interviews and the legislative intent of the program consolidation, a logic model (see Figure A-3) can be identified to achieve what we find to be the principal objectives of the clustering effort: ***increasing the number of minority/ disadvantaged health professionals*** and ***improving minority health through support of institutions that provide training to minority and disadvantaged students. Our*** proposed logic model is shown in Figure A-3.

Our logic model indicates that to achieve these objectives, the cluster should engage in three distinct areas of effort or activity:

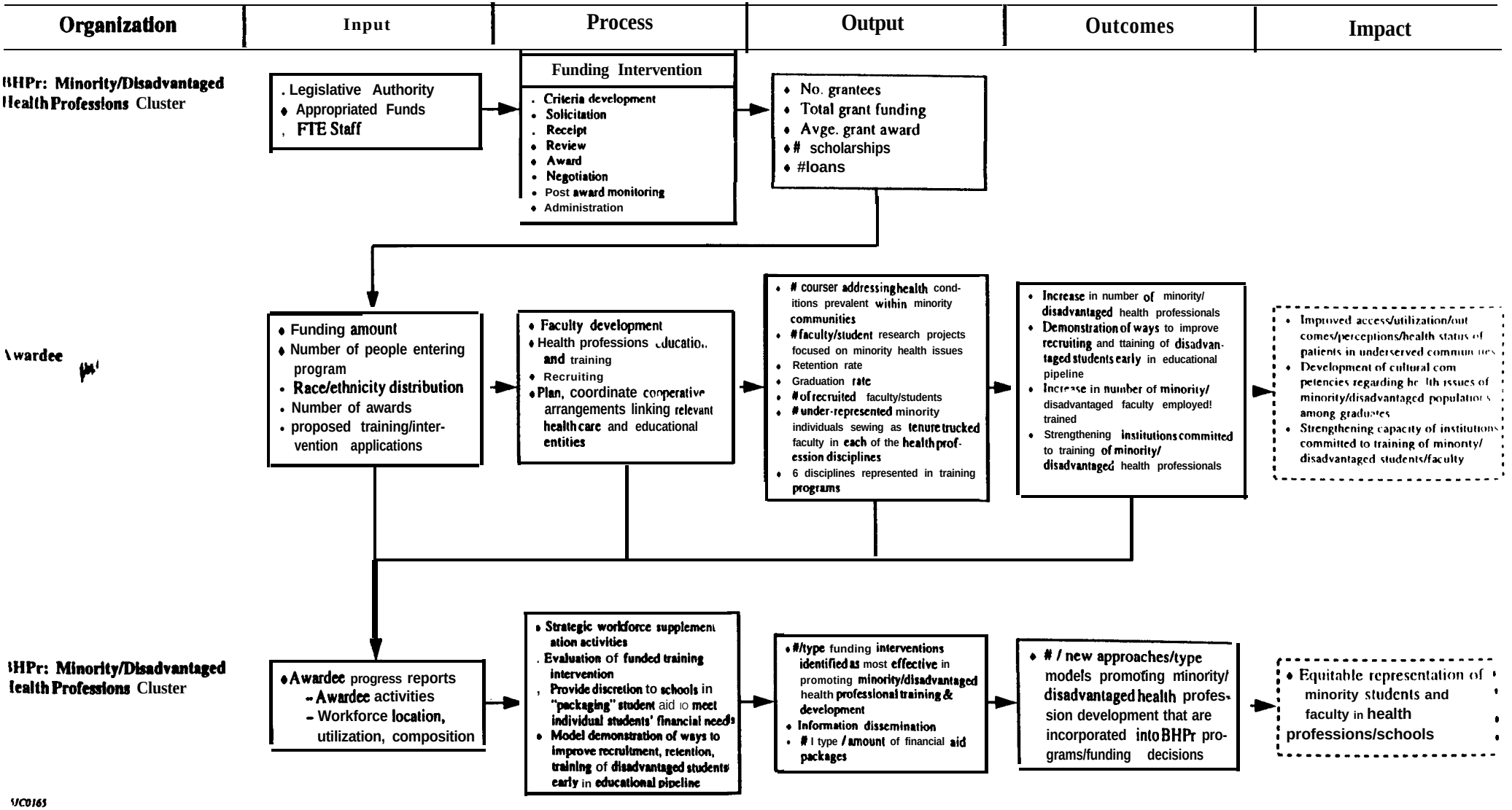
- BHPr grants awards, loans, and scholarships through institutions that are committed to the health professional training of minority/disadvantaged students and faculty. Monies are also provided directly to individuals in the Faculty Loan Repayment program. This funding intervention process can perhaps be performed with a coordinated effort between the two divisions whose programs are subsumed into the ***cluster.***

- The awardees use the funding to support costs related to activities such as training, education, and professional development. Outputs from these efforts include measures such as retention rate, graduation rate, and number of underrepresented minority individuals serving as tenure-tracked faculty in each of the health professions disciplines. Outcomes that can be expected from these activities include increases in the number of minority/disadvantaged health professionals trained by type of specialty and ethnic background. The ultimate impact of cluster activities could be manifested in terms of equitable representation of minority students and faculty in health professions schools.

- BHPr uses information about the cluster grantees, their activities, outputs, outcomes, and impacts to analyze and evaluate grantee performance. New models of training and education may also be identified, as well as economies of scale and efficiencies achieved through program consolidation in the cluster.

Currently, the programs in this proposed minority/disadvantaged health professions cluster emphasize the first two areas-funding interventions and activities related to training, education, and professional development of minorities and disadvantaged students. While there has been some data collection and analysis at the program level, the overall effort devoted to analysis and evaluation is insufficient to achieve a systematic comparison of the advantages and disadvantages of new models of training and education being implemented by the grantees and to assess whether economies of scale and efficiencies have been developed through program consolidation. The next section summarizes the specific data collection and measurement activities that the programs in the proposed cluster have completed.

Figure A-3
BHPr: Minority/Disadvantaged Health Professions Cluster



c. Cluster Measurement Activities

Referring to the logic model above, there is currently no cluster-level measurement, beyond the Bureau input of legislative authorization and funding requested. Contingent upon Congressional authorization of the cluster approach, measurement activities that will need to be developed include coordination of grant processing, identification of measures, and formation of strategies for tracking. Cluster-level grantee tracking measures and mechanisms will also need to be established. To the extent that scholarship and loan recipients remain in individual institutions and efforts within the cluster are similar to current funding interventions for individual programs, the tracking systems already developed within the two divisions involved in this cluster may be adapted for cluster-level use.

Cluster-level consolidated data collection for grantee monitoring and program analysis will need to be developed if the consolidation is authorized. Existing systems for individual programs might be adapted, but a consolidated and uniform set of reporting requirements and analytic foci need to be identified and Bureau staff efforts coordinated across the two divisions. Measures that should be reported to actively manage programs and inform subsequent funding decisions will also require specification.

Since tracking efforts that currently exist are at the individual program level, the sections that follow characterize measures and systems for individual programs that will be replaced by the cluster.

2. Assessment of Inputs

The inputs to this proposed cluster currently include the individual authorizations (cited above) for programs that are comprised by the cluster and the requested overall budget. Other inputs to the processing of funding interventions include the facilities and equipment of the Bureau staff who administer programs. The staffing specificaliy required for efforts within this cluster is currently not tracked but could be. The monies to pay for those resources are provided through the Department's operations management/administrative budget, however, and are not included in the funds requested for this cluster.

Financial inputs related to program grants management (e.g., dollars per award) are available electronically through the IMPACT system. The IMPACT system is operated through NIH and labels all HRSA programs with a code identifier.

Input data is also available through the Division of Student Assistance (DSA). For example, the Loans for Disadvantaged Students program collects data on the number of students who receive loans. This data is administered by DSA and available through a payment management system in the HHS Office of the Secretary, which distributes loans electronically to institutions. In addition, grantees submit current status reports every six months to the Division with data such as the dollar amount of awards. Annual reports are also required, and include grantee projections of how much money will be needed the following year.

3. Assessment of Outputs

Outputs associated with individual programs that are being subsumed into the proposed clusters have been identified in earlier work on program indicators for the Bureau of Health Professions. Some of these measures may also prove applicable to the cluster grantee performance tracking. It should be noted, though, tnat to the extent that the programs are being merged into this cluster, some of these measures of program activities may not be as relevant to cluster-wide activities. Earlier identified measures include the numbers of minority students participating in and graduating from grant-funded programs, number of minority faculty, and minority institution funding.

The Division of Disadvantaged Assistance collects data through the institutions granted awards for three of the programs that will be included in this cluster. The tracking capabilities for the three cluster programs operated by the Division of Disadvantaged Assistance are as follows:

- Health Careers Opportunity Program Management Information System (HCOP MIS) collects data on grantees and program participants on a mainframe database. Data are available from 1972 to the present, although most of the early data are no longer relevant due to a significant change five years ago in the type of data collected.

- Centers of Excellence Program collects data on grantees and program participants on the mainframe used for HCOP MIS. Data is available from 1988 to the present.

- Faculty Loan Repayment Program (listed in the cluster as Loan Repayments and Fellowships regarding Faculty Positions Program) collects data on grantees and program participants on a microcomputer. Data is available from 1991 to the present.

The Division of Student Assistance collects data for four of the programs that will be included in this cluster. The tracking capabilities for the four cluster programs operated by the Division of Student Assistance are as follows:

- Loans for Disadvantaged Students program collects data on grantees and program participants on a mainframe database. Under this program, schools operate revolving funds for loans to students. Data tracked includes: amount of money collected, amount of money paid to collection agencies, and status of loans (e.g. repaid, defaulted).

- Exceptional Financial Need (EFN) Scholarships program collects data on grantees and program participants. Data is tracked in the EFN Award File. Data is used to ensure that the EFN primary care service requirement is fulfilled by awardees.

- Scholarships for Disadvantaged Students program tracks data on the number of students receiving awards and the dollar amount of awards. Data is stored on a mainframe computer. Grantees also submit annual status reports.

- Financial Assistance to Disadvantaged Health Professions Students program tracks data such as the number of students who receive scholarships and the status of loans (e.g. repaid, defaulted). This data is reported by grantees in annual reports to the Division.

Additional outputs that might be linked to performance outcomes are suggested in the FY 1996 justification. These include: improvements in the recruitment and training of disadvantaged students early in the educational pipeline; linkages among health care and educational entities, continued funding of existing grantees and loan/scholarship recipients to receive funding through the end of approved project periods or courses of study; and discretion to schools in "packaging" student aid to meet individual students' financial needs. Outputs such as 'discretion to schools" and "linkages among health care and educational entities" will require further description before data can be collected. A number of these outputs may characterize other performance areas (e.g. process) more appropriately, as depicted in the logic model, in order to achieve the technical rigor suggested by GPRA monitoring.

4. **Assessment of Outcomes**

Under the proposed cluster authority, BHPr anticipates a smaller number of larger grants, contracts, and cooperative agreements awarded in FY 1996. Since this is a new legislative approach, no historical data are available on cluster outcomes. Proposed outcomes are very similar to the outputs currently tracked for individual programs, including: the number of students trained; improvements in retention of students through graduation; and the number of minority/disadvantaged faculty trained and represented in the health professions.

The outcomes that BHPr expects to see for the cluster overall, as delineated in the FY 1996 justification, may be more appropriate for impact analysis because of their broader scope. Four outcomes described for the proposed cluster are:

- Strengthening of institutions committed to training minority/disadvantaged health professionals;
- Improvement in the recruitment and retention of students through graduation;
- Demonstration of ways to improve recruitment and training of disadvantaged students early in the educational pipeline (e.g., at the elementary and secondary school level); and
- Increase in the numbers of minority/disadvantaged faculty employed or trained.

Some of 'he outcomes described above may require further elaboration to be reliably measured and compared to target levels of impact, based on Bureau resources being spent. Measures such as "strengthening of institutions" and "demonstration of ways to improve recruitment and training" are too general to be reliably measured and reported. Further development of these measures and strategies for ongoing and systematic measurement is

needed, and might be addressed in the technical assistance phase of this HRSA performance measurement project.

The various programs in this cluster appear to be at different levels in terms of their ability to link program goals to ultimate outcomes. The relevant programs that have been operated through the Division of Disadvantaged Assistance currently have data that can support evaluation efforts. For example, progress reports submitted by grantees at the end of every year in their three-year funding cycle are used by the Division to determine whether or not the grantees are meeting their stated objectives. On the other hand, the Division of Student Assistance has made less significant progress in evaluating performance outcomes. Technical assistance can support such BHPr data analysis efforts in order to determine the impact of the proposed cluster.

5. Overall Assessment

The Minority/Disadvantaged Health Professions cluster has made substantial progress toward tracking inputs, process and outputs through a number of its subsidiary programs. At this stage, efforts should focus on the implementation of cluster-based approaches. Coordination and consolidation of grantee award processes should be undertaken to be more streamlined and efficient, as expected through clustering. The two divisions involved in administering grants for this cluster should establish procedures, measures and mechanisms for tracking consistent with other cross-division coordinated cluster efforts and tracking.

Program/Budget Line Item: Primary Care Medicine and Public Health Training

1. Overview

Under the consolidated Primary Care Medicine and Public Health Training Cluster, support would be provided for a comprehensive and flexible Federal authority for increasing the number and enhancing the quality of primary medical care providers and public health workers to meet national, state, and local health care needs; and to extend the authority for the Council on Graduate Medical Education. The purpose of the program authority would be to: 1) achieve specific outcomes in the area of primary care medicine and public health workforce supply and distribution; 2) streamline the administration of Federal programs; and 3) continue support for ongoing training activities that have demonstrated success in meeting public needs.

a. Brief Cluster Description

The programs included in this cluster represent a mix of Title VII programs currently administered by the Division of Medicine (DM)and the Division of Associated, Dental, and Public Health Professions (DADPHP). These include:

- Family Medicine Training and Departments, authorized under Section 747;
- General Internal Medicine/General Pediatrics Training, authorized under Section 748;
- Health Administration Traineeships and Special Projects, authorized under Section 771;
- Pacific Basin Medical Officer Training, authorized under Section 10 Disadvantaged Minority Health Improvement Act of 1990 (expired in 1993);
- Physician Assistant Training, authorized under Section 750;
- Preventive Medicine and Dental Public Health Training, authorized under Section 763; and
- Public Health Special Projects and Traineeships, authorized under Sections 761 and 762.

The common theme of these efforts is to increase the capacity to produce more primary care and public health practitioners and to actively support their training, and in some instances the placement of program graduates in health professional shortage areas. In the past, the grants have been made to training institutions.

Under the cluster approach, collaborative efforts of public and private training and service delivery entities will be encouraged to achieve key primary care and public health training outcomes. Applications for funding would be accepted from schools, academic health centers, state and local governments, or other appropriate public and private nonprofit entities. Grantees

would be required to provide for linkages among relevant health care and educational entities, including community-based managed care and public health systems and, as feasible, training programs for several disciplines.

The funding provided for these programs will create interventions in training institutions or in care settings in which part of the training is provided. The outputs of the programs would be measured in either of these settings. Outcomes would be measured primarily in the community care settings where training experience is provided as well as the broader configuration of providers that comprise the delivery system, particularly for underserved communities or populations. This diffusion of information on outcomes may create difficulties for tracking by grantees.

b. Cluster Logic Model

A logic model has not been specified by Bureau staff, but Figure A-4 provides a proposed model that involves three basic areas of activity:

- Funding interventions which would have as inputs the total budget and new legislative authority. The processes of making awards will change under the cluster, to allow wider variation in grantees and interventions proposed. The output will be fewer large awards. Consolidated efforts across Division programs should yield economies of scale, reduced staff, and streamlined consistent processing. Measures are needed to capture these effects.

- Grantee activities include the purchase of inputs to training made possible by grant funds, and the proposed interventions to enhance family medicine, primary care, public health and community-based training. Direct outputs include program graduates and the number of community-oriented training programs. Outcomes include increases in the number of primary care and public health practitioners in MUCs. The cluster authority would seek to support collaboration and partnerships to expand training capacity

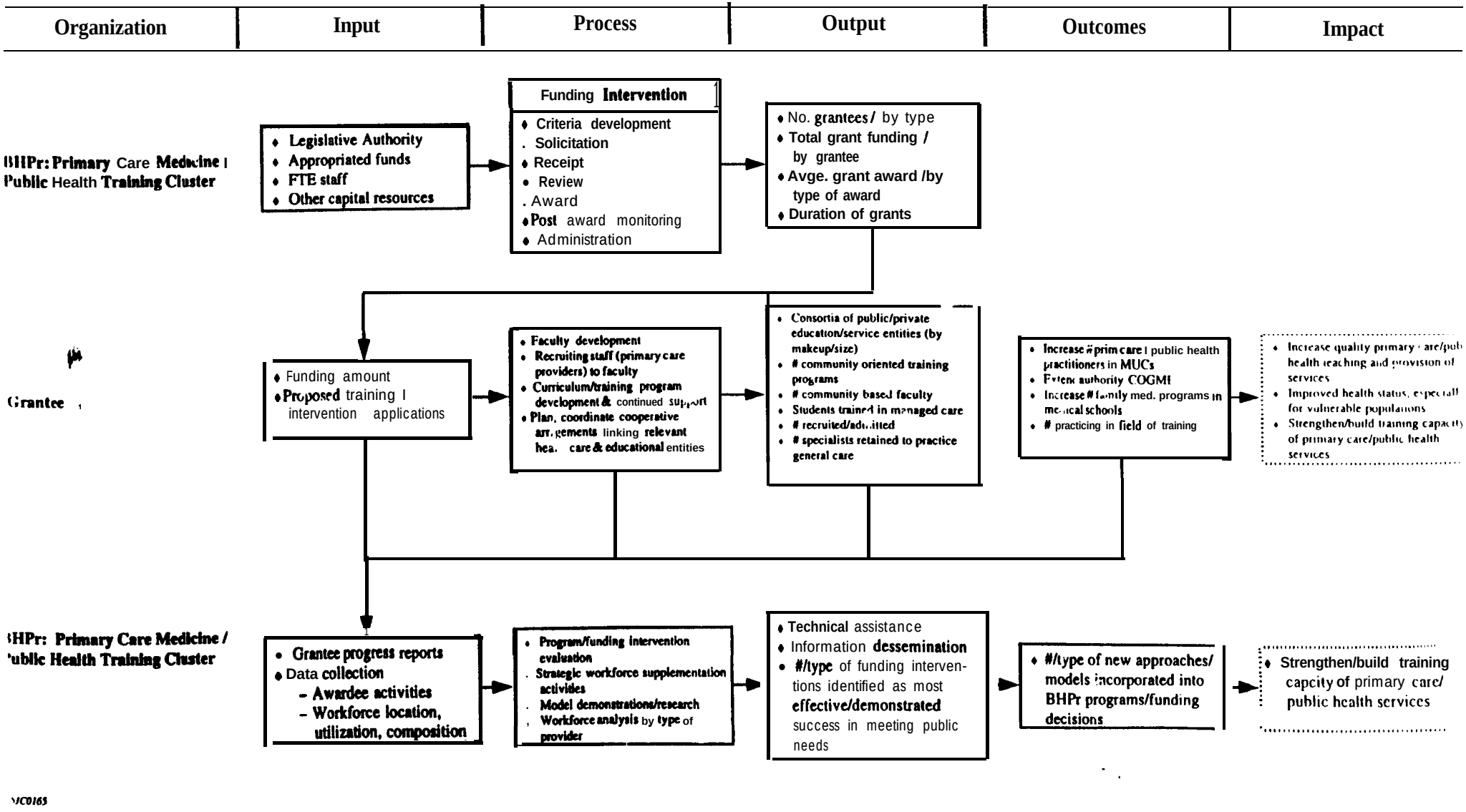
- Within the Bureau, a third area of activity involves tracking of the performance of grantees through collection and analysis of reported information. This could provide the basis for program management and the development and dissemination of new knowledge about effective training interventions in this cluster.

c. Cluster Measurement Activities

Currently, measures and data do not exist for any of these activities at the cluster level. At the individual program level the existence of information for tracking performance in these areas varies. Listed below are some key issues to be resolved for cluster tracking:

- Within the grant-making process, a system exists to track funding of overall cluster funds and awarded grants, but a grants-making process coordinated between DM and DADPHP that streamlines and reduces overall staff resources and improves effectiveness

Figure A-4
BHPr: Primary Care Medicine / Public Health Training Cluster



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and efficiency needs to be developed. The new process should include development of a set of process and outcome measures and a strategy for tracking them.

- The cluster grants would be awarded to teams with likely different mixes of public, private and disciplinary focus. The flexibility of the proposed cluster allows wide variation in the proposed intervention process. These factors, to support collaboration and innovation, create real challenges for consistent performance monitoring.

- The ability to effectively monitor and analyze cluster grantee processes will depend on resolution of the issues described above. Performance monitoring includes evaluation of improvement in service and training capacity as well as new innovations in service delivery and professional training. Measures, processes, and systems supporting such monitoring do not yet exist to provide this capability at the cluster level.

Since the clusters are still in the proposal stage, the discussion that follows characterizes the current status of tracking at the individual program level. Overall, there are no comprehensive tracking efforts ongoing at the program level, within this cluster.

2. Assessment of Inputs

Inputs to this cluster include the requested budget in the FY 1996 budget. The funding for the programs in this cluster is almost entirely allocated to grantees, although a small Portion of the funds is used to pay for peer review of grant applications, contractor services supporting grant processing and one percent evaluation funds and other contracts. The existing legislative authority is still at the program level, as described above. Program grantees are tracked through the NIH grant tracking system called IMPACT. This system keeps track of grant amounts, by grantee institution and by HRSA/Bureau program.

3. Assessment of Outputs

The output data collected for individual programs includedin this cluster vary by program. Grant programs all require regular progress reports from grantees, but reporting required is more qualitative and the progress reports are generaily not used to actively manage or direct grantee efforts.

The Family Medicine Training and Departments program, General Internal Medicine/General Pediatrics Training, Physician Assistant Training and Preventive Medicine and Dental Public Health Training are included in the General Funding Preference legislation (Section 791(a)). This requirement provides a mechanism for linking grantee output/outcomes to future grant awards and continued support by HRSA. These programs are also subject to the Statutory Information Requirements in Section 791(b) of the Public Health Service Act. This specifies the provision of certain information about programs of tbe grant applicants, as a condition for further processing of the application. As the cluster-based approach is further

developed, some of these information elements may be identified as desirable to collect for all cluster grantees.

In addition to the outputs required of selected programs, as described above, the FY 1996 budget justification referred to a number of impacts that were expected to be associated with cluster grant activities. These are similar to the kinds of measures identified for individual programs in this cluster and include:

- development or enhancement of existing family medicine departments, medical student clerkships, and faculty development and residency training programs;
- increased collaboration among academic health centers and other entities responding to needs for primary care providers, as a result of funding;
- increased primary care teaching capacity;
- increase in program graduates who pursue generalist careers or who serve medically underserved populations;
- measurable change in the mix of specialist and generalist residents within funded institutions;
- increased primary care and public health workforce diversity;
- development of community partnerships to expand primary care medicine and public health training; and
- increase in the number of retrained or newly trained public health and health administration professionals in priority areas.

Some of these outputs have been characterized as outcomes or impacts in the cluster logic model. This distinction has been made to reflect the different levels of accountability that GPRA will require from each performance area

4. **Assessment of Outcomes**

Currently, the programs within this cluster generally do not collect outcome information on a routine basis. Such information is not used in a systematic way in directing future efforts for programs, although the preference funding and statutory information requirements for affected programs do serve that purpose to some degree.

Based on the FY 1996 budget justification discussion, the following outcomes are described as expected under the proposed cluster authority:

- Increase in the number of primary care and public health graduates who serve medically underserved communities or populations.

- Increase in the number and quality of primary care faculty, particularly in community-based settings.

- Increase in the number of medical schools with family medicine departments and required clerkships.

- Programs for developing managed care, quality improvement and other skills for organized health care systems.

- Increased output of primary care physician assistants.

- Increase in the number of organized primary care and public health networks.

Tnese outcomes are all potentially measurable, and some may be considered outputs if the narrower, technical scope of GPRA terminology is applied. The data systems to consistently collect this across the diverse types of grantees pursuing different efforts presents a challenge for cluster-level monitoring, however.

5. Overall Assessment

This cluster has made substantial effort? in defining its proposed grantees and activities and desired kinds of output and outcomes; however, much remains to be done to operationalize cluster tracking. This cluster must address issues similar to those identified for the EAHEC cluster. This includes development and implementation of a plan for consolidating grant processing across Divisions and Programs, at the cluster level. This will include specifying a set of process and output measures, and a strategy/data system for tracking performance. Elements collected should be consistently used across all new Health Professions clusters.

Like other clusters proposing great flexibility in grantee teaming and activities, without specific, early guidance on reporting, data provided describing inputs, processes and outputs may vary and be difficult to compare across grantees. A uniform, robust set of reporting requirements that will be applicable to all potential grantees under this cluster, and rules for assigning reporting responsibilities within the multi-entity grantee "team" should be developed. This set of requirements should provide sufficient detail for a health professions cluster grantee database to be developed in parallel, to capture data reported by grantees, beginning with that supplied in the grant application.

Program/Budget Line Item: Nurse Education/Practice Cluster

1. Overview

The consolidated Nursing Education/Practice Cluster will provide for a comprehensive, flexible, and effective authority for Federal support of nursing workforce development. This authority would provide support to strengthen the capacity for basic nurse education and practice, nurse practitioners, midwives, and other advanced practice nurses and to increase nursing workforce diversity.

a. Brief Cluster Description

The cluster comprises six programs, covering eleven different areas of nurse education and practice, which are currently administered by the Division of Nursing. The Title VIII programs included in this cluster are:

- Nursing Special Projects -Title VIII, PHS Act Sec 820;
- Advanced Nurse Education-Title VIII, PHS Act Sec 821;
- Nurse Practitioner/Nurse Midwife Education-Title VIII, PHS Act Sec 822;
- Professional Nurse Traineeships-Title VIII, PHS Act Sec 830;
- Nurse Anesthetist Training-Title VIII, PHS Act Sec 83 l(a),(b),(c); and
- Nursing Education Opportunities for Individuals from Disadvantaged Backgrounds-Title VIII, PHS Act Sec 827.

The *Strengthening Capacity for Basic Nurse Education and Practice* subcluster supports projects designed to develop innovative approaches in nursing education and practice, including nursing services in schools and other community settings, care of underserved populations (particularly the elderly and persons with HIV/AIDS), case management, cultural competencies, emergency health services, and career mobility.

The *Nurse Practitioners, Nurse Midwives, and Other Advanced Practice Nurses* sub-cluster supports the training of these specialty nurses, as well as projects relating to other types Of advanced practice nurses, including clinical nurse specialists and public health nurses, among others.

The *Increasing Nursing Workforce Diversity* sub-cluster supports the training of nurses from disadvantaged backgrounds. Grantees would also have increased flexibility in the use of funds for development of a variety of approaches to enhancing ethnic and racial diversity in nursing education and practice.

b. Cluster Logic Model

Combining the information collected during our interviews with the cluster description in the FY 1996 budget, we have constructed a logic model (see Figure A-S) that identifies what we find to be the principal objectives of the clustering effort: *strengthening capacity* for basic nurse education and practice, *increasing diversity* in the nursing workforce, and *training support and development* of specialty and advanced nurses. Our proposed logic model is shown in Figure A-5.

The logic model shown in Figure A-5 indicates that to achieve these objectives, the cluster should engage in three distinct areas of effort or activity:

- BHPr awards grants to institutions that support nursing students and faculty. These grants are products of the cluster's funding intervention process. Inputs to this process are the cluster's legislative authority, appropriated funds, and FTEs of staff. Outputs that can be measured in this process ir clude descriptive data such as the number of grantees.

- The grantees use the funding to pay for costs related to activities such as training, education, and professional development. Outputs from these efforts include measures such as numbers of new opportunities for training, education and professional development. Outcomes that can be expected from these activities include increases in the number of nurses trained by type of specialty and ethnic background. The ultimate impact of cluster activities could be manifested in terms of strengthened capacity for basic nurse education and practice.

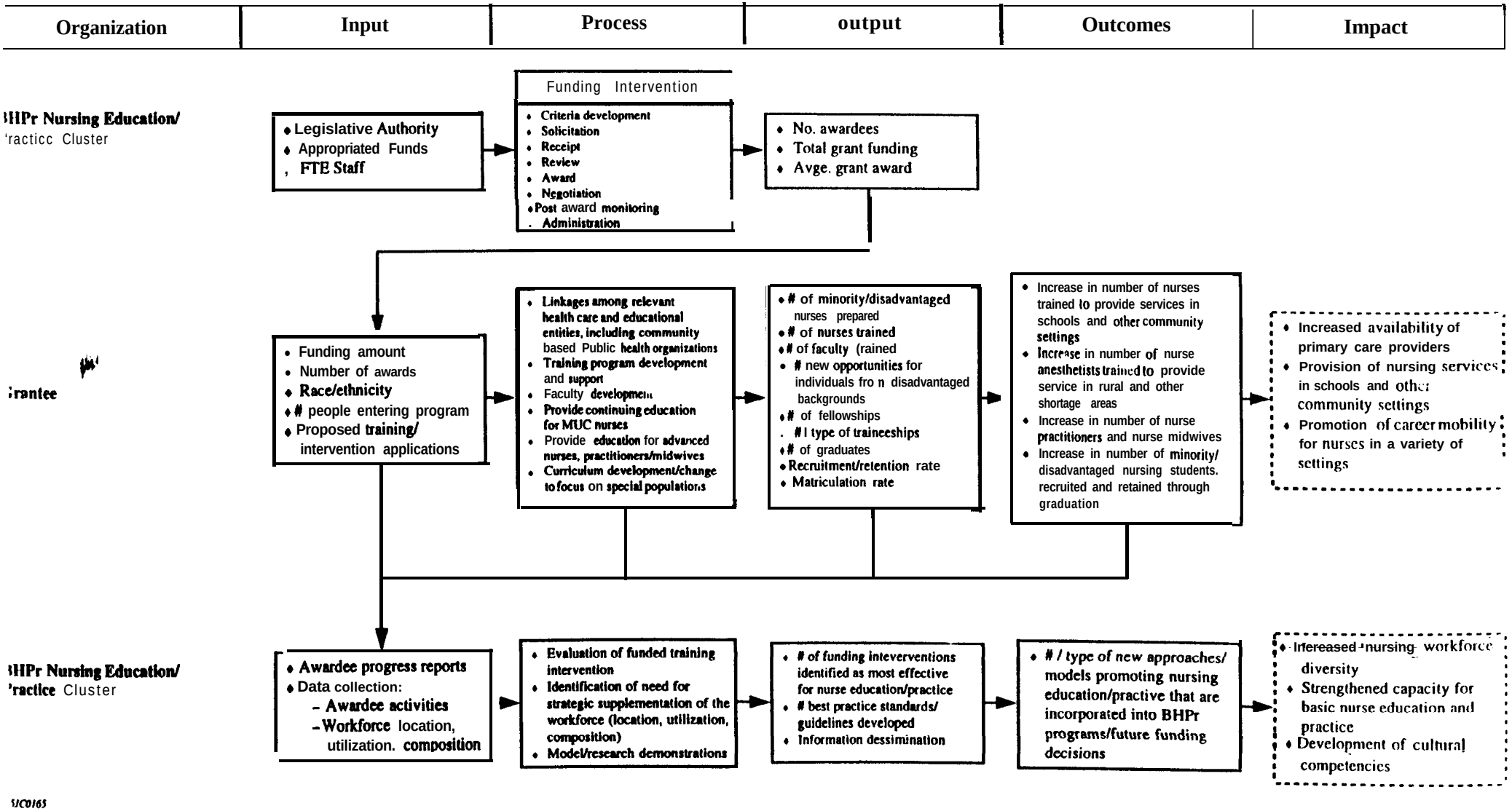
- BHPr uses information about the cluster grantees, their activities, outputs, outcomes, and impacts to analyze and evaluate grantee performance. New models of training and education may also be identified and economies of scale and efficiencies achieved through program consolidation in the cluster.

Currently, the programs in this proposed nursing practice/education cluster emphasize the first two areas--making awards and activities related to nurse training, education, and professional development. While there has been some data collection and analysis, the overall effort devoted to analysis and evaluation is insufficient to achieve a systematic comparison of the advantages and disadvantages of new models of training and education being implemented by the grantees. It is also insufficient to assess whether economies of scale and efficiencies have been developed through program consolidation. The next section summarizes the specific data collection and measurement activities that the programs in the proposed cluster have completed.

c. **Cluster Measurement Activities**

We fmd that BHPr has identified appropriated funds for nurse education and practice at the cluster level, although the issue of whether legislative authority for the cluster approach itself will be granted remains to be resolved. If the requested FY 1996 funds are received, this cluster level funding would support the grant making process.

Figure A-5
BHPr: Nursing Education/Practice Cluster



Because the proposed consolidation of programs has yet to be enacted, most of the other inputs, processes, and outputs at the cluster level at present have not been developed. If authority is given to the consolidation effort, BHPr will need to develop a coordinated system across the programs included in the Nurse Education/Practice Cluster to monitor and evaluate logic model elements delineated earlier. For example, a cluster level tracking system as well as performance measures will need to be developed and identified to provide data on the performance of the activities supported by the cluster. This might include a consolidated set of outputs that grantees would be required to measure in a systematic and routine way.

The programs that have been subsumed into this Nurse Education/Practice Cluster do have limited data related to their activities funded bv grants in previous years. But, they currently do not have the ability to link outcomes of these activities and lessons learned to their stated goals and objectives.

At the program or grantee level, information about each grant and some degree of summary information is available (e.g., total dollars awarded, total number of grants, average size of award). Some descriptive information is also available, classified by type of training or services provided, grantee type (i.e., institution), and racial/ethnic distribution of students in supported programs.

These data are maintained in two separate computer systems by the Advanced Nurse Education Branch and the Nursing Practice and Resources Branch of the Division of Nursing. There are currently efforts to develop a central data system for all of the Division programs in order to collect and track such input and output data in a more systematic and routine way.

2. Assessment of Inputs

The inputs to this proposed cluster currently include the individual authorizations for programs that comprise the cluster and the requested overall budget. Other inputs to the processing of grants to nurse training institutions include the equipment of the Bureau staff who administer the programs. The staffing specifically required for efforts within this cluster is currently not tracked, but it could be. The monies to pay for those resources are provided through the Department's operations management/administrative budget, however, and are not included in the funds requested for this cluster.

Financial inputs related to program grants management (e.g., dollars per award) are available electronically through the IMPACT system. The IMPACT system is operated through NIH and labels all HRSA programs with a code identifier.

3. Assessment of Outputs

Outputs associated with individual programs that are being subsumed into the proposed clusters have been identified in earlier work on program indicators for the Bureau of Health

Professions. Some of these measures may also prove applicable to the cluster grantee performance tracking. It should be noted, though, that to the extent that the programs are being merged into this cluster, some of these measures of program activities may not be as relevant to cluster-wide activities.

Earlier identified measures include the number and type of training provided in funded programs, graduate placements and program curriculum changes targeted at special populations, and training objectives. Also, the Advanced Nurse Education, Nurse Practitioner/Nurse Midwife Education, Professional Nurse Traineeships and Nurse Anesthetist Training programs are included in the General Funding Preference legislation in Section 860(e)(1). These programs are also subject to Section 860(e)(2) of the Public Health Service Act, that stipulates Statutory Information Requirements. Some of these information elements reported on these forms may be identified as desirable to collect for all cluster grantees.

Some of the outputs that are described in the FY 1996 justification may be difficult to measure as they are currently stated and will require further specification. Results such as "innovative approaches in case management," "development of cultural competencies," and "provide for linkages among relevant health care and educational entities" will be difficult to measure until the expected services and direct results of cluster activities are more clearly defined. Moreover, it may be more appropriate to represent some of these indicators as outcomes; this distinction will be important for GPRA monitoring because it will be very difficult to measure the achievement of some of these results, and performance expectations should be reflected accordingly. Further development of these measures might be addressed in the technical assistance phase of this HRSA performance measurement project.

Interviews with BHPr staff have identified some data sources that will be useful in linking inputs to outcomes to evaluate cluster performance. As the cluster implementation progresses, diverse systems within the Division of Nursing should be consolidated into a uniform reporting and tracking system to facilitate cluster-level tracking.[1]

The next step of technical assistance in this HRSA performance measures project can help BHPr to develop strategies for ongoing and systematic measurement building where possible from data systems that are currently in place.

[1] The Division of Nursing collects grantee data on outputs such as: dollars per award (to students, to institutions), number of students enrolled, number of graduates, and the focus/purpose of the grants awarded. Efforts to load this output data onto computer systems are currently in progress.

Output data collected by the Division of Nursing are available through two data sources operated separately by the two Division branches of: Advanced Nurse Education and Nursing Practice and Resources. The Advanced Nurse Education Branch has a computer database with data up to seven years old for the two programs that it operates: the Advanced Nurse Education Program and the Nurse Practitioner/Nurse Midwife Education Program. Data from all of the other programs in the Division of Nursing are collected in a more sophisticated computer database that was developed recently for the Nursing Practice and Resources Branch. This system has data for at least one year of the program grants, and will eventually include the data from the two programs that currently exists in the Advanced Nurse Education branch database.

4. Assessment of Outcomes

Under the proposed cluster authority, BHPr anticipates a smaller number of large grants, contracts, and cooperative agreements awarded in FY 1996. Since this is a new legislative approach, no historical data are available on cluster outcomes. Based on the discussion of this cluster in the FY 1996 budget justification, the following are "examples of performance outcomes that would be met" that BHPr anticipates could represent interim outcomes:

- Number of nursing students trained;
- Number of faculty trained; and
- Number of minority/disadvantaged nurses prepared.

By the GPRA lexicon, the measures listed above would be considered outputs of program interventions since they are the direct result of funded efforts. In addition to the above, the following outcomes are stated in the budget justification:

- Increase in the number of nurses trained to provide services in schools & other community settings;
- Increase in the number of nurse anesthetists trained to provide services in rural & other shortage areas;
- Increase in the number of nurse practiticuers & nurse midwite graduates; and
- Increase in the number of minority/disadvantaged nursing students recruited and retained through graduation.

These outcome measures as stated in the 1996 budget justification are measurable and specific. However, further specifications are needed to determine the extent to which Bureau grant funding was the primary influence in achieving these outcomes. Some of these outcomes also better represent the direct products, or outputs, of the funding intervention, rather than the actual results of program activities. And, the purported benefits of clustering, including increased flexibility, innovation, and linkages are not conveyed by these measures.

Outcomes are neither clearly identified nor systematically measured by the programs. In the accompanying table we suggest the types of example measures that would be appropriate to apply to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (final or program-level outcomes). Many of the outcomes shown below are based upon measures proposed in the FY 1996 budget justification as cluster-wide performance indicators.

5. Overall Assessment

The performance tracking of individual programs within the Nurse Education/Practice Cluster is relatively well-developed, and can provide a good basis for future development of cluster-level tracking. As is true for all of the programs proposed for consolidation, the key challenges for programs in the Nurse Education/Practice Cluster will be development of cluster level outputs and outcomes that demonstrate the value of clustering, and consolidation of individual program processes to achieve the efficiency expected with clustering. Another difficulty that will need to be addressed is that while data collection efforts for these programs are relatively strong, the data reported is not always consistent.

Next steps for this cluster are in common with issues discussed earlier as relevant to all programs that will be included in the proposed cluster approach, contingent upon legislative authorization. The programs in this cluster should address the actual consolidation of grant-making processes across individual programs. Performance expectations for grantees in demonstrating the "value-added" of larger and more flexible grants also need to be further developed and specified. A uniform set of measures for all grants within the cluster should be specified. Staff should be consolidated to achieve efficiencies in grant processing, tracking, technical assistance, analysis, and information dissemination through clusters and systems to document greater efficiency in these Bureau/cluster processes. Before cluster-level grant making is further advanced, a uniform set of reporting requirements for all grantees should be specified. This would include who is involved in managing programs, other inputs to the "intervention" including all other funding, processes of intervention, outputs and outcomes. Strategies for grantee reporting and other approaches to tracking should then be developed and current systems assessed as vehicles for cluster-level collection.

APPENDIX B: BUREAU OF PRIMARY HEALTH CARE

HRSA BUDGET LINE ITEM ASSESSMENTS

BUREAU OF PRIMARY HEALTH CARE: THE HEALTH SERVICES CLUSTERS

The Bureau of Primary Health Care

The FY 1996 budget identifies a set of new Health Services Clusters as part of the HRSA effort to consolidate the role of the federal government in providing emergency, primary, and preventive care as well as enabling and supportive services to underserved and special populations. Four clusters are identified: Health Centers; Special Populations; Rural Health; and Emergency Medical Services. Only the first two are located within the Bureau of Primary Health Care and are discussed in this section. The other clusters are discussed in the sections on the Office of Rural Health (rural health cluster); the Bureau of Health Resources and Development (most of the emergency medical services cluster), and the Maternal and Child Health Bureau (the pediatric component of EMS)

The BPHC administers all program activities in the Health Centers and Special Populations clusters, the National Health Service Corps program within the Health Professions Cluster, and the HIV Early Intervention Services Program (Ryan White CARE Act Title III). These clusters and programs focus on developing and supporting infrastructure to provide primary care services to underserved and special populations, with the ultimate goal of improving access to primary and preventive care services and enhancing health status.

The following discussion provides a brief overview of BPHC's clusters and our assessment of the BPHC's overall progress in performance measurement. This is followed by separate assessments of efforts specific to each of the proposed clusters and the HIV Early Intervention Services Program. A discussion of the National Health Services Corps may be found in the assessment of the Bureau of Health Professions, Appendix A.

The extent to which the BPHC has developed reporting systems and relied on detailed monitoring varies across programs housed within the bureau and is reflective of the relative proportion of funding devoted to each program. The BPHC has made the most progress in the development and measurement of performance indicators for programs within the Health Centers Cluster. These programs account for the vast majority of the Bureau's total budget and are therefore the focus of the Bureau's efforts. Due to the varied nature of the programs within the Special Populations cluster and the relative size of its total cluster budget, the BPHC has not focused its efforts on this cluster. Performance measurement activities for the National Health Service Corps program and the Ryan White Title III Program, which are relatively small in scope and funding, are less well developed.

Although GPRA legislation is relatively new, the BPHC's prior efforts with respect to data collection and monitoring make it well positioned for compliance. The Bureau recognizes the importance of good data collection and has standard systems in place for monitoring inputs and outputs to a number of its programs. As a result, the Bureau is currently able to describe grantees, grantee costs and financial status, and unduplicated program users. For the Health Centers cluster in paritcular, the BPHC systematically measures its contribution to the provision

.of primary care through the Bureau Common Reporting Requirements (BCRR), an annual reporting requirement of all health centers and selected Health Care For the Homeless, Ryan White, and Public Housing grantees. In addition, BPHC is currentiy finalizing the User-Visit Survey, an annual interview survey of health center users, and is in the process of developing clinical measures. Data are systematically collected from some of the programs in the Special Populations cluster and the Ryan White program through annual reporting required by BPHC. Grantee organizations within these programs that are also community and migrant health centers provide data through the BCRR.

Budget development in BPHC is an iterative but ultimately top-down process. Representatives at the BPHC reported that staff develop an initial budget proposal for most programs based on estimates of current and anticipated needs. The budget amount ultimately requested, however, may represent an adjustment from the level of funding from previous years with some adjustment upward or downward to reflect overall targets for growth or reduction in support for these efforts. On the other hand, the budget for programs in the proposed Special Populations cluster is developed entirely through a top-down approach, based on resource availability, parameters specified in the legislative authority for the varied programs within this cluster, and levels of funding in previous years.

The descriptions and assessment that follow attempt to strike a balance between past efforts, which are effectively today's measures, and future planning and performance measurement as the implementation of the cluster concept and GPRA legislation is advanced. In recognition of the need for additional performance measurement efforts, the Bureau is developing strategies of ongoing data collection that go beyond the annual reporting requirements of grantees. The developed measures and means of tracking at the program level, particularly the recently developed Uniform Data System, provide the starting point for cluster-based efforts. The Uniform Data System builds upon the BCRR and streamlines existing grant reporting requirements. Aligning health services program and cluster-level measures to ensure adequate and consistent measurement and monitoring will continue to be an important focus for the Bureau as it works toward GPRA compliance.

1. Overview

The Health Centers Cluster consolidates four grant programs into one, streamlining legislation regarding services, application criteria, and grant requirements. This cluster includes the following programs and legislative authorizations:

- Community Health Centers
  (Public Health Service Act, Section 330)
- Migrant Health Centers
  (Public Health Service Act, Section 329)
- Health Care for the Homeless
  (Public Health Service Act, Sections 340 (a)-(r))
- Health Care for Residents of Public Housing
  (Public Health Service Act, Sections 340a)

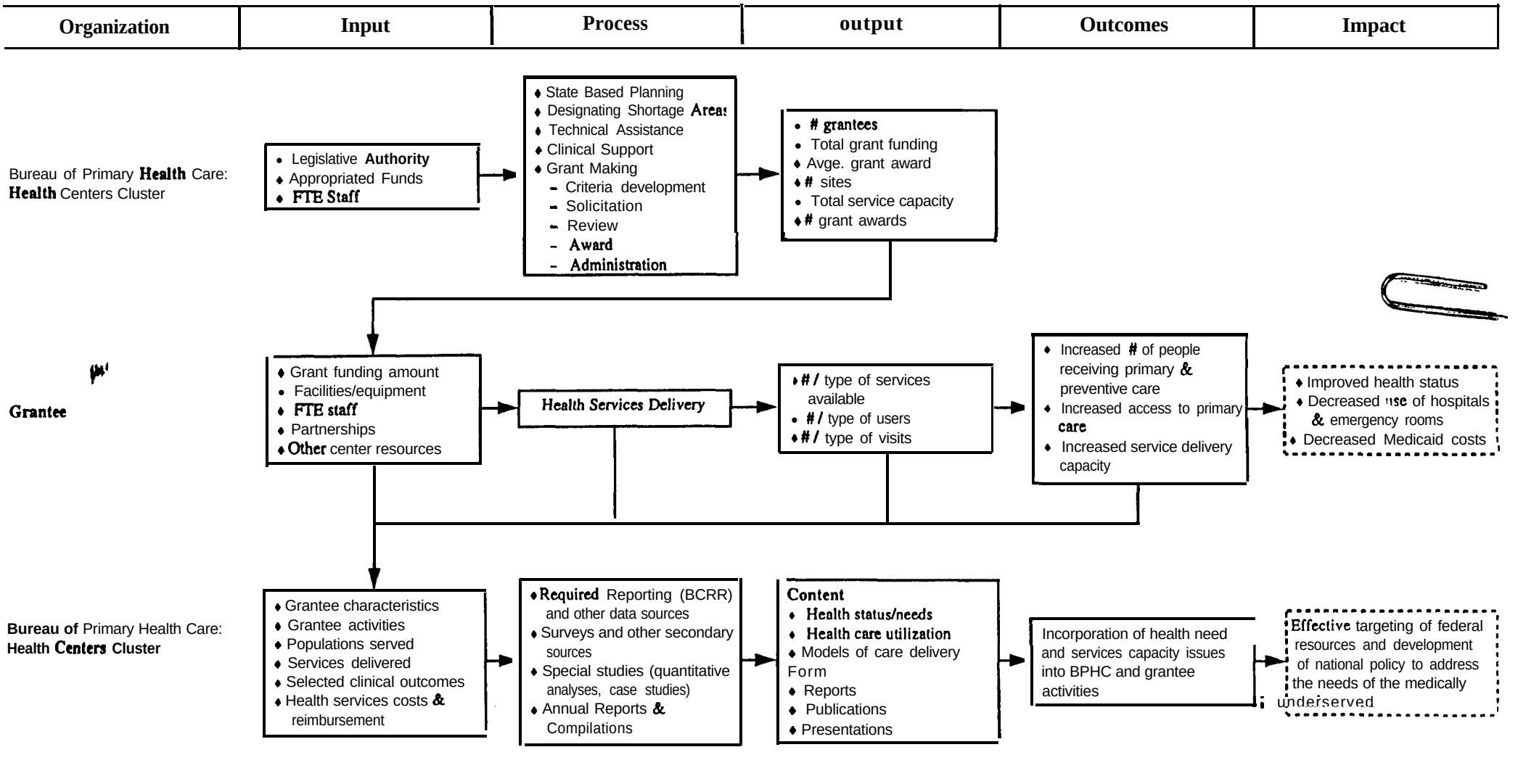
a. Brief Description of the Program Cluster

Through this cluster of programs, the BPHC provides grants to community-based public and non-profit organizations that provide health services to medically under-served populations, including pregnant women, children, migrant and seasonal farmworkers, persons who are homeless, and residents of public housing. Particular efforts are focused on serving at-risk children in school-based settings and in providing prenatal care to pregnant women and adolescents.

b. Cluster Logic Model

Although the concept of a logic model has not been used, the Bureau has historically linked expected goals and outcomes to activities and outputs for its programs. As part of our analysis, we have used a logic model construct to measure HRSA activities. By applying this approach to the cluster's collective legislative intent and the information gathered during our discussions with Bureau staff, a logic model can be developed that may represent measurement and activities around the principal objective of the cluster: to ***build primary and preventive health services delivery capacity for medically underserved populations.*** ***The*** proposed logic model is shown in Figure B-1.

Figure B-l
Bureau of Primary Health Care: Health Centers Cluster



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The logic model describes key efforts that are or should be undertaken by the BPHC to achieve this objective. These include:

- BPHC participates in state-based primary care planning efforts; designates medically under-served areas, provides technical assistance, clinical support and grant funds to community based providers to deliver health care to populations in medically under-served areas;
- Grantees deliver primary care, preventive health, and enabling services; and
- BPHC collects information about the grantees, their activities, outputs, outcomes, and impacts to evaluate grantee performance, provide technical assistance, and to effectively target federal resources and develop national policy to address the needs of the underserved.

To achieve this objective, the Bureau currently focuses its efforts and activities in two areas: grant making and data collection. The next section describes the specific data collection and measurement activities that the Bureau has completed.

c. Cluster Measurement Activities

Systematic collection of data on inputs and outputs occurs through the standard BCRR reports submitted to the BPHC by each grantee. All grantees for the programs included in this cluster were required to report data through the BCRR and some grantees had additional reporting requirements associated with their particular service focus.

A revised version of this reporting system has recently been developed to consolidate all of these requirements into a single system., named the Uniform Data System (UDS). All programs in the cluster will report on their activities through the UDS. In addition to demographics of the served population, numbers served, number of visits, and financial characteristics, the *UDS will* track the utilization of services for key conditions for which early intervention or continued management in primary care settings can significantly reduce likely acute care costs. Health personnel in the centers are reported by specialty, in terms of number of FTEs and number of services encounters provided.

The User-Visit Survey is an additional data collection instrument completed by a representative sample of community health center users (not including migrant and seasonal farm workers). The survey provides information to gauge patients' experiences and attitudes toward particular areas of personal health and health care, their understanding of diagnosed conditions, the care they have received, and satisfaction with the care provided by the funded health center.

2. Assessment of Inputs

The inputs to the health center cluster include the individual authorizations for programs that comprise the cluster, the requested overall budget (The requested budget for 1996 is $756,399,000), and the Bureau staff time devoted to administering the grants within the cluster. The legislative authority and appropriated funds for each program within the cluster are clearly defined and measured. With the exception of a small percentage of grant funds for evaluation and other support activities around grant application processing and management, the funds requested for those programs are all awarded to grantees. Bureau resources such as staff time are included in the department wide BPHC budget and are not reflected in the amount requested for individual programs-

Grantee inputs include facilities and equipment, staff, service delivery partnerships (e.g., referral agreements), and other health center resources. Staff and other resource inputs, including detailed financial data, are systematically measured and reported by the BPHC through the standard BCRR data reporting. Facilities and equipment, service delivery relationships, and other resources may be reported to the Bureau in individual grant applications.

3. Assessment of Outputs

As the logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of Health Center Cluster effort. Outputs of one level of cluster effort serve as inputs to the next level.

Grants are the output of the Health Center Cluster grant making process and are clearly identified. Information about each grant and key summary information is available (e.g., the number of grantees, the number of grant awards, average amount of grant funding, and service capacity). Descriptive information on the grantees and their service populations is also available.

Services Delivered are the outputs of the Health Center Cluster grantee's service delivery ***activities.*** Information on the number and type of services available, health center users, and health center visits is reported by each grantee through the BCRR. Additional descriptive information regarding available services may be available in the grant applications.

Knowledge about the health status, needs, and utilization of services among health center users and models of ***health care delivery*** is the desired output from the Health Center Cluster's analysis and evaluation of the grant making and service delivery activities. This output is currently produced through the BCRR, the User-Visit Survey, special studies conducted by contractors outside of the Bureau, and the information contained in the individual grant applications.

4. Assessment of Outcomes and Impacts

For the purposes of our assessment, outcomes are defined as the results of program output (e.g., the number of people receiving primary and preventive care). Impact is defined as the ultimate effect attributable to a program (e.g., number of people who would not have received care without the program).

The BPHC has clearly defined and measured some outcomes associated with each program within the Health Centers cluster. These outcomes are listed in our proposed logic model and include: increased number of people receiving primary care; increased access to primary care; and increased service delivery capacity as a result of the grantee level efforts. At the Bureau's evaluation and analysis level, the desired outcome is the incorporation of health needs and service capacity issues into BPHC and grantee activities.

The BPHC is working to develop clinical measures of impacts of services on target populations that will provide evidence of the good primary care as well as improved functional status, health awareness, and consumer satisfaction. These efforts are evidenced in the recently developed *BPHC Program Evaluation Overview: Community Health Centers. The BPHC Program Evaluation Overview: Community Health Centers* and the FY1996 Budget Justification include some of the outcomes and impacts suggested in our proposed logic model. In addition, the BPHC is currently exploring physiological measures to indicate whether there has been a demonstrable impact on health conditions in instances where better access to primary care is expected to make a significant difference. This would include examining trends in records of diabetic patients' blood glucose levels and blood pressure measures for hypertensive patients.

5. Overall Assessment

Overall, the BPHC programs within the Health Centers cluster are the most advanced in terms of progress toward performance measurement for GPRA. The Bureau programs currently collect data regarding *inputs (e.g.,* grant funding, grantee staff, etc.), *outputs* (e.g., the number of people served and the type of services provided by grantees etc.), and GPRA defined *outcomes. The ultimate* impacts of services on the target population are generally not tracked. The BPHC is in the process of identifying measures to assess program impact and developing clinical measures to expand upon past efforts (*Clinical Measures Workbook May 1991)* to collect limited outcomes data through medical records sampling at selected health centers.

In the Bureau, data have been used to manage and monitor programs. Data collected have been used to monitor grantee performance to identify administrative or financial problems among grantees that should be explored further by the Bureau. Given its progress in measuring and using performance data, BPHC may provide a valuable source of experience for other programs in HRSA as they develop measures and mechanisms for more systematic tracking.

1. Overview

The special populations cluster consolidates five programs into one, in order to enhance the ability of the Federal government to demonstrate more effective approaches for improving the health status of certain populations through health services delivery and infrastructure development. The cluster includes the following programs and legislative authorizations:

- ***Black Lung Clinics (Federal Mine Safety and Health Act, Section 427 (a)):*** through project grants/contracts, assists public and private entities to establish and operate clinics for the diagnosis, treatment, and rehabilitation of active and retired coal miners with respiratory and pulmonary problems;

- ***Pacific Basin Initiative (Public Law 101-527, Section IO):*** provides funds and technical assistance to projects in the Pacific Basin to build capacity and improve health services and systems;

- ***Payment to Hawaii for Hansen's Disease Services (Public Health Service Act, Section 320):*** provides funds to the state for inpatient and outpatient care for persons with Hansen's Disease;

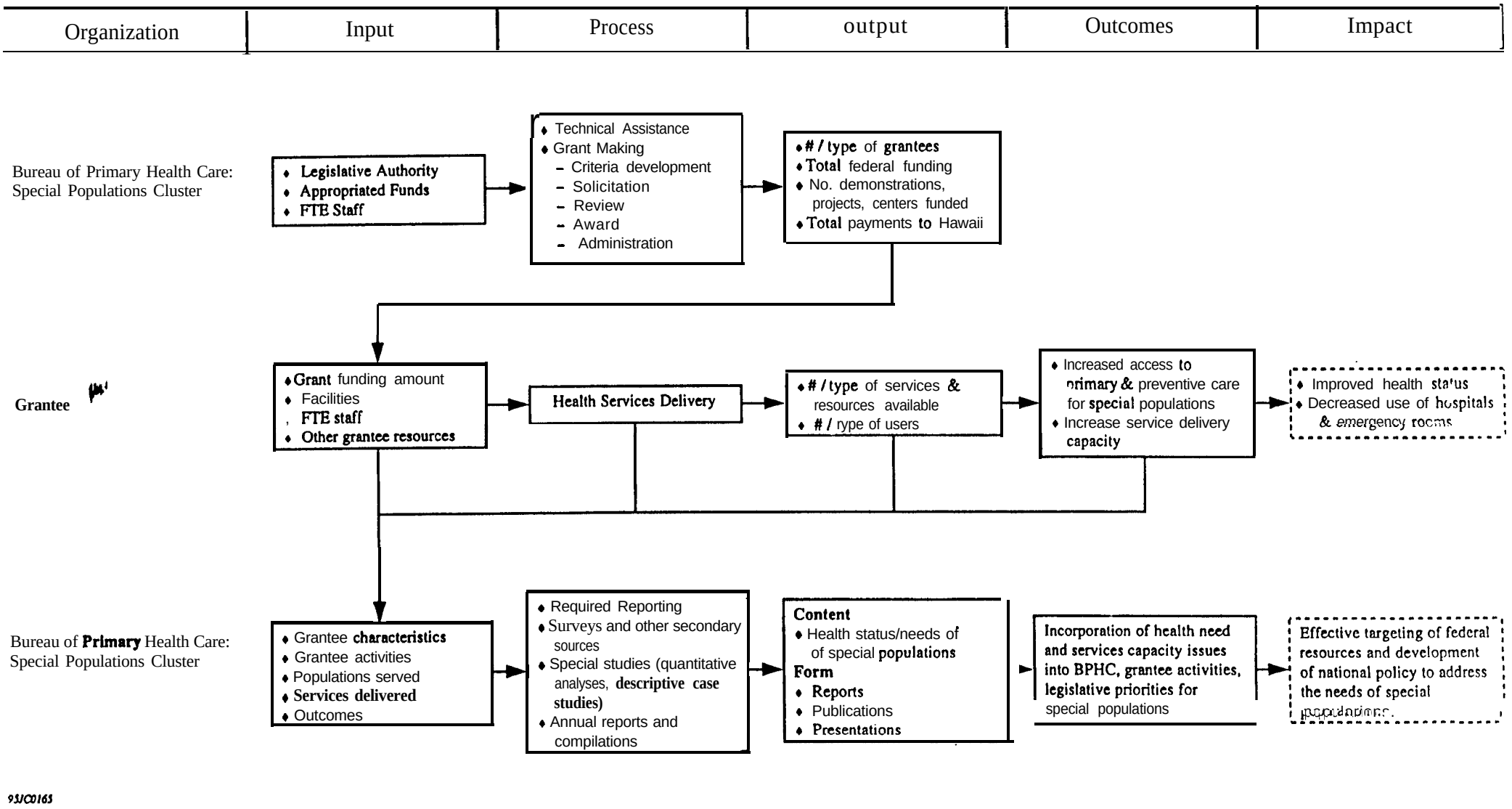
- Native ***Hawaiian Health Care (Public Law 100-579 as amended by Section 9168 of Public Law x02-396):*** provides funding to Native Hawaiian Health Care Systems to provide primary care, health promotion, and disease prevention services directly or by referral; provides funding support to health professions scholarship program for Native Hawaiians and administrative costs of a consortium of Native Hawaiian Health care organizations; and

- ***State Alzheimer's Disease Pilot Grants (Demonstration program under Public Health Service Act, Sections 398-398B):*** awards grants to ***13*** state agencies, including DC. and Puerto Rico, to assist in planning, establishing and operating programs that coordinate health care services to persons with Alzheimer's Disease or related disorders.

a. Cluster Logic Model

The varied nature of the programs within the Special Populations cluster challenges Bureau efforts to link expected goals and outcomes to activities and outputs at the cluster level. As part of our analysis, we have used a logic model construct to measure HRSA activities and to attempt to describe the broader objective of the cluster: ***to build primary and preventive health services delivery capacity for underserved or special populations. The*** model is based on programs' legislative intent and the information gathered during our discussions with Bureau staff. The proposed logic model is shown in Figure B-2.

Figure B-2
Bureau of Primary Health Care: Special Populations Cluster



The logic model describes key efforts that are or should be undertaken by the BPHC to achieve this objective. These include:

- BPHC provides grant funds and technical assistance to health care providers to deliver health care to special or underserved populations;
- Grantees deliver primary care, preventive health, and enabling services; and
- BPHC collects information about the grantees, their activities, outputs, outcomes, and impacts to evaluate grantee performance and to effectively target federal resources and develop national policy to address the needs of special populations.

The Bureau's focus of current efforts to achieve this objective has been on grant making. As described in the following section, how and to what extent data is collected varies considerably across the programs in the Special Population cluster.

b. Cluster Measurement Activities

To evaluate the performance of the Special Populations cluster, systematic measurement of inputs, outputs, and outcomes coordinated across each of the programs within the cluster is necessary. However, the Bureau collects only data on inputs, and in some cases outputs. In general, outcomes are not well defined or measured, and without this type of information, the effectiveness of service delivery to these populations cannot be gauged.

Currently, there is no standardized data collection required or requested by the Bureau across the programs in this cluster. Rather, data collection requirements are specific to each separate program. In particular:

- Grantees who are community or migrant health centers complete an annual BCRR report. Input data is gathered through a review of BPHC records and the program grant applications. There is no systematic reporting of data for Black Lung Clinics or Payment to Hawaii for Hansen's Disease, although Black Lung Clinics report the number of clients served.
- Qualitative information on the Pacific Basin Health Initiative is collected through quarterly progress reports. In 1994, the Native Hawaiian Health Care Program instituted an annual reporting system that provides data on client demographics and utilization of primary care, disease prevention, health promotion, case management, and outreach services.
- The evaluation of the Alzheimer's Demonstration collects information regarding: persons seeking information about the demonstration services; clients served; service utilization by clients and families; types of education, training, and outreach programs funded and their participants; and client satisfaction with care.

2. Assessment of Inputs

As with the Health Center Cluster, BPHC inputs to the Special Populations cluster include the individual authorizations for programs that comprise the cluster, the requested overall budget (The requested budget for 1996 is $17,259,000) and the Bureau staff time devoted to administering the grants within the cluster. The legislative authority and appropriated funds for each program within the cluster are clearly defined and measured. With the exception of a small percentage of grant funds for evaluation and other support activities around grant application processing and management, the funds requested for these programs are all awarded to grantees.

Grantee inputs include facilities and equipment, staff, service delivery partnerships (e.g., referral agreements), and other health center or organizational resources. These inputs are not systematically reported to the BPHC, although some information may be found in the grant applications, the Native Hawaiian Health System annual reports, and Pacific Basin quarterly progress reports. The evaluation of the Alzheimer's Demonstration Program includes the collection of information about paid and volunteer staff who provide direct services to clients and *their* families.

3. Assessment of Outputs

As the logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of Special Populations cluster effort. Outputs of one level of cluster effort serve as inputs to the next level.

Grants are the output of the Special Population Cluster grant making process and are clearly identified. Information about specific grants and key summary information is available (e.g., the number of grantees, the total amount of federal funding, and the number of demonstrations, projects, or sites funded). Descriptive information on the grantees and their service populations may also be available through a review of individual grant applications, the Native Hawaiian Health System annual reports, Pacific Basin quarterly progress reports, and the evaluation of the Alzheimer's Demonstration.

Given the distinct nature of each of the programs and grantees included in the Special Populations cluster, currently available outputs for the Special Populations cluster grantee's service delivery activities vary widely. Those that are defined are specific to each program. For example, outputs currently defined by the Bureau in the FY 1996 budget justification in association with the Black Lung Clinics program include the number of centers funded and the number of persons served, whereas outputs associated with the Payments to Hawaii for Hansen's Disease program include average daily patient census, total number of patient days, and number of outpatient visits. Descriptive information regarding available services may also be available in the grant applications.

Knowledge about the health status and needs of special populations is the desired output from the Special Populations Cluster's analysis and evaluation of the grant making and service

delivery activities. Data on this output may be collected in the Native Hawaiian Health System annual reports, Pacific Basin quarterly progress reports, and the evaluation of the Alzheimer's Demonstration.

4. **Assessment of Outcomes and Impacts**

For the purposes of our assessment, outcomes are defined as the results of program output (e.g., the number of people receiving primary and preventive care). Impact is defined as the ultimate effect attributable to a program (e.g., number of people who would not have received care without the program).

In general, explicit outcomes and impacts are not well defined or measured for the programs within this cluster. Those that are defined are specific to each program. Outcomes and impacts were not defined for the Alzheimer's Disease and Payment to Hawaii programs. The stated impacts for other programs within this cluster include: minimizing the effect of respiratory and pulmonary impairments in coal miners and reducing the incidence of expensive inpatient treatment of these conditions ***(Black Lung Clinics);*** improving health systems and services ***(Pacific Basin Initiative);*** and improved health status of Native Hawaiians ***(Native Hawaiian Health Care).***

In the proposed logic model, we suggest the types of outcomes and impacts that would be appropriate to apply to the grantee as well as program analysis and evaluation activities and outputs.

5. Overall Assessment

Some programs within this cluster are further along than others in the collection of measures to monitor performance. In general, further efforts are needed to develop a more complete set of measures and mechanisms to systematically track inputs, outputs, and the outcomes of all programs within the Special Populations cluster. The populations and problems addressed by programs within this cluster are so varied that it may be best to keep the programs separate but track them consistently. Tracking should both inform the public's understanding of what is being paid for and the relative effectiveness of the services and programs being funded.

Next steps for this cluster may include the specification of a common reporting scheme for inputs and outputs, and development of outcome and impact measures suited to the special population.

Program/Budget Line Item: Ryan White CARE Act Title III

1. Overview

The Ryan White Comprehensive AIDS Resources and Emergency (CARE) Act of 1990 represents the largest dollar investment made by the federal government to date specifically for the provision of services for people with HIV infection. The Act was created with the goal of improving the quality and availability of care for individuals and families with HIV. Each section of the Act has resulted in specific program efforts. Of these, Title III is located in the Bureau of Primary Health Care (although it is listed under the Bureau of Health Resources Development in the HRSA budget). Titles I and II are located in the Bureau of Health Resources Development and are discussed in ***Appendix D***. Title IV is the responsibility of the Maternal and Child Health Bureau and is discussed in ***Appendix E***.

Title III of the CARE Act supports outpatient early intervention HIV services for persons with HIV infection in order to reduce the risk of transmission and to link individuals to services that can prevent or delay the onset of symptoms and opportunistic diseases. The program targets under-served populations that traditionally have limited access to care, including children, adolescents, women, racial/ethnic minorities, and people who abuse substances. Community based public or non-profit private entities currently providing comprehensive primary care services to populations at risk for HIV infection are eligible to apply for Title III funds. This includes Community and Migrant Health Centers, Health Care for the Homeless Centers, Family Planning Grantees, Comprehensive Hemophilia Diagnostic and Treatment Centers, and other Federally Qualified Health Centers.

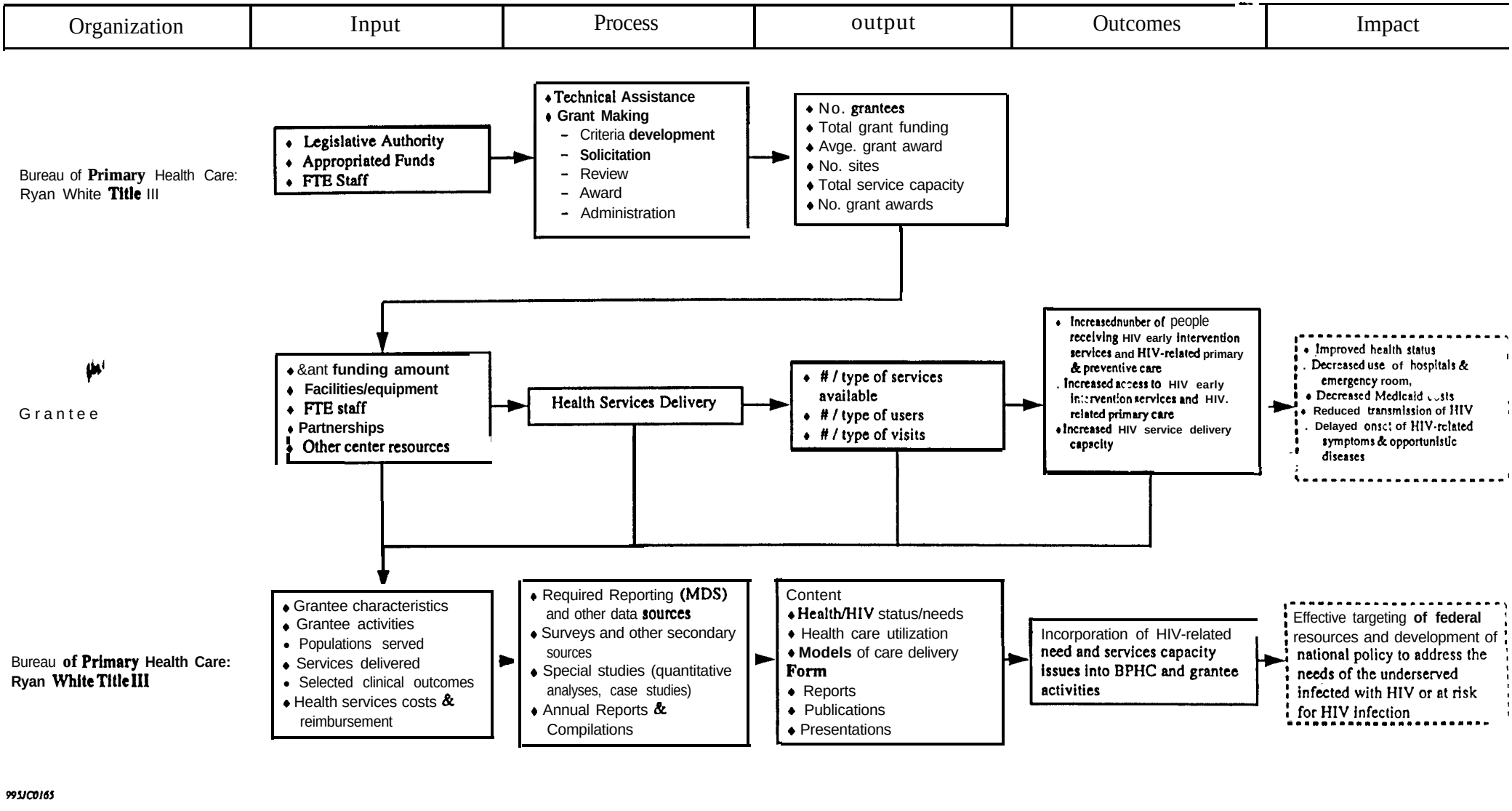
a. Cluster Logic Model

As part of our analysis, we have used a logic model construct to measure HRSA activities and to attempt to describe the broader objective of the cluster: *to* increase ***the capacity and capability of ambulatory care facilities to provide early intervention services as part of a continuum of HIV prevention and care services. The*** model is based on programs' legislative intent and the information gathered during our discussions with Bureau staff. The proposed logic model is shown in Figure B-3

The logic model describes three key efforts that are or should be undertaken by the BPHC to achieve this objective. These include:

- BPHC provides grant funds to community based health care providers to deliver health care to underserved populations infected with HIV or at risk for HIV infection;
- Grantees deliver primary care, preventive health, early HIV intervention, and enabling services; and

Figure B-3
Bureau of Primary Health Care: Ryan White CARE Act Title III



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- BPHC collects information about the grantees, their activities, outputs, outcomes, and impacts to evaluate grantee performance and to effectively target federal resources and develop national policy to address the needs of underserved populations at risk for or infected with HIV.

The Bureau's focus of current efforts to achieve this objective has been on grant making and some data collection.

b. Cluster Measurement Activities

To evaluate the performance of Ryan White Title III grantees, systematic measurement of inputs, outputs, and outcomes is necessary. Without this type of information, the effectiveness of service delivery to target populations cannot be gauged.

Data is gathered from grantees through annual reporting requirements to the BPHC and through a review of BPHC records and the program grant applications. Grantees who are community or migrant health centers also complete an annual BCRR report.

2. Assessment of Inputs

As with the clusters, BPHC inputs to the Ryan White Title III program include the authorization for the program, the requested budget, and the Bureau staff time devoted to administering the grants within the program. The legislative authority and appropriated funds for the program are clearly defined and measured. With the exception of a small percentage of grant funds for evaluation and other support activities around grant application processing and management, the funds requested for this program are all awarded to grantees.

Grantee inputs include facilities and equipment, staff, service delivery partnerships (e.g., referral agreements), and other health center or organizational resources. These inputs are not systematically reported to the BPHC, although some information may be found in the grant applications and the BCRR reports.

3. Assessment of Outputs

As the logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. Outputs of one level of program effort serve as inputs to the next level.

Grants are the output of the Ryan White Title III g-rant making process and are clearly identified. Information about specific grants and key summary information is available (e.g., the number of grantees, the total amount of federal funding, and the number of sites funded). Descriptive information on the grantees (e.g., type of institution) and their service populations

(e.g., gender, racial/ethnic characteristics) may also be available through a review cf individual grant applications and annual reporting.

Knowledge about the health status and needs of underserved populations infected with HIV or at risk for HIV infection is the desired output from the Ryan White Title III analysis and evaluation of the grant making and service delivery activities, Available data on this output is collected through annual reporting under the grant and include HIV status and HIV exposure category.

4. **Assessment of Outcomes and Impact**

For the purposes of our assessment, outcomes are defined as the results of program output (e.g., the number of people receiving primary and preventive care). Impact is defined as the ultimate effect attributable to a program (e.g., number of people who would not have received care without the program).

Although outcomes and impacts are not routinely tracked by the BPHC for Title III, a subset of desired outcomes and impacts for the Title III program have been defined and measured through the BPHC-funded CDM Group program evaluation. The evaluation attempted to measure the impact of Title III funding on the delivery of services to clients through an examination of changes in client demographics, staffing, and service delivery collaborations with other medical and social services providers.

In the proposed logic model, we suggest the types of outcomes and impact that would be appropriate to apply to the grantee as well as program analysis and evaluation activities and outputs.

5. Overall Assessment

Similar to the BPHC programs in the Health Centers cluster, the Title III program is advanced in terms of progress toward performance measurement for GPRA. Title III currently collects data regarding ***inputs*** *(e.g.,* grant funding, grantee staff, etc.), ***outputs*** (e.g., the number of people served and the type of services provided by grantees, etc.), and some GPRA defined *outcomes. The* ultimate impacts of services on the target population are generally no tracked. The CDM Group's recent evaluation of the impact of Title III funding on service delivery should be explored for insights into the type of measures that could be developed to assess program outcomes and impact on a regular basis.

APPENDIX C: OFFICE OF RURAL HEALTH POLICY

HRSA BUDGET LINE ITEM ASSESSMENTS

OFFICE OF RURAL HEALTH POLICY

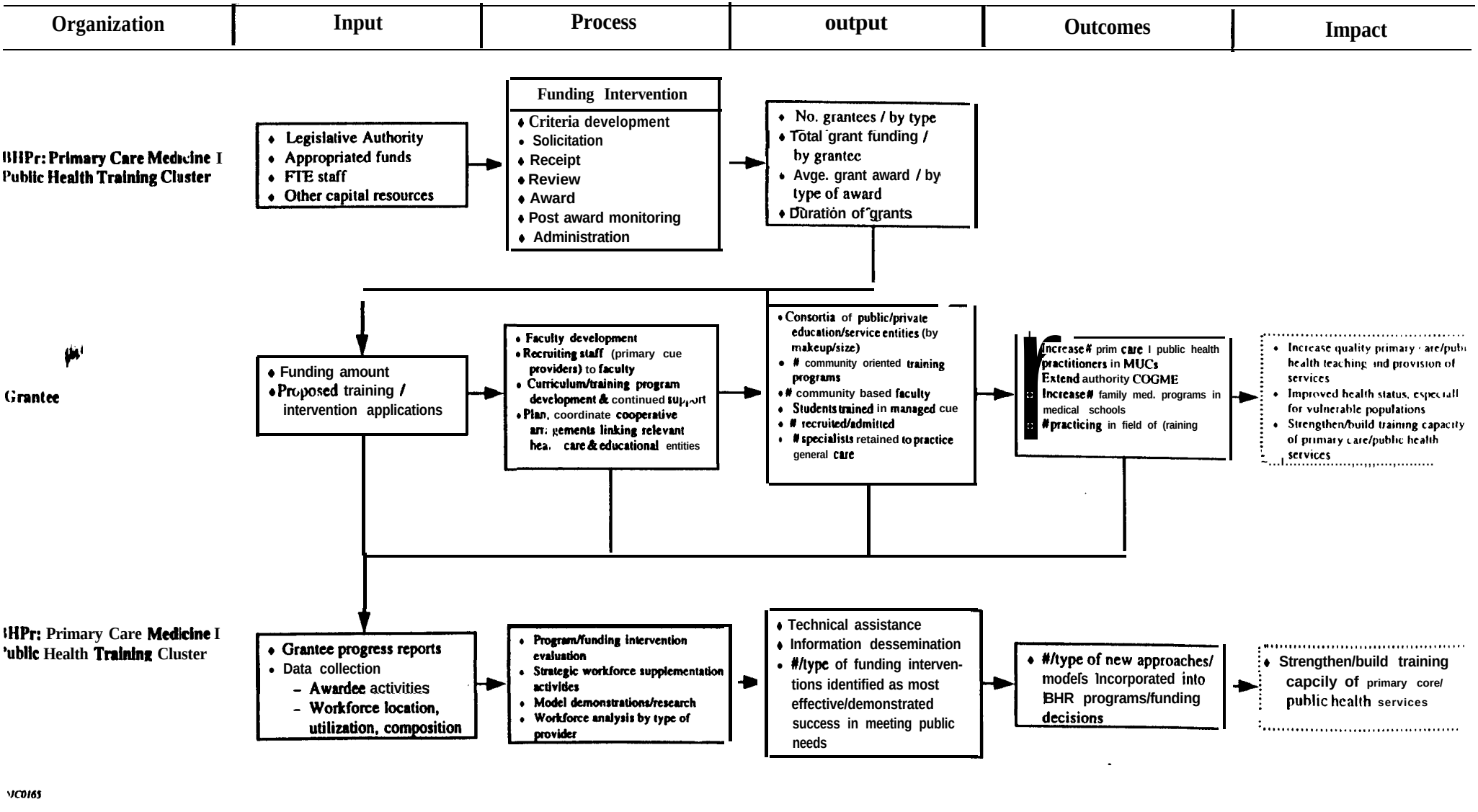
The Office of Rural Health Policy (ORHP) serves as the policy focal point within the Department of Health and Human Services for public and private sector efforts to strengthen and improve the delivery of health services to populations in rural areas. To accomplish this goal, ORHP develops policy for and coordinates rural health activities within the Department of Health and Human Services, and advises the Secretary on access to health care in rural communities and the recruitment and retention of rural health professionals. ORHP also provides matching grants to help establish and support state offices of rural health; administers the Rural Health Outreach Grant program; funds rural health research centers across the country; and staffs the National Advisory Committee on Rural Health

The programs of ORHP (Rural Health Research, State Office of Rural Health, Rural Health Outreach) share the broad goal of using information as a means of increasing access to and the effectiveness of health care service delivery within rural areas. The three rural health programs engage in a similar range of activities including information development and dissemination, service delivery, and capacity building. Given the cornmonalties of activities across these programs, it is logical that they be placed in the same cluster. However, when the programs were clustered under the new budget approach, the Rural Health Research program was not included with the other two programs, the State Office of Rural Health and Rural Health Outreach. Consequently, the programs could not be measured as a cluster; we have chosen to assess each program independently with respect to their performance and evaluation measurement

The degree to which ORHP measures its success in increasing access to and quality of health care in rural communities differs according to each program. Although each program makes an effort at evaluation, some programs have more mature evaluation processes than others. The Rural Health Research program takes a peer review approach to analyze the program's effectiveness. The program evaluation is conducted by a Board of Visitors that makes periodic qualitative evaluations of each grantee research center. The Rural Health Outreach program has developed two products that collect information about their grantees, their activities and lessons learned. Due to financial constraints however, only one of the products has been implemented. Finally, the State Offices of Rural Health has developed a list of criteria by which to assess the progress and maturity of their various offices.

Although ORHP makes no formal attempt to link outcome data and performance results with the budget development process, they do use collected data to justify the budget and defend spending levels. Staff members expressed the sentiments that performance measures would have little or no effect on the total budget. In general, budget development is based on the previous years budget adjusted to reflect an increase or decrease in necessary program support. An exception is the Telemedicine Grant program. The Telemedicine program collects and incorporates data from the previous years grants into the budget development process for future grants.

Figure A-4
BHPr: Primary Care Medicine / Public Health Training Cluster



ORHP staff believe that assessments of the effectiveness of their grant programs should take into account that the primary responsibility of the office is its policy role as the Department's focal point for rural health issues. Staff perceive that having this role in addition to managing grant programs makes ORHP somewhat different than other HRSA programs. ORHP staff also maintain that the office is under-resourced in terms of the staff time needed to adequately address both areas of responsibility with equal effectiveness.

Program/Budget Line Item: Rural Health Research

The various activities conducted under the Rural Health Research program are authorized under Title III of the Public Health Service Act and Section 711 of the Social Security Act. Appropriated funds for the program are clearly identified and program staff are well aware of anticipated changes to this input (e.g., potential rescission actions to the FY 1995 program funding level). The initial proposed funding for the Research program was $13 million. However, a $3.8 million rescission in the Telemedicine grants program decreased funding to the current level of $9.2 million.

- Rural Health Research Center grants program $2.8M
- National Advisory Committee on Rural Health (NACRH) $0.4M
- Rural Health Information Clearinghouse (RHICS) $0.5M
- Telemedicine grants program $5.0M
- Special projects and initiatives $0.5M

Although the Rural Research program is made up of several individual programs as indicated above, our detailed analysis will focus on two of the larger programs, the Rural Health Research Center grants program and the Rural Telemedicine grants program.

Rural Health Research Centers Grants Program

1. Overview

a. Brief Description of Program

The Rural Research Center grants program provides funding to research centers to build research capacity and obtain relevant research on rural health care issues. There are currently seven research centers located at the Universities of Washington, North Dakota, Minnesota, Southern Maine, North Carolina, Florida, and the State University of New York at Buffalo.

b. Program Logic Model

The program does not have available for any of its activities an explicit logic model that links its expected program goals and outcomes to its activities and outputs. Moreover, the program is more a collection of related activities than an integrated system that can be covered by a single logic model. However, **given the legislative intent of the program and the** info-on collected during our interviews, a logic model can be identified to achieve what we fmd to be the objectives of the overall program: ***developing new knowledge*** about rural health issues, and

building the capacity of research institutions to produce this knowledge. Our proposed logic model for the Research Center program is shown in Figure C- 1.

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- Grunt Making: ORHP awards grants to academic institutions to fund investigator-initiated research in rural health issues and to provide ongoing support to the institutions to initiate, improve, and sustain their capacity to conduct this research.

- Grantee Activities: The Research Center grantees produce and disseminate the research and develop their capacity in accordance with the grant proposals.

- ***Analysis & Evaluation:*** ORHP uses information about the grantees, their activities, outputs, outcomes and impacts to analyze and evaluate grantee performance; and improve their allocations of resources to current and potential grantees. Additionally, ORHP uses this information to make distinctions between "developing" and "mature" research institutions.

We find that in general there is a reasonably good balance of effort across these three areas in the Rural Health Research Center program. The next section describes the specific data collection and measurement activities that the program completed.

c. Measurement Activities

The Research Center program uses a peer-review approach, i.e., a "Board of Visitors (BoV)," to conduct periodic qualitative evaluations of the grantee research centers. The Board of Visitors consists of five federal and non-federal members with expertise in rural health policy, health services research, organizational development and administration. The first such evaluation, in 199 1-1992, was charged with

- developing baseline information on new centers;

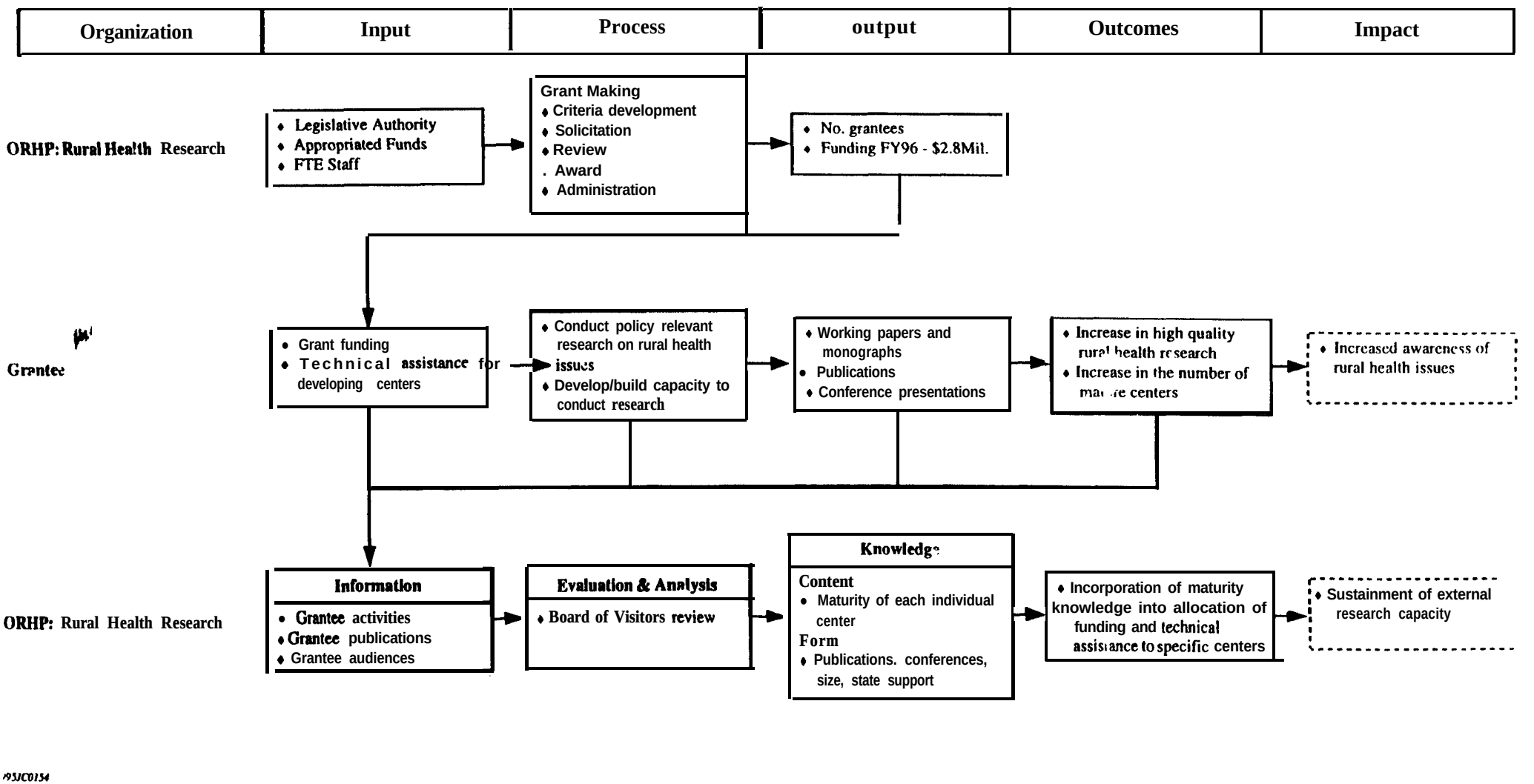
- identifying initial problems and recommending corrective measures;

- ***suggesting performance data for centers to collect to facilitate evaluation and monitoring of the effectiveness of the grant program*** (emphasis added);

- developing recommendations to the program office; and

- specifying other activities the BoV deemed appropriate.

Figure C-l
Office of Rural Health Policy: Rural Health Research Centers



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In the first evaluation, the BoV assessed the quality and quantity of the products developed by the centers and evaluated the centers in terms of their ability to:

- **analyze** rural health issues;
- conduct applied research that is policy relevant;
- disseminate useful rural health research information; and
- establish an identity as a self-sustaining organization fostering rural research.

Based on findings from evaluating the first seven centers, ORHP made several program and resource allocation changes for the second cycle of grants. The BoV conducted a second evaluation in 1993-1994, including four new centers.

The BoV evaluation system provides a good source of measurement data for the Research Centers program and has been effectively used in program management decision making. The intended use of the BoV also includes the identification of performance data for centers to collect to facilitate evaluation and monitoring of the effectiveness of the grant program. However, insofar as we were able to determine, these data have not been identified or collected on a routine basis.

2. **Assessment of Inputs**

Appropriated funds for the Rural Research Centers grant program are clearly identified and program staff are well aware of anticipated changes to this input (e.g., potential rescission actions to the FY 1995 program funding level).

3. **Assessment of Outputs**

As the program logic model indicates, there are three separate types of outputs, **each** corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

- ***Grants are the*** output of the programs' grant-making process, and these are clearly identified. Information about each grant and some degree of summary information **is** available (e.g., total dollars awarded, **total** number of grants, average size of **award).** Descriptive grantee information is also availabie.
- ***Research and Technical Assistance are the*** outputs of the Research Center **grantees'** research and development activities. Information is available (but not summarized) on the volume and type of grantee research products and grantee technical assistance activities. The BoV acknowledges difficulty in measuring the policy relevance-one indicator of'

quality—of research products; evidence that research is accepted for publication in scholarly journals (e.g., The ***Journal of Rural Health, Medical Care, and Health Service Research)*** is used as a proxy measure of research product quality.

- ***Knowledge about the factors that affect the maturity of each research center*** is the desired output from the Research Center program's analysis and evaluation of the grantees' activities. The periodic BoV reports currently provide this information in a summary manner. Data to facilitate evaluation and monitoring of the effectiveness of the grant program on a more routine basis is not being collected.

4. Assessment of Outcomes

Outcomes are neither clearly identified nor systematically measured by the program. In the accompanying table we suggest the types of outcomes and measures that would be appropriate to apply to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (final or program-level outcomes):

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Research and Development	Research Products	Increase in high quality rural health research	Compared to a baseline: • # and type of articles accepted for publication in scholarly journals • # of invited presentations • # of citations of program products
	Capacity Building	Increase in the number of mature centers	• Change in # of institutions classified as "mature*' by BoV • # of institutions attracting funding greater than/equal to federal support • # of institutions providing technical assistance
ORHP Analysis and Evaluation	Knowledge about factors that affect the maturity of individual centers	Incorporation of knowledge into ORHP/grantee processes and activities	• # of times used • # of times use resulted in benefit (e.g., increased effectiveness/efficiency)

5. Overall Assessment

We find that the current structure and operations of the Rural Health Research program conforms to the program logic model that we have proposed. For the Research Centers program, in particular, there is a reasonable balance of effort between grant-making, grantee research and capacity building, and evaluation activities. If resources were available, the effort devoted to analysis and evaluation of the activities of the grantees could be strengthened beyond the periodic evaluations conducted by Boards of Visitors, to provide routine information in the intervals between the evaluations.

Program staff are committed to improving the volume and quality of academic research on rural issues and rural health and to building the institutional capacity to sustain this capability over time. Staff are very knowledgeable about rural health issues and the particular problems and challenges faced by the grantees.

Current program management emphasis is on continuing the program and maintaining the status quo, potentially affected by the proposed Congressional FY 1995 rescissions, FY1996 budget clustering and DHHS-wide reinvention efforts. We did not identify any plans to strengthen data collection from the grantees or evaluation of grantee activities.

Rural Telemedicine Grants Program

1. Overview

a. Brief Description of Program

The Telemedicine Program was created to facilitate development of rural health care networks through the use of telemedicine systems; and provide a baseline of information for conducting a systematic evaluation of telemedicine systems serving rural areas. Grants are authorized under section 301 of the Public Health Service Act. Funding for the program is provided under Public Law 103-333 (HHS Appropriation Act for FY1995).

b. Program Logic Model

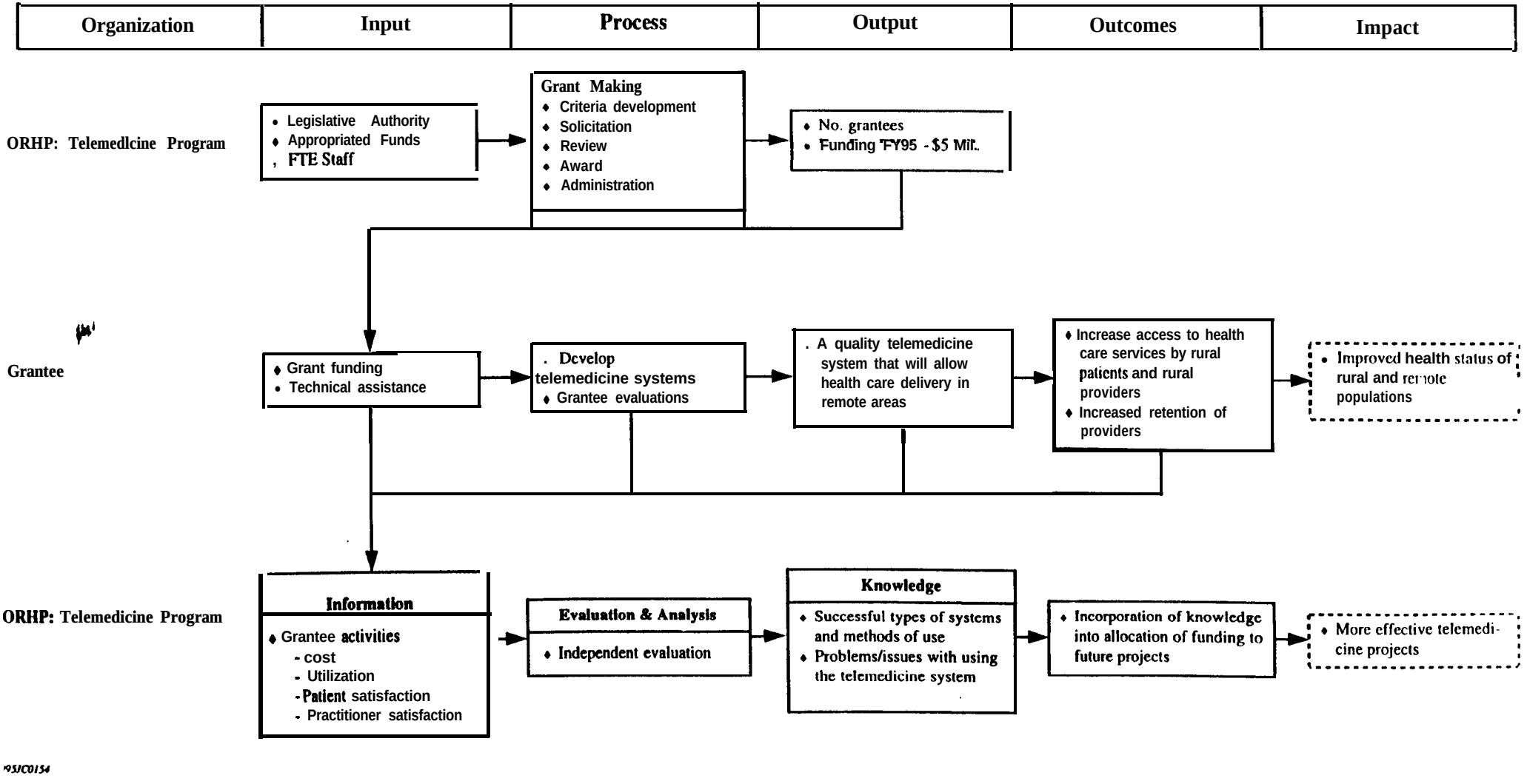
The program does not have available for any of its activities an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objectives of the program: (1)***increasing access to health care services for individuals in rural areas; and (2) reducing the isolation of rural practitioners through the use of telemedicine.*** ***Our*** proposed logic model for the Telemedicine program is shown in Figure C-Z.

The logic models indicate that to achieve its respective objectives, the program should engage in three distinct areas of effort or activity:

- ***Grant Making:*** ORHP awards grants to multi-specialty entities - a facility or group of facilities that can provide health care to rural areas using telemedicine;

- ***Grantee*** Activities: Telemedicine grantees produce telemedicine systems for the **purpose** of medical diagnosis and patient care, including counseling and clinical training of residents and health professions students when this training is the result of direct patient care.

Figure C-2
Office of Rural Health Policy: Telemedicine Grants Program



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- *Analysis & Evaluation:* ORHP uses information about the grantees, their activities, outputs, outcomes and impacts to analyze and evaluate grantee performance; and improve their allocations of resources to current and potential grantees.

We find that in general there is a reasonably good balance of effort across these three areas in the Telemedicine Grants program. The next section describes the specific data collection and measurement activities that the program completed.

c. Measurement Activities

The Telemedicine program has a formal evaluation program that requires grantees to monitor the performance of their respective projects, collect data, and participate in an independent evaluation of telemedicine. Grantees conduct a formal evaluation of their projects by collecting and providing data on costs (start-up and operating costs), utilization (for each type of specialty service provided), patient and practitioner satisfaction, and organizational factors in developing the network.

In addition, grantees submit a progress report twice a year that describes activities and progress achieved since the previous report. The reports include information on:

- persons hired
- equipment purchased
- network activities
- consults provided
- clinical precepting or supervision provided
- any use of the system for the supervision of, or collaborative practice with nurse practitioners, physician assistants, certified nurse midwives or other health professionals
- status of the evaluation activities

Grantees are also required to participate in the ORHP Survey of Telemedicine Installations. The survey is being conducted by an independent research firm and was designed with the purpose of learning more about the diffusion of telemedicine in rural settings. The survey has multiple stages; stage one will look to identify the sites that are participating in telemedicine and formulate evaluation questions. The second stage will begin immediately following the completion of stage one, in August 1995.

2. **Assessment of Inputs**

Appropriated funds for the Telemedicine program are clearly identified and program staff are well aware of anticipated changes to this input (e.g., potential rescission actions to the FY 1995 program funding level). Additionally, legislative direction and authority is clear to the program staff. Because of the "disconnect" between the program and the budgeting process described above, we could not identify an objective staffing level commensurate with achieving program objectives.

3. Assessment of Outputs

As the program logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

- ***Grants are the*** output of the program's grant-making process, and these are clearly identified. Information about each grant and some degree of summary information is available (e.g., total dollars awarded, total number of grants, average size of award). Descriptive grantee information is also available.

- ***Telemedicine Systems*** is the output of the Telemedicine program grantees' activities. Information is available on the number and types of telemedicine systems that **have** been funded through the program.

- ***Knowledge about successful system designs and system problems*** is the desired output of the Telemedicine program's analysis and evaluation of the grantees' activities. Data to facilitate evaluation and monitoring of the effectiveness of the grant program is currently being collected.

4. Assessment of Outcomes

Outcomes are neither clearly identified nor systematically measured by the program. In the accompanying table we suggest the types of outcomes and measures that would be appropriate to apply to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (final or program-level outcomes):

Activities	outputs	Outcomes	Illustrative Measures
Grantee System Development	Telemedicine System Development	♦ Increase access to health care services ♦ Retention of rural providers	♦ change in # of individuals receiving care who would not have done so without telemedicine
ORHP Analysis and Evaluation	Knowledge about successful systems and problem areas	Incorporation of knowledge into ORHP/grantee processes and activities	♦ # of effective telemedicine systems

5. Overall Assessment

We fmd that the current structure and operations of the Rural **Telemedicine Grants** program conforms to the program logic model that we have proposed. The program has a

reasonable balance of **effort** between grant-making, grantee research and capacity building, and evaluation activities.

Additionally, we have found that the Program staff understands the importance of evaluating the projects and are committed to the goal of increasing access to health care through use of successful telemedicine systems. Staff is very knowledgeable about rural health issues and the particular problems and challenges faced by the grantees.

1. Overview

a. Brief Description of Program

The Rural Health Outreach program is a grant program authorized under a general research and demonstration umbrella section of the Public Health Service Act, Section 301, and did not originate from a specific legislative initiative. Instead, the program resulted from the FY 1991 conference agreement of the Joint Appropriations Committee, which included a $20 million appropriation for outreach grants. The conference report sets forth the objectives for the program and provides general guidance as to how the funds are to be used. A total of 100 grant awards were made with the initial appropriation. There are two primary objectives for the program: to demonstrate new models of health care delivery in rural areas, and to promote collaboration among health care providers in rural areas.

b. Program Logic Model

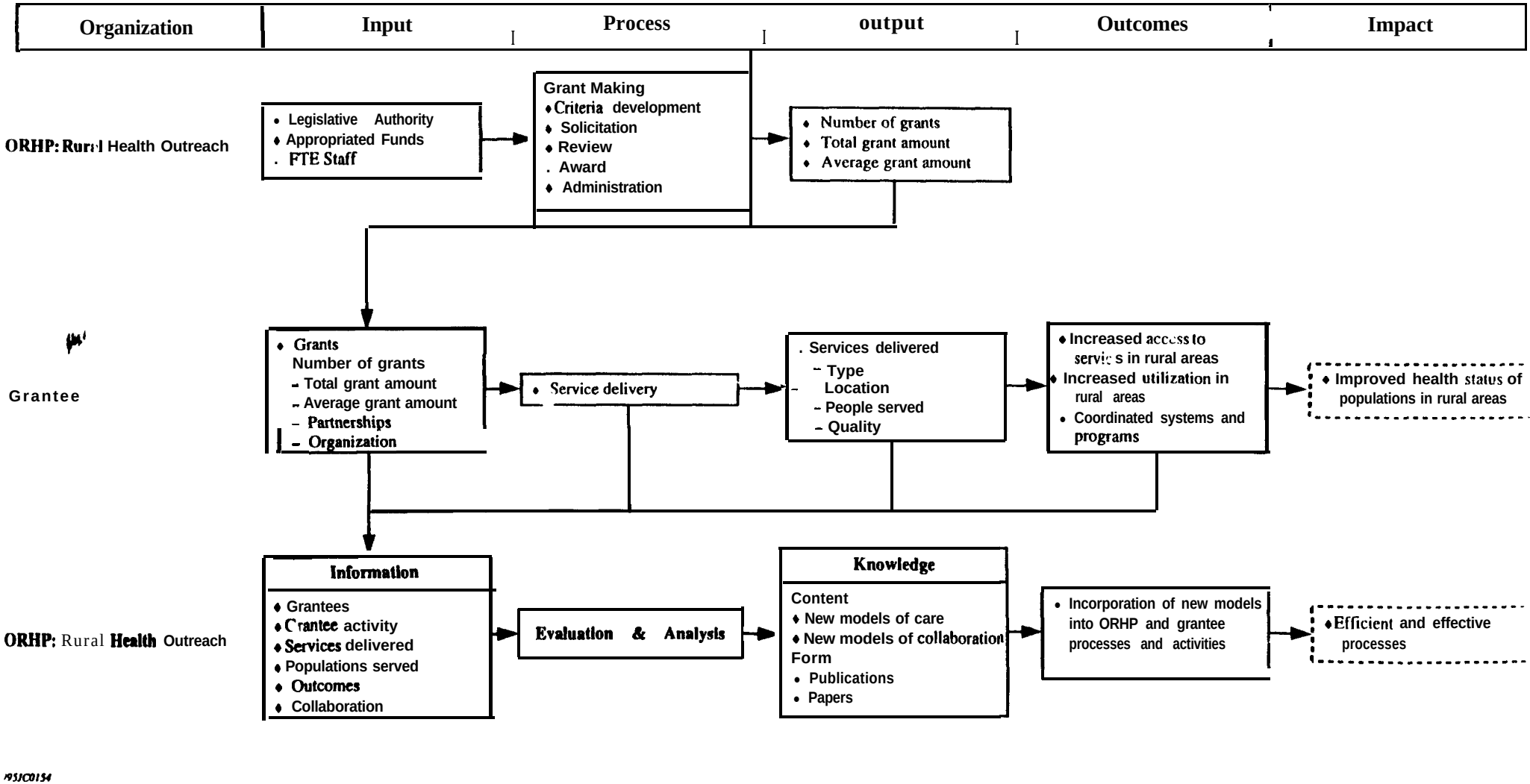
The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objective of the program: ***developing new knowledge*** about rural health issues. Our proposed logic model is shown in Figure C-3.

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- ORHP makes grants to organizations--typically consortia of local health departments, service providers, and community groups-in rural areas to provide services to the populations those areas;
- The grantees provide the services-typically primary care, training, health promotion and disease prevention, and other miscellaneous services; and
- ORHP uses information about the grantees, their activities, outputs, outcomes and impacts to analyze and evaluate grantee performance and identify useful new models— e.g., "best practices"— of care and collaboration in rural areas.

Currently, the program emphasizes the first two areas-grant-making and service delivery; while there has been some data collection and analysis, the overall effort devoted to analysis and evaluation is insufficient to develop comprehensive knowledge and to systematically compare the advantages and disadvantages of new models of care and collaboration being implemented by the grantees. The next section describes the specific data collection and measurement activities that the program has completed.

Figure C-3
Office of Rural Health Policy: Rural Health Outreach



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c. Measurement Activities

The program has developed two products that capture information about the grantees, their activities, and lessons learned. Both products are good examples of the types of systematic and routine measurement activities that would be useful to continuing analysis and evaluation of grantee performance and models of care and collaboration.

The first product is an April, 1993 evaluation design developed by an independent contractor. The design summarized and categorized information about the first 100 grantees and developed evaluation methodologies that describe models through which different types of program evaluations could be conducted. Due to the resource implications of the proposed evaluation designs, no evaluations have been undertaken. However, materials from the study (e.g., grantee typology, questionnaires, reporting formats) have been used by the program to acquire better information from grantees on a routine basis and to prepare the second product, a January, 1995 compendium of descriptive information on 88 of the initial 100 grant projects. Each project summary within this compendium contains the name, address, phone contact information, and contact person of the grantee as well as a qualitative description of the project's: "successes and failures, ...plans for the future.. .greatest challenges, and their solutions to these challenges."

2. Assessment of Inputs

Appropriated funds for the program are clearly identified and program staff are well aware of anticipated changes to this input (e.g., potential rescission actions to the FY 1995 program funding level). Legislative direction and authority is also clear to the program staff, although they acknowledge that resources-especially staff-are insufficient to conduct the type of systematic evaluation of the program implied by the legislative intent. Staff resources for the program are funded by the overall HRSA program management account in competition with other programs. Because of the "disconnect" between the program and the budgeting process described above, we could not identify an objective staffing level commensurate with achieving program objectives.

3. Assessment of Outputs

As the program logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

- Grunts are the output of the program's grant-making process, and these are clearly identified. Information about each grant and some degree of summary information is available (e.g., total dollars awarded, total number of grants, average size of award). Some descriptive grantee information is also available, classified by organization type, type of services provided, and types of populations served.

- ***Services Delivered are the*** outputs of the grantees' service delivery activities. Desired output information includes the type, volume, frequency, and location of services; client characteristics and demographics by service type; and service quality measures. As the compendium shows, some of this information is available from routine grantee reporting, but it is not collected or summarized on a consistent, program-wide basis.

- ***Knowledge about new models of care and collaboration in rural areas*** is the desired output from the program's analysis and evaluation of the grant-making and grantee service delivery activities. This output is not currently produced.

4. **Assessment of Outcomes**

Outcomes are neither clearly identified nor systematically measured by the program. In the accompanying table we suggest the types of outcomes and measures that would be appropriate to apply to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (final or program-level outcomes):

Activities	outputs	Outcomes	**Illustrative** Measures
Grantee Service Delivery	Services Delivered	Increased Access to Services in Rural Areas	Compared to a baseline: ♦ # and type of providers by location ♦ # and type of services ♦ # of new service delivery programs ♦ # of programs reducing barriers to access
		Increased Utilization in Rural Areas	Compared to a baseline: • # and % of population receiving services, by service type (e.g., preventive care, immunizations) and population category (e.g., children, women)
		Coordinated Systems and Programs	• # of programs with simplified and integrated eligibility and services • # partnerships/consortia expanded beyond original members
ORHP Analysis and Evaluation	Knowledge about new models of care and collaboration in rural areas	Incorporation of knowledge into ORHP/grantee processes and activities	• # of times used ♦ # of times use resulted in benefit (e.g., increased effectiveness/efficiency)

5. Overall Assessment

The current structure and operations of the Rural Health Outreach program conforms to the program logic model that we have proposed. However, the effort devoted to analysis and evaiuation of the activities of the grantees is insufficient to allow the program to achieve its legislatively-directed objective of *developing new knowledge* about rural health issues and new models of care and collaboration in rural areas. The continuing lack of resources, both staff time and appropriated funds, for the program to achieve this objective raises the issue of whether the program objective should be changed to emphasize service delivery rather than knowledge development.

Program staff are committed to improving the health status of rural populations and building the service capacity to sustain this improvement over time. Staff are very knowledgeable about rural health issues and the particular problems and challenges faced by the grantees; while grantee performance is not assessed directly or comprehensively, staff can identify and distinguish between stronger and weaker performers.

Current program management emphasis is on maintenance of the status quo, potentially affected by the proposed Congressional FY 1995 rescissions, FY1996 budget clustering, and DHHS-wide operation efforts. We did not identify any plans to strengthen data collection from the grantees or evaluation of their activities.

Program/Budget Line Item: State Offices of Rural Health

1. Overview

a. Brief Description of Program

The State Offices of Rural Health program is a matching grant program authorized under the Public Health Services Act, Section 338J. The program was created to help set up offkes of rural health in each state that would not only provide a link between Federal and State governments, but would allow the individual states to develop networks among each other.

Currently, there are 50 state offkes, each of which serves its respective community by: collecting and disseminating information; assisting in the recruitment and retention of health professionals; providing technical assistance to enable the office to receive Federal, State, and foundation funding; and coordinating rural health interest across the state.

b. Program Logic Model

The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objective of the program: *developing and disseminating knowledge about rural health issues.* Our proposed logic model is shown in Figure C-4 .

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

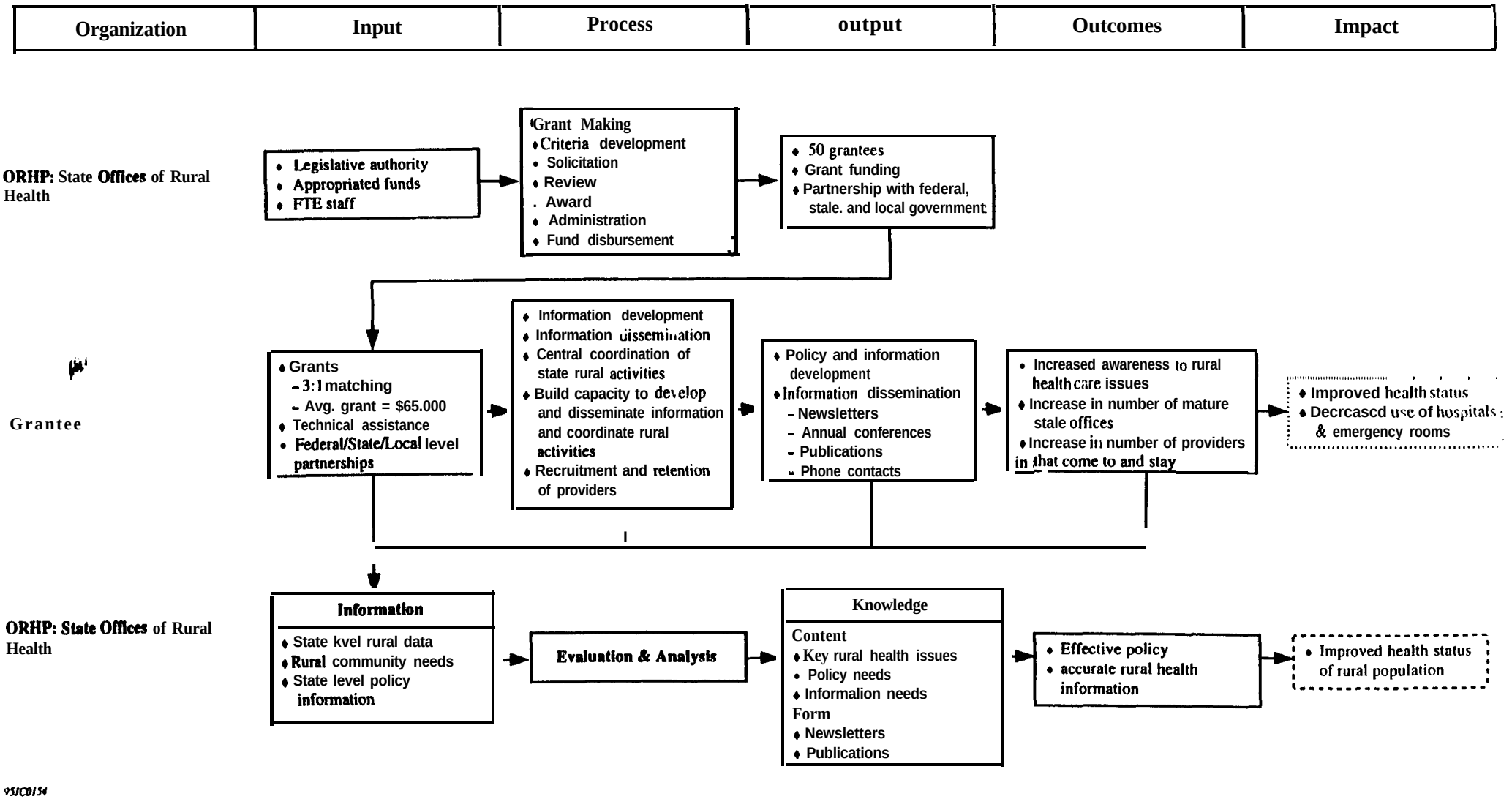
- ORHP develops crucial partnerships among Federal, state, and local rural health officials in order to build the capacity of the offices to develop and disseminate information. ORHP also makes grants and provides technical assistance to state rural health offices.

- The grantees develop and disseminate the information-typically through mediums such as newsletters, annual conferences, publications, and phone conversations. Additionally, they assist rural areas in the recruitment and retention of providers as well as provide technical assistance in the form of strategic planning and needs assessment for rural areas; and

- ORHP uses information and knowledge from the state offices to assist at the federal level with rural health issues including policy development and information dissemination.

The program currently focuses on developing the capacity of the individual state offices of rural health. There as been little formal evaluation and analysis to assess the capacity of the various offkes; however, indicators have been identified that help to determine their maturity.

Figure C-4
Office of Rural Health Policy: State Offices of Rural Health



Additionally, little effort has been made to evaluate the effectiveness of the policy development and information dissemination activities. The following section describes the specific assessment and measurement activities that the program has completed.

c. Measurement Activities

The program has developed a list of criteria for determining the maturity level of each state office of rural health. Although no formal evaluation of the offices has been conducted, the presence of the following elements is indicative of the capacity level of the offices.

- Newsletter - the ability to produce a quality newsletter discussing rural health issues with some regularity
- Annual conference - the ability to bring people together in a conference environment to discuss rural health issues and build coalition
- State support - the level of state support, both financial and administrative
- Outside funding -the ability to attract funding from sources alternative to state and federal governments
- Rural Health Association - the existence of this rural health membership organization within the state
- Sire - the number of individuals staffing the state office

2. Assessment of Inputs

Appropriated funds for the program are clearly identified and program staff members are aware of the potential changes to this input depending on the potential rescission actions to the FY 1995 program funding level. Additionally, legislative direction and authority is also clear to the program staff. Staff resources for the program are funded by the overall HRSA program management account in competition with other programs. Because of the "disconnect" between the program and the budgeting process described above, we could not identify an objective staffing level commensurate with achieving program objectives.

3. Assessment of Outputs

As the program logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

- ***Grunts, technical assistance, andpartnerships are the*** output of the program's grant-making process. Although these outputs are clearly identified, only the grants portion is easily quantified. Information about each grant and some degree of summary information is available (e.g., total dollars awarded, total number of grants, average size of award). The federal/state/local partnerships are difficult to measure, but are perhaps the most important outputs of the grant making process.

- *Policy/Information* ***development and dissemination and technical assistance are the*** outputs of the grantees' service delivery activities. These outputs are difficult to measure, but the program does have information about the media through which the information is disseminated (i.e., newsletters, conferences, publications, phone contacts).

- ***Knowledge about key rural health issues, policy needs, and inform&on needs*** is the output from the program's analysis and evaluation of the grant-making and grantee service delivery activities. This output is difficult to measure yet critical to the developing the linkages among federal, state, and local levels.

4. Assessment of Outcomes

The outcomes of the program are clearly identified but have not been measured. Only one outcome of the program is quantifiable: to increase the total number of mature state offices. Data exist to measure this outcome, however, no formal attempts have been made to accomplish this. The remaining desired outcomes of the program are:

- increased awareness of rural health issues;

- effective policy development at the federal and state levels; and

- information dissemination.

In the following table, we suggest the types of outcomes and measures that would be appropriate to apply to grantee activities as well as the program evaluation and analysis activities.

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Service Delivery and Program Evaluation	Policy Development and Information Dissemination; Technical Assistance	• Increased awareness of rural health issues	• Degree to which informadon reaches the rural community and policymakers
		♦ Increase number of providers that stay for a substatial period of time	• Number of providers, length of time providers stay in the area
		• Increased number of mature state offices	♦ Degree to which policymakers utilize the information ♦ Number of new policies created based on information

5. Overall Assessment

The current structure and operations of the State Offices of Rural Health programs conforms to the program logic model that we have proposed. There is, however, a general lack of effort in evaluating and measuring outputs and outcomes. This current level of effort is insufficient to determine the level of effectiveness at which policy and information are being developed and disseminated.

APPENDIX D: BUREAU OF HEALTH RESOURCES DEVELOPMENT (BHRD)

HRSA BUDGET LINE ITEM ASSESSMENTS

BUREAU OF HEALTH RESOURCES DEVELOPMENT (BHRD)

The Bureau of Health Resources and Development (BHRD) serves as a focal point for the management and administration of four relatively disparate programs: health facilities, organ transplantation, trauma care, and HIV/AIDS services. Taken as a group, BHRD programs encompass the full range of objectives and functions of HRSA programs, including the delivery of health care services, developing and disseminating information, building capacity of the delivery system and systems of care, central coordination and control of decentralized operations, and monitoring compliance with federal standards and requirements.

The disparate nature of BHRD programs precludes development of a summary, outcome-oriented logic model for the Bureau as a whole. However, BHRD programs have several advantages that provide a foundation for development of performance measurements. The advantages include:

- *Data orientation.* Relevant and timely data reporting requirements are routinely included in grant and contract awards. Thus, BHRD programs in general tend to be data-rich. BHRD also appears to have a well-thought out and cost-effective general data strategy to optimize the mix between "wide but shallow" client-level data and "deep but narrow" outcome-oriented data.

- *Evaluation emphasis. In* general, BHRD programs routinely evaluate their grantees contractors and make effective use of evaluation results to improve service delivery and capacity building efforts. Our impression is that evaluation was included as a key element in the original design of BHRD programs.

- *Linking strategic planning performance, and management.* Each division has engaged in a strategic planning exercise and has developed action steps and performance indicators that are relatively consistent and linked to division objectives. These performance indicators are being used to some degree in program management, although we noticed difficulties in definition and inconsistencies in application.

- *Management of information resources.* Although an overall program logic model is not appropriate for BHRD, the Bureau has developed an overall functional model as part of a coordinated Information Resource Management (IRM) plan. Our review of this plan indicates that it is an excellent resource for the continuing development of data-supported performance measures and indicators under GPRA.

BHRD makes no formal attempt to link outcome data and performance results with the budget development process. In general, budget development is based on the previous years' budget adjusted to reflect an increase or decrease in necessary program support. Staff members expressed frustration at the fact that their programs seemed to be an anomaly. While GPRA intends to require performance based budgeting, BHRD programs, generally data rich and able to produce useful GPRA-type performance measures, did not fare better during the current budget process.

The following discussion reviews the line items that comprise the programs located in the Bureau of Health Resources Development. They include: The Emergency Medical Services Cluster, Health Facilities, Organ Transplantation, and Ryan White.

Program/Budget Line Item: Emergency Medical Services (EMS) Cluster: Trauma Care

1. Overview

a. Brief Description of Program

Trauma Care Systems Planning and Development Act of 1990 (P.L. 101-590), autnorized under sections 1201-1232 of the Public Health Service Act, provides grants to states for the development and implementation of trauma care systems. It also provides grants to improve rural trauma services.

The Act required the development of a model trauma care systems plan for states. Currently, states are using the model along with other national standards as a guide for developing their own state plans for traum.1 services. The majority of the appropriated funds (80%) go to the states in the form of grants to improve the trauma care elements of their state health plans. The remaining 20% of funding is equally split between research and demonstration grants to improve trauma care in rural areas and other specialized grants and contracts (e.g., "9 11" program, technical assistance to grantees, information collection and dissemination).

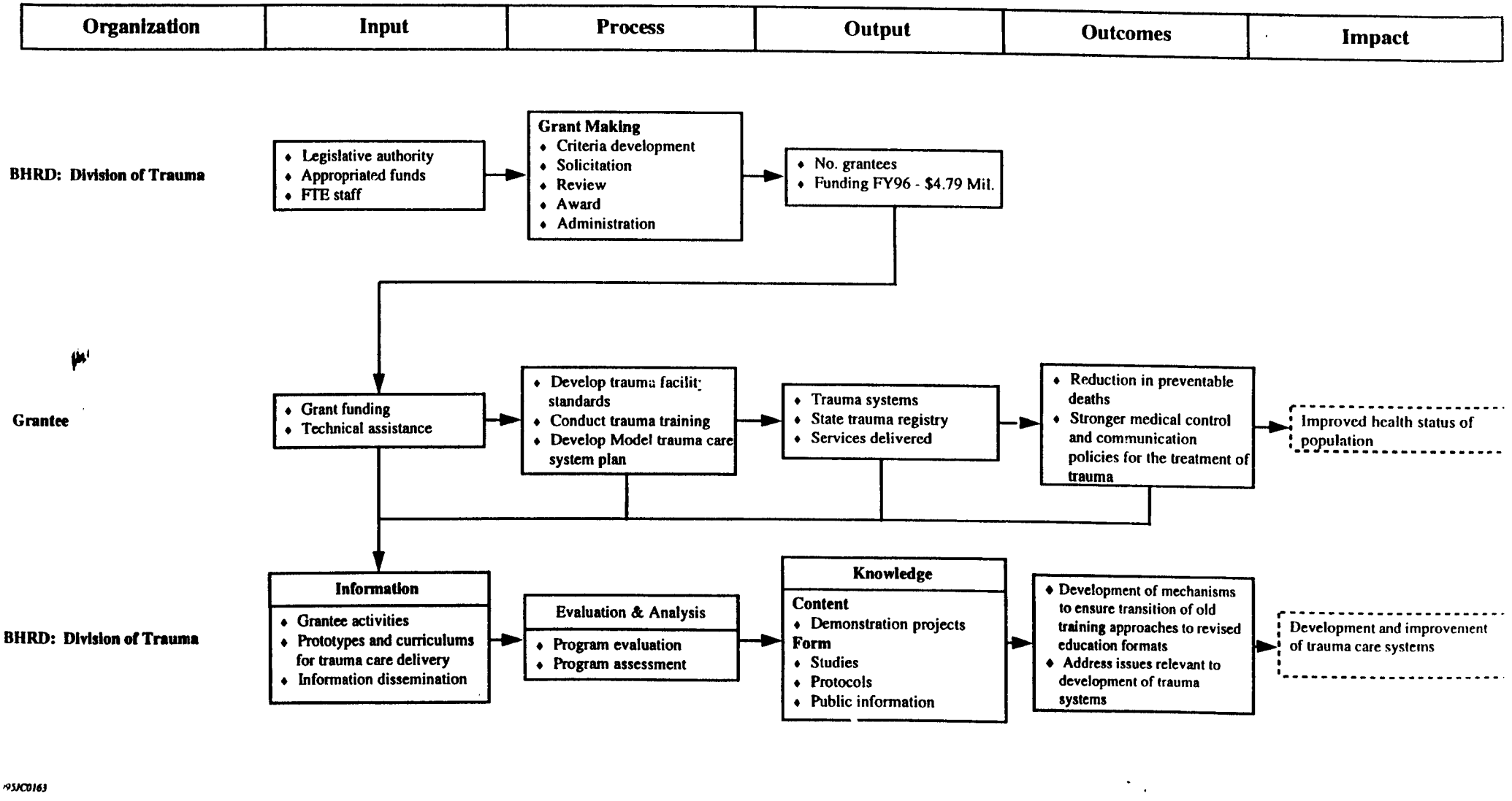
b. Program Logic Model

The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outnuts. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objective of the program: *developing trauma cure systems and improving rural trauma care services.* Our proposed logic model is shown in Figure D- 1.

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- Division of Trauma and Emergency Medical Services (DTEMS) makes grants to two types of organizations—state public and nonprofit entities.
- The grantees provide the services-typically trauma system development; research, evaluation and demonstration projects to improve the availability and quality of trauma care in rural areas; information collection and dissemination; and special initiatives to address access problems; and
- DTEMS uses information about .ne grantees, their activities, outputs, outcomes and impacts to analyze and evaluate grantee performance and identify problem areas and research needs.

Figure D-1
Bureau of Health Resources Development: Division of Trauma and EMS



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Until recently, DTEMS had focused on the first two areas: grant-making and system development. They are currently developing an evaluation system that will allow them to analyze grantee performance as well as identify problem areas and successful trauma systems.

The next section describes the specific data collection and measurement activities that the program has completed.

c. Measurement Activities

The Division of Trauma and Emergency Medical Systems is developing an evaluation methodology to analyze the performance and effectiveness of newly implemented trauma systems in each state. The evaluation design process will address outcome and process measures as well as the requirements to be met by states.

The evaluation methodology will consist of two phases: developing criteria for the evaluation protocol and field testing the protocol. Phase I began on May 23, 1994 with a Workgroup meeting of experts to develop a list of criteria for the evaluation protocol. The Workgroup includes representatives from a state EMS and trauma system office and a regional trauma system. In addition, the workgroups will have representation from surgery, emergency medicine, nursing research, epidemiology, rehabilitation, and prehospital EMS departments. Phase I is scheduled to conclude during FY 1995. Phase II will begin in FY 1995, overlapping Phase I. Its primary focus will be to field test the evaluation protocol in selected states.

2. Assessment of Inputs

Appropriated funds for the program are clearly identified and program staff are well aware of anticipated changes to this input (e.g., potential rescission actions to the FY 1995 program funding level). The funding level for FY 1994 was $4.8 million, and the Division currently has a staff of 7-8 FTEs. Legislative direction and authority is also clear to the program staff.

3. Assessment of Outputs

As the program logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

Grants are the output of the program's grant-making process, and these are clearly identified. Information about each grant and some degree of summary information is available (e.g., total dollars awarded, total number of grants by state, average size of award). Limited descriptive grantee information including type of organization, type of activities supported by grant, lists of projects, and types of populations served are also available.

Services delivered and trauma system development are the output of the grantees' service delivery activities. Desired output information includes: the type, volume, frequency, and location of services; client characteristics and demographics by service type; service quality measures; and system configuration information.

Knowledge about system effectiveness and delivery issues are the desired outputs from the program's analysis and evaluation of the grant-making and grantee service delivery activities. The program provides for the establishment of a National Clearinghouse on Trauma Care and Emergency Medical Services to collect and disseminate information on the achievements and problems of State and local entities providing trauma care. Limited funding has prevented establishment of such a Clearinghouse, although Bureau staff informally serve in this capacity.

4. Assessment of Outcomes

The Division has clearly identified desired outcomes of the program and is in the process of developing an evaluation methodology. In the accompanying table, we suggest the types of outcomes and measures that would be appropriate to apply to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (final or program-level outcomes):

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Service Delivery	♦ Trauma system development	♦ Creation of an effective trauma system in each state	• Presence of a trauma system in each state • "Maturity " of trauma system
	• Service Delivered	♦ Reduction in preventable deaths	• Change in # of preventable deaths
	♦ Information dissemination, educational activities	♦ Increasedawareness of rural health trauma issues	♦ Degree to which any dissemination activity reaches target audience

5. Overall Assessment

Given the charge of the program - to develop a trauma system in each state - and given the number of trauma systems currently in place (41), the program staff should attain its goals within the next ten years.

The Division of Trauma and Emergency Medical Systems has articulated the program's goal of facilitating the development of trauma systems across the U.S. Additionally, the division has clearly identified multiple objectives, action steps and performance indicators to be used in attaining this goal.

The staff has a sound understanding of what is needed to evaluate performance. They are currently developing a formal evaluation of the program, and are well into the first phase of the

protocol development process. In the near future, they will begin to pilot test the draft evaluation protocols in selected trauma systems.

The staff also understands the benefits and limitations of outcome measures. While the number of preventable deaths is the ultimate measure of the program's performance, they recognize that these data are both difficult and expensive to measure.

Program/Budget Line Item: Health Facilities

1. Overview

a. Brief Description of Program

The Health Facilities program is authorized under Titles VI and XVI under the Public Health Services Act and serves two main functions: monitoring compliance with the Hill-Burton grant stipulations and insuring loans for health care facilities improvements. The Health Facilities program monitors compliance by health care facilities with assurances and/or obligations resulting from Hill-Burton grants and loans. Since 1946, more than $4.6 billion in Hill-Burton grant funds as well as $1.5 billion in Hill-Burton loans have assisted approximately 6,800 hospitals and other facilities across the country. In return for these federal funds, these facilities have agreed to provide a reasonable volume of medical services to people who are unable to pay for their care.

The program also administers the mortgage insurance program which insures loans to hospitals for construction projects. Facilities applying for loan insurance typically serve a high proportion of Medicaid and non-paying clients. Consequently, it would be difficult for the facilities to receive a loan without some type of guarantee. The program issues the loan guarantees and manages the loan portfolio of those facilities with outstanding loans.

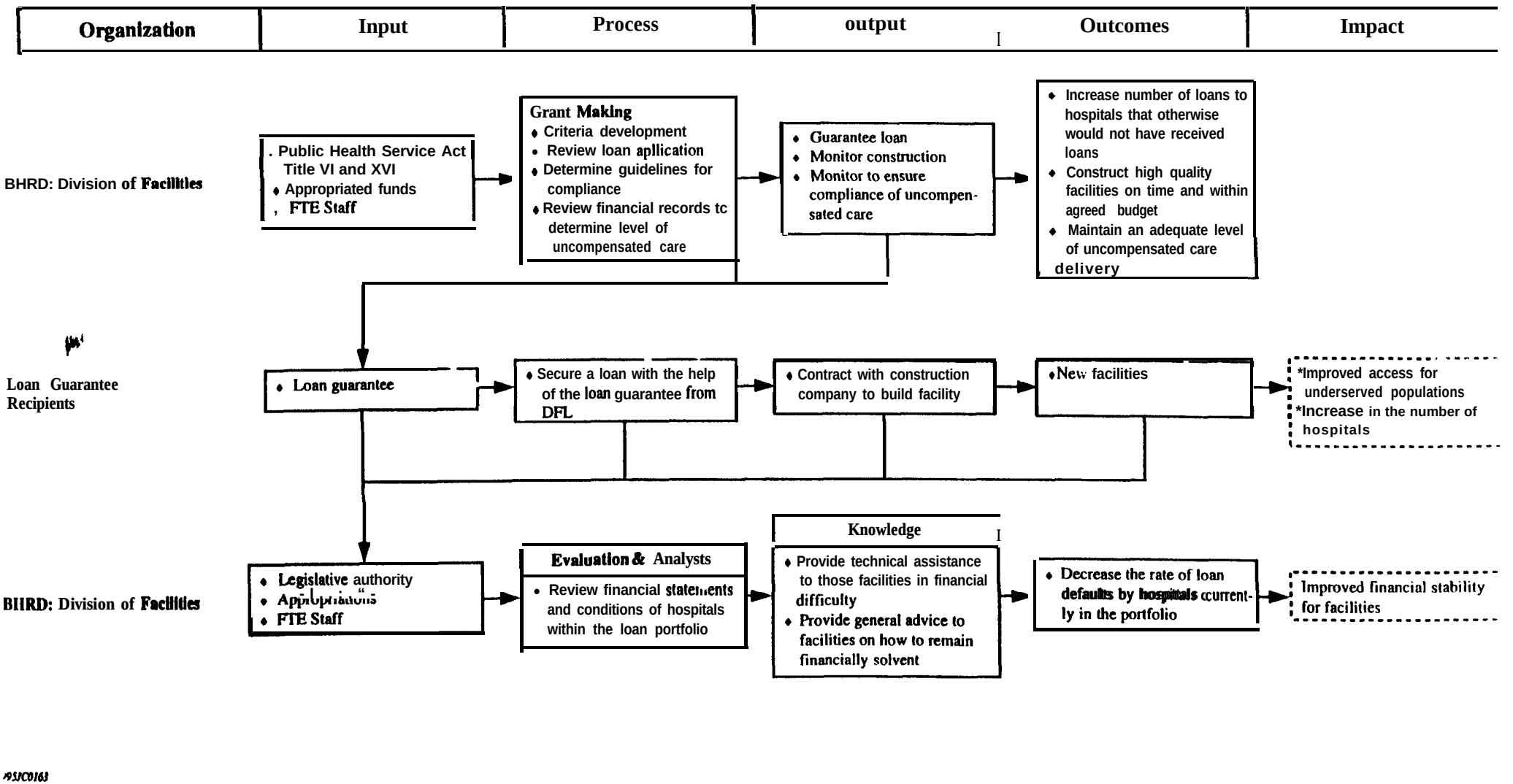
b. Program Logic Model

The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the **legislative intent of the** program and the information collected during our interviews, logic models can be identified to achieve what we find to be the principal objectives of the program: to ***increase the number of*** *loans to facilities that otherwise would not receive them* and *to maintain an adequate level of uncompensated care that is being delivered by Hill-Burton facilities.* Our proposed logic model is shown in Figure D-2.

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- The Division of Facilities and Loans (DFL) provides mortgage insurance and monitors construction of the proposed plans. The facilities would not likely receive loans without the mortgage insurance provided by DFL.
- DFL provides technical assistance to those facilities in financial difficulty and at risk of defaulting on their loans. DFL also provides general advice to facilities ***regarding the*** ability to remain financially solvent.

Figure D-2
Bureau of Health Resources Development: Division of Facilities



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- The Division of Facilities Compliance monitors Hill-Burton facilities to ensure that they are in compliance with the required level of uncompensated care delivery.

Data collection is key to the successful operation of this program. Consequently, data are available on most aspects of the program. The next section describes specific data collection and measurement activities that the program has completed.

c. Measurement Activities

The Division of Facilities and Loans has extensive financial and demographic data for its programs. The Hospital Mortgage Insurance program tracks closely the cumulative number of loans it has insured, the total amount of loans it is currently insuring, the number of loans paid in-full, and the number of loan defaults and claims.

DFC also has data on the Hill-Burton compliance program. The data systems of the program routinely provide information on the dollar value of services provided by individual facilities to persons eligible under the uncompensated services program. The Division has also conducted a study to evaluate the demographic characteristics for populations utilizing Hill-Burton uncompensated services and the conditions for which individuals require uncompensated care.

2. Assessment of Inputs

Appropriated funds for the program are clearly identified. Since the program does not award grants or contracts, the primary inputs are: the legislation authorizing the program and the office staff; the total FE staff; and the program operating budget.

3. Assessment of Outputs

As the program logic model indicates, there is one type of output which corresponds to service delivery by the program.

Provision of administrative services is the output of the program service delivery processes. This output is clearly identified and includes insuring loans, monitoring insurance, providing technical assistance, and monitoring compliance uncompensated care provisions. Output information is available on loan guarantees and facility compliance with uncompensated care levels.

4. Assessment of Outcomes

Outcomes are clearly identified and are being systematically measured by the program In the accompanying table, we have identified the outcomes and example measures that would be

appropriate to apply to the activities of DFL. The Division collects the data necessary to conduct the proposed outcome measures.

Activities	Outputs	Outcomes	Illustrative Measures
Division of Facilities Service Delivery	Administrative Services Provided	♦ Increase number of loans to facilities	♦ Number of facilities that have received loans after receiving loan insurance
		♦ Construct high quality facilities on time and within the budget	♦ Number of facilities built according to specifications
		• Decrease the rate of loan defaults by hospitals in the portfolio	• Percentage of loan defaults
		• Maintain an adequate level of uncompensated care	• Dollar amount of uncompensated care delivered

5. Overall Assessment

The current structure and operations of the Division of Facilities conforms to the program logic model that we have proposed. There is a strong commitment on the part of the staff to operate a successful program and a clear desire to maintain information that can be used to evaluate the effectiveness of the program. While some outcomes are more difficult to measure than others (i.e. is the loan guarantee they only way a facility could secure a loan?), the data currently collected is ideal for measuring outcomes and overall program evaluation.

Program/Budget Line Item: Organ Procurement and Transplantation

1. Overview

a. Brief Description of Program

The Division of Organ Transplantation (DOT) was created by Sections 371-378 under the Public Health Service Act. In addition to planning, directing, coordinating and monitoring a wide range of activities relating to the field of organ procurement and transplantation, the Division provides funding for two major federal contracts to support the Organ Procurement and Transplantation Network and the Scientific Registry of Transplant Recipients.

The Organ Procurement and Transplantation Network (OPTN) is designed to assure the equitable distribution of available organs to patients in need of an organ transplant and to transplant centers. The OPTN matches donor organs with potential organ recipients and coordinates placement efforts with transplant centers.

The Scientific Registry of Transplant Recipients (SRTR) provides demographic and clinical data and information on transplant recipients. These data may be used for research and policy making efforts regarding organ transplant outcomes, including associated medical and other factors which affect outcomes.

In 1994, the Division of Organ Transplantation also assumed responsibility for the Bone Marrow Transplantation program. The Division now administers the contracts governing the National Marrow Donor Program (NMDP) to monitor a data system of marrow donors and recipients, increase the number of minority bone marrow donors, and facilitate patient advocacy and case management. Additionally, the Division monitors trends and analyzes data on the efficiency and effectiveness of bone marrow procurement, the allocation of bone marow among transplant centers and transplant patients, and on other aspects of bone marrow transplantation.

The Division of Organ Transplantation also manages grants with public and private non-profit organizations to promote organ and bone marrow donation and transplantation. This activity includes information dissemination and education about organ and bone marrow donation to professional associations, health providers, consumers, health insurers, medical societies, and the general public.

b. Program Logic Model

The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objective of the program: ***to improve the effectiveness of the nation's organ/bone marrow donation, procurement, and transplantation system by***

increasing the availability of and access to donor organs and bone marrow for patients with end-stage organ failure. Our proposed logic model is shown in Figure D-3.

The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- DOT awards contracts to organizations to operate the Organ Procurement and Transplantation Network (OPTN), establish and operate the Scientific Registry of Transplant Recipients, and monitor the bone marrow data system. The OPTN contract and SRTR contract were awarded to the United Network for Organ Sharing (UNOS). The bone marrow contract was awarded to the National Marrow Donor Program. Additional grants are awarded to organizations to educate individuals about the need for organ donations.

- The contract recipient develops and maintains databases on organ and bone marrow transplant recipients and operates an allocation system for organs and bone marrow. Grantees develop educational material and studies on organ donation and transplantation.

- DOT uses information about the origin of donors, distribution of donated organs and bone marrow, and survival rates of transplant recipients to identify inequitable distribution of organs and bone marrow as well as underrepresented populations in both organ and bone marrow donations and transplants.

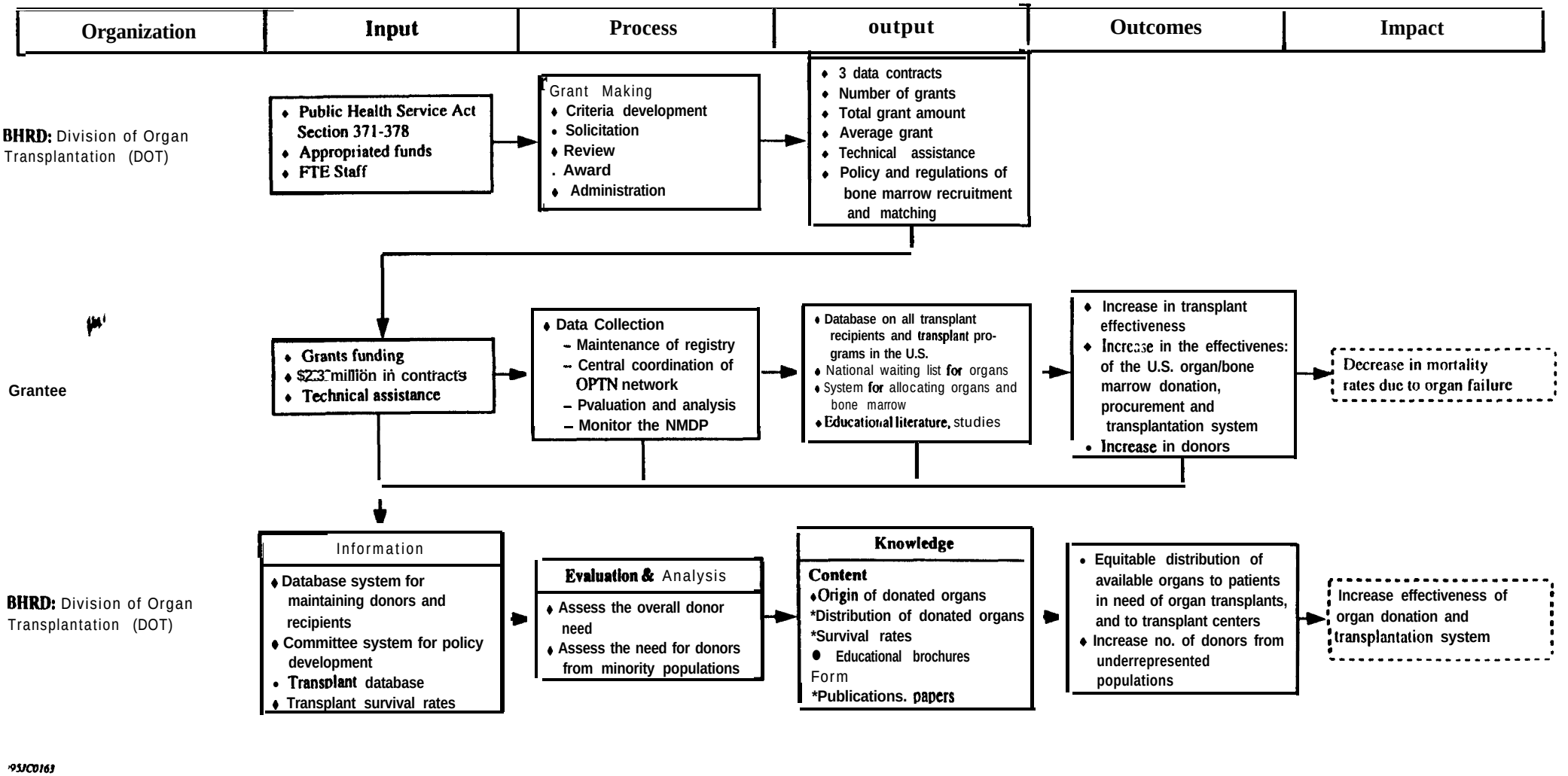
The program has an emphasis on data collection and database maintenance. Consequently, there are excellent data with which to measure the effectiveness of the organ donation system in the U.S. The next section describes the specific data collection and measurement activities that the program has completed.

c. Measurement Activities

The organ procurement transplantation program has developed two systems that capture information about the transplant recipients, origin of donated organs, distribution of donated organs, survival rates of transplant recipients, and the number of individuals waiting for organs. In addition, the bone marrow program is developing a database system that will include data on the number of searches for matching donors intiated, donors registered, and transplants and transplant center results. All three systems' products are excellent resources that can be used for the continuing analysis and evaluation of the contract recipients performance in maintaining an efficient and effective organ allocation system.

The first system is the Organ Procurement and Transplantation Network (OPTN). The OPTN maintains a national computer list of patients waiting for various organ transplants. In addition, the OPTN maintains a computer-assisted system that allocates organs to individuals on the waiting list, as well as an Organ Center that allows 24-hour access by all transplant programs in the U.S. to the donor/recipient matching system. Data collected by the OPTN include

Figure D-3
Bureau of Health Resources Development: Division of Organ Transplantation



information on patients waiting for transplants, donors, and recipients of donated organs, donor/recipient matching and organ allocation, and donor/recipient histozompatibility.

The second system is the Scientific Registry of Transplant Recipients (SRTR), which provides demographic and clinical data as well as information on transplant recipients and transplant programs in the U.S. Additionally, the Registry provides a nationwide database that allows for **the periodic** analysis of transplantation effectiveness.

The final system is the National Marrow Donor Program data system. The database provides information on the number of searches initiated for matching donors, the number of donors registered, and transplant outcome information. One shortcoming of the data system is that it is currently not fully accessible to the government or the public. Consequently, the Division is requiring the NMDP to publish more of its data through annual reports and transplant center-specific reports.

The Division has assessed the quality of data collected in each of the three systems and has identified areas in which improvements can be made. The division's overall assessment of the OPTN and SRTR is that the two data systems have been operating extremely well. However, the NMDP system needs to be improved with a focus on accessibility.

2. **Assessment of Inputs**

Appropriated funds for the program are clearly identified. Legislative direction and authority is also clear to the program staff. Staff resources for the program are funded by the overall HRSA program management account in competition with other programs. Because of the "disconnect" between the program and the budgeting process, we could not identify an objective staffing level commensurate with achieving program objectives.

3. **Assessment of Outputs**

As the program logic model indicates, there are three separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

- Contracts ***and grunts are the*** output of the program grant-making process, and these are clearly identified. Information about each contract and grant is available (e.g., total dollars awarded, total number of contracts and grants, average size of contract and grant). In addition, descriptive contract recipient information is also available, classified by organization type, type of services provided, and characteristics of recipients.

- ***Data and Information are the outputs*** of the contract recipient's activities. The data collected reflect the types of recipients, donors, transplant programs, and organ allocation systems. As indicated above, the data are collected, summarized, and disseminated. Grant recipients also disseminate educational information on organ donation.

- ***Knowledge about donors, donated organs/bone marrow, and survival rates of recipients*** is the desired output from the program's analysis and evaluation of the contract recipients' data collection activities. This output is being produced and disseminated by the DOT in the form of educational literature and studies. This output is easily identified, but difficult to measure.

4. Assessment of Outcomes

Outcomes are clearly identified and are being systematically measured by the program: The outcomes of the program are to increase the effectiveness of the country's organ and bone marrow transplantation systems, increase the effectiveness of transplants, develop an equitable distribution system of available organs, and increase donations from underrepresented populations. The two data systems operated by UNOS provide detailed information regarding survival rates, waiting times, waiting list deaths, and the number of organs donated. We feel that these data systems and the information that they provide are excellent tools for measuring program outcomes. The NMDP database will also be extremely useful once it is improved and made more accessible.

The accompanying table illustrates the desired outcomes of the program and the measures that are currently being utilized to analyze the progress made towards these goals.

Activities	Outputs	Outcomes	Illustrative Measures
Data collection activities	♦ Database on organ and bone marrow transplant recipients	♦ Increasein effectiveness of transplants	• Survival rates
	♦ National waiting list for organs • System for allocating organs and bone marrow ♦	• Increaseinthe effectiveness of the U.S. organ and bone marrow transplantation system	• Waiting list patient data • Deaths on waiting list ♦ Median wait times
Grantee analysis and evaluation	♦ educational literature and studies	• Increase in the number of organ/bone marrow donations	• Changes in number of organs/bone marrow donated
DOT analysis and evaluation	• Knowledge about donated organs/bone marrow, distribution of organs/bone marrow, survival rates • Educational literature, information, and studies	• An equitable distribution of available organs to patients in need of transplants	• waiting list patient characteristics • Organ Procurement ♦ Organization donor activity
		• Increase in donations from underrepresented populations	♦ Change in number of donors from underrepresented populations

5. Overall Assessment

The current structure and operations of the Division of Organ Transplantation conforms to the program logic model that we have proposed. Additionally, considerable effort has been aevoted towards tnc analysis and evaluation of the contract recipients data collection activities and outcomes. This commitment has enabled the program to attain its objective of increasing the efficacy of the organ transplantation system in the U.S.

Program staff are extremely knowledgeable about the field and are committed to improving the transplantation system. They are aware of the problems of the system including access, availability issues, and a dearth of organs from underrepresented groups. Additionally, they have identified the shortcomings of the current data available, and have clearly identified action steps and performance indicators through which to improve the problematic areas.

[Program/Budget Line Item: Ryan White CARE Act Titles I, II

1. Overview

a. Brief Description of Program

The Ryan White Comprehensive AIDS Resources and Emergency (CARE) Act of 1990 represents the largest dollar investment made by the federal government to date specifically for the provision of services for people with HIV infection. The Act was created with the goal of improving the quality and availability of care for individuals and families with HIV. Each section of the Act has resulted in specific program efforts. Of these, Titles I and II are located in BHRD; Title IV is the responsibility of MCHB and is discussed in that section of this report.

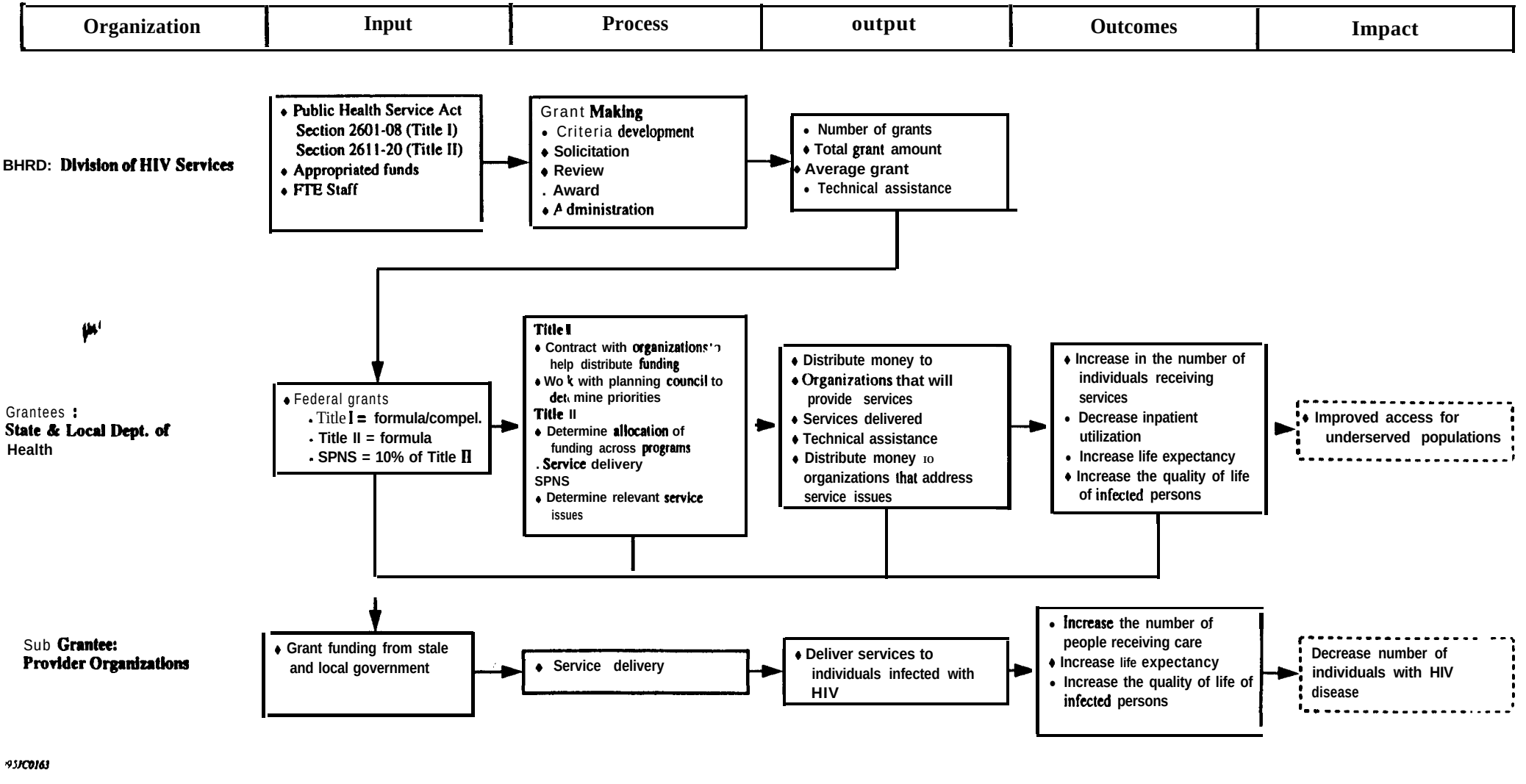
Title I of the CAFE Act, authorized under the Public Health Service Act section 2601-08, was developed to provide emergency assistance to localities that are disproportionately affected by the HIV epidemic. Under Title I, eligible metropolitan areas receive formula and supplemental grants to develop comprehensive HIV service delivery systems for individuals and families with HIV.

Title II, authorized under the Public Health Service Act section 261 l-20, provides grants to states and territories to improve the quality, availability, and organization of health care and support services for individuals and families with HIV. Title II also includes the Special Projects of National Significance Program (SPNS). SPNS programs are designed to help develop knowledge and skills in the delivery of health and support services to persons with HIV.

b. Program Logic Model

The program does not have available an explicit logic model that links its expected program goals and outcomes to its activities and outputs. However, given the legislative intent of the program and the information collected during our interviews, a logic model can be identified to achieve what we find to be the principal objective of the program: *to develop, implement and monitor programs which provide health care and support services to people living with HIV.* Our proposed logic model is shown in Figure D-4.

Figure D-4
Bureau of Health Resources Development: Ryan White Title I, II



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The logic model indicates that to achieve its objective, the program should engage in three distinct areas of effort or activity:

- The BHRD awards grants to state and local governments in areas that are severely affected by HIV. The grants are awarded to provide services to HIV infected populations. Additionally, DHS provides a full-range of technical assistance activities to the grantees.

- The state and local governments award grants to organizations - typically hospitals, community-based organizations, hospices, ambulatory care facilities, community health centers - to develop HIV service delivery and support systems for individuals and families with HIV.

- The grantees provide the services. Title I services typically include outpatient and ambulatory health and support services, as well as inpatient case management services that expedite discharges. Title II services include HIV care consortia, home and community-based care, continuity of health insurance, life prolonging treatments. SPNS develops innovative delivery systems.

Currently, there is heavy emphasis on the grant-making and service delivery activities of the program. There has been some attempt at data collection and analysis regarding the characteristics of consumers of Title I and II supported programs, The next section describes the specific data collection and measurement activities that the program has completed.

c. Measurement Activities

Until recently, the measurement activities for Ryan White Title I & II had been extremely limited The Division of HIV Services recognized that the lack of detailed client level data was a major barrier in measuring program outputs and outcomes. Consequently, they developed the Annual Aggregated Report (AAR), which includes data on the numbers and characteristics of clients served.

The AAR was developed to provide data at the local and national level for planning HIV related services and to provide feedback on the extent to which HIV-related services funded under Title I and Title II are reaching the targeted populations. The staff recognizes that this reporting tool will be critical to the evaluation of the effectiveness of efforts to address inequalities in access to health care for special populations.

The SPNS program has also developed cross cutting evaluation for the Adolescent grant program. The program uses a questionnaire evaluation to collect data on the number of clients served, the number of services used, and client satisfaction. Additionally, BHRD is currently developing an evaluation for the New Models of Care program under SPNS. The evaluation will take on a module approach using fax, interview, and self-administered questionnaire modules.

The Division of HIV Services also has information on the number of eligible metropolitan areas funding various services as well as the aggregate total expenditures for these services.

2. **Assessment of Inputs**

Appropriated funds for the program are clearly identified and program staff are well aware of anticipated changes to this input. Funding for the Ryan White CARE Act of 1990 represents the largest dollar investment made by the federal government to date in the fight against HIV infection. Legislative direction and authority is also clear to the program staff. Staff resources for the program are funded by the overall HRSA program management account in competition with other programs. Because of the "disconnect" between the program and the budgeting process, we could no! identify an objective staffing level commensurate with achieving program objectives.

3. **Assessment of Outputs**

As the program logic model indicates, there are two separate types of outputs, each corresponding to a distinct area of program effort. These are linked, because the outputs of one activity are inputs to the next.

Grants and Technical assistance are the output of the program grant-making and service delivery processes. These outputs are clearly identified. Information about each grant is available (e.g., total dollars awarded, total number of grants, average size of grant). Information about the frequency of technical assistance requests and responses to requests is also available.

Services delivered are the outputs of the grantee's service delivery activities. Desired output data would include: type, volume, frequency, and location of services; client characteristics and demographics by service type; and service quality measures. Client level data is now available through the AAR system as well as the SPNS evaluation. Additional provider level data as well as information on the type and volume of services delivered is available.

4. **Assessment of Outcomes**

Outcomes are clearly identified but are not systematically measured by the program The outcomes of the program are: increase the number of individuals receiving services, decrease inpatient utilization by HIV infected individuals, and increase both life expectancy and the quality of life of individuals infected with HIV. While estimates exists for some of the outcomes, the accompanying table suggests the types of outcomes and example measurements that would be applicable.

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Service Delivery	♦ Services Delivered	• Increased utilization of ambulatory care services	♦ Number and % of population receiving care, by service type, and population category (e.g., women, minorities)
		♦ Decreased Inpatient utilization	Compared to a baseline, ♦ Total inpatient bed days of individuals with HIV
		• Increased life expectancy	Compared to a baseline • Longevity of life after initial treatment
		♦ Increased quality of life	♦ Client satisfaction surveys

5. Overall Assessment

The current structure and operations of the Division of HIV Services conforms to the program logic model that we have proposed. Additionally, there is a commitment to the evaluation of certain aspects of the program. The staff recognizes the importance of conducting needs assessments to identify unmet service needs of special populations. They have clearly identified the goals of needs assessments and have articulated the activities and performance indicators necessary to achieve these goals.

The Division also understands the need to provide technical assistance to help Title I and II grantees improve access to health care for special and underserved populations. Action steps and performance measures have been developed to carry-out and assess the effectiveness of the technical assistance.

The Division has also developed a reporting system the Annual Aggregate Report, which will provide them with data about the characteristics of consumers of Title I and II supported programs. This will allow them to analyze their ability to eliminate inequalities in access to health care for special underserved populations.

APPENDIX E: MATERNAL AND CHILD HEALTH BUREAU

HRSA BUDGET LINE ITEM ASSESSMENTS

MATERNAL AND CHILD HEALTH BUREAU

The Maternal and Child Health Bureau (MCHB) serves as a focal point for national efforts to address the health care needs of women and children through the MCH block grant program and a variety of related grants and other efforts. The role of MCHB and its predecessor organizations has evolved over time since its original mission was established in Title V of the Social Security Act of 1935. The original emphasis on the development of federal-state-local entities to address the needs of the targeted populations has been achieved through the establishment of such organizations within state and local health departments that address the needs of women and children in their political jurisdictions. The current role of MCHB is directed at four major goals articulated in its strategic plan: strengthening the personal care system; strengthening the public health system; fostering the integration of systems of care; and targeting specific critical and emerging concerns.

There are four budget line items in the HRSA budget that are the responsibility of MCHB and are discussed in this section. These include: the MCH block grant, the Healthy Start Program, the Pediatric AIDS program (Title IV of the Ryan White CARE Act) and the Emergency Medical Services for Children (EMSC) program. The MCH block grant is the major and oldest program operated by MCHB and includes three main components: the basic block grant to the states and territories; a grant program of special projects of regional and national significance (SPRANS); and the Community Integrated Services System (CISS). The block grant activities are complex and are carried out by three of the Bureau's divisions. They address the needs of specific subgroups of the target populations. These divisions use similar processes and carry out activities uniquely designed to meet the needs of their specific target populations.

Healthy Start is a five year demonstration designed to develop and support large scale, multi-faceted interventions that will significantly reduce infant mortality in a select number of targeted areas. Both Title IV and EMSC represent efforts to specifically target the needs of children (and their families) as distinct from the adult populations represented in the broader programs of which they are a part.

The following specific descriptions of each of the four budgeted areas demonstrate different approaches and stages of development in identifying performance measures, different issues related to the current data environment, and the need for an array of approaches and strategies to move each area further. The specific aspects of program monitoring, data collection and evaluation are discussed within the context of each of the four areas. This review shows that while the demonstration efforts supported by the Healthy Start and Pediatric AIDS programs have resulted in major efforts related to development of data bases and implementation of national evaluation efforts, there is considerable work that needs to be accomplished in relationship to the MCH block grant program, although efforts are currently in various stages of development for some aspects of this major program. It is expected that in the future, particular attention is likely to focus on the MCH block grant as the federal government examines the potential expansion of the block grant mechanism and the development of new "performance partnerships."

Program/Budget Line Item: MCH Block Grant

1. Overview

The Maternal and Child Health Services Block Grant (Title V) of the Social Security Act provides funds to assist States in maintaining and strengthening their efforts to improve the health of all mothers, children, and adolescents including those with special health care needs. This legislation established the MCH program in 1935 to provide resources to support the creation of a strong maternal and child health services infrastructure that would provide the array of services needed to meet the needs of all mothers and children and improve their health status. This is accomplished by the provision of formula grants to states and by special grants designed to fund an array of efforts that facilitate and improve the services needed. Over time, the specifics of both the MCH state grants and the special funds have changed, most notably when legislation changed the state grants and many of the special grants into a block grant program and when the Medicaid program developed and expanded to address the financing aspects of certain medical services for a large portion of the most vulnerable populations targeted by Title V. The program's efforts are further guided by National Health Objectives for the Year 2000 and the need to target a portion of its limited resources to particularly address the needs of low income populations.

As a block grant program, Title V represents a partnership with the states, who assume responsibility to implement activities within their states. As Federal strategies have changed with regard to the respective roles of Federal and state governments, so have the approaches to Title V grants. Today, at the federal level, the functions of the present MCH block grant program are viewed as a "pyramid" with efforts targeted at infrastructure building as the base; core public health functions as the second tier; and the direct p ovision of services as the third tier. The direct provision of services is viewed as a gap filling function of the block grant program that should decrease overtime, as the amount of gaps decrease, allowing states to focus more of their attention on building and sustaining a strong infrastructure to support direct services. However, there is considerable variance across the states in carrying out these functions and in the relative emphasis placed on each. Differences among the states include: the nature of the relationship of the states to their local jurisdictions; the relative role each state plays; the amount of resources that go to infrastructure related activities versus direct services; the way in which direct services are provided; and the nature of the information systems that exist to support the activities and that are available for program reporting and evaluation. While these variations may be considered a strength of the program's flexibility and its ability to meet the specific and unique needs within a state, the variety of state programs has overtime contributed to the difficulties the Title V program has had with the development of program data.

Another issue with regard tc data for the Title V programs and one which is a particular issue for performance measurement has been the changing philosophy with regard to data requirements and data collection. Of particular importance to the issue of performance measurement was the elimination of evaluation and data collection and reporting requirements when the program became a block grant in 198 1 and the intervening years before Block grant

requirements were established in OBRA 89. This legislation established a planning process for the block grant program that included the provision of specific data on a range of measures of health status and related indicators. Implementation of these requirements (including needs assessments, five year plans, and annual plans/reports) initially resulted in great variation among the states in these efforts and in their submissions of information to MCHB. As a result, new guidances have been issued to provide more specific instructions for these activities and products. The guidance will be used for FY 1996 budget requests beginning with state submissions in July 1995.

a. Brief Description of Program

Currently the block grant represents a line item in the HRSA budget with three major components:

- State Formu12 Block Grants - 85% of the appropriation remaining after the CISS set-aside

  The block grant is designed to support state activities in three areas: infrastructure building, provision of core public health functions, and direct personal services as a gap filling function. States vary in their relative emphasis in the three areas based on the state's unique needs and existing delivery systems.

  To ensure that certain areas are addressed, federal legislation contain specific requirements regarding the allocations of the funds. These include:

  - at least 30% of funds must be allocated to preventive and primary care services for children;
  - at least 30% of funds must be allocated to services for children with special health care needs (CSHCN);
  - no more than 10% of the grant can be spent on administrative costs; and
  - the state must at a minimum match funds at a rate of three state dollars for every four Federal dollars.

- Special Projects of Regional and National Significance (SPRANS)—15% of the appropriations after the CISS set-aside

- These grants are awarded on a competitive basis in a number of categories including research, training, genetics, hemophilia, and maternal and child health improvement projects (MCI-BP). MCI-IB can and does set priorities for a portion of the funding not specifically earmarked by Congress each year, particularly in the broader categories of research, training and MCI-BP. Funds are generally used by the Bureau to develop tools to be used by the states to improve their MCH programs and the health status of mothers and children.

- Community Integrated Service System (CISS) - 12.75% of the amount appropriated over $600 million

  CISS grants are a set-aside program focused on building integrated services systems through the support of activities in specific areas that include home visiting projects, MCH centers at non-profit hospitals, rural projects, efforts to increase provider participation in Medicaid, and outpatient and community-based services for children with special health care needs.

b. Program Logic Model

Based on a review of the legislative intent and a variety of materials on the block grant program, including the most recent report to Congress and the latest guidance to states, a working logic model has been developed for the assessment of HRSA line items. Of the various line item programs, including the others described in this section, the block grant presented considerably more challenges in developing a logic model that could adequately capture the key elements of the Title V program(s). The complexities of the various components of the grant program are reflected in the proposed logic model shown in Figure E-l. The logic model attempts to incorporate the unique roles of the Federal program efforts as well as those resulting from the federal-state partnership in implementing some aspects of the block grant. As clearer guidance is developed on performance partnerships, the issue of "whose performance" should be measured may be clarified. At this point, our logic model distinguishes between federal and state activities which consequently have implications for measurement.

While this model attempts to distinguish some of the differences and distinctions between the federal and state levels, it does not reflect the further complexities represented by the different approaches used by states in carrying out their functions. These differences might suggest the need for yet another level for measurement -- the local (county, city, other) level. The distinctions will be important as one moves further along in developing specific performance measurement activities, including determination of appropriate measures for each level and the relevant data collection activities.

We have also used the funding specifications of Title V to distinguish between the three major legislated components of the block grant. While the logic model demonstrates that there are three distinct areas of effort or activity related to the block grant (i.e., block grant, CISS, and SPRANS), they are all important components in addressing the overall objectives of the MCH program. The specificity of objectives are based on selected objectives from the Healthy People 2000 national objectives in a number of critical areas that include health status outcomes, risk reduction, services, and an overall objective to reduce the proportion of children and youth living in poverty. In addition, MCHB has augmented the Healthy People 2000 effort to include a focus on its objectives to improve the underlying systems that support services for the target populations.

The first page of the logic model shows the federal or MCHB level, identifying five major processes. The first four are those carried out at the federal level and therefore outputs and

outcomes are indicated for these four at the federal level. That is, these are indicators that can be direct measures for federal efforts. The fifth process --grant making -- is the process that shifts a major part of the activities to be measured to other levels. The grant making process therefore includes some output measures at the federal level and then shifts to other organizational levels. Since the grants are given in three distinct areas: the state block grants, SPRANS grants, and CISS grants, we have used these as the basis for the overall Title V logic model:

- 'A' identifies the block grant effort at the state (and local) levels
- 'B' identifies the SPRANS grant logic flow
- 'C' identifies the CISS grant logic flow

c. Measurement Activities

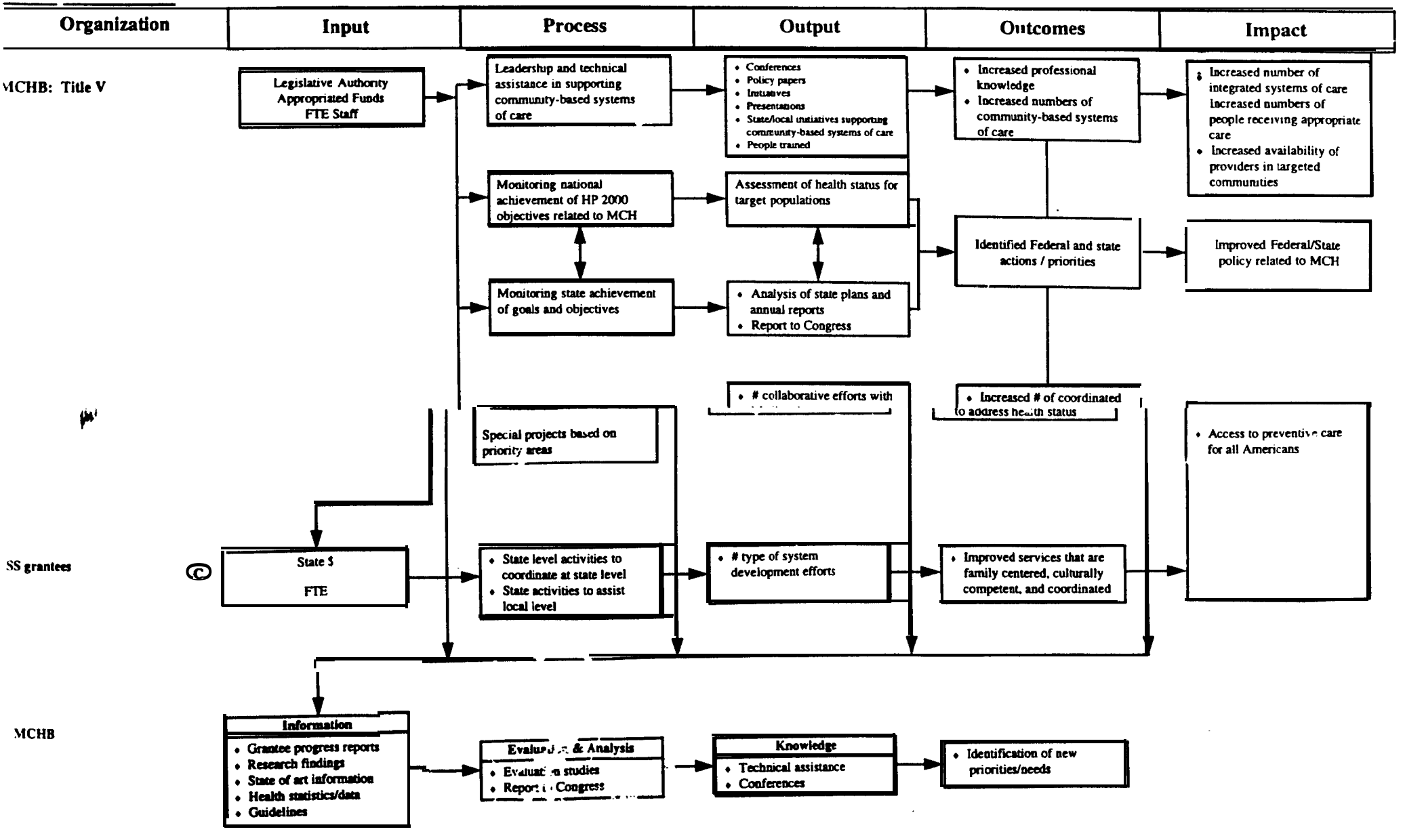
Prior to the information requirements established in OBRA 89, there was a sustained period of time during which little systematic data was collected regarding the block grant program. The OBRA 89 requirements, while refocusing concern on the development of better information regarding the program, did not provide very much guidance or specificity for this effort. Consequently, there has been a great deal of variability in the nature of information provided by the states in their formal submissions to MCHB. This is reflected in the recently submitted Report to Congress and in assessments of state applications.

MCHB is aware of the critical need for developing a system for performance measurement of the activities conducted under the auspices of the block grant activities and many individuals are currently involved in an array of activities related to these issues both within its divisions and at a Bureau-wide level. At this point, these activities have not been closely coordinated at the Bureau level, despite office of the Bureau Director efforts now being designed to move forward. Examples of major current activities identified in discussions with the various divisions are:

1. ***The new guidances*** for ***future applications. needs assessments annual plans and annual reports.*** This will provide more detailed instructions for the states, including: specific new areas to be addressed; the quantification/measurability of objectives; and the specification of report formats. The new guidance represents a cross-divisional effort with multi-state input.

2. ***Development of instruments to measure activities related to systems efforts.*** This will provide more specific and comparative information on the "infrastructure development" function. The instruments will collect data to assess the "systems" related efforts in four areas: state efforts in developing collaborative mechanisms at the state level; state efforts to assist at the community level; community level coordination of primary care with other health services; and community level coordination of health services with other services. The initial focus of measurement development is on the state activities, with plans to develop community **indicators to follow. This has resulted in an approach that combines** quantitative collection of specific data using common definitions and standardized matrices with a qualitative approach that allows states to provide vignettes, using a

Figu -1
MCHB: Title V



common narrative format that describes the effort and its accomplishments. The measurement development effort has included inputs from the states and the developed instruments are currently being tested in nine states.

3. ***Development of a common framework for the core public health functions.*** This *is* currently being supported by a grant to Johns Hopkins School of Public Health. A first draft of ten core functions which defines local, state and federal roles has been recently prepared.

4. ***Specification of a limited set of the Healthy People 2000 objectives to be measured and tracked by*** MCHB. This provides a basis for determining where efforts should be focused and for developing performance measures. To the extent that states select from among the national list, a database can be developed at a state and local level.

5. ***Creation of data and evaluation committees to develop specific process and outcome measures for programs. These are being developed in various divisions and programs including DSCSHN, DHS and DSES.***

For the SPRANS component of Title V, there are a variety of approaches that have been and are being taken with respect to measurement. All SPRANS grantees are responsible for designing and conducting evaluations of their grant. In addition, there is a common report format for all SPRANS grants. However, the diversity of the efforts funded by SPRANS has not lent itself to consistent measurement and there is little monitoring of the completeness or quality of the data by MCHB.

Two ongoing SPRANS components -- hemophilia and genetics -- are the purview of specific branches within the Division of Services for Children with Special Health Needs. For genetics, there is specific data collection related to newborn screening and to identification of services provided, and an evaluation program is being developed. In addition to these efforts, there are more specific, targeted measurement/evaluation activities that relate to some of the larger special initiatives funded by the SPRANS component of Title V.

2. Assessment of Inputs

The logic model identifies three related but different sets of inputs: one at the federal (MCHB) level, a second at the state level for the block grant, and a third at the grantee level. These are both important to consider given the linkage between federal and state roles. While the appropriated funds and state match appears to be collected and reported on a regular and consistent basis, other inputs are not as clearly available. At the Federal level, staffing information is complicated by the dispersion of staff who are involved with various aspects of Title V (including SPRANS) across the various MCHB offices, divisions and branches. While a common application form is used by the states in reporting information to MCHB, it is not clear to what extent this is complete or how consistent the information is, given the differences across the states.

3. **Assessment of Outputs**

The program logic model developed for Title V links specific outputs to individual processes identified at the Federal and state levels. These distinctions reflect the distinct nature of each of these processes which result in different outputs that need to be measured. At the MCHB level, we have identified four specific federal processes in addition to the grant making activities. This assessment focuses more specifically on grant making related outputs. For the other four areas, output data is not systematically collected or available. With the exception of information that is generally provided in the annual report to Congress, output data resides in a variety of forms that may require considerable effort to assemble in a usable form.

Measurement of Title V outputs at the MCHB level need to reflect three areas: the block grant, SPRANS, and CISS. Information on numbers of grantees and funding are most readily available, but more detailed and descriptive information on grantees other than the states and territories is less readily available.

A similar approach, defining specific-process outputs, was identified at the state level. Our assessment of information on outputs that might be available at the national level suggests that there is limited systematic collection and analysis/evaluation of data. The measurement discussion identifies some of the previous activities that may help improve data collection.

4. Assessment of Outcomes

As our logic model suggests, outcomes are often associated with multiple outputs. The MCHB outcomes that have been identified reflect the selected Healthy People 2000 objectives as well as other MCHB specific outcomes related to services coordination and increased services. Closely associated with these outcomes are a wide array of outcomes that ate expected to result from state-specific efforts. The logic model reflects a selected set of these outcomes which have been specified by MCHB in various documents.

MCHB is currently monitoring some of these outcome areas, primarily those that reflect specific health status indicators. The data sources for these include national and state sources of vital statistics (e.g., NCHS) and other agencies. For other items, MCHB has been reliant on information provided by the states, which varies considerably in terms of completeness and quality. Current efforts are addressing some but not all of the issues involved in developing a more adequate set of outcome measures and data bases.

5. Overall Assessment

The development and implementation of efforts to measure performance under the various Title V efforts is complicated and difficult. The MCHB efforts to do so reflect a number of different efforts that have often been geared to address specific issues or division/initiative-specific efforts. Until recently, there have been few attempts to coordinate such activities. Such

coordination needs to be encouraged and should build on some of the current efforts. If past experience bears consideration, the implementation of the new Block grant guidances will require considerable leadership on the part of MCHB including, technical assistance to states as well as careful monitoring and assessment of results.

In addition, there are considerable issues and barriers that need to be addressed to move efforts forward. These include: the diversity among states; the continually changing emphases, priorities, and other characteristics of discretionary funding efforts; and the relative issues of the federal versus state focus. This last issue includes: the need to address support for state capacity to collect data; development of an approach for the use of national sources; and decisions regarding such issues as appropriate units of analysis (e.g., total populations, target populations, or "clients") and the level of investment that should be expended in this area. Because many of these issues are very generic, they are discussed in more detail in a later section of this report.

Program/Budget Line Item: MCHB/Healthy Start

1. Overview

a. Brief Description of Program

The Healthy Start program is a federal demonstration program authorized under Section 301 of the Public Health Service Act and first funded in 199 1. The purpose of the demonstration is to reduce infant mortality by 50% within 5 years in 15 selected communities with disproportionately high levels of infant mortality. An additional 7 sites were funded in 1994 as special two year projects, with the goal of further reducing infant mortality. (A target percentage reduction was not specified for these projects.) The demonstration is designed to test the impact of community-based initiatives to reduce infant mortality and to improve birth outcomes.

b. Program Logic Model

The logic model (See Figure E-2) illustrates the relationship of the demonstration supported efforts to the achievement of the nationally-specified desired impact of the Healthy Start program. The logic model identifies the specific set of funded activities (outputs) in which the various demonstration communities are engaged and the anticipated outcomes of those services.

Our logic model indicates that the program should engage in three areas of effort or activity in order to achieve these outcomes:

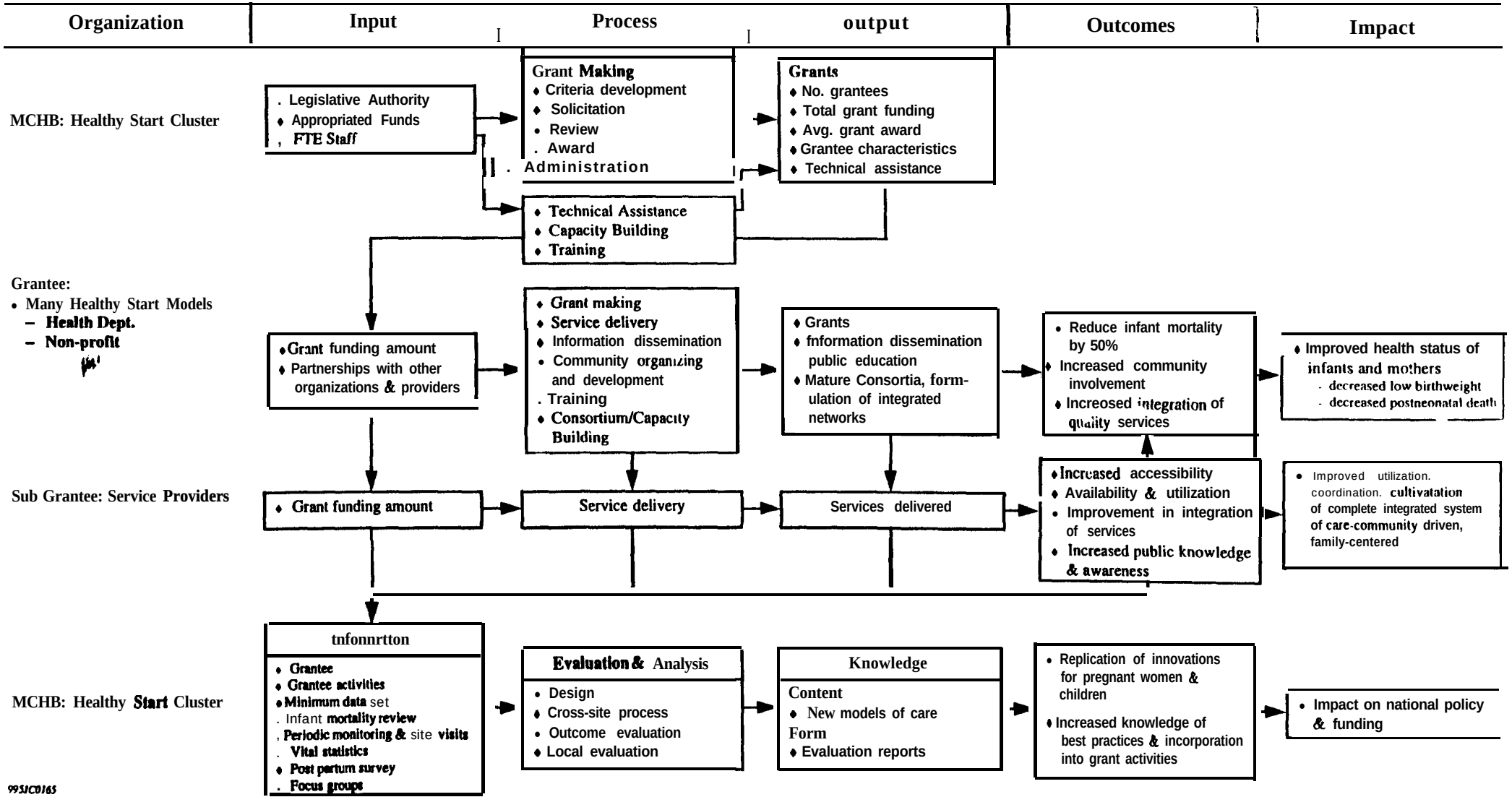
- Healthy Start makes grants and provides technical assistance to organizations such as non-profit 501(c) 3 organizations and city or county health departments to provide services to infants, children, youth, and women in order to impact on local infant mortality;

- The grantees organizes, develops and/or integrates community organizations to provide the services and/or fund contracts to provide services including outreach, direct health services, prevention, and support services; and

- Healthy Start uses the information about the grantees, their activities, outputs, outcomes, and impacts to analyze and evaluate grantee performance and identify successful new models of care and collaboration for infants and their mothers.

Currently, the program emphasizes grant-making collaboration and service delivery. However, Mathematica Policy Research is conducting a five year national cross-site evaluation of the Healthy Start program. The evaluation will include detailed process and outcomes analyses. The evaluators have identified outcomes measures and qualitative and quantitative data sources for those measures. Grantees submit quarterly minimum data set (MDS) reports to the National Evaluator. The data collection and analysis and the evaluation should provide Healthy

Figure E-2
MCHB: Healthy Start Cluster



Start with helpful information and enable the program to identify potentially replicable innovations involving service delivery to infants and their mothers.

c. Measurement Activities

As part of its program design, the Healthy Start demonstration developed a specific MDS that defines the data that each of the grantees must provide. The implementation of the MDS is required for the original fifteen grantees.

Client-based data elements reported in the MDS consist of both maternal and infant data. Maternal data includes the following data elements.

- client characteristics
- key dates and providers
- prior pregnancy history
- medical risk factors
- behavioral risk factors
- medical prenatal care
- psychosocial services
- scope and content of case management/facilitating services
- individual development services
- psychosocial and supportive services: other family members
- delivery
- postpartum care

Infant data includes the following data elements:

- demographic characteristics
- characteristics at birth
- health status at first pediatric visit and at age one
- service utilization: medical services
- service utilization: psychosocial support services
- service utilization: facilitation services
- service utilization: individual development services
- mortality data

Both input and output data are reported to the National Evaluator quarterly. Preliminary analyses of these data are anticipated in the Fall of 1995. The 7 special projects are not required to submit only quarterly progress reports.

In addition to the MDS, data are collected through annual monitoring site visits, a post partum survey and focus groups, and various activities of the national evaluation. The original 15 grantees also submit annual continuing applications, including progress reports, a consortium membership list, a revised organizational chart, a collaboration matrix indicating community

relationships, and a plan for the next year's activities including interim and corollary objectives. The national evaluation includes both a process and outcome component and will continue for one year after the demonstration in order to capture vital record data on outcomes. The grantees are also each doing local evaluations of unique strategies and consortium/capacity building. The complex nature of the demonstration has created a number of issues related to measurement and data sources, including those related to obtaining vital statistics.

Current data on the Healthy Start program has been compiled in a briefing book on grantees that includes a profile on each project containing demographic information on the service population and budget information. Mathematica has produced a report, ***Implementing a Community-Based Initiative: The Early Years of Healthy Start. This*** report is based on information collected during Mathematica's first round of site visits to the Healthy Start projects and includes chapters on: management and governance; consortia; public information and education; and program services. Also produced by Mathematica are ***Evaluation Design: National Evaluation of Healthy Start*** and ***National Evaluation of Healthy Start: Year 1 Annual Report.*** DHS is also in the process of publishing a series of booklets on program experiences. Anecdotal information on the Healthy Start grantees' experiences in Consortia Development and early lessons learned are available in 'The HS Initiative: Vol. I: Consortium Development" and "The HS Initiative: Vol. II: Early Implementation Lessons Learned".

2. Assessment of Inputs

Appropriated funds for the program are clearly identified, and the goal of the program understood. Program principles are based on the Program Guidance. At the Bureau level, the main inputs for the Healthy Start program are the legislative authority and the appropriated funds. At the grantee level, there are many Healthy Start administrative models. As indicated in the program logic model, funds are distributed to grantees. In turn, those grantees may provide services or distribute funds to contractors who provide services. Since many sites have a number of different providers serving the same population, partnerships with other organizations and providers also act as program inputs.

3. Assessment of Outputs

As indicated in the program logic model, there are three types of outputs, which correspond to a distinct area of program effort. Each of the outputs is linked to the inputs of the next area of the program effort.

- ***Grants are the outputs*** of the program's grant-making process. Descriptive information on each grantee is available.

- ***Service delivery*** is an output of the grantee activities. Some grantees have grant-making activities as part of their outputs, and service delivery is an output of the sub-grantee. Data in this area are at least partially available through the MDS, but may not be

adequately collected and recorded by the grantee. In addition, information dissemination for public education is an important grantee output.

- Increased knowledge of best practices and standards is the desired output from the program's analysis and evaluation of its activities and those of its 22 grantees. This knowledge will aid in the replication of innovations for serving pregnant women and their children.

For the original 15 grantees, the national evaluation effort is collecting a set of process data in annual waves; a recently completed baseline data collection to be followed by annual telephone updates and/or site visits. The descriptive information will provide some data related to outputs at the grantee level.

4. **Assessment of Outcomes**

Outcomes will be measured as part of the national evaluation. The evaluation design includes research and policy questions for the process and outcomes analysis and identifies issues and data sources for process and outcomes analysis. Outcome measures will include the following:

Infant Mortality

- infant mortality rate
- neonatal mortality rate
- postneonatal mortality rate
- birthweight-specific mortality rate

Perinatal Outcomes

- birthweight
- gestational age
- rates of low birthweight and preterm delivery
- complications during pregnancy, labor, and delivery
- Neonatal Intensive Care Unit admission

Infant Health Status

- preventable hospitalizations
- immunizations received
- vaccine-preventable illness rates
- age appropriate development

Maternal Health Status

- prenatal care adequacy
- interpregnancy birth interval
- risk-taking behavior during pregnancy
- prenatal WIC participation

Cornmunitv Health Status

- adolescent birth rate and rate of second births to adolescents
- proportion not receiving prenatal care
- proportion receiving adequate prenatal care
- Medicaid service use and costs
- availability of other programs serving women and children

There are a number of difficulties in obtaining and utilizing the needed outcomes information from the data sources identified for the national evaluation. The outcomes analysis of the evaluation relies on 3 main data sources:

1. Vital records files on births and infant deaths in the Healthy Start project areas and comparison areas

2. Medicaid data for the Healthy Start project areas and comparison areas

3. Minimum Data Set (MDS) data from Healthy Start clients linked with the vital records files of births and deaths and with Medicaid claims data

Using linked vital records data will allow for comparisons of outcomes in the demonstration sites with those of comparisons sites, but may be **difficult** to obtain or prepare. The National Evaluator has requested individual-level files on infant births and deaths for 1984 onwards from participating states. **Natality** and linked birth/infant death files are requested when available. However, since there are significant time lags in preparing the linked files, separate **natality** and mortality files are requested when linked **files** are not available.

The use of Medicaid data will allow the national evaluation to examine the service utilization of clients. However, the Social Security Act specifies that the data are to be used only for administrative purposes, Given this significant barrier, the National Evaluators are considering not pursuing this data source any further.

The linking of the MDS data from the Healthy Start programs with vital records data and Medicaid data would provide a valuable source of information on utilization and outcomes. However, it is difficult to obtain client-level data from Federal agencies due to the confidentiality issues raised by requesting files with identifiers. Furthermore, many of the Healthy Start projects experienced delays in implementing their MIS system and have **difficulty** obtaining client level data from all service providers in their target areas.

5. Overall Assessment

The **Healthy Start** program has devoted significant resources to the analysis and evaluation of its grantee activities to learn more about what kinds of demonstration programs are most effective in achieving their objectives. There have been considerable difficulties in implementing the evaluation design and in collecting the data. **A** number of the issues involved in the evaluation have considerable implications for other community-based initiative performance monitoring, both within MCHB and other HRSA programs.

[Program/Budget Line Item: MCHB/Ryan White Title IV

1. Overview

a. Brief Description of Program

The Ryan White Title IV Grants for Coordinated HIV Services arid Access to Research for Children, Youth, Women and Families Program is a grant program designed to improve and expand the coordination of comprehensive care systems for children, youth, women, and families who are infected or affected by HIV. The program is authorized under Section 2671, Part D of the Public Health Service Act. The Federal government has taken a role in providing care to HIV infected and affected children, youth, and women because these groups represent the most recently impacted and rapidly growing populations affected by the HIV/AIDS epidemic. Also, these groups are disproportionately members of communities of color with limited economic resources, and they face the greatest barriers in accessing care arid research.

b. Program Logic Model

The Pediatric AIDS program has a logic model developed by an evaluation contractor (Macro International) that links its program goals and outcomes to its activities and outputs at the grantee level. We have built upon this effort to create a logic model that identifies what we find to be the principal objectives of the program: ***service delivery*** to targeted persons and their families affected by and infected with HIV/AIDS by supporting the development of systems of care and ***providing access to clinical research trials. See*** Figure E-3.

Our logic model indicates that the program should engage in three distinct areas of effort or activity:

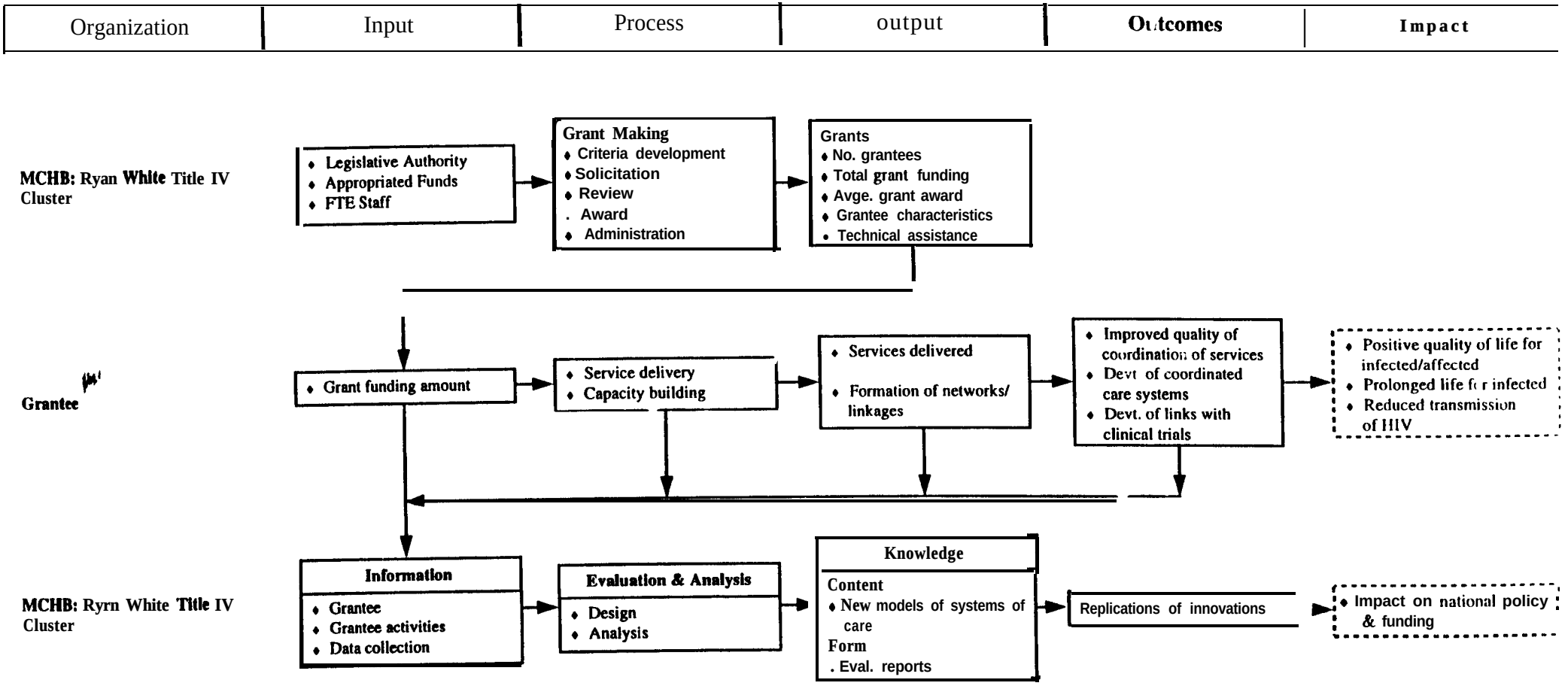
- The Ryan White Title IV program awards grants to hospitals and other health care providers to deliver services to those persons infected with and affected by HIV/AIDS and to provide education, prevention, and outreach services to populations at-risk for HIV/AIDS.

- Grantees provide services to these populations and develop models of comprehensive care systems, linked to research, for children, youth , women, and families.

- MCHB uses the information about the grantees, their activities, outputs, outcomes, and impacts to analyze and evaluate grantee performance and to identify useful new models of care and collaboration for infants and their mothers.

Currently, the Ryan White Title IV program emphasizes grant-making and service delivery activities. However, data collection and program evaluation efforts are also being conducted by two contractors. Lewin-VHI has developed and implemented a data collection

Figure E-3
MCHB: Ryan White Title IV Cluster



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strategy for and has conducted several analyses of Ryan White Title IV programs reported data. Macro International is conducting a program evaluation of the Ryan White Title IV programs which focuses on process measures.

c. Measurement Activities

The program outputs are measured in detail through the Data Reporting Tables developed by Lewin-VHI. The Data Reporting Tables are part of a data strategy to aid in building data capacity and to assist in program monitoring and reporting to Congress on program activities. Recently, Title IV program staff participated in two training sessions conducted by Lewin-VHI to help improve program monitoring using this data collection system. The data reported by the Title IV projects describes grantees in terms of their organizational structure, services provided, clients served, service utilization, and prevention, outreach, and education activities.

This data collection strategy provides a way to measure program outputs for grantees who report data. Currently, grantees are not required to report this information to the Bureau.. The Title IV funds given to grantees are combined with other funds from other sources that are provided for related activities such as service delivery, prevention, outreach, and education. Although grantees do not receive additional funds for data collection, most grantees submit their data to the Bureau. MCHB is in the process of preparing the data collection forms for submission for OMB clearance in order to make the data collection a requirement of the grant.

While Lewin-VHI was developing the data collection strategy in 1992, Macro International was contracted to conduct an evaluation feasibility study for the Ryan White Title IV programs. Due to the lack of standardized data available from programs, especially on outcomes indicators, Macro recommended that a process evaluation of a subset of grantees be conducted to document the program activities and evaluate the progress made toward program goals.

In 1993, Macro was contracted to conduct an evaluation. This evaluation is not an ongoing evaluation, but a single time-limited effort, involving program data collection and reporting including a self-study of projects and site visits. Currently, Macro has collected 3 sets of 6 month process data from the programs and has started to perform preliminary data analysis.

Both Macro and Lewin-VHI have recommended that the Bureau commission several special studies to examine specific outcomes that are not being addressed in the current evaluation. MCHB has contracted with the AIDS Policy Center to define some of the outcomes that should be measured and to conduct policy analyses and lobbying activities. In addition, MCHB funded the Family, Adolescent, and Children Treatment System (FACTS). The FACTS database will be a computerized record keeping system for use by providers of outpatient medical and case management services to HIV infected and affected children, adolescents, and their families. It is intended to be a model software application to enhance the provision of patient care in pediatric and adolescent HIV care settings. This data base will have the potential to support many types of research inquiries about the target populations.

2. Assessment of Inputs

Appropriated funds for the program are clearly identified and legislative direction and authority appear to be clear to the program staff. At the grantee level, the data tables that are reported in the grant application and renewals provide information on program inputs, including staffing and resources.

3. Assessment of Outputs

As the program logic model indicates, there are three separate types of outputs that each correspond to a distinct area of program effort. The outputs of one activity provide inputs to the next.

- *Grants* are the outputs of the program's grant-making process. These outputs are clearly identified.

- Service ***delivery*** is an output of the grantee activities. The voluntary data collection strategy provides information on services provided, clients served, service utilization, and prevention, outreach, and education activities.

- ***Increased Knowledge*** of best practices and standards is the desired output from the program's analysis and evaluation of its activities and those of its grantees. This knowledge will aid in the replication of innovations for serving children, adolescents, women, and families infected with and affected by HIV/AIDS.

The program logic model links specific inputs to outputs. Specific output data is systematically collected by the program with the Data Reporting Tables developed by Lewin-VHI. The data include information on the following:

- the organizational structure of the demonstration project;

- the range of services available and accessible to subgroups of the target population served by the demonstration project;

- the demographic and clinical status characteristics of clients who are "enrolled" in the demonstration project, as well as their service utilization; and

- the prevention, outreach, and education activities conducted by the demonstration project, as well as characteristics of the people reached through these activities.

While the Data Reporting Tables provide valuable information on **program outputs, the data** collected could be used to better inform future program activities if the data strategy were part of a comprehensive evaluation effort.

4. Assessment of Outcomes

Ryan White Title IV Program outcomes are not clearly identified or systematically measured. The Data Reporting Tables do not include outcomes measures. Furthermore, the Macro program evaluation focuses on process measures. In its evaluation design, Macro concluded that although many indicators are collectible, those regarding cost efficiency and effectiveness, outcomes for individuals, families and/or prevention activities, and technical assistance are not available. Macro concluded that a "system-level outcome evaluation" would be most appropriate given the lack of individual outcome data available. The qualities of the system that were outlined include the following measures:

- comprehensiveness
- coordination
- accessibility
- quality
- collaboration
- cultural competency
- family-centered care

Although grantees report aggregate data to the Bureau, some grantees collect client-based data. For a selected subset of grantees, the client-based data could support outcome studies.

The following table suggests the types of outcomes and measures that would be appropriate to apply the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (ultimate outcomes).

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Service Delivery	Services Delivered	Increased availability and accessibility of services	Compared to a baseline: • local network profile • service mix profile • service utilization patterns
		Reduced transmission of HIV	Compared to a baseline: • infectionrates
		Prolonged life for infected	• client characteristics • life after initial treatment
Ryan White Title IV	Knowledge about new models of care and collaboration	Incorporation of knowledge into grantee processes and activities	• # of times used • # of times use resulted in benefit (e.g., increased effectiveness/efficiency)

5. Overall **Assessment**

The current structure and operations of the Ryan White Title IV program conforms to the program logic model that we have proposed. However, the evaluation and the data collection efforts are not well-linked. A more comprehensive evaluation would allow the Title IV program to learn more about what kinds of demonstration programs are most effective in achieving their objectives.

1. Overview

a. Brief Description of Program

The Emergency Medical Services for Children (EMSC) demonstration program is authorized under Section 1910 of the Public Health Service Act. Its purpose is to provide funding for the incorporation of pediatric emergency care into EMS systems. The program is designed to enhance and expand delivery of EMS for acutely ill and seriously injured children. The federal government began to take a role in this area after research in the late 1970s illustrated that children had a higher death rate from trauma than adults and that access to a high level of pediatric emergency care decreased mortality of injured children. Originally, EMS systems were developed primarily to provide care for adult cardiac and trauma patients, and the needs of children were not always adequately addressed.

The goals of the funded grants are to implement EMS for children and to integrate EMS for children into existing EMS systems. The goals of the EMSC are to reduce child and youth mortality and morbidity sustained as a result of severe acute illness or trauma. Through FY 1995, EMSC has funded 42 program grants in 40 states and territories. In addition EMSC funded 2 EMSC technical assistance and resource centers in FY 1995. These centers will be funded to support state EMSC projects and to identify resources in data collection and analysis that can promote a state EMSC program.

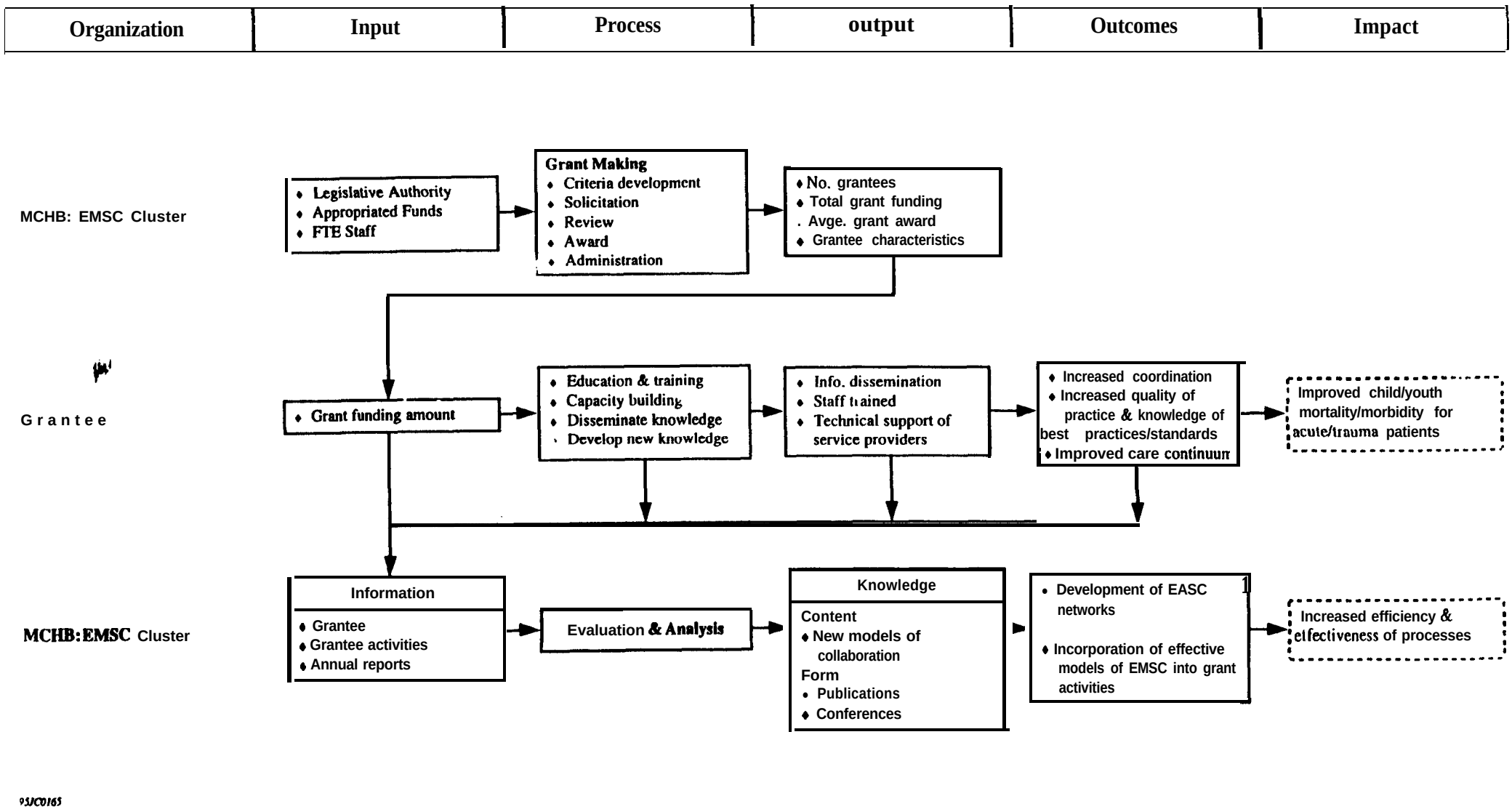
b. Program Logic Model

Although the EMSC program has not developed an explicit logic model, it has developed a 5-year plan which includes goal statements and objectives and tables identifying objectives, needs, activities, and mechanisms. Based on our review of information provided to us and from interviews conducted, we have designed a logic model to describe what we characterize as the major objectives of the program: ***developing new knowledge relating to pediatric emergency issues*** and ***supporting the incorporation of pediatric components in EMS (see*** Figure E-4).

Our logic model indicates that in order to achieve its objective, the program should engage in three distinct areas of effort or activities;

- EMSC provides grant funding to organizations such as state departments of health and or medical schools;
- The grantee uses the funds deliver service and to incorporate pediatric components into their EMS systems; and
- EMSC uses information about the grantees, their activity, outputs, outcomes and impacts to analyze and evaluate grantee performance and to identify new models of care and collaboration for pediatric emergency medical services.

Figure E-4
MCHB: EMSC Cluster



Currently, the program emphasizes grant-making and information dissemination. It does not have a comprehensive system for data collection, analysis, or evaluation.

c. Measurement Activities

Each EMSC grantee develops an evaluation component for its program. However, data collection and data coordination are not required by the program. Furthermore, no measurable outcomes have been developed. EMSC has published *Emergency Medical Servicesfor Children - Abstracts of Active Projects FY 1993. This* document provides descriptive information on each project including a statement of the problem, prcject goals and objectives, and evaluation methodologies. In addition, grantee contact information on each project is provided.

2. Assessment of Inputs

Appropriated funds for the program are clearly identified, and the legislative intent of the program is understood.

3. Assessment of Outputs

As indicated in the program logic model, there are three types of outputs, and each corresponds to a distinct area of program effort. Each of the outputs is linked to the inputs of the next.

- *Grunts are* the outputs of the program's grant-making process. Some descriptive information is available on each grantee.

- *Information dissemination* is an output of the grantee's activities. Grantees help to increase the transfer of knowledge to local EMS systems.

- *Increased Knowledge* of best practices and standards is the desired output from the program's analysis and evaluation of its activities and those of its grantees.

Descriptive information on each program is provided by the grantees. Information **dissemination** activities are carried out by two resource centers. EMSC fund the National EMSC Resource Alliance and the EMSC National Resource Center. The purpose of these centers is to organize and disseminate information, to provide technical assistance to grantees, and to assist new grantees in program implementation. The federal role involves coordination of EMSC functions, support of integration efforts, and development of program guidelines and objectives.

4. Assessment of Outcomes

Outcomes are not clearly identified or systematically measured by the program. In the following table, we suggest the types of outcomes and sample measures that would be appropriate to the grantee activities and outputs (intermediate outcomes) and the program analysis and evaluation activities and outputs (ultimate outcomes).

Activities	Outputs	Outcomes	Illustrative Measures
Grantee Information Dissemination	Information disseminated	Increased coordination of pediatric services	Compared to a baseline: • % of states with lead agency to identify and assess EMSC issues ♦ # of states with pediatric components in the State disaster plan
		Increased knowledge of best practices and standards	Compared to a baseline: • # states including pediatric emergency care topics in recertification exams ♦ # of residency program integrating pediatric EMS components
		Improved quality of care and care continuum	♦ # of hospitals having interfacility transfer guidelines for pediatric patients
EMSC Analysis and Evaluation	Knowledge about new models of care and collaboration for pediatric emergency medical services	Incorporation of knowledge into EMSC/grantee processes and activities	• # of times used • # of times use resulted in benefit (e.g.. increased effectiveness/efficiency)

5. Overall Assessment

The current structure and operations of the EMSC program conforms to the program logic model that we have proposed. While demonstration programs are implemented, program effort devoted to analysis and evaluation of the grantee activities is insufficient to allow the program to learn more about what kinds of demonstration programs are most effective in achieving their objectives.