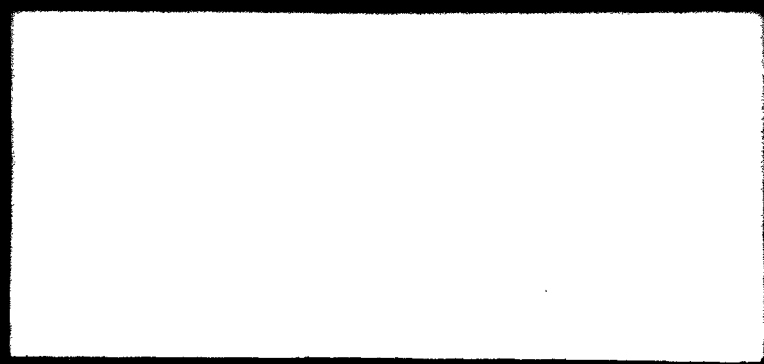


MACRO

macro systems inc.

EDC ID 1905 Yates

FINAL REPORT OF THE EXPLORATORY EVALUATION OF THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS (SECTION 784) PROGRAM OF THE HEALTH RESOURCES ADMINISTRATION

Submitted to:

Office of the Assistant Secretary for Planning and Evaluation
Department of Health and Human Services

Prepared by:

Martin Kotler
Lanny Morrison
Mary Savoy
David Homme

Macro Systems, Inc. May 30, 1980

TABLE OF CONTENTS

INDEX OF EXHIBITS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This exploratory evaluation of the General Internal Medicine and General Pediatrics (Section 784) program of the Health Resources Administration began in October, 1979 , and was completed in May, 1980.

The ultimate purpose of this effort, a precursor to a possible formal evaluation in the future, was to identify options for review by Federal policymakers and program managers that would make the program more effective and to identify data categories required to support future evaluation.

Procedures in implementing this exploratory evaluation called for a Work Group consisting of Macro Systems staff and several Federal personnel who, in a collegial manner, assumed responsibility for completing the required work. A Policy Group consisting of ranking Federal officials provided direction to this effort. Identification of members of each group can be found in Chapter IV.

1. TASKS PERFORMED

In order to achieve this purpose, four major tasks were completed:

Task l--Document The Intended Section 784 Program

This included identifying and reviewing pertinent documentation ; preparing and conducting interviews with Federal policymakers and program managers ; and developing logic models depicting legislative authorization, program inputs, and intermediate and long-term objectives.

Task 2--Document The Actual Section 784 Program

During this task, the Work Group reviewed grant files and associated documents; planned field visits to 10 sites; arranged, scheduled, and conducted visits to 10 medical schools throughout the nation, and interviewed 98 individuals representing 13 projects; prepared summaries of all the interviews; and developed function models of specific project activities encountered in the field.

Task 3--Analyze And Synthesize Information Collected

During this task, major issues were identified and analyzed; logic and function models were compared; indicators and measures for recording progress toward stated objectives were identified and submitted to the Policy Group for ranking: and a preliminary formulation of management/evaluation options was prepared.

Task 4--Refinement Of Models And Options

This final task called for refining the models and options subject to Policy Group review, structuring a plausibility analysis of the program, organizing and preparing the findings, and developing a final report.

2. SEVEN KEY ASSUMPTIONS UNDERLINE PROGRAM PLAUSIBILITY

In an analysis of the program's plausibility, the following seven assumptions were identified:

- Resources on the Federal and grantee level are adequate to the intended mission of the grant program
- Program objectives can be achieved regardless of the influence of external factors, such as the third-party reimbursement system
- The program adequately prescribes the necessary ingredients for residency training in primary care
- The grant review process has criteria and controls adequate to ensure the achievement of program intentions
- The program will result in a net increase of residents training in primary care
- The geographic distribution of Section 784 program graduates will differ from graduates of traditional internal medicine and pediatric training programs
- Graduates of Section 784 programs will be better able to practice primary care than graduates of traditional programs

For each of the seven key assumptions listed, Chapter I indicates options related to each assumption. An overriding impediment to measuring the effects of this program on postgraduate activities is the absence of an operationalized definition of primary care.

3. EVALUATION OPTIONS

Chapter I presents two basic evaluation options categorized as models for implementing collection of critical data and for outcome evaluation. Implementation of these models is a prerequisite to measure program progress toward the three identified goals for which the program is accountable:

- Increased numbers of general internal medicine and pediatric residency program graduates who specialize in primary care
- General internists and pediatricians are better able to practice primary care
- Practicing general internists and pediatricians are appropriately distributed geographically

The exploratory evaluation has described the program and its objectives from a Federal perspective; examined a sample of the projects in the field; compared the Federal intent with project reality; analyzed available and potential measures and indicators; conducted a plausibility analysis from which key assumptions emerged; and, finally, submitted management /evaluation options for consideration.

* * * *

The final report is organized into five chapters and series of appendices:

- Chapter I--Analysis of Section 784 Plausibility and Presentation of Management and Evaluation Options
- Chapter II--The Evaluability Assessment Approach
- Chapter III--Overview of the General Internal Medicine and General Pediatrics Program
- Chapter IV--Exploratory Evaluation Methodology
- Chapter V--Obstacles Encountered in Conducting the Exploratory Evaluation

Appendices

A. Reactions of the Policy Group to Materials Developed During This EA

B. List of Federal Personnel Interviewed

C. Content Analysis of Interviews with Policymakers and Program Managers

D. Content Analysis of Field Visit Interviews at General Internal Medicine and General Pediatric Projects

E. Function/Measurement Models of the General *Internal* Medicine and General Pediatrics Grant Program

F. General Internal Medicine and General Pediatrics Interview Guides and Summary Forms for Policymakers/Program Managers and Field Visits to Residency Training Projects

G. Program Documentation and Annotated Bibliography of Journal Articles Related to Primary Care

H. Performance Indicators

I. ANALYSIS OF SECTION 784 PROGRAM PLAUSIBILITY AND PRESENTATION OF MANAGEMENT AND EVALUATION OPTIONS

I. ANALYSIS OF SECTION 784 PROGRAM PLAUSIBILITY AND PRESENTATION OF MANAGEMENT AND EVALUATION OPTIONS

During the analysis phase of the Section 784 exploratory evaluation, an overriding issue that affects all aspects of the evaluability assessment was identified. This grant program seeks to train primary care practitioners in order to increase ultimately the availability of, access to, and quality of-primary care services, primary care is a term which has varied interpretations and definitions. There is no generally accepted definition as to what constitutes primary care. The Section 784 program uses a primary care defintion--the Health Resources Administration one--which is not operationalized, i.e., capable of direct measurement. Consequently, it is not presently possible to assess conclusively the attainment of program objectives, beyond determining the number of residents completing their training activities.

In the absence of an operationalized definition of primary care, it is difficult to measure the effects of this program on post-graduate activities. This complicates also the ability of program managers to give more specific direction to grantees regarding the skills, knowledge, attitudes, and practices residents should acquire through training (which has curriculum implications) and limits program manager ability to assess the shorter-term objectives of producing more primary care practitioners, better able to practice primary care. If an operationalized definition of primary care were developed, many plausibility and measurement issues would be eliminated or reduced. We propose this as a consideration when studying the issues, implications, and options presented in the following sections. Exhibit I presents a summary of the issues and options to address the issues.

1. ISSUES RELATED TO PROGRAM PLAUSIBILITY

In examining the plausibility of the Section 784 program, the Work Group has analyzed seven assumptions critical in linking various events and objectives in the program's intent. Arraying them according to their location on the logic model, seen in Exhibit II. These key assumptions are:

EXHIBIT i(1)

HHS, Office of the Assistant Secretary for Planning and Evaluation

SUMMARY OF OPTIONS

Assumption	Options	Financial Resources	Staff Resource Requirements	Time Requirements	Information Availability	Feasibility	Likely Impact
.esources on the Federal nd Grantee Level Are dequate to the Intended lission of the Grant rogram	Collect information on grantee resource utilization/needs	None	Program Analyst will be required for several person-weeks to structure data collection and analyze data	Could be accomplished in several months, with appropriate OMB Clearanc	Not presently in a comparable, aggregable form acros grantees	Highly feasible	Will increase knowledge regarding the adequacy of resources
	Develop mechanisms lo encourage resource development	Grant funds would be required to implement any such option	Additional staff time will be required if implemented	Will be required to implement in next available grant cycle	Not applicable	Unlikely to occur due to existing commitments on available grant funds	Possible impacts will take several years to filter down into a" increased number of applicants
	Expand eligibility to include other approved residency programs	The program will still operate within existing appropriation	Staff support will be required to review a" increased number of applications and possibly monitc an increased number of grantees	Uncertain because of the legislative process; however, applicants will have to await appropriate grant award cycle	Nor applicable	Current bill in Congress to do this, but legislative action is ""certain	Impact will be immediate upon implementation
rogram Objectives can Bc chieved Regardless of fluence of External actors, Such As the Third arty Reimbursement ystem	Increased reimbursement parity between hospital-based subspecialty services and ambulatory-based primary care services	Large scale increases in Medicare, Medicaid, and CHAMPUS expenditures will likely occur unless subspecialty services are simultaneously reduced	Not applicable	Assuming this were tied to some National Health Insurance bill, will likely take three years to become operational	ol applicable	Not likely to occur	Will mat directly impact the subspecialty maldistribution issue than any other option
Grant Review Process Has Criteria and Controls dequate to Ensure chievement of Program Objectives	Expand and make more specific data reporting requirements	None	Probably no additional staffing requirements; may, in fact, ease some of the staff's review responsibilities	Could be implemented in three to six months, depending on necessity of securing OMB approval	By definition, data are not resently available	Highly feasible, if focused on modifying application instructions	Will sharpen, somewhat, the review process since more comparable data across applicants will he available
	More pre-application technical assistance; option for technical assistance (TA) conference	On-site assistance will require additional resource for travel; TA conference option need "ot require additional funds	Staff lime will need to be allocated to implement this option	Depends on the scope of he activity but probably not extensive	Not applicable	On-site TA not too feasible due to limitation on travel funds; TA conference hfghly feasible	Will allow DM to make explicit "requirements" which cannot be put in regulations or guidelines
	Applicants appear for "oral" examinations during review process	None, assuming applicants will pay their own travel	Staff time will need to be allocated to assist in performing this option	Will be worked into existing review time frames	Not applicable	Potentially great difficulty I" integrating into existing NACHPE review process	Could be highly effective in pinpointing precisely what a" applicant intends to do

EXHIBIT I(2)

Assumption	Options	Financial Resources	Staff Resource Requirements	Time Requirements	Information Availability	Feasibility	Wkely Impact
Program Will Result in a Net Increase of Residents Trained 1" Primary Care	Collect data on residents training 1" primary care, irrespective of location or support	Will require funds for conduct of a survey at about one person-year of effort for each survey	Will require some staff time to organize and oversee survey	six months of effort to design and conduct survey and prepare report of findings	Probably no baseline data are available	Feasible but within the context of stated evaluation options	Will provide critical feedback on program impact
	Modify resident recruitment and selection requirements	None	Will require some staff time to modify grant guidelines or to plan for inclusion in TA conference	Two weeks	Not applicable	Highly feasible	May have no effect on the program depending on veracity of hypotheses
	Modify reporting requirements to allow for identification and tracking of residents in supported residency programs	None	Will require staff time to develop and administer this requirement	Unknown	Presently available at grantee institutions	Feasible, but may have some attendant Privacy Act and Freedom of Information Act obstacles to overcome	Will provide accurate determination of bow many residents are being supporte by the program
Geographic Distribution of Section 784 Programs Graduates in Practice will Differ from That of Graduates of Traditional Internal Medicine and Pediatric Training Programs	Collect information on postgraduate distribution of both cohorts	Will require funds for survey (See Evaluation Options)	Will require some staff time to organize and oversee survey	Minimum of two years after graduation before data collection can occur	Data not presently available	Feasible but within the context of broader evaluation option	Critical in determining program impact
	Establish requirement for training in health manpower shortage areas		Will require some staff time to modify program regulations and guidelines	standard time frame for regulation/guidelines change	Not applicable	Feasible but may be fought by grantee institutions	May have no impact if hypothesis is not prove"
Graduates of Section 784 Training Programs Will be Better Able to Practice Primary Care than Graduates of Traditional Programs	Develop "standards" for the practice of primary care	Will require substantial funds for developmental effort	Likely to be minimal since development will probably be through grant or contract	12 months	Not applicable	Likely not to occur	Could serve as basis for development of educational objectives of the program
	Collect data on graduates' performance	Will require funds for survey	Will require staff time to organize and Oversee survey	Several years of effort	Data presently do not exist	Impossible without "standards"	Critical to assess achievement of long-range program objectives
IMPLEMENTATION MODEL							
	Conduct technical assistance conferences	Probably no additional funds required	Staff time will need to be allocated to implement thls option	Depends on the scope of the activity but probably not extensive	Not applicable	Highly feasible	Will allow DM to make explicit "requirements" which cannot be put in requlations or guidelines
	Modify grant application requirements	Probably no additional funds required	Three to four person-months of staff time	Three to six months	Not applicable	Highly feasible if focused on modifying application instructions	Critical in determining what grantees are doing in a systematic, comparable way across projects
	Collect data through a survey of grantees	Likely to require one- and one-half person-years of effort for a sample of 25 grantees, per survey "wave"	Will require staff time to organize and oversee survey	Six to nine months	Data not presently available/comparable across grantees	Possible but will require OMB approval	Unclear since data may be subject to extensive sample bias

EXHIBIT I(3)

Assumption	Options	Financial Resources	Staff Resource Requirements	Time Requirements	Information Available	Feasiblity	Likely Impact
OUTCOME MODEL							
	.ongitudinal study (mail urvey) of a sample of graduates (with appropriate control group)	ikely to require two and ne half person-years of ffort for a sample of ,000 (500 graduates; 500 ontrols), per survey wave"	Will require staff time to organize and oversee survey	welve to 18 months per wave"	Data not presently available	Feasible if as opera- ionalized definition of rimary care can be eveloped	Critical in determining program impact

EXHIBIT II-(1)

HHS, Office of the Assistant
Secretary for Planning and Evaluation

GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROGRAM LOGIC

LEVEL I LOGIC MODEL

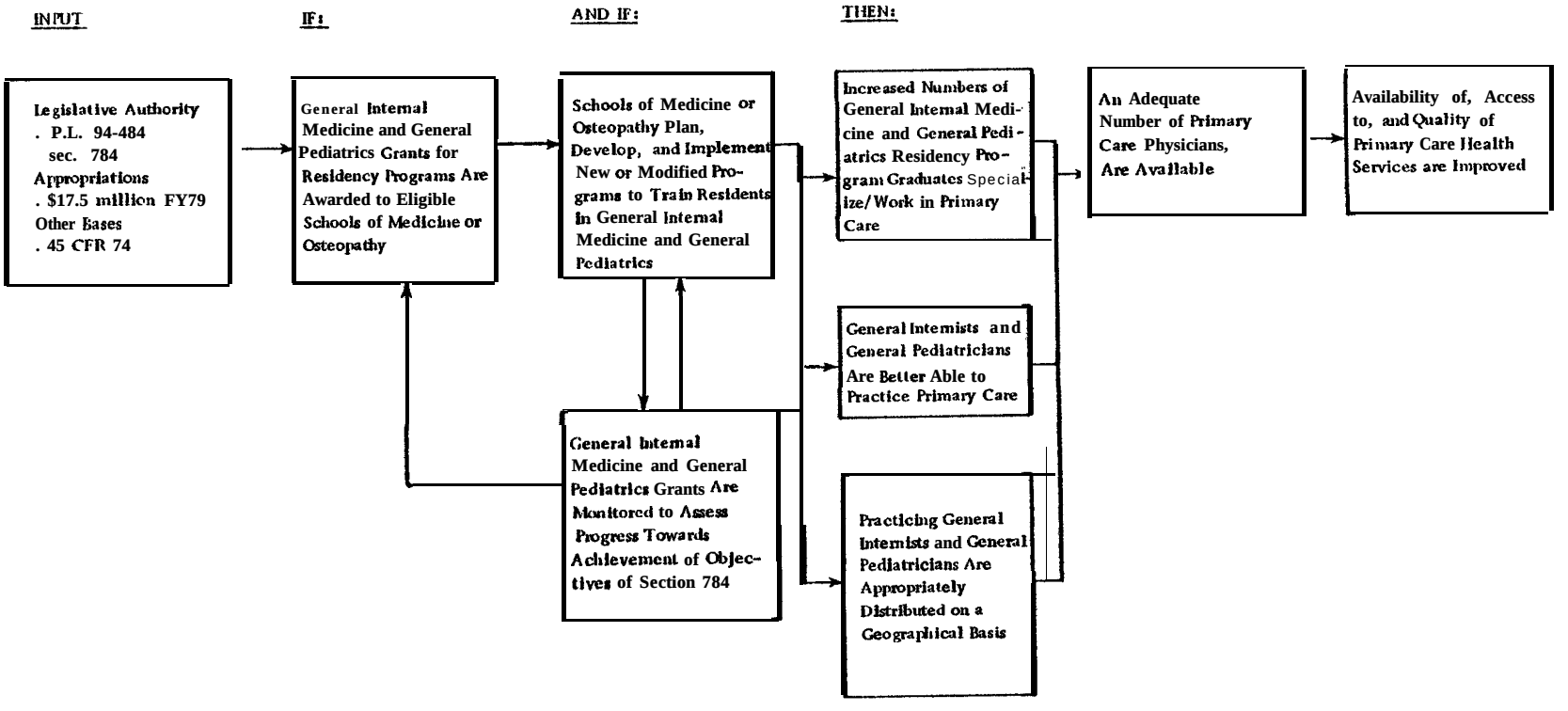
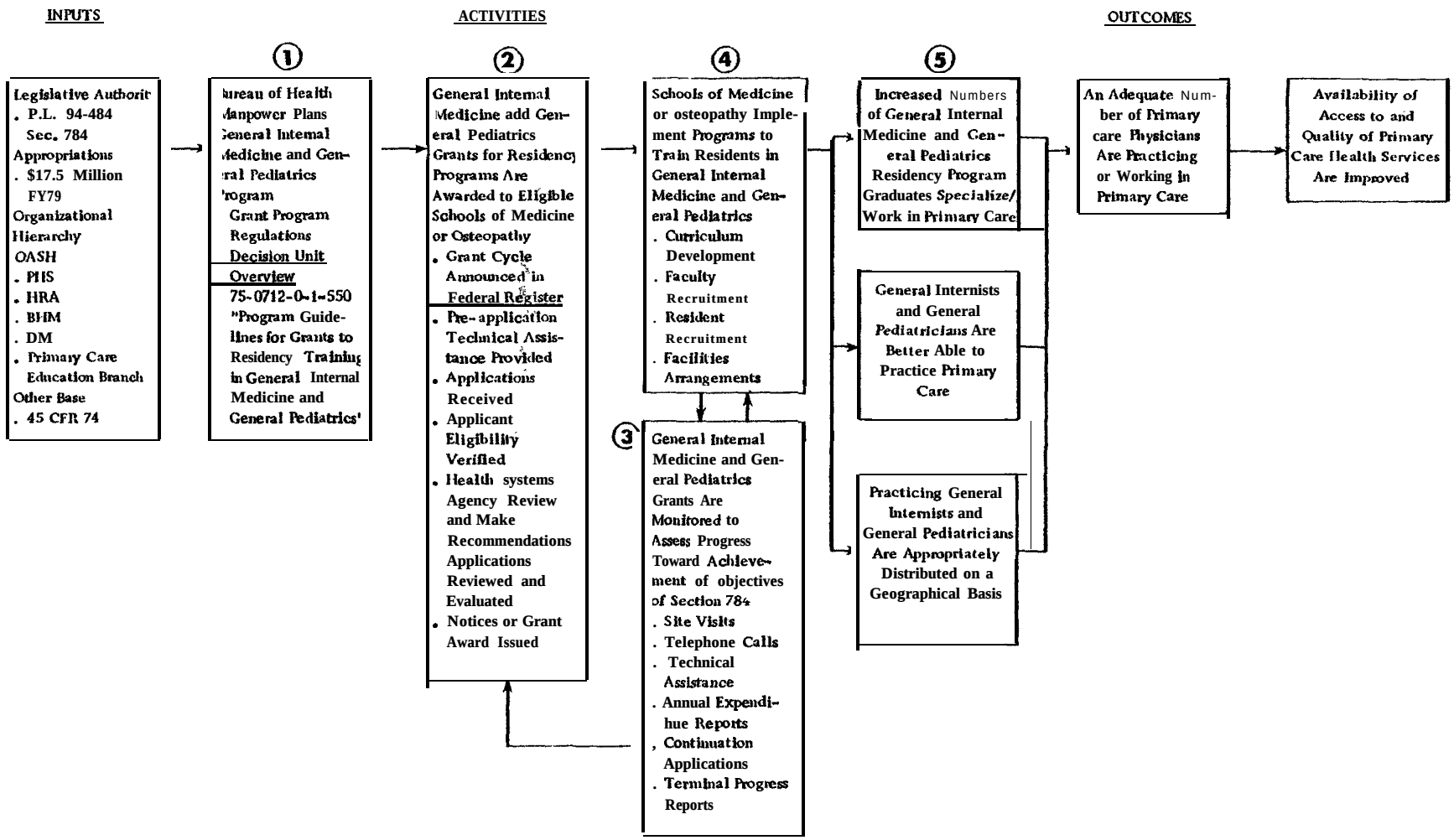
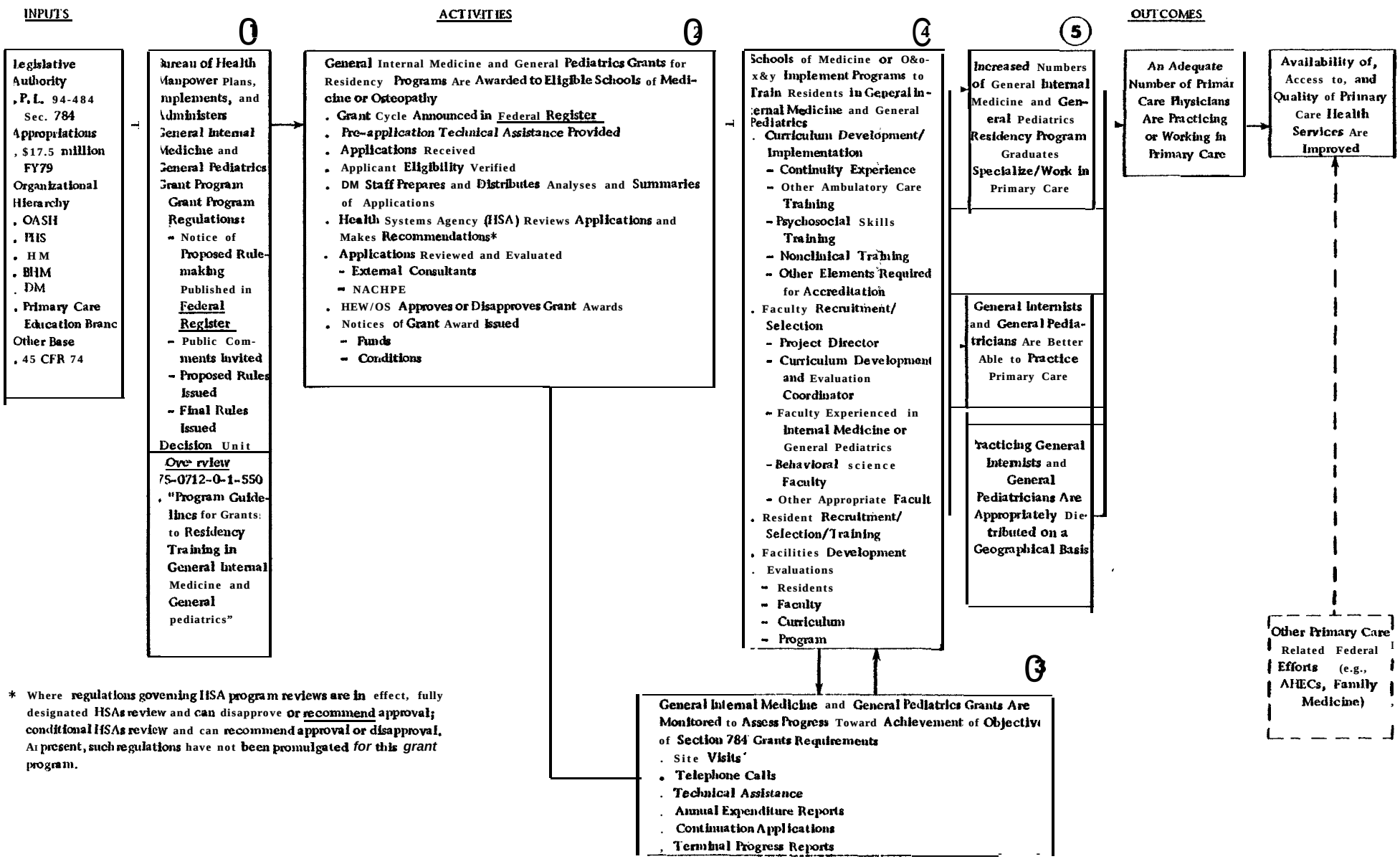


EXHIBIT II-(z)

LEVEL II LOGIC MODEL



LEVEL III LOGIC MODEL



* Where regulations governing HSA program reviews are in effect, fully designated HSAs review and can disapprove or recommend approval; conditional HSAs review and can recommend approval or disapproval. At present, such regulations have not been promulgated for this grant program.

INDICATORS/MEASURES FOR PROGRAM LOGIC

- Time required for planning/implementation activities
- Information base(s) utilized
- Criteria for decisions made

- Number and type of residency programs awarded grants
- Time/cost required for grant award activities
- Number and characteristics of funded approvals, unfunded approvals, and disapprovals
- Criteria for decisions made during grant award process

- Number and types of monitoring activities
  - Planned
  - Performed
- Number and types of recommendations resulting from monitoring activities
- Number and types of actions
  - Possible
  - Taken
- Number and percent of files containing evidence of monitoring activity

- Nature and content of curriculum, pre and post grant award
- Nature, content, and schedule of mandatory and elective curricular offerings required for accreditation and by the 784 Grant
- Degree to which grant requirements regarding curricular content are met
  - Continuity of care experience
  - Other ambulatory care training
  - psychosocial training
  - Nonclinical training
- Composition/characteristics of faculty
- Number of resident positions available
- Criteria used for resident selection
- Number of residents trained
  - Year 1
  - Year 2
  - Year 3
- Characteristics of residents trained
- Number of residents trained in primary care, pre and post grant award
- Number of residents graduated
- Resources available/needed for evaluation activities
- Number/types of evaluation activities undertaken, by year
- Number/types of changes attributable to evaluation activities

INDICATORS/MEASURES FOR PROGRAM LOGIC (Continued)

- Post-training activities of graduates over time
  - Number in practice
  - Number in primary care practice
  - Number in subspecialty practice
  - Number in research
  - Number in academic positions
  - Number in other activities
- Practice characteristics of graduates providing primary care over time
  - Setting
  - Modality
  - Location
- Activities/practice characteristics of program nongraduates over time
  - Number in practice; practice type (primary care, subspecialty)
  - Practice setting
  - Practice modality
  - Practice location
- Factors influencing activities of graduates and nongraduates over time

* These measures should also be utilized to compare General Internal Medicine and General Pediatrics graduates with graduates of traditional residencies.

- Resources on the Federal and grantee level are adequate to the intended mission of the grant program
- Program objectives can be -achieved regardless of the influence of external factors, such as the third-party reimbursement system
- The program adequately prescribes the necessary ingredients for residency training in primary care
- The grant review process has criteria and controls adequate to ensure the achievement of program intentions
- The program will result in a net increase of residents training in primary care
- The geographic distribution of Section 784 program graduates in practice will differ from graduates of traditional internal medicine and pediatric training programs
- Graduates of Section 784 programs will be better able to practice primary care than graduates of traditional programs

These assumptions are discussed below relative to their implications and linked to, recommended options to management.

2. ISSUES EMANATING FROM EVENT: BUREAU OF HEALTH MANPOWER PLANS, IMPLEMENTS, AND ADMINISTERS GRANT PROGRAM

This section presents analysis and management options for three assumptions relative to this event.

(1) Resources On the Federal And Grantee Level Are Adequate To The Intended Mission Of the Grant Program

In order to institute the Section 784 program, considerable resources should be in place or available to support implementation of the program. On the Federal level, this means that the level of Federal appropriations needs to be sufficient and staff must be available and appropriate to administer the program. At the medical or osteopathic school level, there are several issues bearing on the adequacy of resources:

- Are those entities eligible for Section 784 grants capable of providing settings appropriate to training in primary care?
- Are there sufficient faculty available who are experienced in the practice of General Internal Medicine and General Pediatrics?
- Are there enough residents interested in primary care to fill available training slots?
- Are other institutional resources, such as a representative patient population to utilize residents* services, and adequate to meet training needs?

It may be premature to attempt answers to some of these questions. Presently, and at the time of the program's inception, information pertaining to primary care education is not conclusive, is non-generalizable, and, often, is contradictory. There is no expert consensus or model approach to guide this program to success. Funding levels may or may not be adequate. Other questions ultimately may have to be answered before we can determine what resource levels are necessary to provide those elements and activities' necessary to accomplish program objectives. Yet, there are two basic inferences which may be drawn regarding the adequacy of program resources.

First, during this exploratory evaluation, it has become apparent that Federal-level staffing for this program is probably not sufficient to implement fully two key functions: monitoring and technical assistance. According to program,, logic, these functions are necessary to ensure that grantees implement required program elements, which are deemed precursors to achievement of program objectives. Preliminary, short-term studies of the expenditure of program resources (e. g . , staff time utilization, facilities usage, and budget allocations) should be performed to develop a basic understanding of how efficiently the program operates. Based upon such studies, probable program management options might include addition of staff, modification of the program's budget for greater support of underdeveloped management activities such as travel to enable monitoring, or streamlining time-consuming tasks.

Second, not only must resources be available and adequate at the Federal level, but the population of eligible entities must be able to provide sufficient faculty, residents, patients, facilities, and other resources to implement the

program. Although no conclusive statement is possible regarding the adequacy of grantee resources at this time, information collected from field visits and through interviews and documents review imply that there are probably sufficient appropriate resources available on the institutional level. Three distinct options exist with regard to these matters.

Options:

- Information can be collected to document the level of various resources applied to Section 784 program at each school. Information could also be collected regarding what resource levels are deemed necessary to fulfill grant requirements and, ultimately, achieve program objectives .

- Federal initiatives could be developed to encourage resource development . For example, more undergraduate and medical school emphasis on primary care could stimulate greater interest among prospective residents. This might also encourage primary care practitioners, necessary as role models for residents, to enter the teaching ranks, thereby building a cadre of faculty for the residency training programs. If more residents were interested in primary care and there were more primary care practitioners represented among faculty positions, schools *would be more likely to reorder priorities to meet the needs of primary care instruction so as to facilitate the achievement of program objectives.

- As Section 784 is enacted, eligibility is limited to Schools of Medicine and Osteopathy. This often results in training being based in tertiary care facilities (which may be contradictory to a primary care orientation) and limits the overall availability of resources. Expanding the eligibility base to include other approved residency programs, for example, approved community-based programs, would increase resources availability, particularly that of non-tertiary care settings.

(2) Program Objectives Can be Achieved Regardless Of The Influence Of External Factors, Such As The Third-Party Reimbursement System

The educational process in which residents are involved is assumed by the logic of this program to be a significant factor affecting career choices The literature on the subject of career choices in the health manpower field. includes this factor and many others. A prominent factor mentioned in the literature, and noted in our interviews and field visits, is the economic incentive surrounding a career selection. For example, the third-party reimbursement system currently provides greater compensation for subspecialist services,

provided in inpatient facilities. Services performed on an ambulatory basis by primary care physicians are reimbursed at considerably lower rates. To select primary care as a career is a clear choice for less income than subspecialist physicians. Although this issue does not fall under the direct purview of the program, consideration of it is important to assessment of the potential for ultimate program successes, primarily because of its presumed effects on faculty and resident recruitment.

If income potential is a predominant determinant in career choice for physicians, the Section 784 program may not be able to achieve its objective of impacting specialty maldistribution unless federal third-party reimbursement policies are changed. Thus, a basic option necessary to affect specialty maldistribution would be 'to enact legislation pertaining to Medicare, Medicaid, and CHAMPUS to facilitate greater reimbursement parity between hospital-based subspecialist services and ambulatory setting-based primary care services.

(3) The Program Adequately Prescribes the Necessary Ingredients For Residency Training In Primary Care

The regulations and guidelines for the Section 784 program portray a general concept of what primary care training should be. Except for the percentage of time requirements for the continuity of care experience, there are not specific and detailed requirements for resident training. In general, there is no consensus in the field regarding what it takes to make a general internist or general pediatrician--a position reflected in the regulations and guidelines. The general nature of the Federal requirements limits direction to the field and may reduce the likelihood of attainment of program objectives. This will likely impair attempts to attribute results of the program because cause and effect relationships require an ability to directly measure and relate variables with results. However, the state of the art of primary care is far from being fully developed and it would be premature to attempt construction of an "absolute" model. Attribution studies may have to await the further maturation of the field of knowledge. There are actions, however, management can take that could result in improved clarity of direction to grantees.

Options

- Specific information could be collected from grantees about how they would/are instituting aspects of training addressed in the regulations and guidelines.
- Examples of approaches to training among grantees could be shared and feedback obtained.
- Grantee opinion of the importance of various aspects of the "primary care" requirements could be assessed.
- From information collected, and the feedback obtained grantees, regulations, and guidelines might be modified.

3. ISSUES EMANATING FROM EVENT: GRANTS TO RESIDENCY PROGRAMS ARE AWARDED

This section presents analysis and management options for a single assumption related to this event.

(1) The. Grant Review Process Has Criteria And Controls Adequate To Ensure Achievement Of Program Intentions

Because of the dearth of detailed, specific educational objectives for the Section 784 program, it is difficult to judge accurately the effectiveness of the grant award process. Reviewers must rely on general guidelines; ultimately, it is the professional judgments of the reviewers that determines an applicant's rating. Some changes in regulations and guidelines have been suggested already and others will emanate from the discussion of other issues; such changes may improve the grant award process. In the absence of these changes, more spe-fic information from grantees when applying for example, could increase the effectiveness of the grant award process.

Options:

- Data reporting requirements for grantees could be expanded and made more specific.
- More pre-application technical assistance to potential grantees in development of applications, particularly regarding the Federal intentions for the primary care requirements, could be provided.

- Data reporting requirements for grantees could be expanded and made more specific.

- To enhance the quality of information available during the grant award process, grantees could be required to be available to provide desired information to reviewers. This might be accomplished through potential grantees appearing for "oral" examinations during the review or through pre-award site visits performed by program staff.

4. ISSUES EMANATING FROM EVENT: SCHOOLS OF MEDICINE OR OSTEOPATHY IMPLEMENT PROGRAMS

This section presents analysis and management options for three assumptions related to this event.

(1) The Program Will Result In A Net Increase Of Residents Trained In Primary Care

A program expectation is that there will be an increase in the overall numbers of residents trained in primary care. This expectation is affected by several variables, including which students and residents are being recruited and whether the program has evoked greater interest among students and residents who might not otherwise pursue primary care training. It is not clear at present whether all residents trained under the auspices of the Section 784 grant program are truly interested in practicing primary care. Nor is it clear that residents trained in primary care through this program would not have sought training in primary care in the absence of the grant program or would not have entered primary care activities after traditional training. It must also kept in mind that increasing the total numbers of residents training in primary care at an institution is not required for grantees. Information could be collected to assess these variables and management options may be exercised to increase the likelihood of increasing the overall numbers of residents trained in primary care.

Options:

- Data may be collected from grantee and other institutions (retroactively and longitudinally) to determine the actual numbers in primary care training, regardless of program origin or sponsorship.

- Resident recruitment and selection requirements could be modified to address more strongly the need for "appropriate" candidates and the expectation of an increase in total numbers trained. Specific funding preferences could also serve this purpose, e.g.. , a preference being given for the utilization of a separate NRMP number.

- Reporting requirements could be modified to allow for specific identification and tracking of residents.

(2) The Geographic Distribution Of Section 784 Program Graduates In Practice Will Differ From Graduates Of Traditional Internal Medicine And Pediatric Training Programs

Two assumptions underlie the expectation that the grant program will impact the geographic distribution of practitioners. First, by exposing residents to training settings in health manpower shortage areas, it is expected they will be more inclined to practice in such settings. Second, it is also assumed that because general practitioners seem to distribute themselves differently, geographically from other medical practitioners, graduates of General Internal Medicine and General Pediatrics programs will follow suit. The former assumption is partially supported by the use of a funding preference for training provided in health manpower shortage areas but requires study to determine its veracity. The latter assumptions awaits longitudinal study to determine whether the hypothesis is supportable.

Options:

- Information could be collected to allow for post-graduate comparisons across groups regarding the geographic distribution of practicing graduates.

- Requirements or funding preferences could be modified to better ensure exposure to training settings in health manpower shortage areas, assuming of course, that the hypothesis is either proved or deemed to be well-founded.

(3) Graduates Of Section 784 Training Programs Will Be Better Able To Practice Primary Care Than Graduates Of Traditional Programs

There are no current standards for the quality of primary care. The expectation that graduates will practice better primary care, therefore, cannot

be tested until standards are constructed. This is tied closely also to the lack of stated educational objectives for the program, to which standards would presumably be related. Collection of information on graduate practice characteristics may, in the long term, provide the necessary input to standard setting--in lieu of separate "boards" for general internal medicine or general pediatrics.

5. OPTIONS FOR EVALUATION OF THE SECTION 784 PROGRAM

As we noted previously, there are a number of management options that focus upon information collection. This section combined these alternatives with agreed-upon information requirements to present specific evaluation options. The two evaluation options described below are stated in the form of models for data collection and for evaluation purposes. Overall, we have found the program to be evaluable except that an operationalized definition of primary care needs to be developed as a prerequisite to longitudinal study of post-graduate activities of residents .

(1) The Implementation Model (Data Collection)

The structure of the implementation model is based on the following: Who is doing what to whom, where, and how much of the time? The model is designed to obtain comparable and detailed information on the residency programs, in addition to information presently collected using one or more of the three following options for collecting the data:

- Conducting a technical assistance conference(s) on how to put together a "good" application by emphasizing points to be addressed in the application, relating to required data elements for evaluation.
- Modifying grant application requirements or grant guidelines to require reporting of the information specified below. This may be accomplished by either changing the instructions for Form 2499 or seeking OMB approval for modification of the application.
- Conducting a survey of the universe or sample of grantees to collect the data specified.

The WHO considers both faculty and residents. The faculty element would include:

- Identification Of Role Models--Grantees would identify what they consider to be a good general internist or general pediatrician role model for residents of this program and how many such models are currently on the faculty (or are expected to be), performing what functions and for what amount of time.

- Faculty Positions--Grantees would identify additions and deletions to the faculty that are supported in any way by the program, the qualifications of additional faculty, what functions they are (or will) performing, and for what amount of time.

The resident element would include:

- Recruitment And Selection--Grantees would provide the Division of Medicine with the following materials at the end of each year:

  The applications form used
  The brochures distributed describing the program
  Sample of the letter of acceptance distributed

- Number Of Residents--Grantees would provide the Division with. the following information at the end of each year:

  The number of applicants

  The number of offers made

  The number, of acceptances

  The number of residents, by year

  The number of residents moving from Year one to Year Two and from Year Two to Year Three

  The number of residents who left and where they went

  The number of graduates ;their immediate plans, including practice locations

- Faculty /Resident Interactions--Grantees would identify the availability of faculty to residents and the natures of the availability, 'e.g., case conferences or seminars, for different faculty types, for each year or residency. These data would be reported in continuation applications.

The WHAT and TO WHOM are closely tied and will be considered as an integral unit, with the following elements:

- Continuity Experience--Grantees would be expected to address the following as part of applications:

  How will each resident be assured of a panel? (new competing applications would be required to specify the above)

  What is the optimal size and actual, average size of each patient panel? (new competing and continuation applications)

  What is the mix, on the average, of the patient panels, including the kinds of presenting problems and socioeconomic and other demographic characteristics? (continuation applications)

- How are the following situations handled: (1) panel member's unscheduled clinic visit when the resident is not present; (2) after hours coverage for the panel; and (3) panel member's hospitalization off the resident's assigned inpatient rotation? (continuation applications)

  Of the total continuity time, how much time, and the percentage thereof, is devoted to direct intervention with panel patients? (continuation applications)

- Psychosocial Aspects--Grantees would be expected to address the following as part of the application:

  To what extent are psychosocial personnel available to residents?

  How much direct clinical exposure will providers of psychosocial services offer to residents?

  How are psychosocial aspects otherwise addressed in the curriculum?

The WHERE considers the following. elements regarding, each training site:

- Each site should be described as to size, number and characteristics of patients, and occupancy or utilization levels.

- If there are multiple sites involved, how are they integrated into a program that will meet continuity requirements?

All of the above information would be obtained specifically for the primary care track supported by the Section 784 grant. However, it may be important to obtain similar information on all internal medicine and pediatric programs at each funded institution to determine if the grant is supporting new activities as opposed to maintaining old ones.

(2) The Outcome Model

By agreement with the Policy Group, measuring the attainment of program objectives will focus on only three objectives: Increased Numbers of General Internal Medicine and General Pediatrics Residency Program Graduates who specialize in Primary care ; General Internists and General Pediatricians are Better Able to Practice Primary Care ; and Practicing General Internists and General Pediatricians are Appropriately Distributed on a Geographical Basis. Therefore, the outcome model considers the longitudinal study of Section 784 program graduates regarding their "practice" activities. In order to isolate the effects of the Section 784 program, longitudinal study of a control group is required. Four possible cohorts to comprise a control group include:

- Drop-outs for Section 784 supported residencies
- Graduates of traditional tracks at Section 784 supported institutions
- Graduates of Internal Medicine and Pediatrics programs form institutions not supported by Section 784
- Graduates of Family Medicine residency programs

The earliest point following graduation at which information should be collected is two years--to allow for the inclusion of graduate experience of minimal time commitments to the National Health Service Corps, yet sufficient in time to build an ample size database. At that time, the following information would be collected on a sample of graduates and the control group:

- What are they currently doing?

  Practicing?
  Academic medicine?

Research?
Other?

- If they are practicing, where?

  Location?
  Setting, e.g., hospital?
  Modality, e.g., solo versus group practice?

- How is the practice characterized, predominantly?

  Primary care vs. subspeciality care?
  In-hospital care vs. outpatient care?

- Did they go on for subspecialty training?

  Subspeciality?
  How long?

- If they are doing something other than practicing, what (precisely)? Can it be classifiable as primary care-related?

The practice characterization requires some operationalized definition of primary care.

Ultimately, the longitudinal study will attempt to isolate those factors influencing graduates and control group members over time, as follows:

"Practice" Characteristics = f (Human Capital Theory, Trickle-Down Theory, Resident Recruitment and Selection, Curriculum Clinical Experience, Faculty Role Models, Cost of Training, Personal Factors, and Other factors)

Where,

1. Human Capital Theory refers to economic motives
2. Trickle-Down Theory refers to subspecialist saturation of the marketplace

Data collection options include: (1) in-house study by the Division, (2) a contract or grant to perform the study, and (3) requiring grantees to perform follow-up studies of graduates, with either 1 or 2 used for the control group.

II. THE EVALUABILITY ASSESSMENT APPROACH

II. THE EVALUABILITY ASSESSMENT APPROACH

Exploratory evaluation, or evaluability assessment (EA) as it is sometimes called, is one methodological approach to the continuing dilemma Federal policymaker program managers face in responding to congressional or other demands to demonstrate that an ongoing program is effective and reduces or eliminates the problems it addresses. As funding levels tend to diminish or plateau, the demand for accountability and proof of results increases dramatically.

Historically, large-scale formal evaluation efforts have been used to address the efficacy of program initiatives. Usually at great expense inreal dollars and staff time, such evaluations have led to "conclusions" which frequently had limited relevance to program realities or were completed too late to be of use to program managers and policymakers. Overall, program activities did not benefit, Because of these shortcomings in evaluations, an impetus has grown to develop and implement an evaluative approach which would not be as costly, yet would produce timely, useful information, and act as a valuable precursor to formal evaluations. Such an approach has become known as evaluability assessment (EA).

EA is a technique to address directly those issues which impair program design, impede program managers implementation efforts, and limit the value of large-scale evaluation. Four typical conditions have been identified which hamper evaluation efforts.

- Inadequate or vague definition of the program
- Insufficient delineation or understanding of the assumptions underlying program
- Inadequate identification and agreement on indicators to measure program performance

- Insufficient specification of the uses of evaluation information

E-A addresses -these conditions by examining the design of a program to determine if:

- The program input and description are well defined
- The intent and description are concurred with by policymakers
- The description is a valid representation of the program activity actually being carried out
- The expected results of the program are plausible, given program activities actually being implemented
- The evidence required to support the description is reliable and cost-feasible
- Management% expected uses of evaluative information are realistic

Upon addressing these issues, an initial decision can be made regarding the likelihood of program success and the usefulness of evaluation information.

The EA approach begins with documenting the "intended" program based on review of documents and literature pertinent to the program and interviews with key Federal program managers and policymakers knowledgeable about the Program . From these sources of information, a description is developed which includes the :

- Enabling legislation
- Governing regulations and guidelines
- Resources
- Program activities
- Objectives

These elements of the description are arrayed in a sequence representing the "logic" of the program, e.g. , if resources are allocated to the program and if specific activities are implemented, the specific objectives may be achieved. In

collaboration with program managers, the program description undergoes review and modifications until one or more "models" of program logic are produced upon which there is concurrence that they represent what the program is intended to be. Additional descriptions (function models) are developed to depict more specifically the activities necessary to be implemented to achieve program objectives. For these models and the models depicting the program logic, points at which measurements may be taken are identified to determine whether activities have been implemented and objectives achieved and, to the extent possible, specific indicators or measures of performance are delineated.

Following the description of the intended program, the actual program is documented by examining activities underway in the field. This examination is done by making site visits to funded program entities in the field and reviewing pertinent documents on program operations, e.g. grant applications. Models are developed, again in collaboration with program staff, which depict the actual structure and process of these activities actually underway in the field. Information regarding problems, successes, needs for resources, evidence of accomplishments is also collected for future use in the analysis of program operations.

An underpinning of the EA approach is that the descriptions of both the program rhetoric and the program reality are reviewed with Federal policymakers and program managers. Based upon their feedback, the descriptions are modified to reflect a portrayal of the program concurred with jointly by policymakers and program managers.

After data have been collected and models have been developed, an analysis is begun. This examination results in conclusions about the logic of the program, the viability of program operations, and congruence between the program intent and the program reality. Specifically, this analysis seeks to determine:

- Are there activities in place that are likely to achieve management's objectives, and expectations?
- What portion of the program is ready for useful evaluation?

- To what extent are program managers and policymakers able to change program activities or objectives based on evaluative information?
- What evaluation or management options would enhance program performance, i.e., the likelihood of achieving program objectives?

Comparisons of the actual and intended programs partially addresses the first question--are the expected activities occurring and are they adequate? Then, a decision is made regarding whether it is plausible to expect these activities to achieve the objectives. Factors that may undermine the plausibility of the program include:

- Lack of resources
- Unrealistic expectations
- Lack of theory or knowledge indicating there is a causal relationship between program activities and the expected program outcomes
- Lack of evidence that specific program activities are actually underway

Through the abovementioned comparisons and analysis of the information collected, the presence or influence of any of the above factors is identified and a determination of plausibility is made.

A determination then -must be made regarding which portions of the program are ready for useful evaluation. Assuming the program is plausible, the portions ready for evaluation are those for which:

- There are feasible sources of data
- Management has defined realistic and meaningful performance indicators
- Management has defined the uses of evaluative information

From issues identified with respect to the program logic and the plausibility and measurement of the program, options arise for improving program

performance and **evaluability .** The options may take the form of either suggested actions management may take to alter, the program or recommendations regarding data collection and evaluation. These options can lead management to:

- Further define or modify program objectives
- Further define or modify program activities
- Modify program management practices
- Develop new program activities
- Further define or modify performance measures' or develop new ones
- Adopt strategies for future data collection
- Develop a design for more intensive evaluation

Once a full array of options are developed, they are reviewed with policymakers and program managers. Modifications of the options may be made based on new 'information or further clarification of policymakers' and/or managers' concerns. The modifications may include, for example, adding performance measures, changing activities, or eliminating the measurement of certain objectives . After the necessary revisions to the analysis and options, plans for implementing selected options are developed collaboratively. The ultimate result of an evaluability assessment is a final report to assist management to establish conditions necessary to ensure the likelihood of program success and to develop an evaluable program description.

III. OVERVIEW OF THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROGRAM

III. OVERVIEW OF THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROGRAM

Over the past 10 years, much attention has been focused on increasing the number of general practitioners in order to counterbalance the escalating interests of medical graduates in sub-specialization. Health planners and law makers have developed initiatives to increase the access to and the quality and availability of primary care services (often equated with the services provided by general practitioners), particularly to residents of health manpower shortage areas and medically underserved areas.

The General Internal Medicine and General Pediatrics Grant Program for Residence Training, authorized by Section 784 of the Health Professions Education Assistance Act of 1976 (P .L. 94-484), is one such initiative and provides assistance for the support of residents' training who plan to specialize or work in the practice of general internal medicine or general pediatrics. The basic intent of the program is facilitation of graduate medical education which focuses on continuity, ambulatory, preventive, and psychosocial aspects of health care. Additionally, training is to be provided which broadens the graduates' ability to plan and manage their continuing education and to interact better with factors intrinsic to their practice locales. Grant funds are to be used, to support the creation of new positions/training programs as well as to assist conversion of "traditional" training programs to primary care. Specific activities of the program are managed at the Federal level within the Department's Health Resources Administration (HRA) by the Bureau of Health Manpower (BHM), and are executed at the local level through grant awards to qualified training institutions (i.e., Schools of Medicine or Osteopathy).

Currently, the Bureau supports and manages 91 grant entities which reflect a variety of emphases within a broad framework established by program regulations and guidelines. The basic elements of this framework include:

- Specified staff requirements
- Procedures for resident recruitment and selection
- Requirements for the number and distribution of residents
- Required training experiences and educational offerings

  Continuity of care experience
  Other ambulatory care training
  Topics on psychosocial aspects of health care
  Non-clinical topics (e . g . , office management)

- Evaluation requirements

1. DESCRIPTION OF THE PROGRAM

The General Internal Medicine and General Pediatrics Program is described in this EA through logic models which display a series of sequentially ordered events and objectives representing the Federal perspective of the program is intended to and through function models which display a defined set of activities that operationalize events in the program logic. Discussions of both models are presented below.

(1) Logic Models

The logic of the General Internal Medicine and General Pediatrics Grant Program can be found in Chapter I. This model, constructed in levels of increasing detail, displays the inputs to the program; the events comprising overall program activities ; short-term objectives intended to be realized directly through the grant program; and long-term objectives or outcomes which are intended to be accomplished by the activities of the Section '784 Program when combined with other Federal initiatives related to primary care. The arrows connected boxes in the models represent causal relationships or underlying assumptions linking events . Performance indicators/measures are also identified which specify points at which evaluation data can potentially be collected as well as the specific data to be obtained.

At the most detailed level of program logic (i. e., Level III) , the inputs identified include : (1) the legislative authority of the Health Professions

Education Assistance Act and Section 784 which authorizes this program; (2) the program's appropriations for the most recent fiscal year ($17.5 million for FY 1979); (3) the 'organizational -hierarchy through which the program is implemented and managed; and (4) the applicable regulations governing allowable costs and cost principles under the grant mechanism (45 CFR 74).

The first event presents activities necessary for the Bureau to plan, implement, and administer the grant program: (1) development of program regulations; (2) preparation of the Zero-Based Budgeting document, the Decision Unit Overview; and (3) preparation of program guidelines to inform grantees of requirements for project-level operations and to present guidance for development of grant applications. Potential evaluation data can be collected about this process, as is indicated by measurement point 0. These measures are presented on the Indicators/Measurement sheet attached to the logic model.

Assuming that the planning and procedural activities have taken place, the second event is the award of grants to eligible training institutions. The relevant activities include: (1) announcement of the grant cycle in the Federal Register; (2) provision of pre-application technical assistance by the Bureau; (3) receipt of applications; (4) verification of applicant eligibility; (5) preparation and distribution of analyses and summaries of applications; (6) review of applications by Health Systems Aencies (HSAs); (7) completion of peer and -merit reviews by external consultants and the National Advisory Council on Health Professions Education; (8) approval or disapproval at the Department level; and (9) issuance of Notifications of Grant Award. This event represents quite an extensive process (its activities are depicted in Exhibit III, Function/ Measurement Model of the Grant Award Process for the General Internal Medicine and General Pediatrics Grant Program). Measures indicated at this point in the logic model are explicated further on the function model.

Assuming that grants have been awarded to eligible and qualified training institutions, the next event is program implementation of grant activities by Schools of Medicine or -Osteopathy. There are five basic activities associated with this event: (1) development and implementation of the curriculum; (2)

recruitment and selection of faculty; (3) recruitment, selection, and training of residents; (4) development of necessary facilities; and (5) conduct of required evaluations. In examining this event during the EA--that is, in documenting the actual program--numerous function models were developed. These were used as tools to facilitate the plausibility analysis and to derive measurement points and measures for project-level activities. The various function models and measures are included either in the following section of this chaper or are appended to this report. Aggregated measures from these models are indicated here as measurement point ④.

Assuming that projects implement their granst according to the guidance provided., short-term program objectives are to be realized. These goals, represented by three events displayed in vertical boxes on the logic model, have been identified as directly attributable to activities of the General Internal Medicine and General Pediatrics Grant Program. They include: (1) increasing the numbers of program graduates who specialize or work in primary care; (2) enabling general internists and general pediatricians to be better able to practice primary care; and (3) appropriately distributing practicing general internists and general pediatricians geographically. Measures for these goals are indicated by measure point ⑤. Attainment of these objectives is to lead to outcomes to which this grant program contributes; namely : (1) production of an adequate number of primary care physicians who practice of or work in primary care; and (2) improvement in the availability of, access to, and quality of primary health care service. Since achievement of these longer-range outcomes are not specific to the Section 784 program, no measures have been identified.

The grant monitoring event is depicted in this model as an information source and as a means of ensuring grantee compliance with applicable program requirements. The methods by which monitoring occur for the 784 Grant Program are depicted here. The arrows indicated principally reciprocal information exchnages between the Bureau and the grantees to provide factual data for review of continuation applications. Specific activities and measures explicating the grant monitoring event are shown in Exhibit III, Function/Management Model for Grant Monitoring Process, Aggregated measures are presented as measurement point ③.

(2) Function /Measurement Models

Function/measurement models were prepared to depict key events occurring at the Federal level and project-level activities that distinguish the General Internal Medicine and/or General Pediatrics training from training provided to residents in traditional tracts, Exhibits III through VIII include models displaying functions associated with :

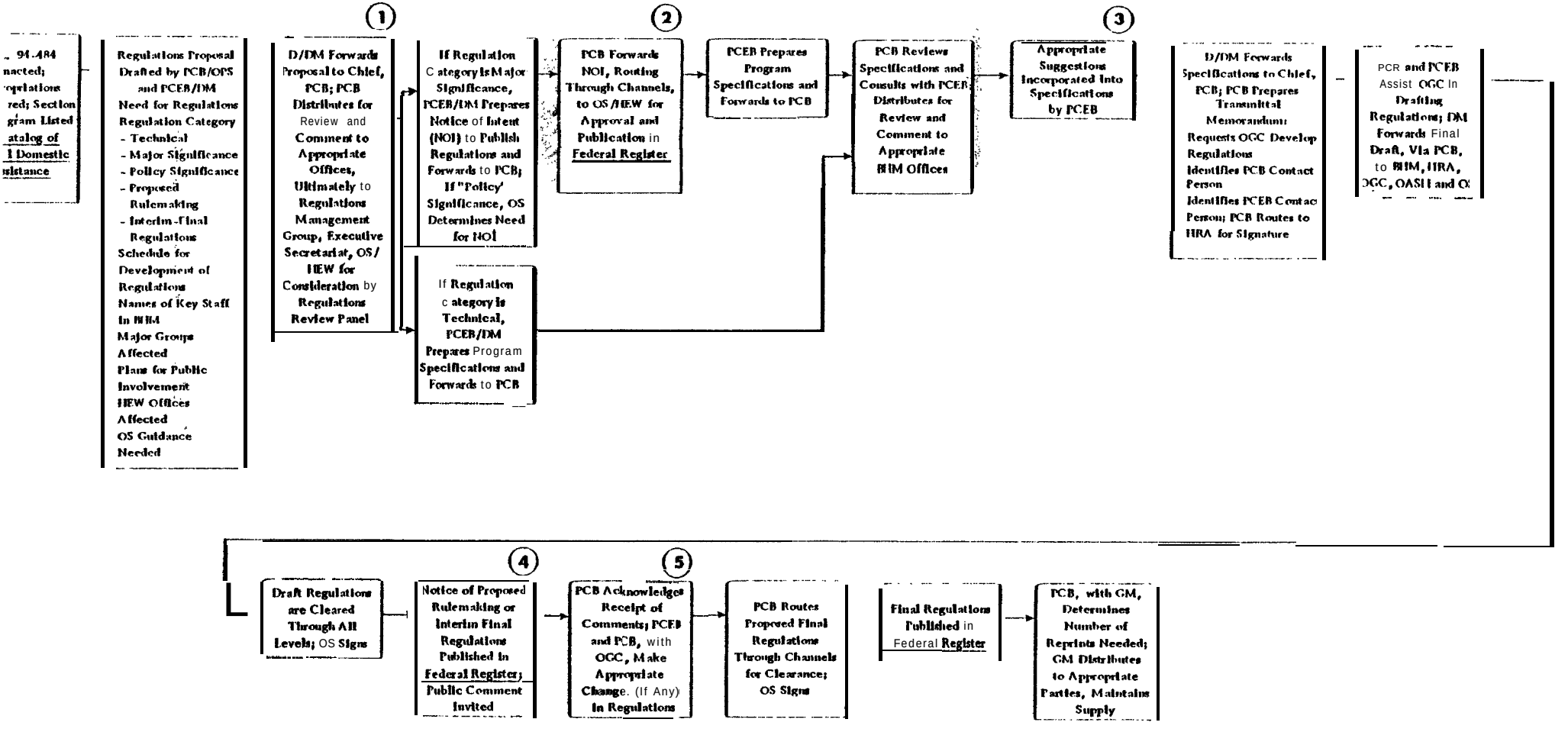
- Development of Grant Program Regulations
- Grant Award Process for the General Internal Medicine and General Pediatrics
- Grant Monitoring Process
- Project-Level Activities of the General Internal Medicine and General Pediatrics Grant Program
- Resident Training in General Internal Medicine and General Pediatrics
- Evaluation Activities at General Internal Medicine and General Pediatrics Projects

Models of various other aspects of the training experience were also developed and are include as Appendix E. Activities reflected these latter function models include :

- Redicent Recruitment and Selection
- Continuity of Care Training
- Continuity of Care Provided to Ambulatory Patients During Secheduled Clinic Visits
- Continuity of Care Provided to Ambulatory Patients During Unscheduled Clinic Visits
- Continuity of Care Provided to Ambulatory Patients after Clinic Hours
- Continuity of Care Provided to Ambulatory Patients Requiring Hospitalization

Measurement points and measures are also included on each of the function models. Measurement points indicated on the logic model discussed earlier include significant measures identified in various functions.

FUNCTION/MEASUREMENT MODEL OF DEVELOPMENT OF GRANT PROGRAM REGULATIONS



INDICATORS/MEASURES FOR DEVELOPMENT OF GRANT PROGRAM REGULATIONS

01 ▪ Routing locations
. Review panel criteria/guidelines

02 Routing locations

03 Criteria determining comments' incorporation

04 Process for soliciting public comment

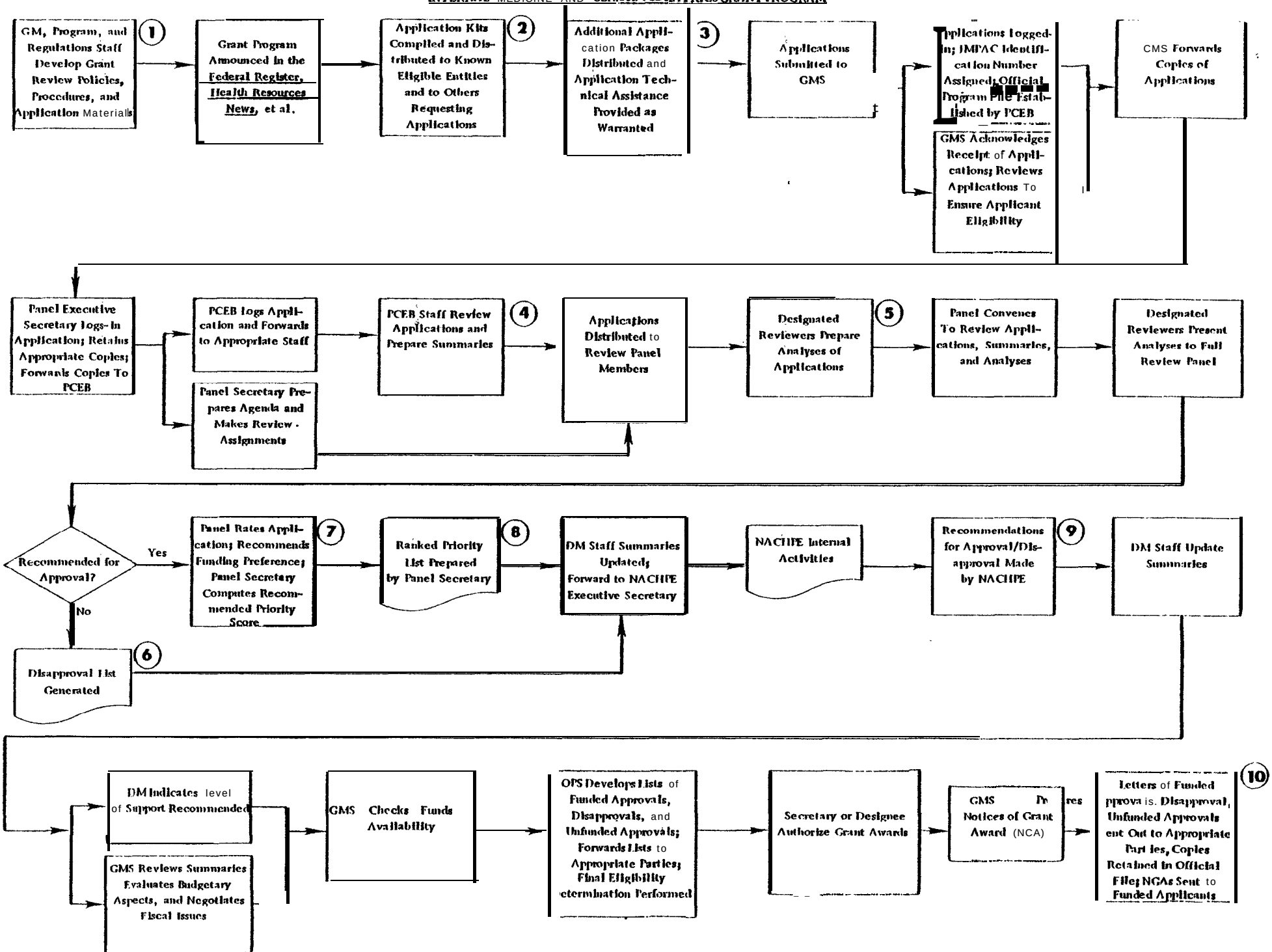
05 ▪ Volume of comments received
. Criteria determining comments' incorporation

Overall Measures:

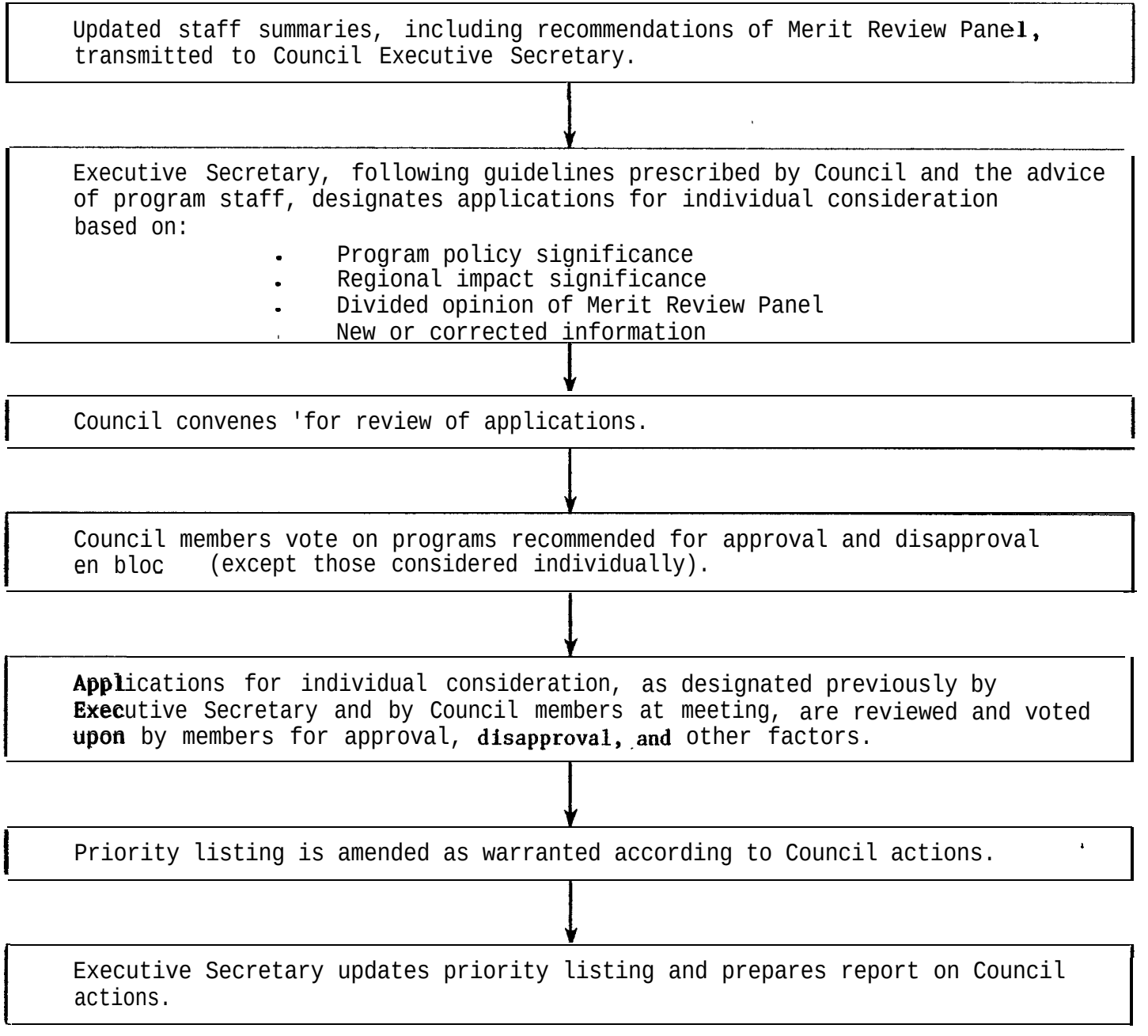
• Time required for activities
. Information base(s) utilized

FUNCTION/MEASUREMENT MODEL OF THE GRANT AWARD PROCESS FOR THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS GRANT PROGRAM

EXHIBIT IV-(1)



INTERNAL ACTIVITIES OF NATIONAL ADVISORY COUNCIL ON HEALTH PROFESSIONS EDUCATION: GRANT REVIEW



INDICATORS/MEASURES FOR GRANT AWARD PROCESS

1. . Criteria for policy/procedure development
   . Data base utilized

2. Number of application kits distributed

3. . Number of application kits distributed
   . Types and amounts of technical assistance provided

4. Review criteria

5. . Process for reviewer designations
   . Reviewers designated
   . Reviewers' criteria/guidelines for assessment of applications
   . Data base utilized

6. Number and characteristics of disapprovals

7. . Criteria
   . Basis for criteria

8. Number and characteristics of approvals

9. . Number and characteristics of approvals
   . Number and characteristics of disapprovals

10. . Number and characteristics of funded approvals
    . Number and characteristics of unfunded approvals
    . Number and characteristics of disapprovals

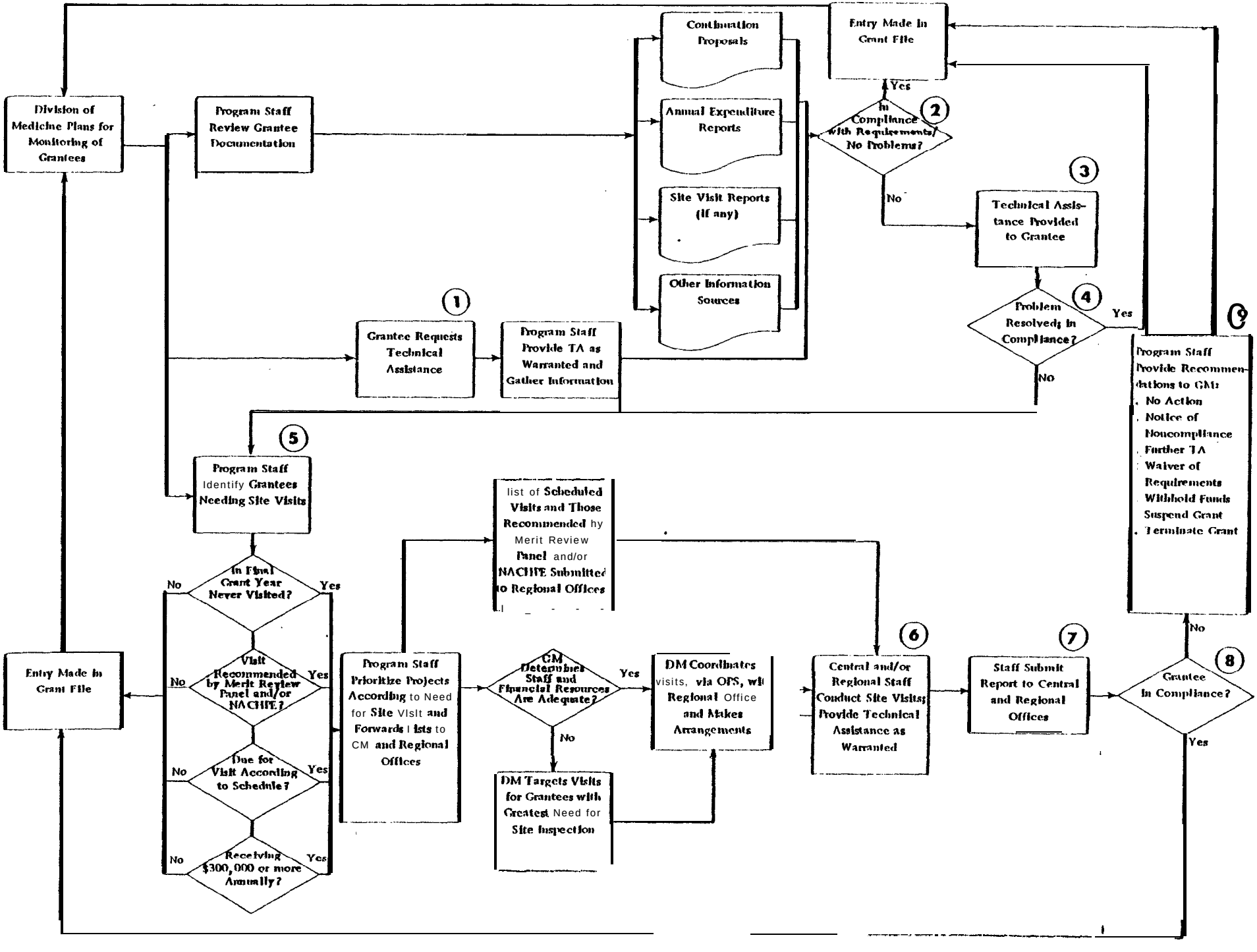
OVERALL MEASUREMENT CRITERIA

. Time required for the grant award process and each step thereof

. Costs required for the grant award process and each step therof

FUNCTION MEASUREMENT MODEL FOR CMM' MONITOWING PROCESS

EXHIBIT V-(1)



INDICATORS/MEASURES FOR GRANT MONITORING PROCESS

EXHIBIT V-(2)

0 1
- Number of requests
- Nature of requests
- Amounts and types of technical assistance provided
- Time frame: from request to delivery of technical assistance

(2) Number and types of noncompliance/problems

0 3 Amounts and types of technical assistance provided

0 4
- Number and types of noncompliance/problems remaining
- Reasons for nonresolution of problems/noncompliance

0 5
- Number of site visits planned
- Criteria for planning of site visits

0 6 Number of site visits performed versus number of site visits planned

0 7
- Number of reports submitted
  - To Central Office
  - To Regional Office(s)
- Time frame: from time of visit to submission of report

0 8 Number and types of noncompliance

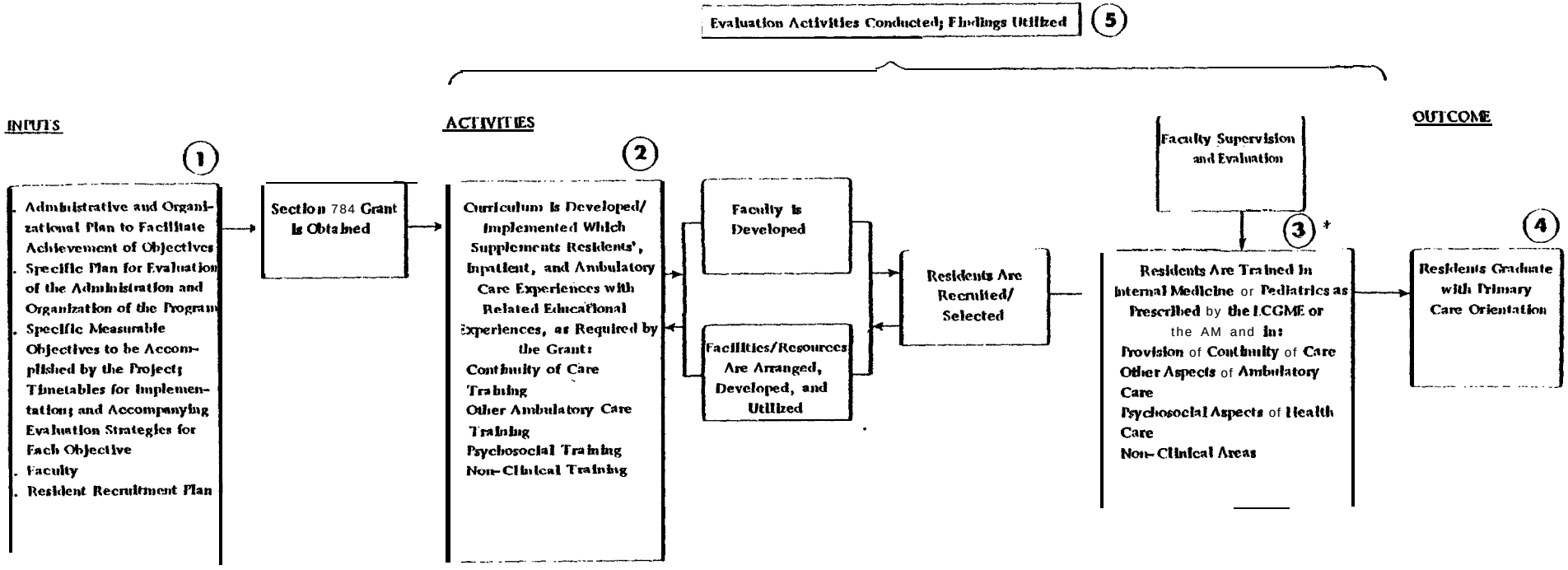
0 9
- Number and types of recommendations
- Number and types of actions taken

OVERALL MEASURE

Number and percent of files containing evidence of monitoring activity

FUNCTION/MEASUREMENT MODEL FOR PROJECT-LEVEL ACTIVITIES OF THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS RESIDENCY PROGRAM

GRADUATE MEDICAL EDUCATION PROGRAM WITH FULL OR PROVISIONAL APPROVAL BY LCGME or AOA



* A function model depicting the resident training process follows.

INDICATORS/MEASURES FOR PROJECT-LEVEL ACTIVITIES

0[1]
- Degree to which project inputs exist at the time of grant award
- Composition and characteristics of faculty:
  - Percent of staff full-time
  - Percent of staff salaried
  - Type (practitioner, academician, researcher)
  - Tenure status
- Credentials/affiliations of Project Director and other faculty on-board (i.e., Curriculum Coordinator, Evaluation Specialist)

0[2]
- Number and content of ambulatory care subjects provided, by year of training
- Number and content of psychosocial topics provided, by year of training
- Number and content of non-clinical topics provided, by year of training
- Frequency of evaluation of curriculum

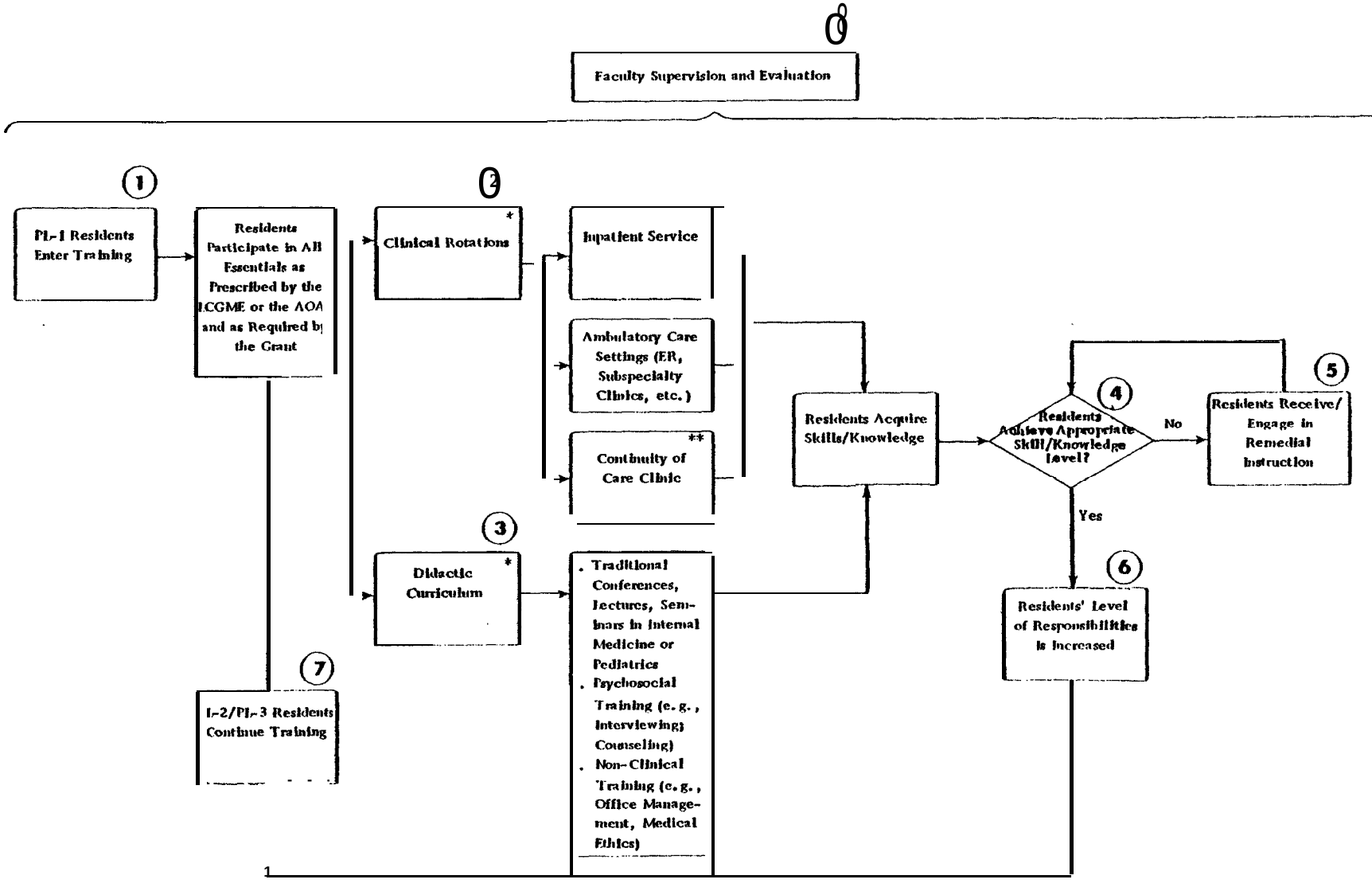
0[3]
- Number of residents per year of training program
- Number and percent of residents matriculating through training program
  - Year 1 to year 2
  - Year 2 to year 3
  - Year 1 to year 3
- Nature and rate of progression in resident responsibilities
- Retention rates by year in training program
- Reasons for attrition

0[4]
- Number of graduates
- Grant requirements for number of graduates
- Initial practice plans of graduates

0[5]
- Time frame for evaluation implementation
- Evidence of utilization of evaluation data

EXHIBIT VII-(1)

FUNCTION/MEASUREMENT MODEL FOR RESIDENT TRAINING IN GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS



* Residents also participate in elective experiences in these areas.

** A function model of Continuity of Care training is presented in the following exhibit.

INDICATORS/MEASURES FOR RESIDENT TRAINING

0 1 Number entering PL-1

0 2 Residents' schedule, by year of training

0 3
- Content
- Frequency

0 4
- Methods for evaluating
- Frequency of evaluation
- Evidence that evaluation data is used
- Number of residents not achieving appropriate levels of skills/knowledge

0 5
- Number and percent of residents receiving remedial instruction
- Number and percent of residents achieving appropriate levels after remedial instruction

0 6
- Criteria for determination
- Nature of responsibilities (e.g. , clinical, teaching)

0 7
- Number of residents PL-1 to PL-2
- Number of residents PL-2 to PL-3
- Number of PL-3 residents who entered at PL-1

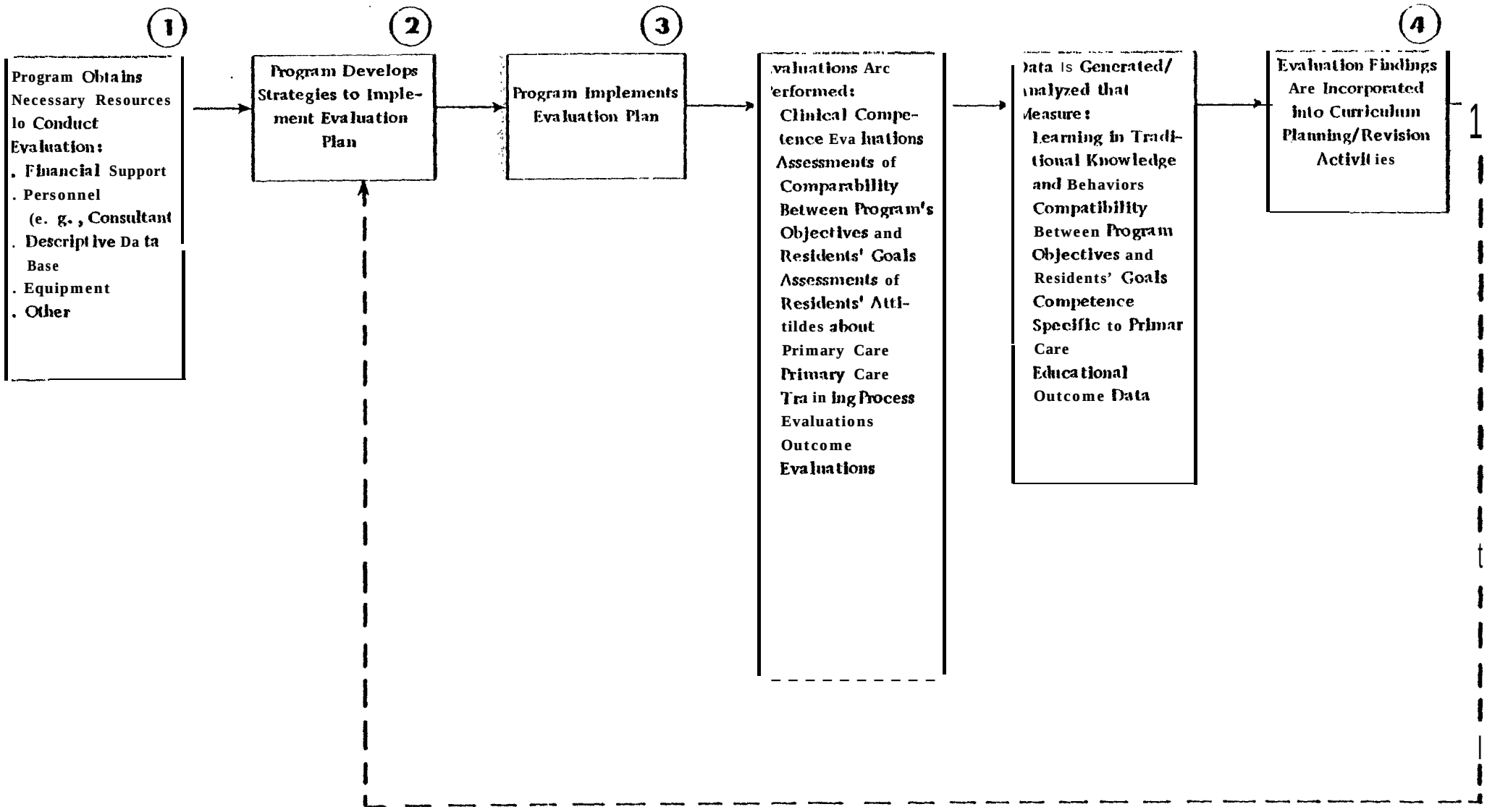
0 8
- Number and frequency of evaluation activities
- Number and type of overall curricular modifications resulting from evaluation efforts

OVERALL MEASURE

Comparisons of elements common to traditional and primary care training

FUNCTION/MEASUREMENT MODEL OF EVALUATION ACTIVITIES AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROJECTS

EXHIBIT VIII-(1)



INDICATORS/MEASURES FOR EVALUATION ACTIVITIES AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROGRAMS

0 1
- Amount of grant funds used for evaluation
- Other sources of evaluation funds

0 2
- Degree to which evaluation plan exists
- Degree to which program objectives are quantifiable
- Methods for establishing evaluation criteria
- Nature (e.g., frequency, relationship to level of training, etc.) of resident involvement in evaluation planning
- Number of evaluation activities undertaken per year

0 3
Time frame for implementing evaluation plan

0 4
Number and type of changes attributable to evaluation activities (e.g. , number of remedial education experiences, frequency of staff intervention to reduce "no-show" rates, etc.)

IV. EXPLORATORYEVALUATION METHODOLOGY

IV. EXPLORATORY EVALUATION METHODOLOGY

The evaluability assessment of this program began in October, 1979. In conducting the EA, Macro worked in collaboration with the Evaluation and Technical Analysis Task Order Officer, Mr. Ed Yates, and a Work Group consisting of representatives of various elements of HHS. The functions of the Work Group included input and technical direction for tasks of the EA and review and refinement of products developed. Membership of the Work Group consisted of:

- Federal Personnel

  Mr. Ed Yates
  Ms. Kate McGuire
  Mr. Robert Walkington
  Ms. Ruth Page
  Dr. Marjorie Bowman
  Ms. Linda Palesis
  Ms. Joyce Johnson

- Macro Staff

  Mr. Martin Kotler
  Mr. Lanny Morrison
  Ms. Mary Savoy
  Mr. David Homme

To supplement Work Group memberships during field visits, Dr. Cecilia Roberts and Ms. Pat Owens, both Division of Medicine staff, were temporarily assigned to the Work Group. Mr. Robert Walkington and Ms. Joyce Johnson left the Group in December due to other time commitments.

In order to ensure that work performed was appropriate to this evaluability assessment's objectives and satisfied Department needs, a Policy Group provided direction to our work and reviewed and gave final approval to products developed.

Two briefing meetings were held with this Group at critical junctures in the EA process. Membership in this Group included:

- Dr. Kenneth Moritsugu
- Dr. Gordon Vidmar
- Mr. Gerald Hejduk
- Mr. Robert Belsey
- Dr. Gwynne Winsberg
- Mr. Richard Schmidt
- Dr. Louis Steinberg

Four major tasks comprised the scope of work in this evaluability assessment. They were:

- Document the intended Section 784 program
- Document the actual Section 784 program
- Analyze and synthesize information collected
- Reanalyze and reformulate options

These tasks, their subordinate subtasks, and their time schedule for their completion, are depicted in Exhibit IX. A more specific description of the conduct of these tasks is discussed in the following sections.

TASK l--DOCUMENT THE INTENDED SECTION 784 PROGRAM

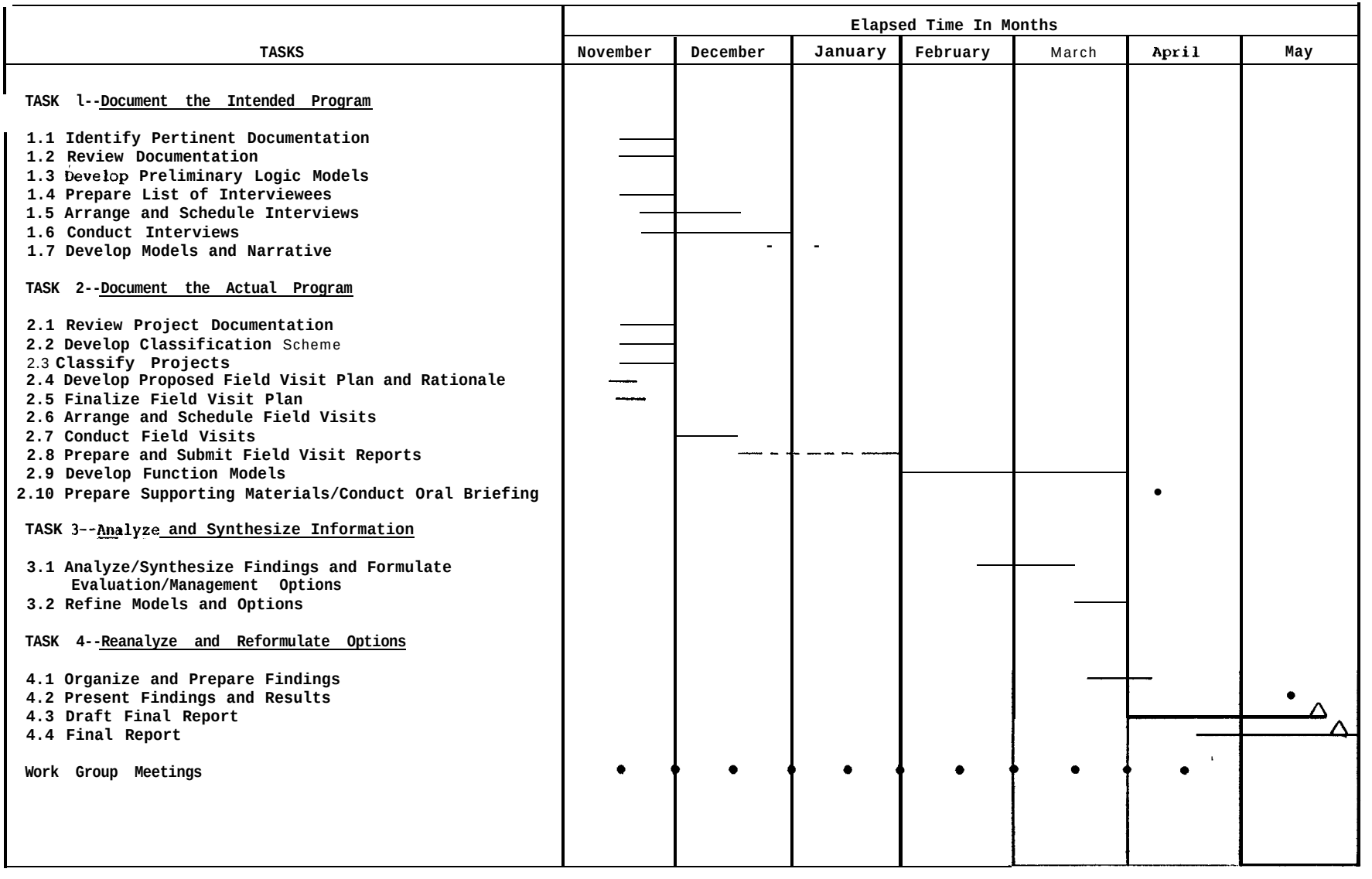
Documenting the intended program entailed performance of seven subtasks: (1) Identification of Pertinent Documentation, (-2) Review of Documentation, (3) Development of Preliminary Logic Models, (4) Preparation of Interviewees List, (5) Arrangement and Scheduling of Interviews, (6) Conduct of Interviews, and (7) Development of Logic Models and Narrative. Operationally, these were collapsed into the three major activities as described below:

- Identify/Review Pertinent Documentation--With the assistance of program staff, documents pertinent to program origin, development, planning, and operation were identified and acquired. These included the enabling legislation (P.L. 94-484), the governing regulations (42 CFR 57), and the Bureau of Health Manpower Grants Manual. The full list of these documents is included in Appendix G. Concurrently, Macro staff performed a literature search for journal articles and other literature relevant to various facets of the primary care field, (An annotated bibliography was developed to document the review of literature selected from the search and is in Appendix G.)

EXHIBIT IX

HHS, Office of the Assistant Secretary for Planning and Evaluation

WORK PLAN FOR EVALUABILITY ASSESSMENT OF THE SECTION 784 GRANT PROGRAM



All documents and literature were reviewed and subsequently discussed with Work Group members to determine contents salient to the purpose of the EA. The results of these discussions established our initial database.

Prepare For And Conduct Interviews--During the early stages of the EA, the Work Group met to determine which Federal policymakers and program managers should be interviewed to document the intended program. Designation of potential interviewees were based on the degree of involvement with the planning or operation of the program persons had or the impact their authority or scope of responsibility had on the program, These individuals were either members of the Senate subcommittee sponsoring the enabling legislation (Health and Scientific Research), within the Department (OASPE, OASH, HRA) , or in the Office of Management and Budget.

Since scheduling of interviews was dependent on the availability of the individuals so designated.,, the conduct of the interviews occurred ove a period of approximately three months. Responsibility for scheduling and interviewing was shared by Work Group members and Macro staff. Interview teams consisted of one Federal Work Group member and one Macro staff person. The interviews were usually scheduled for one hour. A total of 22 individuals were interviewed; a list of this individuals is shown in Appendix B.

The summary form and guide used in these interviews is presented in Appendix F; an analysis of their content is included as Appendix C. This analysis relates to the purposes, activities, and assumptions governing the program.

Develop Logic Models And Narrative--Based upon information collected from interviews and the continuing documents review, models of program logic were constructed. These models reflect program input, activities, and objective and were developed in levels to reflect progressive detail of the program's design. This approach depicted the program's logic in a concise fashion while allowing further scrutiny at subsequent levels of complexity. An expanded discussion of the logic model is presented in Chapter III.

TASK 2--DOCUMENT THE ACTUAL SECTION 784 PROGRAM

Documentation of the actual program required implementation of nine subtasks: (1) Review of Project Documentation, (2) Development of a Classification Scheme; (3) Classification of Projects, (4) Development of Proposed Field Visit Plan and Rationale; (5) Finalization of the Field Visit Plan; (6) Arrangmeent and Scheduling of Field Visits ; (7) Conduct of Field Visits; (8) Preparation of Field Interview Summaries ; and (9)

Development of Function Models. In order to ensure the availability of Bureau personnel for field visits, Subtasks 2, 3, 4, and 5 had to be accomplished within an extremely limited time frame and were consolidated into one Subtask, Field Visit Planning. This consolidation resulted in six principal activities associated with documenting the actual program., as follows:

- Review Of Project Documentation--Documentation reviewed included official grant files. "Essentials for Accredited Residencies, " and the "Program Guide for Grants for Residency Training in General Internal Medicine and General Pediatrics. " Summaries of the grant files for projects to be field visited were developed by Macro staff for utilization by field visit team members.

- Field Visit Planning--Field visit planning culminated in the decisions arrayed in Exhibit X. In summary, it was determined that--given the availability of time and staff resources--field visits would be limited to 10 locations with projects varying according to stage of development and size of grant award; geographic location; and would include institutions with General Internal Medicine residencies, General Pediatrics residencies, and with both General Internal Medicine and General Pediatrics residencies. Individuals identified to be interviewed included the Project Director, the Dean of the Medical School, the Curriculum Coordinator /Evaluation Specialist, a Resident, and the fiscal person(s) responsible for managing the 784 Grant. (In some instances; additional persons were interviewed, e. g . , Internal Medicine Department chairman, at the discretion of the university.)

- Arrangement And Scheduling Of Field Visits--This activity was primarily accomplished through efforts of Bureau personnel. Letters explaining the purpose of the EA visit were mailed to Regional Office staff., who were invided to participate in the visit. A sample of this letter is presented in Exhibit XI. To the extent possible, tentative agendas were established prior .-to the visits.

- Conduct Of Field Visits--Field visits were conducted over a span of two weeks using five, two-person teams. A total of 98 individuals, representing 13 projects., were interviewed. The 13 projects were located at 10 grantee institutions:

  Brown University
  University of California at San Diego
  University of Iowa
  University of Oklahoma
  University of Rochester
  Universitv of South Carolina
  University of South Dakota
  University of Virginia
  University of Wisconsin
  University of Washington

The guide used for interviews during the field visits is include in Appendix F .

EXHIBIT X

HHS, Office of the Assistant Secretary for Planning and Evaluation

FIELD VISIT PLANNING FOR GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRIC PROJECTS

Number Of Schools To Be Visited: 10

Number Of Projects Represented: 13*

Geographic Location Of Projects (By HEW Region):

I	1*	VI	1
II	1	VII	2
III	1	VIII	1
IV	1	IX	2
V	1	X	2

Number Of Programs By Grant Type:

General Internal Medicine	7*
General Pediatrics	3
General Internal Medicine and General Pediatrics	3

Size Of Grant Award:

Amount	Number
Under $100,000	1*
$100,000 - $200,000	5
$200,001 - $300,000	5
Over $300,000	2

Field Teams: 2-3 persons per team (one must be Bureau staff)

Duration Of Visit: 2 days per site

---

* Includes one project in first-year planning phase.

EXHIBIT XI(1)

HHS, Office of the Assistant Secretary for Planning and Evaluation

SAMPLE LETTER TO GRANTEES

Dear :

The Division of Medicine of the Bureau of Health Manpower, in conjunction with the Office of Assistant Secretary for Planning and Evaluation of the Department of Health, Education, and Welfare, is conducting an exploratory evaluation of the General Internal Medicine and General Pediatrics program. The evaluation is principally descriptive and entails a step-by-step process, focusing on three salient aspects of the program:

- Program objectives and expectations
- Potential measures of program performance
- Uses of information on program performance

To accomplish the evaluation, the following study tasks are being performed:

- Review of program documentation such as authorizing legislation and program guidelines to delineate the intent of the program

- Interviews with key Federal policymakers and program managers, also centered on the delineation of program intent

- Interviews with Federal program managers to delineate the many activities representing program operations

- Site visits to a sample of residency programs to delineate how program intent is operationalized in the field

The products of these tasks will be models describing the intent of the program, how the program actually operates, and agreed upon measures of program performance, given the intent and actual operations. Ultimately, these products will be used to frame short- and long-term evaluation studies to obtain information on program performance. The attached paper describes this exploratory evaluation technique *in* more detail.

Our purpose in conducting a site visit at your program is to gain first-hand knowledge of the actual operations of general internal medicine and general pediatric residencies and to obtain your perspectives on possible measures of program performance. To obtain needed information, we plan to conduct one-hour interviews with the following individuals involved with your program:

- Project Director
- Curriculum Coordinator
- Senior Resident
- Evaluation Specialist, if there is one
- Dean, **if available**
- Fiscal person responsible for management of the grant
- Third-Party Payment Specialist, if there is one

At least thirty minutes should be allowed between interviews and each person to be interviewed should be scheduled separately (no group interviews). We have allowed two days for completion of the site visit.

. The site visits will be conducted by up to three-person teams composed of: (1) one member of the Division, (2) one member from either the Office of the Secretary, other components of the Health Resources Administration, or a contractor to the Office of the Secretary, Macro Systems, and (3) one member from your HEW Regional Office. The Division will assume responsibility for coordinating the site visit. Any questions or concerns regarding the site visit should be directed to Ms. Linda Palesis of the Division, who may be reached at (301) 436-6584.

Thank you for your cooperation in this endeavor.

Sincerely,

- Preparation Of Interview Summaries--Member of field visit teams completed reports of their visits, prepared in the form of interview summaries. (A sample of the summary form is included in Appendix F). Content -analyses of field visits reports were developed by Macro staff and these analyses are presented in Appendix D.

- Development Of Function Models--Function models of specific program activities were developed based on field visit findings, Activities were selected for inclusion in the models if they were considered distinctively characteristic of primary care training (e. g., the continuity of care experience). In addition to function models developed for project activities, Macro staff, concurrently, developed function models depicting some of the more critical Federal-level activities (e. g., Grant Award Process; Grant Monitoring Process). Measurement points and performance indicators for assessing the efficacy of activities were either identified or developed for each one of the function models. This: was accomplished in collaboration with Work Group members and with. input from the Policy Group,

TASK 3--ANALYZE AND SYNTHESIZE INFORMATION COLLECTED

The analysis and synthesis of information collected was accomplished through two subtasks: (1) Analysis/Synthesis of Findings and Formulation of Evaluation/Management Options and (2) Refinement of Models and Options. Performance of thes subtasks included the following activities :

- Presentation Of Issues Encounted During the EA--From the analysis of information collected, major issues on the program and project levels surfaced that seemed to have problematic implications. These issues, including their implications, were presented to the Policy Group. for review and comment at the first briefing session. The feedback of the Policy Group allowed further refinement of our analysis and focused our preliminary development of options on those program aspects considered most salient,

- Analysis /Rating Of Indicators /Measures Of Program Activities--Previously developed logic and function modes1 were examined and elements of activities warranting closer examination were identified. Measures and indicators of these elementswere identified or developed with the assistance of a measurement specialist who met with Macro staff and Work Group members. A decision package containing these measures and indicators was- submitted to the Policy Group. Their revisions and comments were incorporated in our further analysis. Appendix H contains the ranked performance indicators.

- Preliminary Formulation Of Management /Evaluation Options--Utilizing comments and suggestions of the Policy Group, members of the Work Group and Macro staff prioritized issues according to importance and

utility, The analysis of indicators and measures was modified to reflect Policy Group input. The resulting product included the issues with corresponding options, actions /information necessary to exercise the options, and the purposes of expected effects of the options,

Refinement Of Models And Options--Members of the Work Group and Macro staff met with staff of the Office of the Assistant Secretary for Program Evaluation to discuss the preliminary formulation of management/evaluation options. Their recommendations were used in revising the options in terms of their form and content. Logic and function models had been revised as result of the previous Policy Group meeting,

Reanalyze Information Collected And Reformulate Options--The final task of the evaluability assessment, reanalysis of data and reformulation of options, was accomplished through three subtasks: (1) Organize and Prepare Findings, (2) Present Findings and Results, and (3) Prep&e and Submit Final Report. Each subtask is described below:

Organize And Prepare Findings--Macro staff compiled the results of previous analyses and input from the Policy and Work Groups, with guidance from staff of the Office of the Assistant Secretary for Program Evaluation. The resulting produce provided, in narrative form, our conclusions regarding what assumptions underlying the logic model might not be plausible, A range of options for each assumption., arrayed according to location in the logic model, were identified and described. Macro also included recommendations for two options regarding larger-scale evaluation of the program. One option related to dollection of additional data on grantee activities; the other considered the possible structure and content of a longitudinal study to determine program effects in terms of achievement of objectives. The findings were reviewed with Work Group members and revised accordingly.

Present Findings And Results--The report of findings was delivered to members of the Policy 'Group in advance of a scheduled meeting, At the meeting, the report was discussed at the second Policy Group briefing. With minor exceptions, the findings were accepted by the Policy Group. Comments and reactions of the Policy Group meetings are summarized and presented in Appendix A.

Prepare And Submit Final Report-- In preparation of this final report, modifications to various sections were made. Requests from the Policy Group for further explication of our findings have been addressed in Chapter I. Additionally, input from our Task Order Officer, Mr. Ed Yates, and Mr. Richard Schmidt, are reflected in the present form and content. The main body of the report encompasses the purpose, approach, and findings of the evaluability assessment of the Section 784 Program. Obstacles we encountered in the conduct of the EA have been included in Chapter V for use in the planning of future EAs. The appendices contain the bulk of the work performed and the 'products developed.

V. OBSTACLES ENCOUNTERED IN CONDUCTING THE EXPLORATORY EVALUATION

V, OBSTACLES ENCOUNTERED IN CONDUCT-ING THE EXPLORATORY EVALUATION

Three major obstacles were encountered during the EA of the 784 Grant Program:

- Time constraints that were imposed on field visit preparation
- Perception by project-level personnel of the EA as a qualitative review of project activities
- Circulation of interim 'products developed-'by the Work Group to non-Work Group members

Although these obstacles were overcome, each impacted on the EA process. They are presented here to provide feedback to the Department and hopefully to mitigate the recurrence of the problems they generated on future EAs.

1. RIGID TIME CONSTRAINTS WERE IMPOSED ON FIELD VISIT PREPARATION

Field visit planning began almost simultaneously with the task order initiation due to the fact that Bureau personnel would not have been available for field visits after January 4, 1980. Consequently, all field visits were scheduled within a two-week span--the first two weeks after the assignment commenced. The myriad tasks surrounding field visit planning were undertaken before the resolution of basic questions:

- Exactly what is the EA and how does it differ from a "site visit"?
- How are the roles/responsibilities of the field teams to be divided?
- What are the objectives of the questions in the interview summary? What additional questions /responses are appropriate to determine the future usefulness of this effort?

- To what extent is observation of field visit activities necessary to address information requirements for the EA?
- How specifically will the information obtained duringthe field visits be used?

These and other questions could not be sufficiently addressed prior to the field visits; many did not surface until the teams were actually on-site (e.g., the significance of the continuity of care experience in primary care training). Consequently, the site visit summaries revealed in some cases inconsistent and incomplete understanding of the EA process and of the necessary information requirements. For example, content emphases varied (e. g . , some teams obviously queried project personnel extensively on the mechanisms involved in constituting patient panels, whereas others focused on the nature of the psychosocial curriculum), and degrees of completeness varied (e.g., some teams used references to the grant application as responses on the interview summary sheets).

In preparing the content analysis from the field visit interview summaries, it was evident that information needs/utilization had not been clearly identified by the Work Group. The flurry of field visit planning activities over a brief span of time obviated sharper definition in this area.

To overcome this obstacle, Macro conducted an extensive literature review to more accurately define the state of the art on primary care; reanalyzed all site visit summaries to distinguish individual project nuances from attributes specific to the 784 Program; and revised the original content analysis from chart format to narrative descriptions in order to ensure accurate representation of project-level activities. Key events were then identified for display through function models. Information obtained through the literature reviews supplemented findings from the content analysis to produce the models. In retrospect, the field visits would have been more useful if they could have occurred at a later, date, and if even time were available to resolve EA questions and to weed the Work Group into a more cohesive body.

2. PROJECT-LEVEL PERSONNEL PERCEIVED THE EA FIELD VISITS AS QUALITATIVE REVIEWS OF THEIR PROJECTS' PERFORMANCE

Despite assurances regarding the purpose of the visits, both through telephone conversations during field visit planning and as part of the entrance

interview once the EA team arrived on site, project staff expressed concern that their projects were being "evaluated." Two factors can be isolated as probable contributors to this concern:

- The composition of the team, which included some combination of Bureau personnel, other HRA staff, Regional Office representative, and contractor personnel
- The interview skills of the team, both as individuals and as functioning team members

The impact of this obstacle was manifest in the attitudes and responses of the interviewees: although the majority were courteous and cordial, the candor of some of the responses may have been limited.

We attempted to overcome this obstacle by reassuring project staff of the nature of the task and conveying to them the anonymity to be maintained during development of EA products for all institutions visited.

3. INTERIM PRODUCTS DEVELOPED BY THE WORK GROUP WERE CIRCULATED TO NON-WORK GROUP MEMBERS

This obstacle posed a serious problem for EA progress in that it temporarily polarized the Work Group and surfaced questions of ethics and credibility. As alluded to earlier, the content analysis initially developed was presented in chart format. It was only partially complete but was submitted to other members of the Work Group for review /completion. Bureau staff who were not members of the Work Group participated in field visits because of the necessity to complete field visits within stringent time constraints. These individuals were, therefore, requested to review the draft content analysis and to complete/correct data reported on the schools they visited. Schools were identified by name. Lengthy memoranda ensued that enumerated inaccuracies in the content of the documents and cited violations of confidentiality regarding inclusion of project identities.

The problem was resolved at two levels: within the Work Group, by seeking concurrence from all members that draft products would only be circulated

internally, thereby obviating the difficulties with breaches of confidentiality; and at the Branch and Bureau levels, through informal individualized briefings with program managers.

APPENDIX A

REACTIONS OF THE POLICY GROUP TO MATERIALS DEVELOPED DURING THIS EA

REACTIONS OF THE POLICY GROUP TO MATERIALS DEVELOPED DURING THIS EA

Policy Group reactions to the EA process were obtained on two formal occasions. The first was after the policy briefing on the accomplishments achieved after completion of Tasks 1 and 2 in the Work Plan; the second was at the completion of the plausibility analysis. Reactions to each briefing are described separately below.

1. REACTIONS TO COMPLETION OF TASKS 1 AND 2

The first Policy Group briefing was conducted approximately halfway through the assignment. 'After a brief overview of the EA 'process /objectives and a discussion of the logic model, the Policy Group was requested to:

- Comment on the logic of the program as depicted
- Discuss the appropriateness of the objectives
- Review the measures included on the logic model, rating their relative importance and utility
- Discuss the issues and attending implications generated by the Work Group concerning findings to date

The comments received were favorable and constructive. They focused on the following areas:

- Structure And Content Of The Logic Model--The Policy Group suggested several changes related to the location of events (i.e., moving the "monitoring" box), the location of objectives to distinguish short-term ones from longer-range outcomes, and the language used to describe events.
- Appropriateness Of The Objectives--The objectives as presented were generally acceptable to the Policy Group. It was suggested, however, that a short-term objective relative to the "appropriate" geographic distribution of program graduates be included on the model. The Group also suggested an additional outcome box, indicated by dotted lines, that reflected other Federal initiatives that impact on delivery of primary health care services (e.g., AHEC, NHSC, Family Medicine).

- Measurement Points And Measures--The Policy Group was apprised of the problems encountered in measuring outcomes in the absence of an operationalized definition of primary care. The Group recommended that, because long-range outcomes would not be singularly attributable to the success of the 784 Grant Program, their measurement would not be necessary/appropriate. Measurement, therefore, should be limited to successful achievement of objectives related specifically to this program, e.g., increased numbers of graduates practicing or working in primary care. Measures were also rated by the Policy Group according to their relative importance and utility. These ratings are included as Appendix H.

The logic model presented to the Policy Group is presented following this page. The revised version has been presented earlier in this report as Exhibit II.

2. REACTIONS TO PLAUSIBILITY ANALYSIS

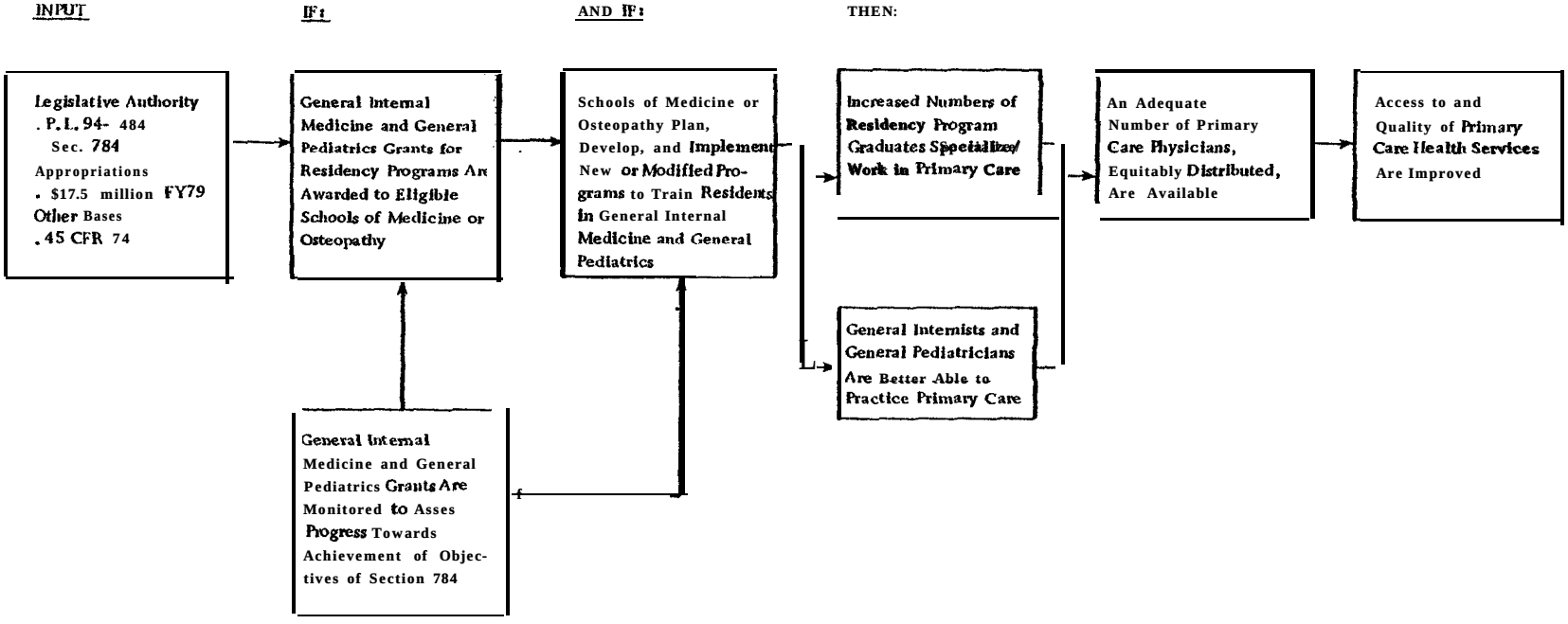
The second policy briefing focused on presentation of the analysis of program plausibility, The Policy Group had been provided a narrative description of plausibility findings and options in advance of the presentation; comments were generally addressed to the options recommended by the Work Group. Issues of feasibility were raised around options relating to ensuring the existence of appropriate controls over the grant review process (i.e., requiring applicants to attend "orals" prior to grant award) and around modifying the grant application package in any way that would require OMB clearance. Some more specific options were suggested (i.e., identifying TA conferences as vehicles for pre-application TA); recommendations were made on some additional options to be included (e.g., an option regarding the existing third-party reimbursement system); and expansion of options related to the availability of resources to support implementation of the grant program was advised (e.g., the impact of third-party reimbursement for primary care on the status of faculty in generalist training programs and, consequently, the subsequent ripple effect this impact has on availability of faculty and trainee resources). Finally, the Policy Group requested a schematic presentation of the options and some comments as to feasibility, cost, etc.

The initial discussion of plausibility, as presented prior to the Policy Group briefing, is included following this page. The revised version of this document is presented as Chapter I of this report.

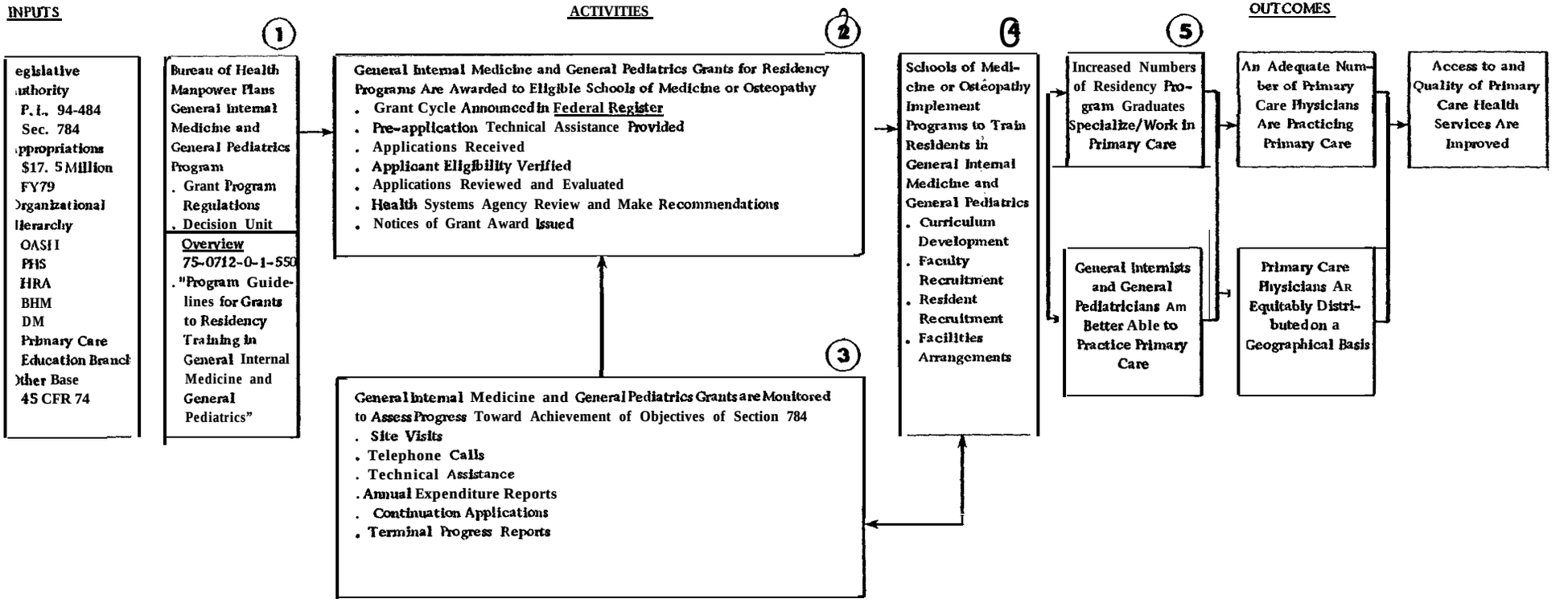
Health Resources Administration

GENERAL INTERNAL MEDICINE AND
GENERAL PEDIATRICS PROGRAM LOGIC

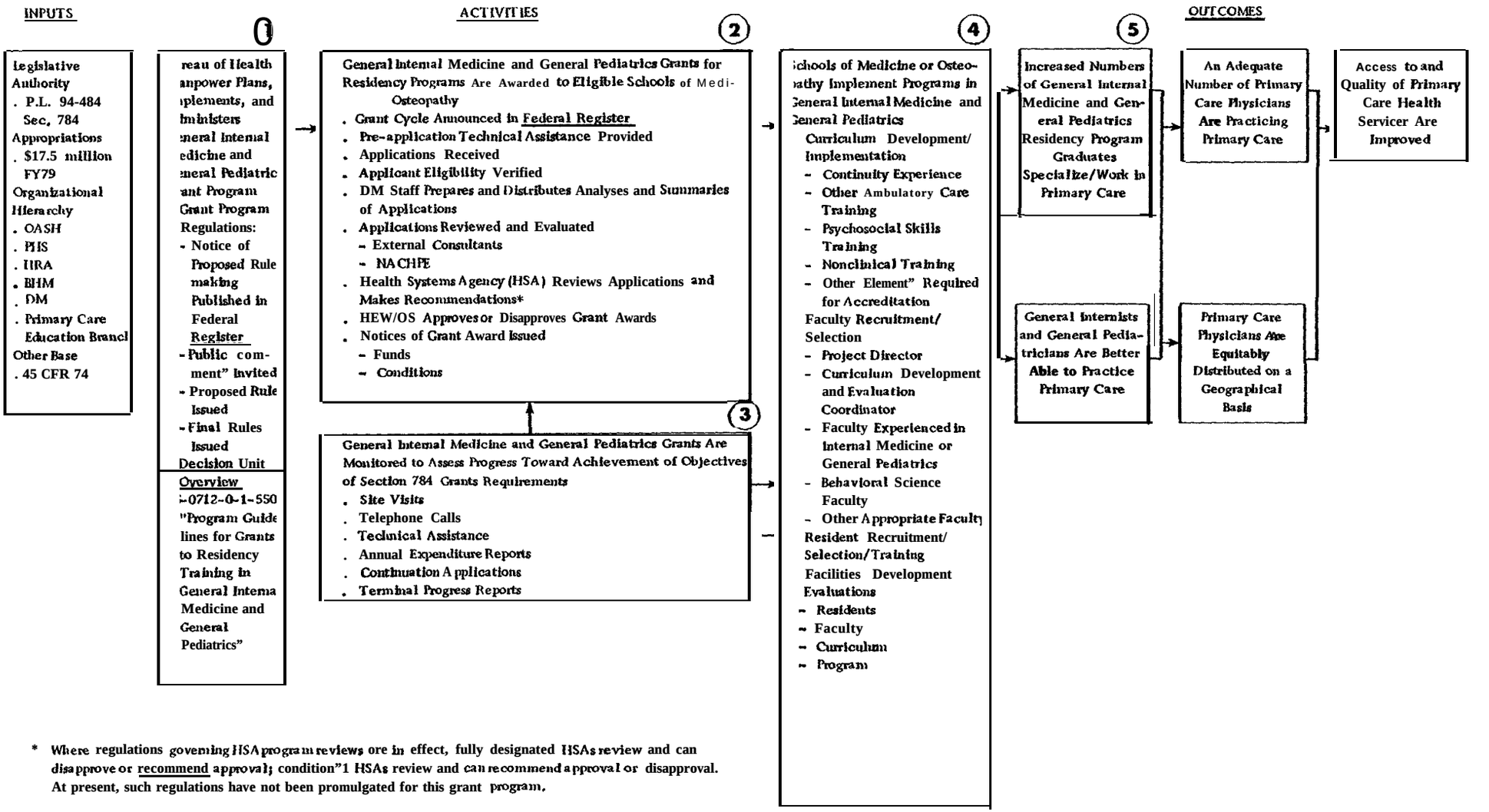
LEVEL I LOGIC MODEL



LEVEL II LOGIC MODEL



LEVEL III LOGIC MODEL



* Where regulations governing HSA program reviews ore in effect, fully designated HSAs review and can disapprove or recommend approval; condition"1 HSAs review and can recommend approval or disapproval. At present, such regulations have not been promulgated for this grant program.

GENERAL INTERNAL MEDICINE' AND PEDIATRICS EXPLORATORY' EVALUATION

1. ANALYSIS OF PLAUSIBILITY AND PRESENTATION OF MANAGEMENT OPTIONS

During the analysis phase of the Section 784 exploratory evaluation, we identified an overriding issue which affects all aspects of the evaluation. Although this grant program seeks to train primary care practitioners to ultimately increase the availability of, access to, and quality of primary care services, primary care is a term which has varied interpretations and definitions. There is no generally accepted position in the field regarding what constitutes primary care. The Section 784 program uses a d&Z&ion--the Health 'Resources Administration one--which is not operationalized , i .e , , capable of direct measurement. Because of this, it is not presently possible to conclusively assess the attainment of program objectives, beyond the point of residents completing their training activities.

In the absence of an operationalized definition of primary care-, it is difficult to measure the effects of this program on post-graduate activities. This complicates also the task of program managers giving more specific direction to grantees regarding the skills, knowledge, attitudes, and practices residents are to acquire through training, which have curricular implications, and limits program' managers ability to assess the shorter-term objectives of producing more primary care practitioners, better able to practice primary care. If an operationalized defiiition of primary care were developed, many plausibility and measurement issues would be eliminated or reduced. We propose this as a consideration when studying the issues, implications, and options presented in the following sections.

(1) ISSUES RELATED TO PROGRAM PLAUSIBILITY

In examining the plausibility of the Section 784 program, the Work Group has analyzed seven assumptions critical in linking various events and objectives in the program's intent. Arraying them according to their location on the logic model, these key assumptions are:

- Resources on the Federal and grantee level are adequate to the intended mission of the grant program

- Program objectives can be achieved regardless of the influence of external factors, such as the third-party reimbursement system

- The program adequately prescribes the necessary ingredients for residency training in primary care

- The grant award process has criteria and controls adequate to ensure achievement of program intentions

- The program will result in a net increase of residents training in primary care

- The geographic distribution of Section 784 program graduates in practice will differ from graduates of traditional internal medicine and pediatric training programs

- Graduates of Section 784 programs will be better able to practice primary care than graduates of. traditional programs

These assumptions are discussed below relative to their implications and options management could exercise.

(2) ISSUES EMANATING FROM EVENT: BHM PLANS, IMPLEMENTS, AND ADMINISTERS GRANT PROGRAM

Resources On The Federal And Grantee Level Are Adequate To The Intended Mission Of The Grant Program

In order to institute the Section 784 program, considerable resources should be in place or available to support implementation of the program, On the Federal level, this means that the level of Federal appropriations needs to be sufficient and staff must be available and appropriate to administration of the program. At

the medical or osteopathic school level, there are several issues bearing on the adequacy of resources :

- Are those entities eligible for Section 784 grants capable of providing settings appropriate to training in primary care?

- Are there sufficient faculty available who are experienced in the practice of General Internal Medicine and General Pediatrics?

- Are there enough residents interested in primary care to fill available training slots?

- Are other institutional resources, such as patients to utilize residents' services (clinical material), adequate to meet training needs ?

It may be premature to attempt answers to some of these questions. Presently, and at the time of the program% inception, information pertaining to primary care education is not conclusive, is non-generalizable, and, often, is contradictory. There is no expert consensus or model approach to guide this program to success. Funding levels may or may not be adequate. Other questions ultimately may have to be answered before we can determine what resource levels are necessary to provide those elements and activities necessary to accomplish program objectives. Yet, 'there are two basic inferences which may be drawn regarding the adequacy of program resources.

First, during this exploratory evaluation, it has become apparent that Federal-level staffing for this program is probably not sufficient to fully implement two key functions : monitoring and t echnical assist ance. According to program logic, these functions are necessary to ensure that grantees implement required program elements, which are deemed precursors to achievement of program activities. Preliminarily, short-term studies of the expenditure of program resources (e.g., staff time utilization , facilities usage, budget allocations) should be performed to develop a basic understanding of how efficiently the program operates. Based upon such studies,

probable program management options might include addition of staff, modification of the program's budget for management activities such as travel to support monitoring, or streamlining time-consuming tasks.

Second, not only must resources be available and adequate at the Federal level, but the population of eligible entities must be able to provide sufficient faculty, residents, patients, facilities, and other resources to implement the program. Although no conclusive statement is possible regarding the adequacy of grantee resources at this time, information collected from field visits and through interviews and documents review imply that there are probably insufficient appropriate resources available on the institutional level. Three distinct options exist with regard to these matters.

Options:

- Information can be collected to document the level of various resources applied to Section 784 program at each school. Information could also be collected regarding what resource levels are deemed necessary to fulfill grant requirments and, ultimately, achieve program objectives.

- Federal initiatives could be developed to encourage resource development. For example, more undergraduate and medical school emphasis on primary care could stimulate greater interest among prospective residents. It might also encourage primary care practitioners, necessary as role models for residents, to enter the teaching ranks, thereby building a cadre of faculty for the residency training programs. If more residents were interested in primary care and there were more primary care practitioners represented *among* faculty positions, schools would be more likely to reorder priorities to meet the needs of primary care instruction so as to facilitate the achievement of program objectives

- As Section 784 is enacted, eligibility is limited to Schools of Medicine and Osteopathy. This often results in training being based in

tertiary care facilities (which may be contradictory to a primary care orientation), and limits the overall availability of resources, Expanding the eligibility base to include other approved residency programs, for example, approved community-based programs, would increase resources availability, particularly that of non-tertiary care settings.

Program Objectives Can Be. Achieved Regardless Of The Influence Of External Factors, Such As The Third-Party Reimbursement System

The education process in which residents are involved is assumed by the logic of this program to be a significant factor affecting career choices. The literature on the subject of career choices in the health manpower field includes this factor and many others. A prominent factor mentioned in the literature, and noted in our interviews and field visits, is the economic incentive surrounding a career selection. For example, the third-party reimbursement system currently provides greater compensation for subspecialist services, provided in inpatient. facilities. Services performed on an ambulatory basis by primary care physicians are reimbursed at considerably lower rates. To select primary care as a career is a choice for less income than subspecialist physicians . Although this issue does not fall under the purview of the program, consideration of it is important to assessment of the potential for ultimate program success.

If income potential is a predominant determinant in career choice for physicians, the Section '784 program- may not be able to achieve its objective of impacting specialty maldistribution unless Federal third-party reimbursement policies are changed.

The Program Adequately Prescribes The Necessary Ingredients For Residency Training In Primary Care

The regulations and guidelines for the Section 784 program portray a general concept of what primary care training should be. Except for the percentage of time requirements for the continuity of care experience, there are no specific and detailed

requirements for resident training. In general, there is no consensus in the field regarding what it takes to make a general internist or general pediatrician--a position reflected in the regulations and guidelines. The general nature of the Federal requirements limits direction to the field and may reduce the likelihood of attainment of program objectives. This will likely impair attempts to attribute results- to the program because cause and effect relationships require an ability to directly measure and relate variables with results. However, the state of the art of primary care is far from being fully developed and it would be premature to attempt construction of an "absolute" model. Attribution studies may have to await the further maturation of the field of knowledge, There are actions, however, management can take that could result in improved clarity of direction to grantees.

Options :

- Specific information could be collected from grantees about how they would/are instituting aspects of training addressed in the regulations and guidelines
- Examples of approaches to training among grantees could be shared and feedback obtained
- Grantee opinion of the importance of various aspects of the "primary care" requirements could be assessed
- From information collected, and the feedback obtained about it from grantees, regulations and guidelines might be modified

(3) ISSUES EMANATING FROM EVENT: GRANTS TO RESIDENCY PROGRAMS ARE AWARDED

The Grant Award Process Has Criteria And Controls Adequate To Ensure Achievement Of Program Intentions

Because of the -dearth of detailed, specific educational objectives for the Section '784 program, it is difficult to accurately judge the effectiveness of the grant

award process. Reviewers must rely on general guidelines; ultimately, it is the professional judgments of the reviewers that determines an applicant's rating. Some changes in regulations and guidelines. have been suggested alreay and others will emenate from the discussion of other issues; such changes may improve the grant award process. In the absence of these changes, more specific information from grantees when applying, for example, could increase the effectiveness of the grant award process.

Ontions

- More pre-application technical assistance to potential grantees in development of applications, particularly regarding the Federal intentions for the primary care requirements, could be provided.

- Data reporting requirements for grantees could be expanded and made more specific.

- To enhance the quality of information available during the grant award process, grantees could be required to be available to provide desired information to reviewers. This might be accomplished through potential grantees appearing for "oral" examinations during the review or through pre-award site visits performed by program staff.

(4) ISSUES EMANATING FROM EVENT: SCHOOLS OF MEDICINE OR OSTEOPATHY IMPLEMENT PROGRAMS

The Program Will Result In A Net Increase of Residents Trained In Primary Care

A program expectation is that there will be an increase in the overall numbers of residents trained in primary care.. This expectation is affected by several variables, including which students and residents are being recruited and whether the program has evoked greater interest among students and residents who might not otherwise pursue primary care training. It is not clear at present whether all residents trained under the auspices of the Section 784 grant program are truly interested in practicing primary care. Nor is it clear that residents trained in primary care through this program would not have sought training in

primary care in the absence of the grant program or would not have entered primary care activities after traditional training. It must be kept in mind, also that increasing total numbers of residents training in primary care at an institution is not required for grantees. Information could be collected to assess these variables and management options may be exercised to increase the likelihood of proper conditions operating.

Options

- Data may be collected from grantee and other institutions (retroactively and longitudinally) to determine the actual numbers in primary care training, regardless of program origin or sponsorship

- Resident recruitment and selection requirements could be modified to more strongly address the need for "appropriate" candidates and the expectation of an increase in total numbers trained; specific funding preferences could also serve this purpose, e.g., a preference designated for the utilization of a separate NRMP number.

- Reporting requirements could be modified to allow for specific identification and tracking of residents.

The Geographic Distribution Of Section 784 Program Graduates In Practice Will Differ From Graduates Of Traditional Internal Medicine And Pediatric Training Programs

Two assumptions underlie the expectation that the grant program will impact the geographic distribution of practitioners. First, by exposing residents to training settings in health manpower shortage areas, it is expected they will be more inclined to practice in such settings. Second, it is also assumed that because general practitioners seem to distribute themselves differently, graduates of General Internal Medicine and General Pediatrics programs will also. The former assumption is partially supported by the use of a funding preference for training provided in health manpower shortage areas but requires study to ascribe its veracity. The latter assumption awaits longitudinal study to determine whether the hypothesized analogy is applicable or relevant.

- Information could be collected to allow for post-graduate comparisons across groups regarding the geographic distribution of practices

- Requirements or funding preferences could be modified to better ensure exposure to training settings in health manpower shortage areas, assuming of course, that the hypothesis is either proved or deemed to be well-founded

Graduates. Of Section 784 Training Programs Will Be Better Able To Practice Primary Care Than Graduates Of Traditional Programs

There are no current standards for the quality of primary care. The expectation that graduates will practice better primary care, therefore, cannot be tested until standards are constructed. This is tied closely also to the lack of stated educational objectives -for the program, -to which standards would presumably be related. Collection of information on graudate practice characteristics may, in the long term, provide the necessary input to standard setting--in lieu of separate "boards" for general internal medicine or general pediatrics.

2. PRESENTATION OF EVALUATION OPTIONS

As we noted in the previous section, there are a number of management options which are information collection in nature. This section combines these alternatives with agreed upon information requirements to present specific evaluation 'options. The two evaluation options described below are stated in the form of models for data collection, for evaluation purposes.

(1) THE IMPLEMENTATION MODEL

The structure of the implementation model is based on the following: Who is doing what to whom, where, and how much of the time? The model is designed to obtain comparable and detailed information on the residency programs, in addition to presently collected information using either of the two following options for collecting the data:

- Modifying grant application requirements or grant guidelines to require reporting of the information specified below

- Conducting a survey of the universe or sample of grantees to collect the data specified

The WHO considers both faculty and residents, The faculty element would include :

- Identification of role models--Grantees would identify what they consider to be a good general internist or general pediatrician role model for residents of this program and how many such models are currently on the faculty (or are expected to be), performing what functions and for what amount of time.

- Faculty positions--Grantees would identify additions and deletions to the faculty that are supported in any way by the program, the qualifications of additions, what functions they are (or will) performing, and for what amount of time.

The resident element would include:

- Recruitment and selection--Grantees would provide DM with the following materials at the end of each year:

  The applications form used
  The brochures distributed describing the program
  Sample of the letter of acceptance distributed

- Number of residents--Grantees would provide DM with the following information at the end of each year:

  The number of applicants
  The number of offers made
  The number of acceptances
  The number of residents, by year
  The number of residents moving from Year One to Year Two and from Year Two to Year Three
  The number leaving the residency, by year and to what
  The number of graduates and their immediate plans, including practice locations

- Faculty /resident interactions--Grantees would identify the availability of faculty to residents and the nature of the availability, e.g., case conferences or seminars, for different. faculty types, for each year of residency. These data would be reported in continuation applications.

The WHAT and TO WHOM are closely tied and will be considered as an integral unit, with the following elements:

- Continuity experience--Grantees would be expected to address the following as part of applications:

  How will each resident be assured of a panel? (new competing applications)

  What is the optimal size and actual, average size of each patient panel? (new competing and continuation applications)

  What is the mix, on the average, of the patient panels, including the kinds of presenting problems and socioeconomic and other demographic characteristics ? (continuation applications)

  How are the following situations handled: (1) panel member's unscheduled clinic visit when the resident is not present; (2) after hours coverage for the panel; and (3) panel member's hospitalization off the resident's assigned inpatient rotation? (continuation applications)

  Of the total continuity time, how much time, and the percentage thereof, is devoted to direct intervention with panel patients? (continuation applications)

- Psychosocial aspects--Grantees would be expected to address the following as part of the application:

  To what extent are psychosocial personnel available to residents?

  How much direct clinical exposure do residents get to providers of psychosocial services?

  How are psychosocial aspects addressed in the curriculum, if not through the two above methods?

The WHERE considers the following elements regarding each training site:

- Each site should be described as to size, number. and characteristics of patients., and occupancy or utilization levels

- If there are multiple sites involved, how are they integrated into a program that will meet continuity requirements.

All of the above information would be obtained specifically for the primary care track supported by the Section 784 grant. However, it may be important to obtain similar information on all internal medicine and pediatric programs at each funded institution that deal with primary care to determine if the grant is supporting new activities as opposed to maintaining old ones.

(2) THE OUTCOME MODEL

By agreement with the Policy Group, measuring the attainment of Program objectives will focus on only three objectives: Increased Numbers of General Internal Medicine and General Pediatrics Residency Program Graduates Specialize/Work in Primary Care; General Internists and General Pediatricians Are Better Able to Practice Primary Care; and Practicing General Internists and General Pediatricians are -Appropriately Distributed on a Geographical Basis. Therefore, the outcome model considers the longitudinal study of Section 784 program graduates regarding their "practice" activities. In order to isolate the effects of the Section 784 program, longitudinal study of a control group is required. Four possible cohorts to comprise a control group include:

- Drop-outs for Section 784 supported residencies

- Graduates of traditional tracks at Section 784 supported institutions

- Graduates of Internal Medicine and Pediatrics programs from institutions not supported by Section 784

- Graduates of Family Medicine residency programs

The earliest point following graduation at which information should be collected is two years--to allow for the inclusion of graduate experiences of minimal time commitments to the National Health Service Corps, yet sufficient in time to build an ample size database . At that time, the following information would be collected on a sample of graduates and the control group :

- What are they currently doing?

  Practicing?

  Academic medicine?

  Research?

  Other?

- If they are practicing, where?

  Location?

  Setting, e.g. , hospital?

  Modality, e.g., solo versus group practice?

- How is the practice characterized, predominantly?

  Primary care vs. subspecialty care?

  In-hospital care vs. outpatient care?

- Did they go on for subspecialty training?

  Subspeciality?

  How long?

- If they are doing something other than practicing, what (precisely)? Can it be classifiable as primary care-related?

The practice characterization requires. some operationalized definition of primary care.

Ultimately, the longitudinal study will attempt to isolate those factors influencing graduates and control group members over time, as follows :

"Practice" Characteristics = f(Human Capital Theory, Trickle-Down Theory, Resident Recruitment and Selection, Curriculum, Clinical Experience, Faculty Role Models, Cost of Training, Personal Factors, and Other Factors)

Where,

1. Human Capital Theory refers to economic motives

2. Trickle-Down Theory refers to subspecialist saturation of the marketplace

Data collection options include: (1) in-house study by DM, (2) a contract or grant to perform the study, and (3) requiring grantees to perform follow-up studies of graduates, with either 1 or 2 used for the control group.

APPEND1 X B

LIST OF FEDERAL PERSONNEL INTERVIEWED

APPENDIX B

LIST OF FEDERAL PERSONNEL INTERVIEWED

Name	Title	Agency/Division/Program	Date Interviewed
Dr. Marjorie Bowman	Medical Specialist	DM	11/21/79
Mr. Barry Clendenin	Budget Examiner	OMB	11/27/79
Ms. Marilyn Falik	Program Analyst	OASPE	1/16/80
Dr. Henry Foley	Administrator	HRA	2/6/80
Mr. Lee Goldman	Director	OPD	1/16/80
Dr. Robert Graham	Staff Member	Senate Subcommittee on Health and Scientific Research	11/26/79
Mr. Gerald Hejduk	Chief	Primary Care Education Branch	11/21/79 and 2/19/80
Mr. John Heyob	Chief	Program Coordination Branch/OPS	2/19/80
Ms. Ruth Johnson	Legislative Officer	BHM	11/30/79
Ms. Shirley Johnson	Deputy Director	DM	1/17/80
Dr. Robert Knauss	Staff Member	Senate Subcommittee on Health and Scientific Research	11/26/79
Dr. David McNutt	Director	GME	2/4/80
Dr. Kenneth Moritsugu	Director	DM	11/30/79
Mr. Don Parks	Deputy Director	OPS	1118180
Mr. Sam Seeman	Director	Division of Health Services/OASH	1/16/80
Dr. Louis Steinberg	Chief	Education Development and Reports (DM)	11/30/79
Mr. James W. Stockdill	Acting Deputy Administrator	HRA	2/6/80
Mr. John Westcott	Officer GM	GM	11/28/79 and 2/19/80
Dr. Daniel Whiteside	Director	BHM	11129179
Ms. Terry Wright	Program Analyst	DM	1/17/80
Ms. Carol Zuekert	Program Analyst	OASH	1/16/80

APPENDIX C

CONTENT ANALYSIS OF INTERVIEWS WITH POLI CYMAKERS AND PROGRAM MANAGERS

APPENDIX C(1)

SOURCE	PURPOSES/INTENT	COMMENTS
Documents (e.g., P.L. 94-484; H.R. 94-3; Decision Unit Overview, et al.)	. Train residents in General Internal Medicine and Pediatrics . Increase number of residents in primary care, Internal Medicine and Pediatrics (IM&P) programs . Restructure existing residency programs in IM&P . Create new residency programs in primary care . Improve access to primary care	. Training of resident-s in General Internal Medicine and Pediatrics, and increasing numbers of residents, is stated as a purpose by all sources except Congressional/OMB. . Creation of new training programs, or the restructuring of existing programs is cited by policy makers and in the pertinent literature. . Dealing with the issues of specialty and geographic maldistribution as explicitly represented as a purpose by policy makers and Congressional/OMB parties; it is indirectly addressed in the literature and by program managers. . Increasing the number of primary care Internal Medicine and Pediatric practitioners appears in reports from policy makers and Congressional/OMB sources; program managers intend gradual-es to enter primary care practices. . Improving access to primary care is cited in the literature as an intent of the program, while policy makers, address this issue by setting as an intent the presence of large blocks of ambulatory training in residency programs.
Congressional/OMB	. Increase number of primary care IM&P practitioners . Impact physician subspecialty maldistribution in Internal Medicine and Pediatrics . Impact geographic maldistribution of primary care medical practitioners	
Policy Makers	. Increase number of primary care IM&P practitioners . Create new residency programs in primary care . Restructure existing residency programs in primary care . (As part of broader strategies) Impact geographic and subspecialty maldistribution and provide greater access to primary care . Bring large blocks of ambulatory training to residency programs	
Program Managers	. Train residents in General Internal Medicine and Pediatrics . Have gradual. es (of residency programs) practice primary care	

APPENDIX C(2)

SOURCE	ASSUMPTIONS/EXPECTATIONS	COMMENTS
Documents (e.g., P.L. 94-484; H.R. 94-3; Decision Unit- Overv Lew, et al.)		The ultimate practice choice of residents is expected, as a likely outcome, to be primary care. Program managers and Congressional /OMB sources explicitly cite this. A decrease in the number of physicians entering subspecialties, as expected by Congressional/OMB parties, can be considered a corollary to the practice expectation. Policy makers' expectations are based on a holistic view of health care, services, and systems. The program is expected to impact the "quality of Life" as well as the preparation of primary care practitioners. Geographic maldistribution will be addressed as a result of preferential awards to programs located in manpower shortage areas, according to policy makers; program managers expect this need will be remedied as a consequence of residents training experience in such areas.
Congressional/OMB	The grant program in General Internal. Medicine arid Pediatrics will provide primary care specialists in primary care health manpower *shortage* areas . The number of physicians entering subspecialties will decrease .. Hospital care is cxyerrsive; the concept (of primary care) will move care out of hospitals and into primary car-e settings, cut down on hospitalization, and length of stay	
Policy Makers	. The program: is not an end in itself, but should be perceived as a means to an end; by promoting health resources providing health services, the ultimate end-point "happy and healthy" Americans Through funds support for additional faculty requi r-e--ments, and by exposing residents to varied Learning experiences and settings, the quality of resident training will. be enhanced, which will. result in better practitioners By giving funding priority to the programs located in health manpower shortage areas, "distribution problem" may be eased	
Program Managers	Exposure to primary care Internal Medicine and Pediatrics wi ll increase the likelihood that. residents wi 11 enter primary care practices Exposure to servi ng primary care manpower shortage areas will increase the likelihood that residents will practice in such areas	

APPENDIX C(3)

SOURCE	ACTIVITIES	COMMENTS
Documents (e.g., P.L. 94-484; H.R. 94-J; Decision Unit Overview, et al.)	. Central staff (DM) issues regulations . Central and regional office staffs provide preapplication technical assistance . Central and regional staffs review and evaluate applications . DM gives notice of awards for program support and stipend assistance . Grantees receive postaward technical assistance for operation of programs . DM assesses program performance (monitoring, site visits, etc.)	. Program managers have clear sense of activity sequence involved in making awards and managing grant process. The literature supports their conception with additions regarding involvement of regional staff and provision of technical assistance. Policy makers appear to be in accord with program managers' conception, also. . Evaluation of program performance Is directly addressed by policy makers and in the literature. Monitoring is the only evaluation activity cited by program managers. . Liaison with other Federal entities appears as solely a concern of policy makers . Congressional/OMB parties cite no activities.
Congressional/OMB		
Policy Makers	Increase focus on 1 iaison with funded insti tut ions and potentially fundable organizations together With provision Of technical assistance Act as liaison with constituency and the Hill Manage the grant program: - Solicit appl ications - Review grant submissions - Grant award process - Monitoring and evaluat ion	
Program Managers	**Grant Award Process** Announce in Federa lReg i ster Identify eligible entities Mai 1 packages to applicants Receive appl icat ions at Grants Management Enter dsta on IMPAC system and chuck eligibility Distribute copies lo Division of Medicine DM reviews, summarizes; consultant panel reviews competing applicat ions DM summarizes panel reviews, submits to NACHPE NACHPE recommends and ranks approved applicat ions (priori ty ret ing) DM, with author it y from OS/HEW, determines awards and amounts Notice of Grant Award to Grantee, HEW Congressional Liaison, HSAs, Regional Offices, et al. Not i fy Payment Office GM prepares official list of approved and funded applicants **Grant Management** . Schedule grant cycle . Ensure fair, objective review of applications . Ensure grantees are fiscally sound, have good accounting practices . Handle rabudgetiny requests . Handle requests for change in Project Director . Interpret pol icy/answer policy questions . Monitor grants	

APPEND1 X D

CONTENT ANALYSIS OF FIELD VISIT INTERVIEWS AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRIC PROJECTS

APPENDIX D

CONTENT ANALYSIS OF FIELD VISIT INTERVIEWS AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRIC PROJECTS

This revised content analysis summarizes information collected during the field visits to General Internal Medicine and General Pediatrics projects. It also includes insights gleaned from reviews of grants and of other support documentation and feedback provided by the work group on the initial draft distributed January 10. The purposes of this content analysis are to provide an overall generalized description of local project operations (to the extent possible) and to serve as the basic framework for the development of function models. It should be noted that the content analysis may not be totally comprehensive, and, if these descriptions of project activities do not contain certain data, it cannot be automatically inferred that operations are deficient. For these and other reasons, it should still be considered a draft document for critique/refinement by work group members.

The information collected has been-grouped into general categories that correspond to seven of the eleven areas of discussion pursued during the site visits. These categories are:

- Program objectives
- Continuity experience
- Curriculum
- Resident recruitment
- Evaluation
- Problems/future directions
- Fiscal issues

Narrative highlights in each category are provided for all projects visited. Data collected in the other four areas have either been consolidated into those listed above (e.g., "Methods for Implementing Objectives" is included in descriptions of the curriculum and/or the continuity experience) or determined most useful for future analyses.

APPENDIX D-I

PROGRAM OBJECTIVES EMANATING FROM FIELD VISITS

Train Residents in General Internal Medicine and General Pediatrics	Expose Residents to Non-Clinical Aspects of Primary Care Practice	Improve Quality of Training in Primary Care Residency Programs	Improve Access to Primary Care Medical Services	Produce More Practicing Primary Care Physicians	Impact Geographic Distribution of Physicians
Train residents to become primary care physicians	. Provide more realistic practice experience	. Make outpatient/ambulatory experience as exciting and intellectually challenging as inpatient experience	. Improve health care delivery systems	. Have residents practice primary care after graduation	. Have residents practice in underserved areas
Expose residents to primary care	. Increase emphasis on ambulatory care	. Provide contacts in other primary care areas, e.g., family practice	. Establish branch medical school	. Provide attractive settings to make it desirable to become generalists	. Train residents to be able to work alone and to provide acute and emergency care in underserved areas
Train physicians to provide ambulatory and inpatient care in the American medical tradition	. Train residents in holistic approach to patient treatment	. Improve primary care training while maintaining subspecialties	. Integrate and define uses of physician assistants in primary care	. Encourage traditional track residents to enter general practice	. Better prepare residents to work in sites other than center cities by providing larger selection of practice sites
Attract residents to primary care	. Train residents in obtaining and utilizing other, nonmedical and supportive resources	. Enable residents to provide broad, nonsurgical care	. Train house staff in providing care in ambulatory settings		
Identify residents who wish to go into general practice		. Increase residents' ability to track psychiatric problems	. Teach residents "team concept"		

Visit Dates : December 3, 1979
Interviewers: Roberts/Kotler
Grant Type: General Pediatrics

ONTINUITY EXPERIENCE :

At this university, patient panels are treated in the continuity clinic with visits scheduled by appointment. Residents at all levels are assigned in the clinic one half day each week; physician services are augmented by other members of the continuity team (Nurse Practitioner, Child Psychologist, Psychiatrist, residents, and faculty).

In addition to half-day clinic assignments, residents also have block time rotations that include the continuity clinic in the first two years. In the third year, block time rotations are elective.

CURRICULUM:

The curriculum includes "apprenticeships" with attendings, rounds, rotations, consultations, clinical and non-clinical conferences, resident supervision, and elective rotations.

RESIDENT RECRUITMENT:

Residents *are* matched directly to the program and are selected based oa academic excellence, commitment to primary care, interest and enjoyment of children and their families, persoaality ***traits,*** peer compatibility, behavior and developmental orientation, and recommendations.

:VALUATION :

Currently, residents are evaluated regarding their level of "developmental knowledge" after each developmental seminar: overall performance is also evaluated by the attendings. In addition, patient panels have been surveyed to obtain demographic profiles, and the effect of primary care intervention on specific diagnoses has been assessed.

Evaluation activities planned include assessing patient satisfaction using the Profile of Non-verbal Sensitivity (PONS) Test and studying the extent to which residents emulate faculty (as role models).

PROBLEMS/FUTURE DIRECTIONS:

No problems were listed for this program.

Future plans include establishment of a group practice, provision of rotations to outlying clinics, and preceptorships with private practitioners.

ISCAL:

The 784 grant totals $202,000 and provides 40 percent program support. Other funding sources include the hospital, the State, private monies, and patient fees.

Grant expenditures are tracked through audit trails by the busiaess office and ledger records kept by the university. The program has also been audited by the National Institutes of Health.

Visit Dates: December 4,1979
Interviewers: Kotler/Roberts
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

The continuity experience at this institution involves longitudinal care for a panel of patients, clinic assignments in the continuity setting, and block time rotations.

In general, first-pear residents share the same experiences as residents in the traditional tract. The second-year experience includes a six-month-block rotation in the outpatient clinics after which time residents can continue to see patients. No ward rotations are scheduled for second-year residents on this block assignment.

In the third year, residents have a six-week rotation to the Indian Health Service.

CURRICULUM:

The curriculum includes inpatient rotations, specialty clinic rotations (e.g., cardiology, infectious diseases, orthopedics, psychiatry, ENT, dermatology, arthritis, etc.), clinical conferences, non-clinical conferences (acupuncture, behavior modification regarding obesity and smoking, office management, depression, etc.), rounds oriented to primary care, consults, and electives.

RESIDENT RECRUITMENT:

Residents are matched directly to the primary care program during recruitment. Although there is not a separate recruitment committee, at least one committee member is an internist. In addition to interviews by committee members, applicants expressing strong interests in General Medicine are also interviewed by General Medicine faculty.

Selection criteria include academic performance, interest in primary care, program/peer compatibility, and recommendations.

EVALUATION :

Current activities in the area of evaluation are limited to chart audits, informal evaluation of residents, and annual evaluations of the program by residents.

Desired information includes data regarding patients reaction to the services they received (planned as a telephone survey two weeks after the visit), and faculty evaluations of the residents (using videotape equipment).

PROBLEMS/FUTURE DIRECTIONS:

Problems listed include rigidity of the continuity requirements (i.e.., 25 percent), an excessive emphasis on "minor complaints" in primary care training, the negative impact of military bases (Navy) and the local HMO on patient recruitment, low reimbursement by third-party payors, and the less lucrative returns overall for General Internal Medicine services.

Future plans include combining both tracts, involving one or two third-year residents in an existing group practice, and instituting a course on practice management.

FISCAL:

The amount of this grant is $150,000 including 8 percent for wer'nead costs. Other sources of funds include local/State money, other grants, and patient fees.

Visit Dates: December 4, 1979
Interviewers: Owen/Morrison
Grant Type: General Pediatrics

CONTINUITY EXPERIENCE:

The continuity experience includes treatment of a panel of patients ranging from 10 families -at PL-1 to approximately 50 families at PL-3. Residents are assigned to the continuity clinic, but also have additional block time assignments with private physicians during their second year.

Services are provided by continuity teams consisting of faculty, residents, and physician extenders. Patient visits are scheduled through an appointment system; back-up clinic coverage by the continuity team, however, provides physician access even in the event the primary doctor is not available during unscheduled visits. After hours, an answering service is used as an adjunct to the on-call system.

When patients are hospitalized, the resident acts as attending physician if the patient is admitted to the service corresponding to the resident's inpatient rotation. Otherwise, the resident consults.

CURRICULUM:

Elements of the curriculum include rounds, consultations, clinical conferences, preceptorials, rotations, supervision, electives, and a visiting faculty program (bi-monthly). Bon-clinical conferences are also provided and cover such topics as behavioral issues and morbidity.

RESIDENT RECRUITMENT:

Resident recruitment does not involve separate matching for the primary care tract. The principal selection criteria are academic performance and interest in primary care. Written contracts are required.

EVALUATION:

Current evaluation activities involve faculty and program evaluations by residents, resident evaluation by faculty, and program evaluation by the Department of Pediatrics.

Evaluation information desired relates to faculty and resident recruitment: Is the program consistently attracting "good" residents? What factors are related to becoming a General Pediatrician (useful in deveioping better recruitment and hiring practices)?

PROBLEMS/FUTURE DIRECTIONS:

Problems were listed that pertain to attracting/retaining good faculty, erosion of talent among faculty, meeting continuity requirements during winter months, and developing a General Pediatrics program in a tertiary care environment/facility.

Future plans involve changes in the curriculum: increasing block time rotations to four and one-half or five months with private practitioners, including physical disabilities in the PL-1 curriculum, and introducing management of school clinics in PL-3.

FISCAL:

No data available.

Visit Dates: December 5, 1979
Interviewers: Owen/Morrison
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

The continuity experience is comprised of block time rotations and clinic assignments in the continuity clinic for treatment of patient panels. During the first and second years, residents are assigned to the clinic for one half day each week. They spend two half days per week in their third year.

Patient visits are scheduled through the clinic's appointment system and, depending on the site of the resident's rotation, care is provided by continuity teams (physician extenders, faculty members, and residents). An on-call system facilitated through use of an answering service, is used co ensure patient access to a primary care physician after clinic hours. Residents also provide back-up coverage for each other.

When patients are hospitalized, the resident acts as attending physician if the patient is admitted co the service corresponding to the resident's inpatient rotation. Otherwise, the resident consults.

CURRICULUM:

The curriculum consists of preceptorials in the community, hospitai rounds, inpatient and ambulatory setting rotations, clinical and non-clinical conferences, consultations, and electives.

RESIDENT RECRUITMENT:

The program does not utilize a separate matching number in the recruitment of its residents, Applications ate reviewed and approximately 25 percent of the applicants are selected for interview. Subsequent to rankings based on the interviews, one-third are targeted for General Internal Medicine. Selection criteria are academic excellence and interest. Written contracts are also required.

EVALUATION:

Currently, house officers evaluate rhe faculty on a semi-annual basis and also evaluate the program. Faculty evaluate the house officers.

Evaluation information desired includes the number of graduates remaining in General Internal Medicine in small and mid-sized communities, overall retention rates, referral and practice patterns over time, level of professionai satisfaction/peer group satisfaction, patient volume, practice management problems, and site selection determinants. There was also interest expressed regarding the-cost-effectiveness of treating common diseases in different settings (e.g., specialty clinics, block clinics, continuity clinics).

PROBLEMS/FUTURE DIRECTIONS:

Problems expressed include the lack of practice management sites, insufficient number of full-time faculty, erosion of talent among faculty, difficult faculty recruitment/retention (due to unpredictable funding base), conflict between continuity requirements and ward rotations, and an underdeveloped psychosocial curriculum.

Future plans include establishment of a fellowship in General Internal Medicine. The program aiso has good prospects for viability at granr expiration.

FISCAL:

Activities for tracking grant expenditures include reviews of monthly print-ours from the university business office of summarized financial data. Additionally, all expenditures must be approved by the Project Director.

Visit Dates: December 6, 1979
Interviewers: Roberts/Kotler
Grant Type: General Pediatrics

CONTINUITY EXPERIENCE:

Residents are assigned to a model practice (continuity clinic) throughout the three years of training. Continuity teams, consisting of four residents per team, provide services to a panel of patients to ensure back-up coverage when the primary resident is not available in the clinic. Longitudinal experience is also provided during block-time rotations: three months in the pediatrics clinic and three months in specialty clinics.

CURRICULUM:

The curriculum consists of rounds, consultations, clinically-oriented conferences, resident supervision, rotations and electives. Non-clinical conferences are also included in the curriculum which cover issues related to:

- Anthropological and cultural aspects of special populations
- Psychodynamics
- Sociology
- Political science

RESIDENT RECRUITMENT:

Residents are recruited specifically for the primary care tract; each attends a screening interview. (Tvo hundred sixty-eight medical school graduates applied for 16 posifions-six of which were primary care--last year. A pre-selection process is pianned for future recruitments.)

Selection is based on academic performance, personal or professional experience in rural areas, general interest and commitment, ability to communicate and get along well with others, and recommendations.

EVALUATION:

Current evaluation activities are limited to pre- and post-attitudinal tests and scores on the board in-service examination to measure cognition. Planned/desired evaluation efforts will focus on the following types of questions:

Row do primary care and traditional tract residents compare regarding choice of practice sites (outcome); performance on in-service training boards and on specialty boards after training (cognition); and end of rotation rating (clinical and interpersonal skills)?

Do primary care pediatricians provide services more efficiently (e.g., fewer laboratory tests, referrals)?

PROBLEMS/FUTURE DIRECTIONS:

Problems experienced include high travel costs/living expenses associated with distant site rotations: conflict between continuity requirements and assigning residents to rural practice sites; reduced incomes of practicing physicians who also have teaching responsibilities (e.g., preceptors); needed changes in reimbursement schedules away from subspecialties to ambulatory care; reluctance of applicants to select the primary care tract; and difficulty determining indirect cost rates. Concern regarding self-sufficiency at grant expiration was also raised.

In terms of future directions, some difference of opinion emerged: the Chairman of Pediatrics supports maintenance of two separate tracts while the Head of Ambulatory Pediatrics favors redirecting the entire program to primary care.

FISCAL:

The amount of this grant is 5125,000. Other sources of support include a grant from the March of Dimes, State funds, and private monies (foundations). The Federai share of program support is approximately 33 percent.

Expenditures against the 784 grant are tracked through audit trails kept by the accounting office. This office also does random checks on major acquisitions, though all expenditures are authorized by the Pediatrics Department.

Visit Dates: December 6, 1979
Interviewers: Owen/Morrison
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

The continuity experience includes resident assignment to patient panels in the continuity clinic; utilization of an appointment system to control patient visits; an answering service and on-call rotations to accommodate patients after clinic hours; back-up coverage to ensure physician access when the primary physician is not available; and block time rotations. Residents also attend during patients' hospitalizations if the patient is admitted to a service corresponding to the inpatient rotation of the resident; otherwise, the residents consult.

CURRICULUM:

The curriculum is comprised of rounds, consultations, clinical conferences, resident supervision, rotations, electives, and non-clinical conferences. Topics for the non-clinical sessions have included:

- Death and dying
- Practice management
- Nursing home placement
- Determining VA benefits
- Utilization review
- Participation on hospital committees

RESIDENT RECRUITMENT:

Since primary care is the only tract, applicants are matched directly to the program during recruitment. Selection criteria include quality of medical education, interest in General Internal ?ledicine, communication skills, and probability of practicing in-state. Applicants are also requested to submit written contracts regarding their career intentions.

EVALUATION:

Current activities include competency assessments for students and residents, monthly procedure evaluations by attendings, videotaped evaluations of work-ups done by residents, "ambulatory care evaluations" by faculty, and knowledge/&ill evaluations (specifically in gastroenterology).

Evaluation information desired or anticipated from future activities includes graduates' practice characteristics; measurements of graduates' performance (through assessing number/rate of referrals to the medical school); measurement of cognitive knowledge (i.e., passage of IM boards); assessment of graduates' abilities to do. histories/physicals, differential diagnoses, and make appropriate referrals; and graduates' interese in continuing medical education.

PROBLEMS/FUTURE DIRECTIONS:

Problems listed include the need to attract better qualified students (the school 'has been mislabeled by AMA as community-based); the need for broader ambulatory care and continuity experiences due to the number of missed appointments, geographic dispersion of the patients, and treatment precedence requirements of the VA; the "excessive" continuity requirements for General Internal Medicine (25 percent); the difficulty simuiaring private pracririoner roles during residents' ward rotations; the shortage of women and children in the patient population; and the inequitable reimbursement systems by third-party payors. Program operators also cited difficulties in calculating indirect cost rates and the absence of mechanisms for information sharing among programs as problematic.

The program has good future viability and good prospects for self-sufficiency at grant expiration. Work has already begun for solicitation of State appropriations, foundation monies, and increased patient fees.

FISCAL:

The amount of this grant is $211,235, approximately 50 percent of ail program costs. Other funding sources include the State, the Veterans Administration, third-party payors, and patient fees.

Expenditures against the 784 grant are tracked through the use of purchase orders and vouchers which are submitted to the university for remittance. Record keeping includes iniormacion by line item on budgeted amount, monthly expenditure, year-to-date expenditure, and year-to-date variance.

Visit Dates: December 7, 1979
Interviewers: Roberts/Kotler
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

Continuity is based on care for a panel of 150 patients seen in the continuity clinic. Residents are assigned to the clinic one half day each week during ward rotations and 40 percent during their ambulatory care block experience. For the PL-1, this block time is four months; PL-2s have a three-month required block rotation in ambulatory care settings and may elect an additional two-month rotation. Third year residents have a six-month elective during which they may work in the ambulatory care clinics.

The clinic setting is based on a group practice model and utilizes continuity teams comprised of faculty and Nurse Practitioners (there are plans to include residents in the future). Clinic nurses triage new patients and the receptionist provides patient education. Continuitv is also maintained during patients' hospitalization during which time residents "follow" their patients.

CURRICULUM:

The basic curriculum consists of rounds, consults, conferences, rotations, and elective experiences. Additionally, psychosocial training is provided by a Social Worker who also chairs reviews of patients with psychosocial, alcoholic, or dependency problems.

Two physicians are scheduled in the clinic daily to provide resident supervision (no practice) in addition to one Physician Assistant for Resident Counseling (PARC). There is also a separate attending for the continuity tract. At the conclusion of each day, faculty and residents participate in debriefing conferences.

The program provides a variety of practice sites and, during the second year, contact with generalists in the community (through preceptorials). There is a broader exposure to allied health professionals, with residents functioning as first contact supervisors for *Nurse* Practitioners.

RESIDENT RECRUITMENT:

Residents *are* recruited through announcements, brochures, and posters circulated in Schools of Medicine, and are matched directly to the primary care tract. Selection criteria include academic performance; applicants' personal attributes such as caring, working with peers, accepting authority, and taking responsibility: commitment to primary care; and recommendations. Residents are also required to submit a letter of intent to practice General Internal Medicine.

EVALUATION:

Cunent evaluation *activities* consist of comparison studies between the primary care and traditional tract programs to determine how residents spend their time during outpatient and inpatient experiences; compilation of attitudinal data on in-coming residents; evaluation of faculty and peers by residents; and evaluation of residents after each rotation by faculty. During a semi-annual meeting with residents, an assessment is also made regarding whether or not the program is meeting the resident's goals.

titer graduation, a survey of practicing physicians is conducted to determine practice styles.

Evaluation activities desired by program operators include a longitudinal study to track Medicaid/Medicare claims which indicate primary care activities, a longitudinal study to determine retention among generalists, an assessment of physicians' interpersonai and counseling skills, and measurement of the amount of primary care provided by specialists.

PROBLEMS/FUTURE DIRECTIONS:

Problems expressed addressed the logistical difficulties of scheduling, obtaining sufficient patient variety, and providing adequate resident supervision and consultation. In addition to issues related to reimbursement/financial support (e.g., inability of ambulatory care to be self-supporting in a teaching environment, internists' low-level impact on fee schedules, lack of fixed support for residents' education, and the low return on physicians' time in ambulatory clinics versus high return for hospital procedures), a series of problems surfaced concerning continuity/primary care (e.g., conflict between continuity requirements and scheduling ward rotations, imbalance between distribution goal and continuity goal, inflexibility of 25 percent time requirement for continuity, and arbitrary definition of primary care). Other significant problems concerned the overiap between Family Medicine and Internal Medicine and the inadequate preparation of residents for practice management.

Discussions of future directions revealed an anticipated merge of traditional and General Internal Medicine residency programs and difficulty in post-grant funding.

FISCAL:

The amount of this grant is $134,000. Other sources of support include the Robert Wood Johnson Foundation, the Department of Medicine, and patient fees.

The Federal share of project support is 12 percent.

visit Dotes: December 10, 1979
Interviewers: Bowman/Savoy
Grant Type: General Internal Medicine

)NTINUITY EXPERIENCE:

The continuity experience includes patient panels of 130-135 patients (by the third year) drawn primarily from the medical clinic population. Residents are assigned 'to'the clinic one half day each week at the PL-1 level, and two half days each week for six months and three half days each week for six months for the remainder of their residency. Block time rotations include six weeks at the Student Health Center (PL-1); three months at a local Community Health Center practice site (PL-2); and three months elective rotations as PL-3s.

Other facets of the continuity experience are an appointment system for patient scheduling; the continuity teams, comprised of faculty and residents, that provide back-up coverage during office hours (the emergency room handles patients after hours); and night call rotations by the faculty. During patient hospitalizations, the primary care physician consults with the attending physician on the unit.

CURRICULUM:

Rounds; consultations: clinical conferences; block time, inpatient. and sub-specialty clinic rotations; supervision by faculty; a visiting Clinician program; and elective rotations are the basic components of the curriculum. Also included are non-clinical conferences during which the following topics have been discussed: psycho-somatic medicine, practice management, cost containment, compliance issues, forms completion, and epidemiology.

ESIDENT RECRUITMENT:

Interviews are conducted on seven consecutive Mondays for applicants to the program. While residents do not participate formally in the interview process, they do accompany applicants on tours of the facility and answer questions. Basic selection criteria include academic standing, intent to practice General Internal Medicine, prospective compatibility with the program and with peers, and letters of recommenda-tion.

Although the General Internal Medicine program uses a separate match number, applicants are ranked and selected from a single list that includes applicants to the traditional tract.

VALUATION:

Currently, three basic evaluation activities exist: 1) residents evaluate seminars, workshops, the visiting clinician experience, and the attendings;2) faculty evaluate residents' block time experience; and 3) staff conduct ad hoc evaluations for curriculum planning and resident rotations.

Information desired by program operators, but not currenclv collected, includes determinations regarding the effectiveness and quality of care (through chart audits); data on retention/attrition of residents and on achievement of residency training objectives; practice assessments regarding the type of services prwided by graduates and to whom; data specifically relevant to primary care (percent of firs: and continu-ing contact patients; referral methods, patterns, and rates); studies on the effect tenure or promotions have on faculty: and data on the cost efficiency of primary care practices versus traditional practices.

ROBLEMS/FUTURE DIRECTIONS:

Problems cited by staff at this program include insufficient exposure of the residents to "real world" experiences of practice management (this will hopefully be alleviated through future involvement of residents in block rotations at a rural private practice site); inadequate emphasis on non-clinical issues earlier in the curriculum; lack of continuity during patient hospitalizations; and insufficient number of full-time staff.

Of overwhelming concern was the non-tenure status of the primary care faculty. This situation was described as the result of powerful subspecialists controlling the politics of the academic environment (e.g., requirements for research and publications to attain tenure).

FISCAL:

Funding sources for the program include Robert Wood Johnson and other grants, State funds channelled through the university, hospital contributions, patient fees, and the 784 grant which totalled $352.189 as of September 1979.

Expenditures under the 784 grant are monitored by the Project Director (approves all expenditures) and accounting staff of the university. Documentation of grant expendi-tures is maintained through weekly month-end balance sheets, categorical ledgers, general ledgers, and the grant files.

Visit Dares: December 10, 1979
Interviewers: Roberts/McGuire
Grant Type: General Internal Medicine and General Pediatrics

CONTINUITY EXPERIENCE :

Residents are assigned co the continuity clinic one half day per week at all three levels. Each also has a panel of patients of approximately 100 individuals. For PL-ls, block experiences include nine months on the inpatient service, one month in specialty clinics, and two months in the continuity clinic. PL-2s and OL-3s are scheduled in two-month blocks in the continuity clinic; all other block rotations at these levels are on the inpatient service.

Continuity teems-comprised of faculty, residents, Nurse Practitioners, and Social Workers--provide intra-team back-up coverage if cbe primary physician is not availabie in the clinic. Patient visits are managed through an appointment system; after hour coverage is provided through an on-call rotation. If patients are hospitalized, "another resident takes over."

CURRICULUM:

Components of the curriculum include rotations, rounds oriented to primary care, emergency room consultations, clinical conferences, supervision, and electives. Non-clinic conferences are considered an integral part of the curriculum as well and include topics such as:

- Interviewing
- Sensitivity
- Interpersonal relationships
- Behavioral issues

Residents are also trained in teams.

RESIDENT RECRUITMENT:

Resident recruitment occurs through the use of posters and other "advertising" activities. Each applicant is invited for an oriencacion interview which includes audiovisual presentations on the program and facilities.

Selection criteria include academic performance, recommendations, board scores, personal attributes (decision-making, rapport with non-physician staff), and interest in primary care.

EVALUATION:

Current activities include formal evaluations of attendings, peers, and specialty rotations by residents; and evaluations of residents by attendings. Other activities related to broader issues include: a study of illnesses most commonly detected (data used to revise curriculum); a needs assessment of residents' interests (data used to plan seminars); *a study of community resources* available in rural areas (data used for resource identification by residents); study of services needed by Low income popuiations; a study of the composition of patient panels (no specific use planned); a study regarding source of patients (data used in continuation application); and a study of "no-show" rates in the Pediatrics program.

PROBLEMS/FUTURE DIRECTIONS:

Problems include conflict among Internal Medicine, Family Medicine, and specialties; difficulty coordinating care by residents during patient hospitalizations; negative resident attitudes in :he third year; geographic saldistribution (i.e., residents go to other States); faculty recruitment for Adolescent Medicine; resident and patient recruitment; inadequate full-time faculty, funds, and research dollars; and high turnover among clinic staff due to the city's low unemployment rate.

The most significant problem raised was the "ambiguous" definition of primary care. Program operators feel that primary care should be made "operational" co include ambulatory care experiences, block time, and continuity with the population rather than with individuals.

FISCAL:

Funding sources that complement the 784 grant include the hospital, State funds, *and* patient fees. Grant expenditures are tracked through use of a separate (unique) account number, and through review by the Department of monthly income/ *expenditure statements.*

All expenditures must be approved by the Project Director.

Visit Dates: December 12, 1979
Interviewers: Bowman/Savoy
Grant Type: General Internal Medicine and General Pediatrics

CONTINUITY EXPERIENCE:

The continuity experience includes longitudinal care for a panel of patients comprised of former clinic patients, hospital employees and/or their children, patients discharged from the hospital, walk-ins, and referrals. Services are provided through a group practice directed by Internal ?ledicine and Pediatrics faculty/practitioners. Residents, Nurse Practitioners, Psychiatrists, and a Social Worker participate with the faculty to form continuity teams.

First-year residents are assigned to the continuity clinic (which is constructed to simulate private practice) one half day each week plus one month block rotation. PL-2 Internal Medicine residents spend one half day per week and two months block time in the clinic; both PL-2 and PL-3 Pediatrics residents are assigned three half days a week. There are currently no third-year IM residents.

Other aspects of continuity include a commercial answering service for after hours calls; back-up clinic coverage by the block time physician if the primary physician is not available; night call rotation in which residents cover each other with faculty as back-up (faculty cover each other); and 24-hour staffing of the clinic. Patients requiring face-to-face contact after the clinic closes meet the physician at the office, as use of emergency room facilities is discouraged by the group. Primary care physicians also function as attendings for their patients who are hospitalized.

CURRICULUM:

The curriculum includes rotations (inpatient, ambulatory care settings, the local hospitals' Emergency Room, medical and pediatric clinics, and the primary care unit), rounds, consults, clinical conferences, electives of additional rotations, and supervision by faculty. In addition, both the General Internal Medicine and General Pediatrics residencies offer non-clinical conferences. Topics of these conferences have included medical economics, practice management, children's views on birth and death, and insurance and estate planning.

RESIDENT RECRUITMENT:

Applicants are matched directly to the program: medicine residents through a separate number and pediatric residents to a single tract (there is no categorical pediatric residency at this school).

Recruitment strategies and selection criteria include ratings from orientation interviews conducted for all applicants: consideration of academic performance; level of interest in primary care; degree of program and peer compatibility; and recommendations.

EVALUATION:

Current activities include evaluation of residents by attendings and evaluation of attendings by residents. Future evaluation plans call for implementation of a measurement strategy to determine achievement of program objectives.

Information desired by program operators relates to the appropriateness of the current physician-saturation thrust for the State, how to maintain the quality of services delivered in the absence of the model unit environment, determining the practice patterns of graduates, identifying where graduates locate, and describing graduates' level of job satisfaction.

PROBLEMS/FUTURE DIRECTIONS:

Problems identified include the inadequate documentation of need for physicians and the resulting concerns over balancing the numbers of primary care physicians, physician extenders, and specialists. Other problems concerned difficulties in patient recruitment and inadequate space.

The primary care program has good prospects for fiscal viability at grant termination and will probably be largely supported through patient fees. Plans are currently underway for relocation in a new facility to eliminate the space problem.

FISCAL:

The Federal share of support to the program for next fiscal year is projected at 40 percent. Other than grant funds, the major sources of support are hospital contributions and patient fees.

All grant expenditures are tracked through various monitoring reports generated by the hospital (annual projections, weekly/monthly balance sheets, etc.). These are supplied to administrative personnel at the hospital and to the administrator of the units who approves and monitors all transactions.

Visit Dates: December 13, 1979
Interviewers: Roberts/Kotler
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

This university administers two Internal Medicine programs funded by one grant. One site is owned and operated by the university; the other is comprised of a community-based hospital and an HMO.

Patient panels at one site range between 100-150 patients and are treated in a group practice environment which operates on the "firm system." PL-1s are assigned to the clinic one half day per week plus a three-week block rotation; PL-2s are scheduled two half days per week plus a six-week block rotation; and PL-3s spend five half days per week for 24 weeks plus two half days per week for 24 weeks. Clinic staff utilize the Message/Appointment Center to schedule activities,for all members of the firm; on-call responsibilities are shared by residents and faculty. If patients are hospitalized, they are admitted to their physician's service if he/she is on an inpatient rotation. Otherwise, the attending on the service manages the hospitalization.

Patient panels at the other site range between 500 - 600 patients by the third year of residency. Residents function as members of an Internal Medicine team and are responsible for a portion of their team's panel. The clinic assignment for first-year residents is one half day a week; two half days for second-year residents; and 50 percent time for seniors. Physician access is enhanced through use of a centralized appointment system, an on-call system and back-up coverage. Inpatient services are provided either-directly by the team or through consultation arranged for by the HMO.

Both sites utilize continuity teams of at least Nurse Practitioners (Nurse Clinicians). One site also has Social Workers and students; the other has Physician Assistants.

CURRICULUM:

The curriculum consists of the required elements: rounds, rotations, conferences, consultations, supervision, and electives. In addition, a series of non-clinical conferences are conducted which address health planning/policy; PSROs; HMOs; quality assessments; hospital and physician reimbursement; office records; bedside statistics; decision theory: office management; medical data collection, storage, and retrieval; and epidemiologic methods.

Psychosocial skills and topics are dealt with by the Medical Psychiatric Liaison Group and non-clinical areas are handled in weekly conferences on health care and seminars sponsored by the General Medicine Unit.

RESIDENT RECRUITMENT:

Each program utilizes only one NIRMP number: one program because its experience has proven that only one number is necessary and the other because it only offers a single tract program.

Selection criteria for each program include academic credentials, specific experience indicating interest in general health care, career goals, and interview rankings.

EVALUATION:

Evaluation activities at both programs measure individual achievements, and facilitate modifications to each resident's training experiences. Residents are assessed annually for clinical competence as part of the American Board of Internal Medicine's evaluation procedure. Additionally, evaluation activities include development of strategies to assess educational innovations in the primary care training efforts. (Based on data available from the interview summaries and from the grant application, the latter is the major evaluation objective. Also, according to these two sources, uses of data collected during other evaluation endeavors is not clear.)

PROBLEMS/FUTURE DIRECTIONS:

Problems listed include difficulties anticipated by program operators in securing post grant funding for residents' stipends; difficulties in conducting an overall program evaluation due to one of the programs' flexibility, its close relationship to the traditional tract, and the lack of a "charismatic leader."

Visit Dates: December 14, 1979
Interviewers: Roberts/Kotler
Grant Type: General Internal Medicine

CONTINUITY EXPERIENCE:

Panels of patients receiving care in the continuity clinics range in size from 100 to 150 for PL-1s; 1.50 to 200 for PL-2s; and 200 to 250 for PL-3s. These patients are assigned to continuity teams of which the primary care resident is a part. Other members of the team are 3 to 5 preceptors, 10 to 12 residents, one Nurse Clinician, 1 to 2 Social Workers, and a secretary.

Residents in the first year are assigned to the clinic one half day per week, plus three half days par week for nine weeks during block rotations on ambulatory services; second-year residents have clinic assignments one half day per week plus three half days each week for 12 weeks during ambulatory block rotations; and third year residents spend two half days per week in the clinic during 18 weeks of inpatient rotations and five half days per week during 30 weeks of longitudinal electives. Clinic teams provide night and weekend coverage through an on-call system (patients call an answering service). Should a patient be admitted to the hospital, the resident functions as attending.

CURRICULUM:

In addition to the basic curricular offerings, the following are specifically oriented to primary care:

- Series of primary care-related lectures
- Noon teaching conferences
- Daily outpatient conferences
- Interviewing techniques with a "programmed mother"
- Telephone management exercises

Ambulatory care rotations are provided at one of two hospitals; in developmental pediatrics; during night call; and, for second- and third-year residents, during a five to six week elective.

Residents also have self-instructional audiovisual and computer-programmed materials, and individual preceptorial supervision available to them.

RESIDENT RECRUITMENT:

No data available.

EVALUATION:

Based on information available, evaluation activities include assessments of the effectiveness of curriculum studies to determine the program's effectiveness in reaching its educational objectives. These assessments require semiannual preceptor evaluations of individual house officers regarding knowledge, skills, and attitudes. Evaluations of residents' interviewing skills and knowledge specific to primary care are also included in these assessments.

Educational process studies are also conducted to determine the appropriateness of settings and populations served. These studies are based on data obtained through comparisons of residents' continuity experiences with experiences of practicing pediatricians: comparisons of residents in the two tracts; and determining the effects of the residents' level of training on patient encounters.

Surveys of faculty and staff, documentation of primary care experiences and of the primary care curriculum, and follow-up of graduates have been used to generate a third bank of evaluation data called "program contextual studies." This information is used to continuously evaluate the setting in which the above-cited educational changes are expected to take place.

PROBLEMS/FUTURE DIRECTIONS:

The "potential problem" listed from the on-site interviews relates to obtaining continuing support at grant termination. Patient scheduling, failure to keep appointments, ensuring that the residency training program provides adequate educational experiences for primary care practice, locating community-based practice sites to relieve the burden on the hospital-based clinic, and increasing ambulatory care experiences for residents who simultaneously are on call for the continuity clinic were included as additional problem areas.

FISCAL:

Grant expenditures are monitored by the fiscal administrator within the Pediatrics Department.

Visit Dates: December 14, 1979
Interviewers: Roberts/McGuire
Grant Type: Internal Medicine

CONTINUITY EXPERIENCE:

Patient panels range from approximately 40 patients during the first two years to 150-200 in the third year. Assignment to the panels is based on old/new appointments made each day. However, with the planned automated system in place, assignments will be made by presenting problems.

Patients are seen in the Adult Medicine Clinic where PL-1s and PL-2s are assigned one half day each week. PL-3s are assigned one half day per week over a six-month block assignment.

Services are provided by two continuity teams each consisting of two faculty members, two residents, a Nurse Practitioner, and a Social Worker. Back-up coverage is provided by the physician team members when the primary resident is not available. During patient hospitalizations, the primary care resident functions as attending.

CURRICULUM:

Curricular offerings Include rounds, rotations, consultations, team conferences (problems discussed with attendings), case conferences (residents make one-hour presentations), exposure to physician extenders, supervision, and elective rotations.

Additionally, the curriculum includes an emphasis on behavioral medicine and formal sessions on non-clinical issues: interviewing, communication, acupuncture, financial management, psychosomatic illness, 'marriage, depression/anxiety, and physician behavior with patients.

RESIDENT RECRUITMENT:

Between 100 and 200 applications are received for the six to eight positions available (though many apply to both tracts). While interviews are not required, group interviews are conducted. The primary selection criteria are: class standing, interest in primary care, and recommendations.

This program utilizes a separate NIRMP number.

EVALUATION:

Current activities involve evaluations of conferences/lectures, specialty rotations, and Nurse Practitioners by residents: evaluations of residents by staff; evaluation of the program by the Department; and periodic evaluations by the education committee (of which residents are members) of the attainment of educational objectives.

Other evaluative studies that have occurred include a survey of patients to assess compliance and level of satisfaction; needs assessment of residents' interests which was used to plan seminars; demographic and patient problem data which will be used to "control" patient panels; and chart audits.

PROBLEMS/FUTURE DIRECTIONS:

Problems listed for this program include:

Rigid continuity requirements ("25 percent doesn't have to be spread over three years")
Conflict between ward assignments and continuity clinic requirements
Prejudice against primary care faculty
Insufficient resources for faculty training
Non-tenured faculty
Need to establish primary care as viable academic area
Difficulties in faculty recruitment, development, and retention
Less dedicated residents/difficulty recruiting
Need to attract better qualified residents
Slow-growing patient population (related to third-party payments)
Mechanical responsibilities associated with operating clinic (billing/charging)
Estrangement between Family Medicine and N&P
University bureaucracy (retrieving charts, etc.)

Future directions for the program include plans to add Practice Management sessions to the curriculum, open a new clinic, and modify the entire residency program to include the continuity experience.

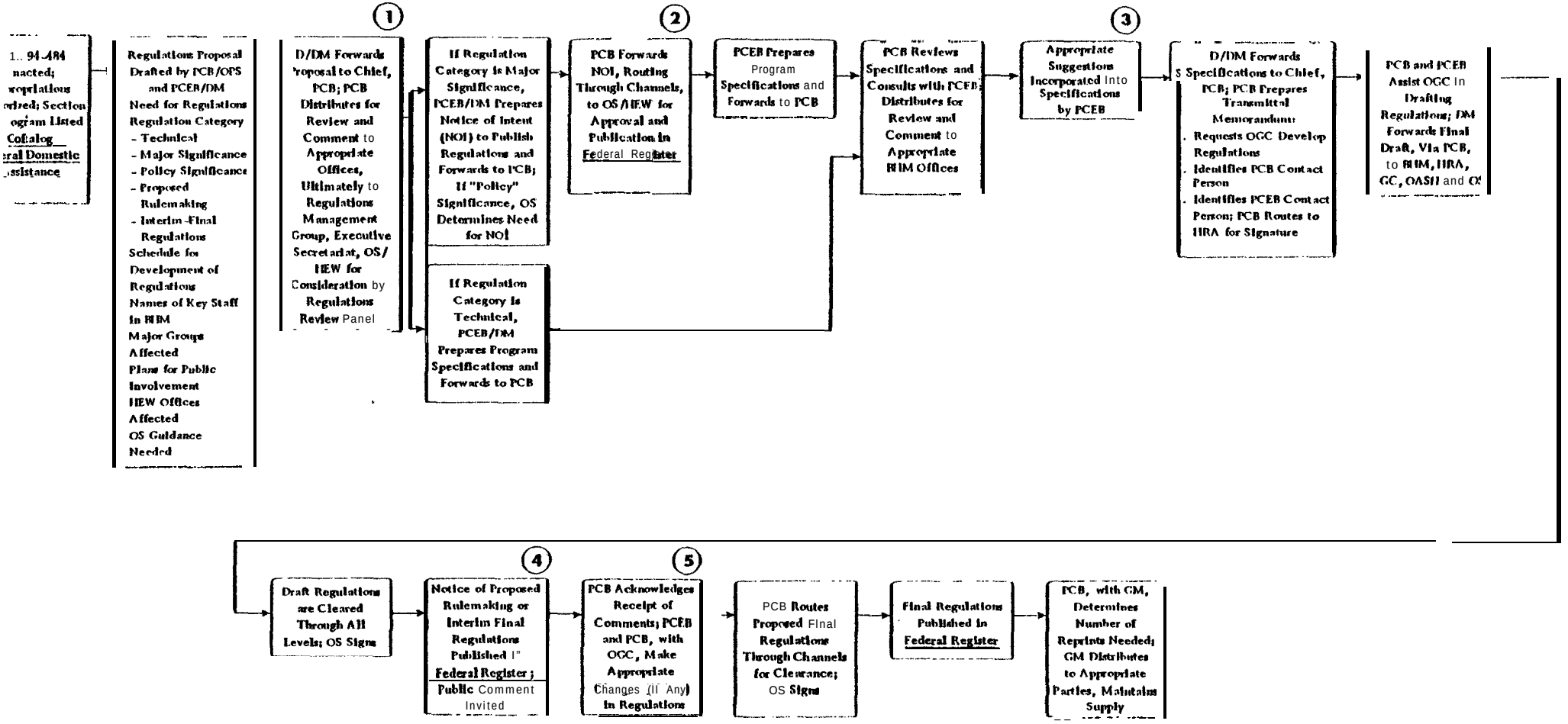
FISCAL:

The primary care budget for this program is $600,000 approximately one-sixth of which is supported by the 784 grant. Other sources of support are the State, other grants, third-party payments, and patient fees.

APPEND1 X E

FUNCTION /MEASUREMENT MODELS OF THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS GRANT PROGRAM

FUNCTION/MEASUREMENT MODEL OF DEVELOPMENT OF GRANT PROGRAM REGULATIONS



INDICATORS/MEASURES FOR DEVELOPMENT OF GRANT PROGRAM REGULATIONS

0001 . Routing locations
. Review panel criteria/guidelines

0002 Routing locations

0003 Criteria determining comments' incorporation

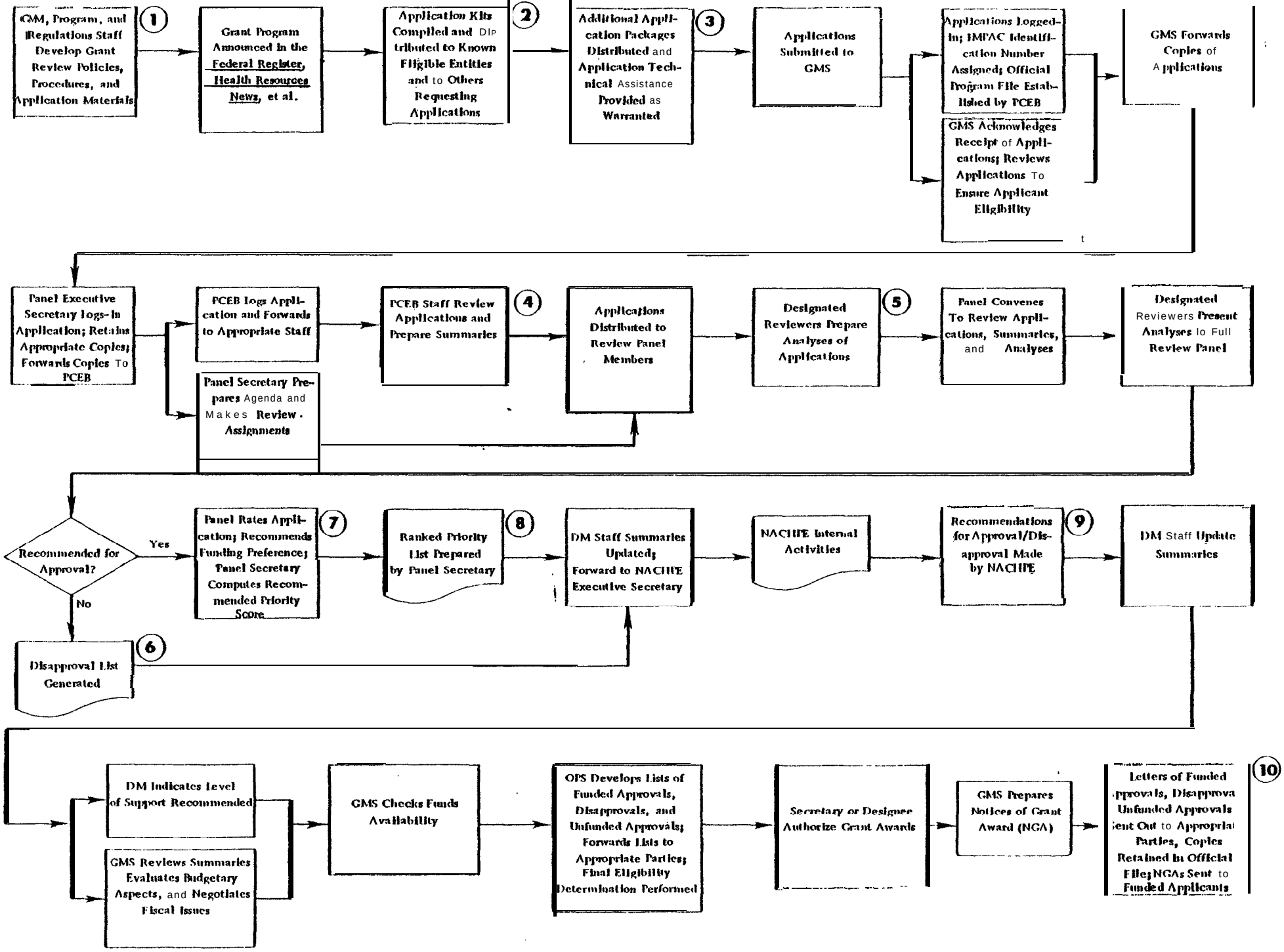
0004 Process for soliciting public comment

0005 . Volume of comments received
. Criteria determining comments' incorporation

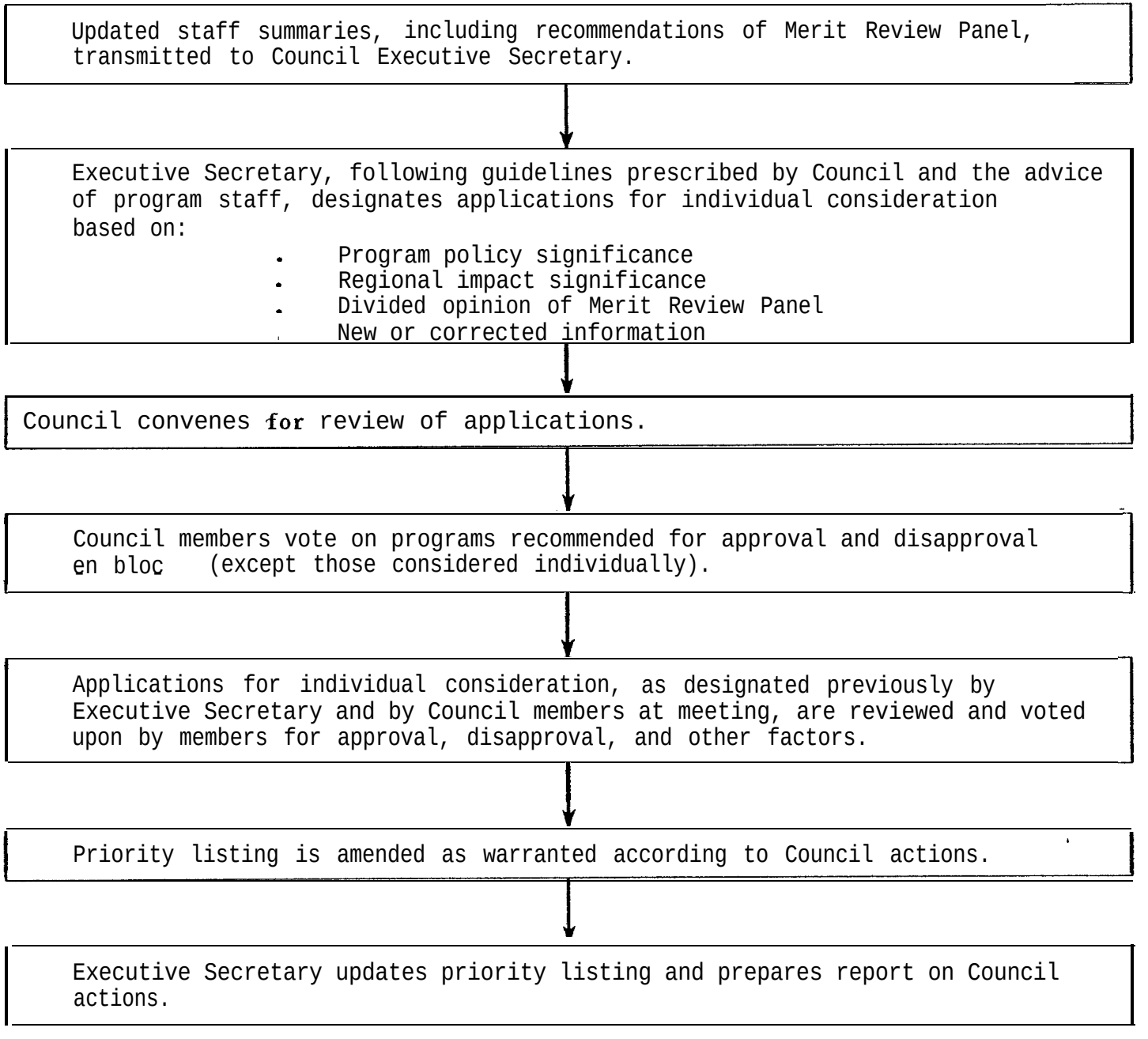
Overall Measures:

- Time required for activities
- Information base(s) utilized

FUNCTION/MEASUREMENT MODEL OF THE GRANT AWARD PROCESS FOR THE GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS GRANT PROGRAM



INTERNAL ACTIVITIES OF NATIONAL ADVISORY COUNCIL ON HEALTH PROFESSIONS EDUCATION: GRANT REVIEW



INDICATORS/MEASURES FOR GRANT AWARD PROCESS

0 1
- Criteria for policy/procedure development
- Data base utilized

0 2
Number of application kits distributed

0 3
- Number of application kits distributed
- Types and amounts of technical assistance provided

0 4
Review criteria

0 5
- Process for reviewer designations
- Reviewers designated
- Reviewers' criteria/guidelines for assessment of applications
- Data base utilized

0 6
Number and characteristics of disapprovals

0 7
- criteria
- Basis for criteria

0 8
Number and characteristics of approvals

0 9
- Number and characteristics of approvals
- Number and characteristics of disapprovals

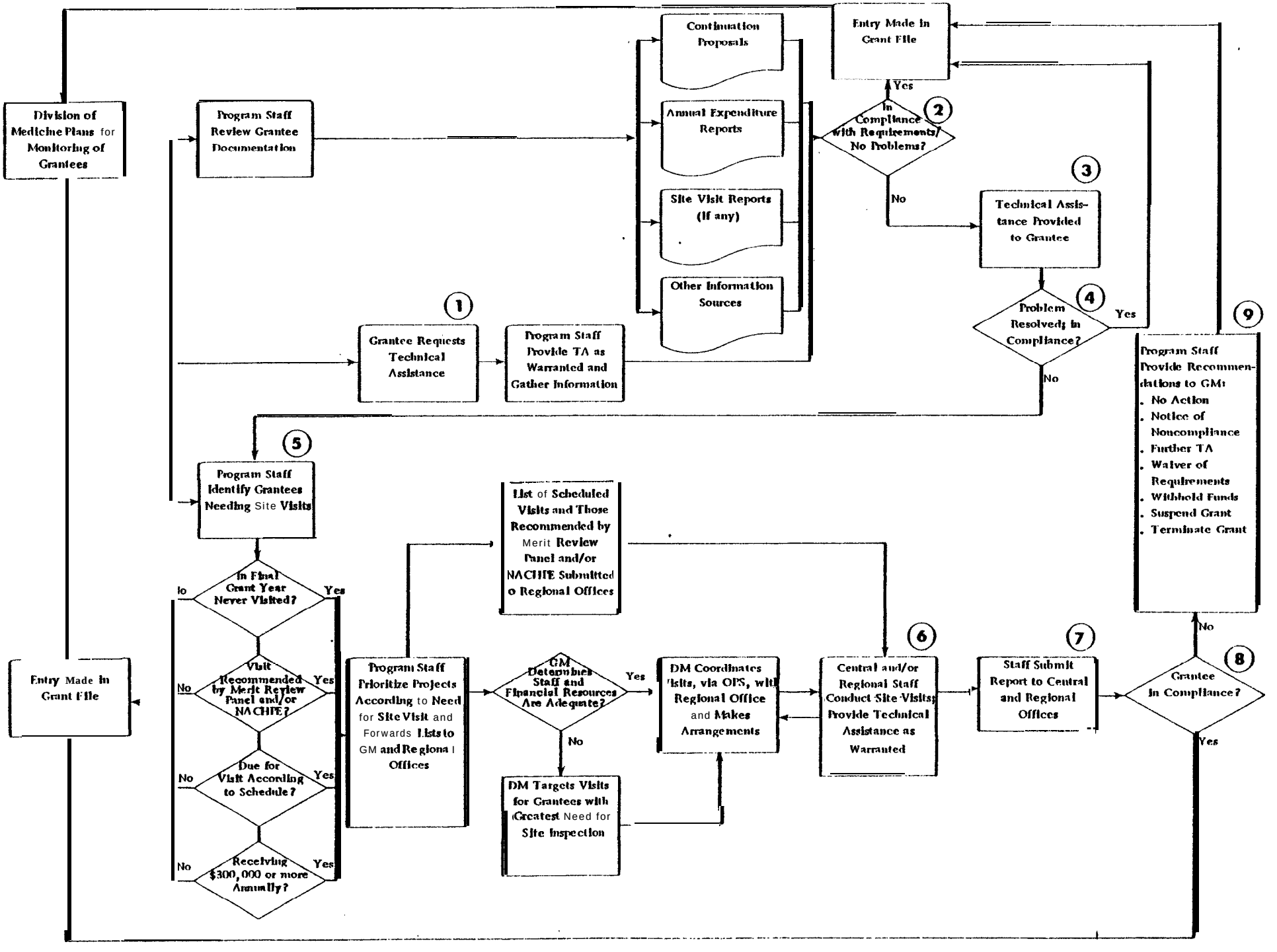
1 0
- Number and characteristics of funded approvals
- Number and characteristics of unfunded approvals
- Number and characteristics of disapprovals

OVERALL MEASUREMENT CRITERIA

- Time required for the grant award process and each step thereof
- Costs required for the grant award process and each step therof

APPENDIX E-III(l)

FUNCTION/MEASUREMENT MODEL FOR GRANT MONITORING PROCESS



INDICATORS/MEASURES FOR GRANT MONITORING PROCESS

(1)
- Number of requests
- Nature of requests
- Amounts and types of technical assistance provided
- Time frame: from request to delivery of technical assistance

(2) Number and types of noncompliance/problems

3 Amounts and types of technical assistance provided

4
- Number and types of noncompliance/problems remaining
- Reasons for nonresolution of problems/noncompliance

5
- Number of site visits planned
- Criteria for planning of site visits

6 Number of site visits performed versus number of site visits planned

7
- Number of reports submitted
  - To Central Office
  - To Regional Office(s)
- Time frame: from time of visit to submission of report

8 Number and types of noncompliance

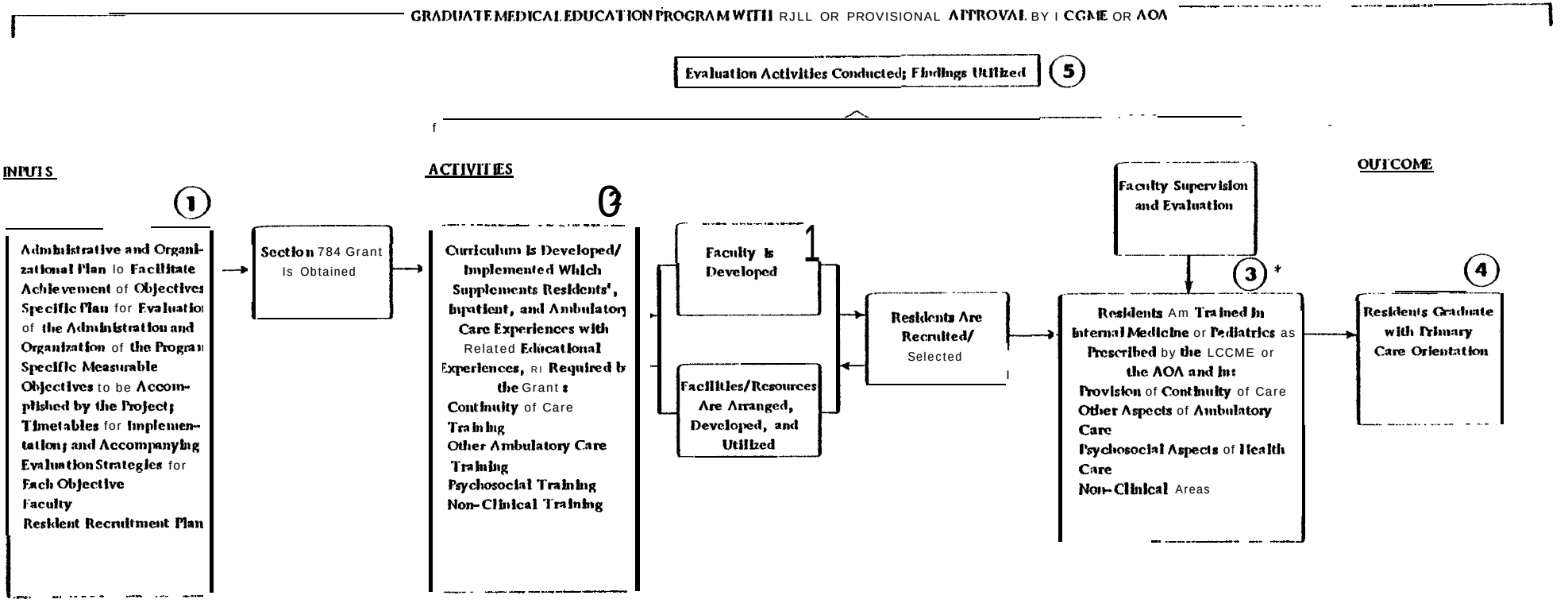
9
- Number and types of recommendations
- Number and types of actions taken

OVERALL MEASURE

Number and percent of files containing evidence of monitoring activity

APPENDIX E-IV(1)

FUNCTION/MEASUREMENT MODEL FOR PROJECT-LEVEL ACTIVITIES OF THE CENEML
INTERNAL MEDICINE AND GENERAL PEDIATRICS RESIDENCY PROGRAM



* A function model depicting the resident training process follows.

INDICATORS/MEASURES FOR PROJECT-LEVEL ACTIVITIES

0

- Degree to which project inputs exist at the time of grant award
- Composition and character&tics of faculty:
  - Percent of staff full-time
  - Percent of staff salaried
  - Type (practitioner, academician, researcher)
  - Tenure status
- Credentials/affiliations of Project Director and other faculty on-board (i.e., Curriculum Coordinator, Evaluation Specialist)

0

- Number and content of ambulatory care subjects provided, by year of training
- Number and content of psychosocial topics provided, by year of training
- Number and content of non-clinical topics provided, by year of training
- Frequency of evaluation of curriculum

0

- Number of residents per year of training program
- Number and percent of residents matriculating through training program
  - Year 1 to year 2
  - Year 2 to year 3
  - Year 1 to year 3
- Nature and rate of progression in resident responsibilities
- Retention rates by year in training program
- Reasons for attrition

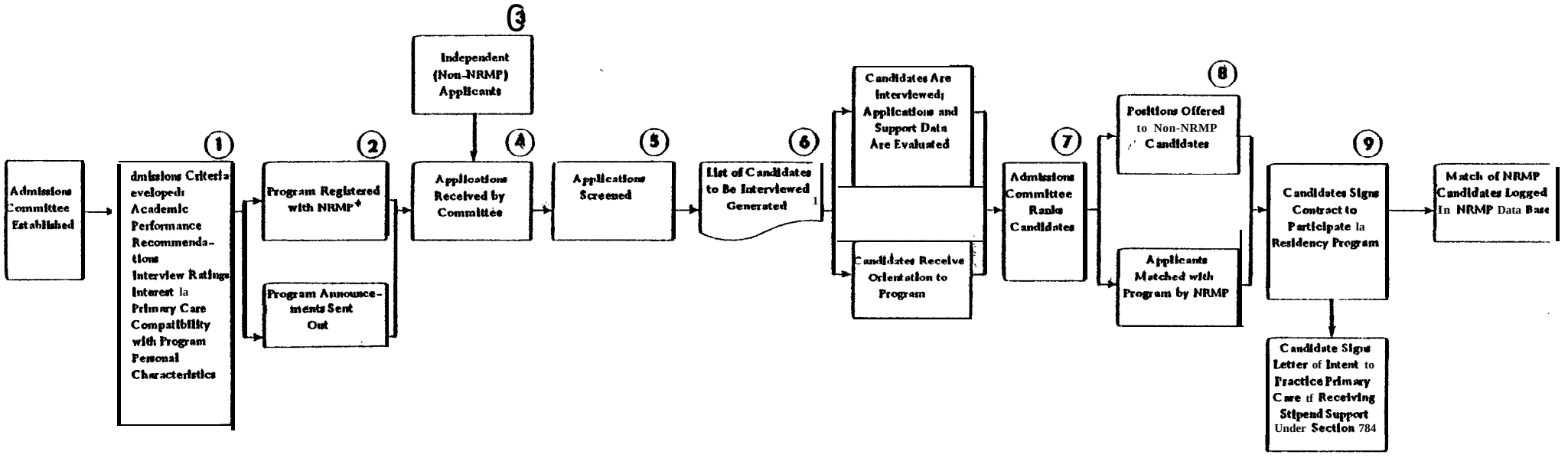
0

- Number of graduates
- Grant requirements for number of graduates
- Initial practice plans of graduates

0

- Time frame for evaluation implementation
- Evidence of utilization of evaluation data

FUNCTION/MEASUREMENT MODEL OF RESIDENT RECRUITMENT AND SELECTION



* Schools of Osteopathy and Schools of Medicine with non-English native language (Puerto Rico) are not eligible for NRMP. Not all Schools of Medicine (approximately 2% of total) participate In NRMP.

INDICATORS/MEASURES FOR RESIDENT RECRUITMENT AND SELECTION

0 1
- Specific criteria used
- Weights assigned to criteria

0 2
- Is a separate NRMP number used for general tract?
- If so, number of positions registered
- If not, total number of positions registered and percent of total which are general tract positions

0 3
- Number of non-NRMP applicants

0 4
- Number and percent of applicant pool specifically applying to general tract

0 5
- Criteria used for screening applicants

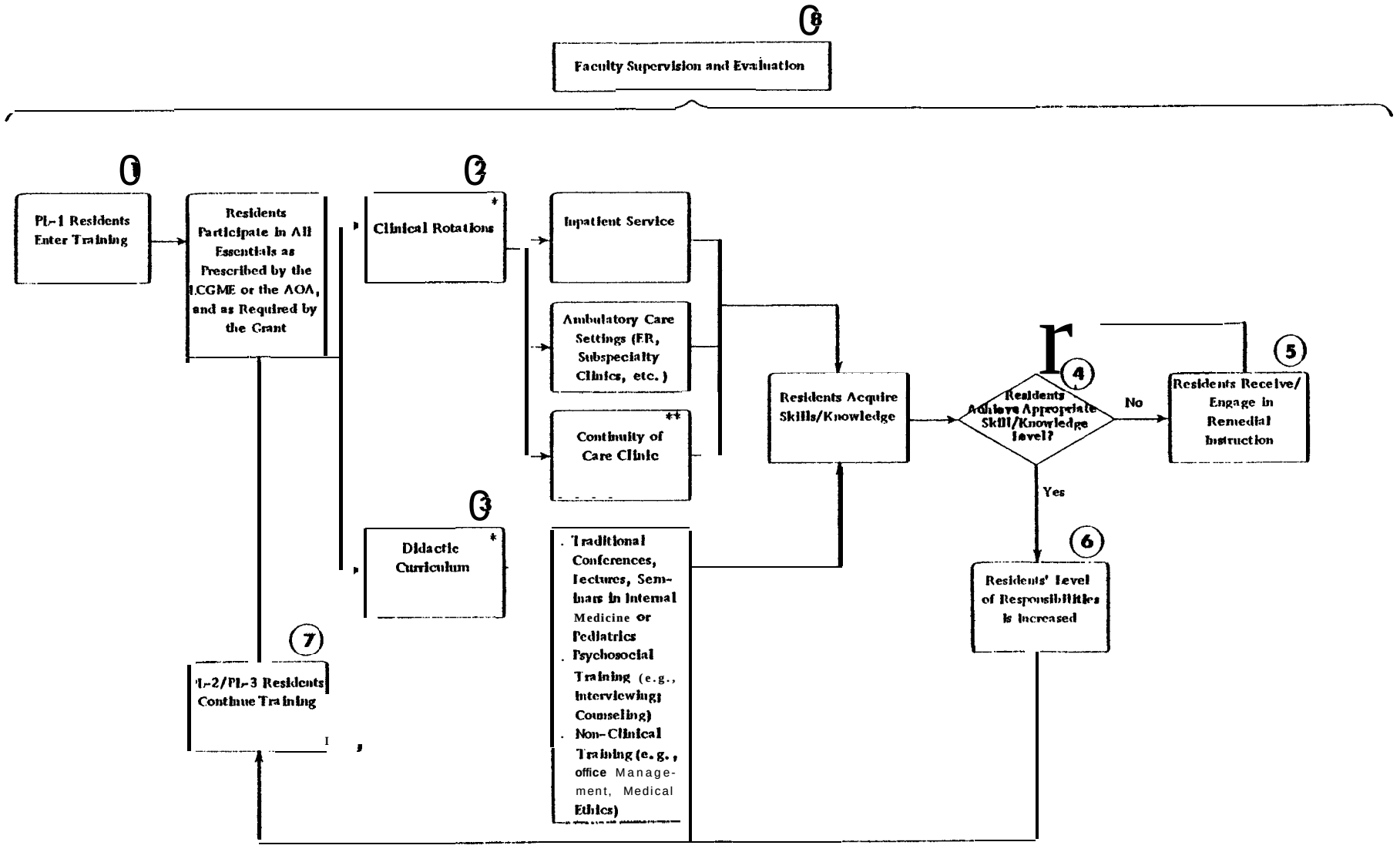
0 6
- Number and percent of applicants invited as candidates

0 7
- Percentile used as discrimant level
- Criteria used for ranking
- If candidate pool is mixed, is ranking performed separately according to tract?

0 8
- Number and percent of candidates offered positions
- Number and percent of available *positions* filled
- If candidate pool is mixed, percent of positions offered to general tract applicants

(9)
- Number and percent of position offers accepted
- Characteristics of accepted candidates

FUNCTION/MEASUREMENT MODEL FOR RESIDENT TRAINING IN GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS



* Residents also participate in elective experiences in these areas.

** A function model of Continuity of Care training is presented in the following exhibit.

INDICATORS/MEASURES FOR RESIDENT TRAINING

0 1 Number entering PL-1

0 2 Residents' schedule, by year of training

0 3
- Content
- Frequency

0 4
- Methods for evaluating
- Frequency of evaluation
- Evidence that evaluation data is used
- Number of residents not achieving appropriate levels of skills/knowledge

0 5
- Number and percent of residents receiving remedial instruction
- Number and percent of residents achieving appropriate levels after remedial instruction

0 6
- Criteria for &termination
- Nature of responsibilities (e. g., clinical, teaching)

0 7
- Number of residents PL-1 to PL-2
- Number of residents PL-2 to PL-3
- Number of PL-3 residents who entered at PL-1

0 8
- Number and frequency of evaluation activities
- Number and type of overall curricular modifications resulting from evaluation efforts

OVERALL MEASURE

Comparisons of elements common to traditional and primary care training

FUNCTION/MEASUREMENT MODEL CONTINUITY OF CARE TRAINING

Existing Educational Resources

- Ambulatory Care Training Setting(s) I-
- Personnel Organized Into Functional Units to Provide Health Services (Continuity Teams)
- Systems for Referring Patients 10 Other Specialists and Subspecialists
- Appointment System
- Medical Records System Which Ensures Retrievability, Is Suitable for Audit, Assures Systematic Review
- System for Constructing Patient Panels

0 Faculty Supervision and Evaluation

n

0 Faculty Assigns Resident to Continuity Clinic and to Continuity Team

0 Faculty Supervises Assignment of Patient Panel to Resident

Residents/Faculty Add Members Throughout Residency

4 * Resident Learns/Provides Longitudinal, Comprehensive, and Coordinated Care to His/Her Panel (Ambulatory and Hospitalized Patients) Throughout Three Years of Training According to Prescribed Educational Objectives

* Function models depicting methods of patient-provider Jntcraction for ambulatory and hospitalized patients follow.

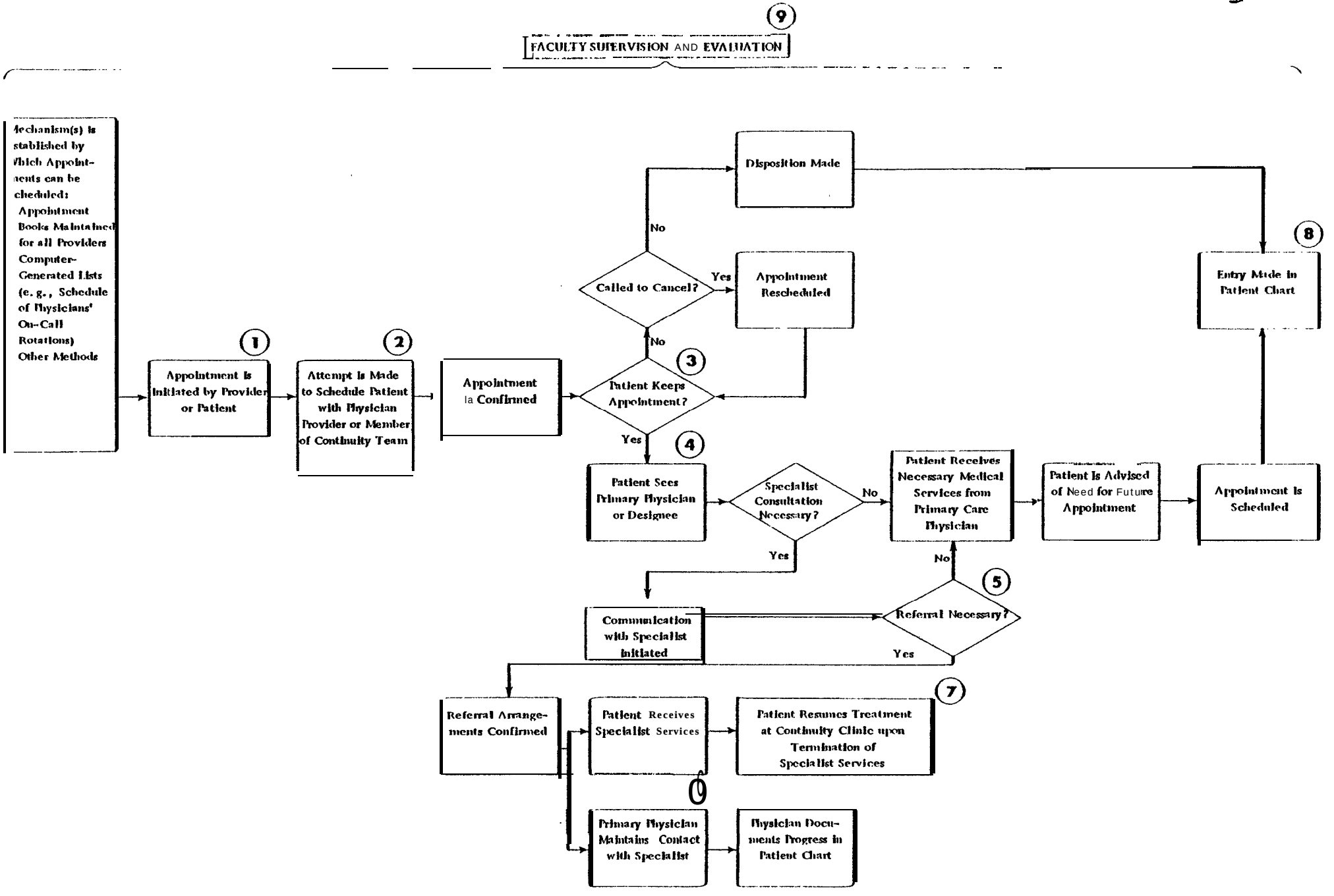
INDICATORS/MEASURES FOR CONTINUITY OF CARE TRAINING

(1)
- Nature of supervision
- Method of evaluation
- Frequency of evaluation
- Utilization of evaluation data

(2) Amount of time spent by resident in continuity clinic, by year of training

(3)
- Size of panel intended
- Size of panel assigned
- Timing for/methods of panel assignment
- Composition of panel assigned
  - Presenting problem
  - Demographic/geographic profile
  - Number and percent of panel members by source
- Number of panel members perceived by resident as his/her patients
- Number of panel members who perceive resident as primary physician
- Criteria for assignment of new patients to panel
- Incremental increases in panel size/composition, by year of training
- Amount of time spent in continuity clinic seeing panel members, by year of training

(4)
- Number of first contact patients
- Nature and frequency to which preventive care is provided
- Nature and frequency of coordination activities
- Nature and frequency of comprehensiveness of services
- Degree to which longitudinality exists


9
FACULTY SUPERVISION AND EVALUATION
Mechanism(s) is stablished by Which Appoint-ments can be cheduled:
Appointment Books Maintained for all Providers
Computer-Generated Lists (e.g., Schedule of Physicians' On-Call Rotations)
Other Methods
1
Appointment is Initiated by Provider or Patient
2
Attempt is Made to Schedule Patient with Physician Provider or Member of Continuity Team
Appointment Is Confirmed
3
Patient Keeps Appointment?
No
Yes
Called to Cancel?
Yes
No
Disposition Made
Appointment Rescheduled
4
Patient Sees Primary Physician or Designee
Specialist Consultation Necessary?
No
Yes
Patient Receives Necessary Medical Services from Primary Care Physician
Patient Is Advised of Need for Future Appointment
Appointment Is Scheduled
8
Entry Made in Patient Chart
5
Referral Necessary?
No
Yes
Communication with Specialist Initiated
Referral Arrange-ments Confirmed
Patient Receives Specialist Services
7
Patient Resumes Treatment at Continuity Clinic upon Termination of Specialist Services
6
Primary Physician Maintains Contact with Specialist
Physician Docu-ments Progress in Patient Chart

INDICATORS/MEASURES FOR CONTINUITY OF CARE PROVIDED TO AMBULATORY PATIENTS DURING SCHEDULED CLINIC VISITS

0 Number of appointments made for ongoing preventive care

(2) Frequency at which primary physician is scheduled to see members of his/her panel

0 Number of missed appointments

0 Frequency at which primary physician sees members of his/her panel

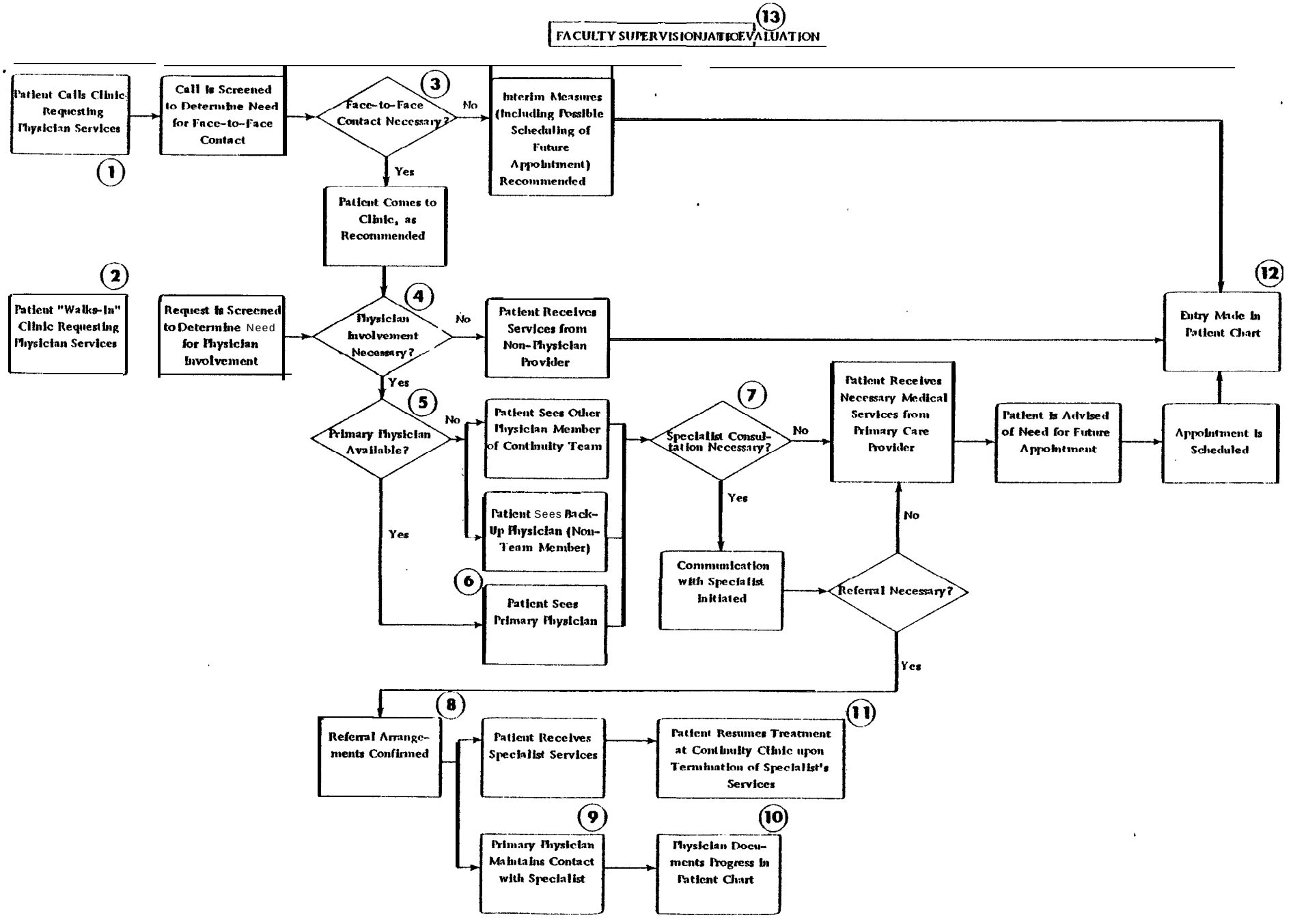
0 Referral patterns
- Number and frequency of referrals
- Nature of referrals

0 Nature and frequency of communication with specialist

(7)
- Number of patients returning to continuity clinic
- Number of patients returning to clinic who receive same panel/primary physician assignment

0 Completeness of patient chart (including referral information)

(9) Nature and frequency of supervision/evaluation


(13)
FACULTY SUPERVISION/ATTENDING EVALUATION
Patient Calls Clinic Requesting Physician Services
(1)
Call is Screened to Determine Need for Face-to-Face Contact
(3)
Face-to-Face Contact Necessary?
No
Interim Measures (Including Possible Scheduling of Future Appointment) Recommended
Yes
Patient Comes to Clinic, as Recommended
(2)
Patient "Walks-In" Clinic Requesting Physician Services
Request is Screened to Determine Need for Physician Involvement
(4)
Physician Involvement Necessary?
No
Patient Receives Services from Non-Physician Provider
Yes
(5)
Primary Physician Available?
No
Patient Sees Other Physician Member of Continuity Team
Patient Sees Back-Up Physician (Non-Team Member)
Yes
(6)
Patient Sees Primary Physician
(7)
Specialist Consultation Necessary?
No
Yes
Communication with Specialist Initiated
Referral Necessary?
No
Yes
Patient Receives Necessary Medical Services from Primary Care Provider
Patient is Advised of Need for Future Appointment
Appointment is Scheduled
(12)
Entry Made in Patient Chart
(8)
Referral Arrangements Confirmed
Patient Receives Specialist Services
(11)
Patient Resumes Treatment at Continuity Clinic upon Termination of Specialist's Services
(9)
Primary Physician Maintains Contact with Specialist
(10)
Physician Documents Progress in Patient Chart

INDICATORS/MEASURES OF CONTINUITY OF CARE PROVIDED TO AMBULATORY PATIENTS DURING UNSCHEDULED CLINIC VISITS

0 . Number of calls received per day
. Number of calls received resulting in clinic visits

0 . Number of "walk-ins" per day
. Number of "walk-ins" who do not have primary physician assigned

0 . Screening criteria
. Number not requiring face-to-face contact

0 . Screening criteria
. Number not requiring physician involvement

0 Frequency

6 Frequency

0 . Criteria
. Frequency

0 . Procedure
. Percent of referrals made

0 Nature/frequency of contact with specialist

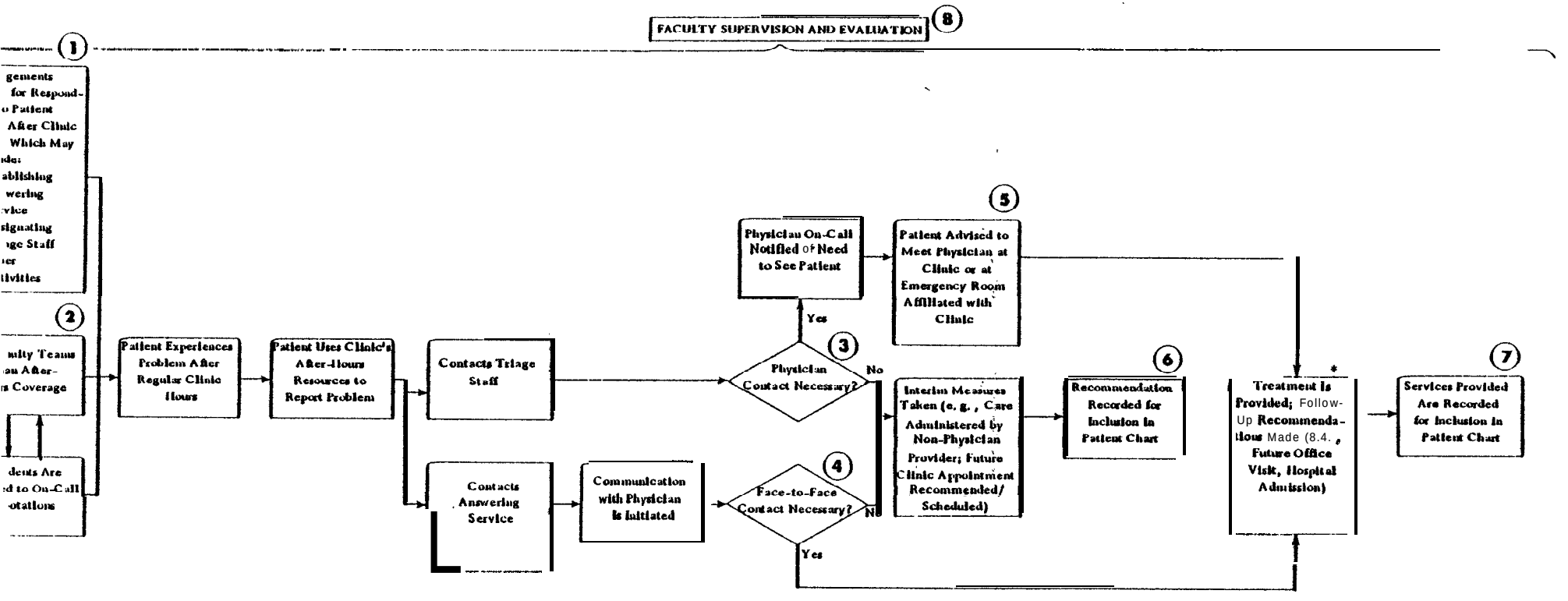
0 Frequency of entries

0 . Number of patients resuming treatment at clinic
. Number of patients resuming treatment at clinic with same primary physician/panel

0 Nature/frequency of entries

0 Nature/frequency

FUNCTION/MEASUREMENT MODEL OF CONTINUITY OF CARE PROVIDED TO AMBULATORY PATIENTS AFTER CLINIC HOURS

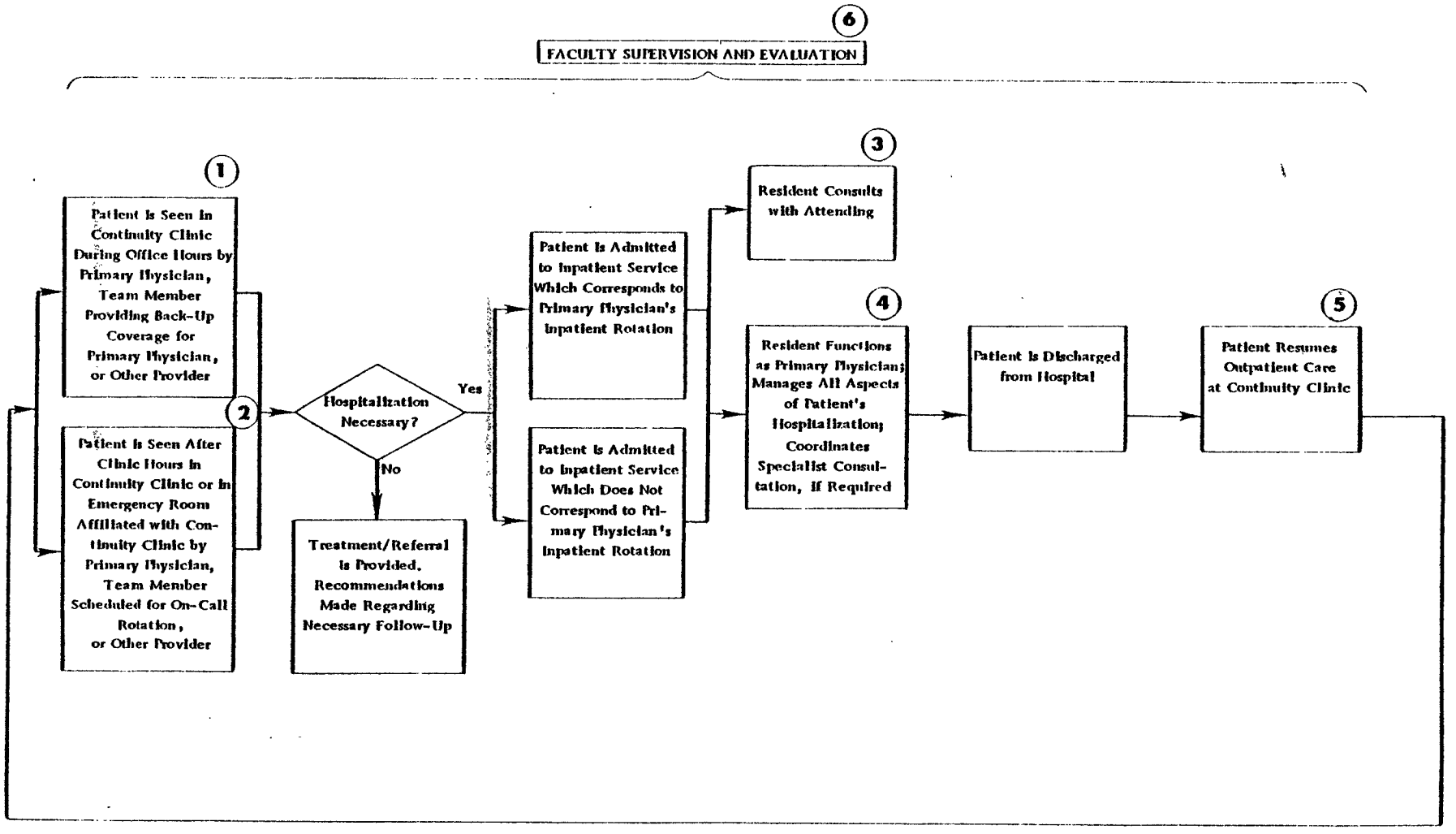


* Scheduled office visits and patient hospitalizations are presented in other models.

INDICATORS/MEASURES FOR CONTINUITY OF CARE PROVIDED TO AMBULATORY PATIENTS AFTER CLINIC HOURS

1. Evidence of formal procedure
2. Schedule/plan for team back-up
3. . Screening criteria
   . Percent of calls not requiring physician contact
4. . Screening criteria
   . Percent of calls not requiring face-to-face contact
5. Frequency at which services are provided by patient's primary physician or member of team
6. . Nature/frequency of notation
   . Method of transfer to patient chart
   . Timeframe for inclusion in patient chart
7. . Nature/frequency of notation
   . Method of transfer to patient chart
   . Timeframe for inclusion in patient chart
8. Nature/frequency

FUNCTION/MEASUREMENT MODEL OF CONTINUITY OF CARE PROVIDED TO AMBULATORY PATIENTS REQUIRING HOSPITALIZATION



INDICATORS/MEASURES FOR CONTINUITY OF CARE PROVIDED FOR PATIENTS REQUIRING HOSPITALIZATION

0

- Frequency at which patient is seen by primary physician
- Frequency at which back-up physician or other provider seeing patient is member of primary physician's continuity team

0

- Frequency at which patient Is seen by primary physician
- Frequency at which back-up physician or other provider seeing patient Is member of primary physician's continuity team
- Other facilities used by clinic patients after clinic hours

0 Frequency/nature of consultation

0 Frequency

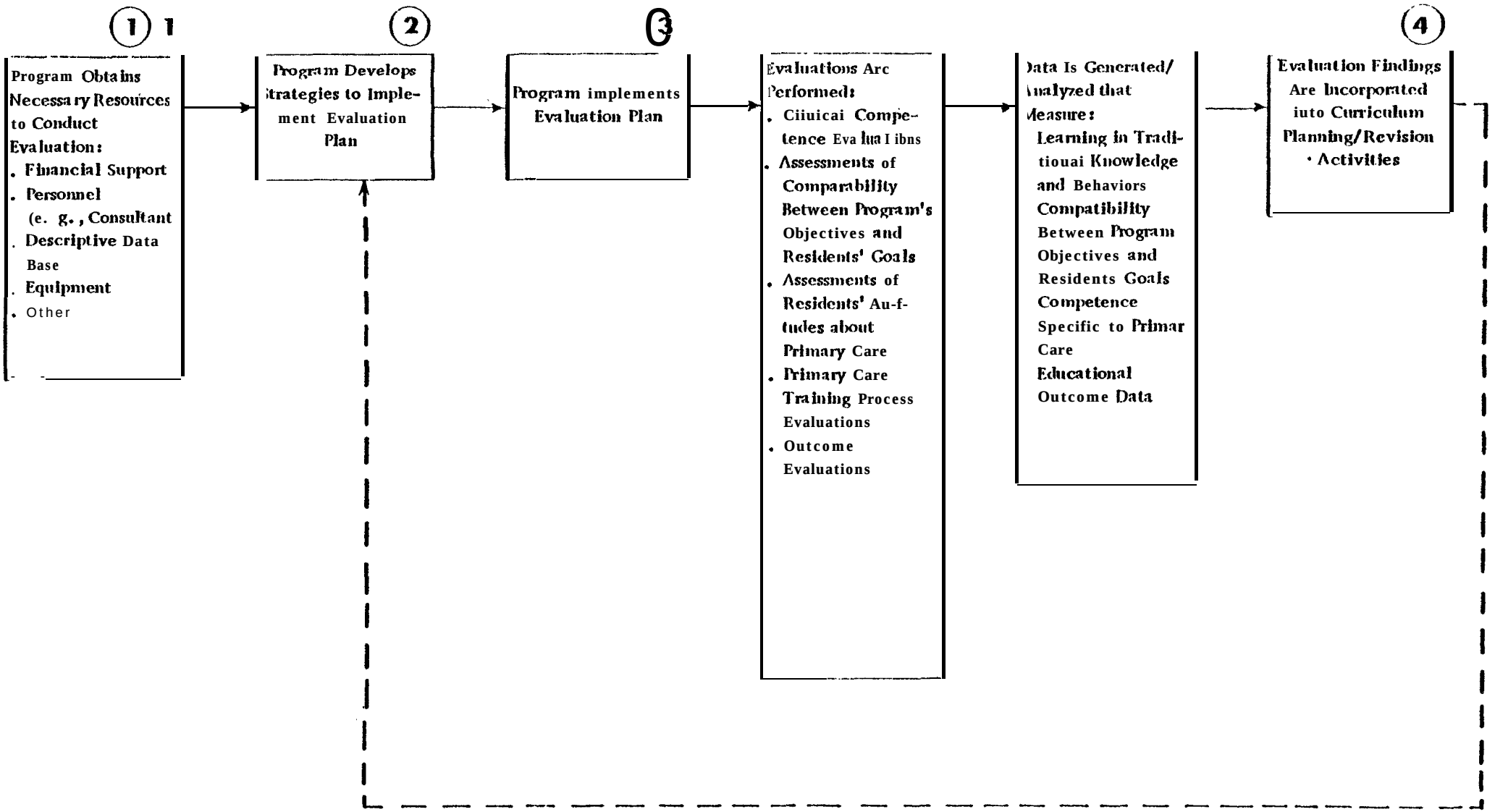
0

- Number of patients resuming treatment at clinic
- Number of patients resuming treatment at clinic with same primary physician

0 Nature and frequency of supervision/evaluation activities

APPENDIX E-XIX (1)

FUNCTION/MEASUREMENT MODEL OF EVALUATION ACTIVITIES AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROJECTS



INDICATORS/MEASURES FOR EVALUATION ACTIVITIES AT GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS PROGRAMS

0 1
- Amount of grant funds used for evaluation
- Other sources of evaluation funds

0 2
- Degree to which evaluation plan exists
- Degree to which program objectives are quantifiable
- Methods for establishing evaluation criteria
- Nature (e.g., frequency, relationship to level of training, etc.) of resident involvement in evaluation planning
- Number of evaluation activities undertaken per year

0 3 Time frame for implementing evaluation plan

0 4 Number and type of changes attributable to evaluation activities (e.g., number of remedial education experiences, frequency of staff intervention to reduce "no-show" rates, etc.)

APPENDIX F

GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS INTERVIEW GUIDES AND SUMMARY FORMS FOR POLICYMAKERS /PROGRAM MANAGERS -AND FIELD VISITS TO RESIDENCY TRAINING PROJECTS

GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS
PROGRAM MANAGER/POLICYMAKER INTERVIEW GUIDE

1. What is your (or your Section's/your Branch/s/your Division's) relationship to the General Internal Medicine and General Pediatrics (Section 784) program?

2. a. How is the program staffed and organized at the Section level?
   b. What other components of HRA are involved with the program and how?
   c. What agencies, external to HRA, are involved with the program and how?

3. a. Can you describe the major activities of the program?
   b. What resources are applied to these activities?

4. Please describe the grant award process.

5. How were grantees selected for the first, second, and'third years of the program?

6. From your perspective, what are the main purposes or objectives of the program? What is the program trying to accomplish?

7. How will the activities undertaken by/through the program produce these accomplishments? (Why would these activities produce those results?)

8. What kinds of information do you have on program performance?. (If necessary, explore how grants are monitored.)

9. How do you use this information?

10. a. What kinds of information do you (or other involved components) need to assess program performance/accomplishments?

    b. How would this information be used?

11. What measures or indicators of program performance are relevant to the program?

12. a. What problems (conceptual or operational) face the program in meeting its objectives?

    b. How might these problems/difficulties be overcome?

13. What factors will likely influence the program over the next two to five years?

Exploratory Evaluation--General Internal Medicine & General Pediatrics (IM&P)

PROGRAM MANAGER/POLICYMAKER INTERVIEW SUMMARY

Interviewee

Address/Phone No.

Title

Interviewers

Agency/Division/Program

Date of Interview

Relationship/Role In IM&P

I. STRUCTURE/ORGANIZATION OF IM&P

II. Major Program Activities/Resources

Exploratory Evaluation— EM&P (continued)

III. EM&P Grants (Evaluation, Selection, Management)

IV. Purposes/Objectives Of EM&P

V. Expectations For EM&P Assumptions For Underling EM&P

Exploratory Evaluation--E&P (Continued)

VI. Program Performance Information Available/Uses

VII. Program Performance Or Measurement Information Needed/Uses

VIII. Problems Facing E&P/Future Directions Or Influences

IX. Other Important Information

FIELD VISIT INTERVIEW GUIDE FOR GENERAL INTERNAL MEDICINE AND GENERAL PEDIATRICS EVALUABILITY ASSESSMENT

For Dean(D), Project Director(PD), and Curriculum/Evaluation Specialist(CES)

D, PD, CES	1.	What is your relationship/responsibilities within the GIM&GP? program?
D, PD, CES	2.	What are the objectives of your residency program in GIM&GP? What was the impetus for the initiation of the program?
D, PD	3.	What mechanisms exist (policy, staff activities, etc.) to achieve these objectives?
D, PD, CES	4.	Please describe the major primary care aspects of your curriculum. How does the primary care track differ from the traditional track? Are you having any difficulty implementing any aspects of the primary care track?
PD, CES	5.	How are you meeting the following requirements of your grant? (Probe regarding how the program is linked to local health/social agency practitioners and particular problems.)

a. Continuity experience (no-show rate, caseload management, case review, referral, etc.)?

b. Ambulatory care training settings (number of facilities, type, space, etc.)?

c. Other ambulatory patient care experiences?

d. Psychosocial component?

e. Nonclinical component?

D, PD, CES	6.	How do you recruit and select residents for the program? What characteristics do you look for in residents?

D, PD, CES	7.	What information is necessary to determine whether the program's objectives are met? Is this information currently collected? How is this information used or would it be used? (Probe to determine what evaluation criteria are used and how mandatory annual evaluations are accomplished.)
PD, CES	8.	What data or records are maintained on the IM&P program? (Probe to determine links to evaluation criteria and mandatory program elements.)
PD, CES	9.	How often are these data collected?
PD, CES	10.	How accurate are these data?
PD, CES	11.	How are these data used? (Probe for any policy or programmatic changes based upon available data.)
D, PD, CES	12.	Where do you think the program (primary care track) will be in five years?
D, PD, CES	13.	How does the program plan to become self-sufficient from the Federal GIM&GP grant?
D, PD, CES	14.	What major problems are you experiencing regarding the primary care track (e.g., in development or in the institutionalization of the program)?
D, PD, CES	15.	What are the best features of the program? What areas still need improvement?

For Residents

1. What are the objectives of the primary care track? Why did you choose this track? What are your own personal objectives?

2. In what year of training are you?

3. Please describe the major primary care aspects of *your* curriculum.

4. Please describe the following aspects of your program:

   a. Continuity experience
   b. Ambulatory care training settings
   c. Other ambulatory patient care experience
   d. Psychosocial component
   e. Nonclinical component

5. What is the recruitment process used by the program'? What kinds/types of characteristics do they look for in selecting residents for the primary care track?

6. On completion of training, what are your plans for practice, in terms of:

   a. Specialty?
   b. Geographic area? (urban, rural, shortage area, etc.)
   c. Mode? (group practice, HMO, etc.)

7. Has the program affected your practice plans?

8. Have there been any changes in the faculty and/or curriculum as a result of evaluation? Did you have any input to these changes?

9. What are the best features of the program? What areas still need improvement?

<u>For Fiscal Person</u>

1. What is the total budget/cost of the primary care track? Other than the Federal grant, what sources of revenue support the program? What percentage of the total cost of the program is covered by the grant?

2. What kind of information is kept to track the use of the grant funds, and how?

3. What major problems are you experiencing regarding the IM&P program?

APPENDIX F-IV(1)

Exploratory Evaluation--General Internal Medicine & General Pediatrics (IM&P)

SITE VISIT INTERVIEW SUMMARY

Interviewee

Address/Phone No.

Title

Date of Interview

Interviewers

Relationshi;! to Program

I. PROGRAM OBJECTIVES/IMPETUS FOR INITIATION:

II. METHODS FOR IMPLEMENTING OBJECTIVES

Exploratory Evaluation--IX&I (continued)

III. PROGRAM RESOURCES

IV. PRIMARY CARE ASPECTS OF CURRICULUM

V. SPECIALIZED GRANT REQUIREMENTS, e.g., CONTINUITY EXPERIENCE

Exploratory Evaluation--IM&P (continued)

VI. RESIDENT RECRUITMENT PROCESS

VII. PROGRAM PERFORMANCE INFORMATION AVAILABLE/USES

VIII. PROGRAM PERFORMANCE OF MANAGEMENT INFORMATION NEEDS/USES

Exploratory Evaluation--IM&P (continued)

IX. PROBLEMS FACING IM&P/FUTURE DIRECTIONS OR INFLUENCES

X. OTHER IMPORTANT INFORMATION

XI. STUDENT PRACTICE PLANS

APPEND1 X G

PROGRAM DOCUMENTATION AND ANNOTATED BIBLIOGRAPHY OF JOURNAL ARTICLES RELATED TO PRIMARY CARE

PROGRAM DOCUMENTATION

P.L. 94-484: Health Professions Educational Assistance Act of 1976

42 CFR 57: Grants for Construction of Health Research Facilities, Teaching Facilities, Student Loans, Educational Improvement and Scholarships

45 CFR 74: Administration of Grants

Decision Unit Overview, DHEW/PHS 75-0712-O-l-550

PHS: Grants Policy Statement, DHEW (OS) 77-50,000

Program Guidelines: Grants for Residency Traininq In General Internal Medicine and General Pediatrics

Bureau of Health Manpower Grants Manual

"General Information and Guidelines for Non-Federal Reviewers of Requests Submitted Under Title VII of the Public Health Service Act"

"Specific Instructions for Review of General Internal Medicine and General Pediatric Grant Applications"

1978-1979 Directory of Residency Traininq Programs Accredited by the Liaison Committee on Graduate Medical Education

American Osteopathic Association Yearbook and Directory of Osteopathic Physicians (1978)

AAMC Longitudinal Study of Medical School Graduates of 1960, DHEW (PHS) 79-3235

A Manpower Policy for Primary Health Care, National Academy of Sciences, May 1978.

Resident Training for Primary Care, University of California, at San Francisco, School of Medicine, June 1978.

Standards for Education in Ambulatory Pediatrics, Ambulatory Pediatric Association, January 1978.

The Education of Physicians for Primary Care, DHEW (HRA) 74-3113

The National Study of Internal Medicine Manpower: Final Report, Department of Medicine, University of Chicago, January 1979.

ANNOTATED BIBLIOGRAPHY OF JOURNAL ARTICLES RELATED TO PRIMARY CARE

1. Aiken, L.H., et al. "The Contribution of Specialists to the Delivery of Primary Care: A New Perspective," The New England Journal of Medicine, 300:24 (June 14, 1979) p. 1363-1370.

   Despite events and efforts to increase the supply of primary care practitioners, a shortage may continue through the 1980s. Primary care services delivered by specialists is an area which has not been adequately examined. This study contends that specialist provided primary care will result in adequate primary care services by the mid-1980s. The appropriateness or cost-effectiveness of this manner of delivery of primary care service remain unresolved questions. Until these issues are addressed and resolved, more regulation of graduate medical education may be unwise. A recommended direction in dealing with the concerns surrounding primary care services is to provide all physicians primary care experiences during residency.

2. Ducker, D. G. "The Myth of Professional Isolation Among Physicians in Nonurban Areas," Journal of Medical Education, 52:12 (December 1977) p. 991-998.

   The majority of respondents to an interview survey of a small group of physicians practicing in nonurban areas of California reported rarely/never feeling professionally isolated. Current community and professional activities were not predictors of isolation. Mean rating by school of medicine admissions interviewers was the significant (background) variable. The authors conclude that applicants with high ratings were more likely to acquire a strong academic research view and, as a result, to feel isolated in nonurban areas.

3. Ferretti, William P. "The Realities of Rural Primary Care," The Journal of Ambulatory Care Management, 2:1 (February 1979) p. 29-38.

   The author reviews issues and considerations impacting the providing of primary care services. Reimbursement schedules, methods for measuring distribution of physicians, modes of practice, access to medical facilities/resources, National Health Insurance, and assessing need for primary care services are critically examined. Recommendations consist of avoiding misleading assumptions common to the field (e.g., expecting development of primary care group practices in isolated areas).

4. Grimes, R.M. et al. "A Study of Factors Influencing the Rural Location of Health Professionals," Journal of Medical Education, 52:19 (September 1977) p. 771-773.

In response to a perceived lack of consensus in the literature, the authors conducted a Delphi study using 139 "experts" to nominate and rank factors considered to be influentialin choosing practice locations. Some highly ranked factors are outside the impact of policymaking (e.g., personal characteristics), but some factors are associated with medical school selection processes; the author suggests these processes should be adapted_

5. Hadley, J. "An Empirical 'Model of Medical Specialty Choice," INQUIRY, XIV:4 (December 1977) p. 384-401.

An examination of a predictive model of specialty choice is presented, along with a brief review of other studies' findings. Central to the conceptual model is the notion that the choice of specialty is the result of comparing the monetary and non-monetary costs and returns associated with some set of possible outcomes. According to this report, economic incentives are not major factors influencing specialty choice. The author suggests giving preference to older applicants and those with lower MCAT scores and utilizing preference-measuring instruments in medical school applicant evaluation procedures. "Small" changes in methods of financing medical education are not considered promising as redistributive mechanisms.

6. Haduc, R.R. et al. "Can Continuity of Medical Care He Taught?," Journal of Medical Education, 54:7 (July 1979) p. 525-533.

An approach to teaching continuity at the University of Washington is discussed. Second-year medical school students enrolled in elective family medicine preceptorships were placed with practicing family physicians one-half day per week for the entire academic year. Student-perceived benefits were assessed through required written reports. Three-fourths of students over a two-year period were judged to have experienced imp'ortant aspects of continuity.

7. Haggerty, R.J. "Graduate Physician Training in Primary Care," Journal of Medical Education, 49:9 (September 1974) p. 839-844.

Constraints on planning and development of health care systems/services are examined in the context of graduate physician'training. The author does not consider the educational process to be a significant factor in influencing specialty selection or physician practice behavior. He does not consider separate programs or departments necessary, although

the content and nature of physician training is recognized as an essential underpinning of the primary care field. Recommendations focus on student selection issues, pre-professional educational experiences, and components/settings of residency training. Clinical research in "real world problems" (e.g., diet and weight control') is suggested as a core portion of graduate training.

8. Mattson, D.E. et al. "Evaluation of a Program Designed to Produce Rural Physicians," Journal of Medical Education, 48:4 (April 1973) Part 1, p. 323-331.

In 1946 the State of Illinois instituted the Medical Student Loan Fund program. An evaluation was conducted including all participants from 1948 to 1964. Awards are based on need and expressed/adjudged likelihood of practicing in rural locations. Results of this study indicated that candidates from rural backgrounds were most likely to practice in rural areas; those who received awards based only on need had best academic performance, were most likely to meet service commitments, and remain in rural practice locations. This study compared participants and non-participants; the authors recommend this as a more adequate model of loan program analysis.

9. Morrow, J.S. "Toward a More Normative Assessment of Maldistribution: The Gini Index," INQUIRY, XIV:3 (September 1977) p. 278-292.

The Gini Index of Concentration, chiefly used in income analysis, is posited as a theoretical perspective from which to determine maldistribution. Where data are available, geographic breakdown is delineated according to Office of Business Economics areas; otherwise, geopolitical units are used. (Comparisons are made using other types of units.) Geographic distribution is shown to be exclusive of strength in numbers (or practitioners). The author suggests using the Gini Index to determine factors causing change in eveness of distribution and for predicting geographic patterns.

10. Plovnick, M.S. "Primary Care Career Choices and Medical Student Learning Styles," Journal of Medical Education, 50:9 (September 1975) p. 849-855.

This study examined the influence of learning styles on initial career inclinations and those factors during medical school which affect career decisions. Freshmen and seniors at a medical school were administered the Learning Styles Inventory (Kolb; Sloan School of Management, 1971), along with a general questionnaire. Interpretation of results indicate those students who seem to prefer primary care physician roles need work experiences and role models in medical school which relate to career directions and reinforce them. Abstract course work frustrates these students and can lead them to not excel in course work.

11. Reynolds, R.E. "Primary Care, Ambulatory Care, and Family Medicine: Overlapping but Not Synonymous," Journal of Medical Education, 50:9 (September 1975) p. 893-895.

The writer contends that primary care is best described as a function of medical services, not a medical discipline. Primary care, secondary care, and tertiary care represent portions of the medical care continuum. Utilizng this definition, he depicts Family Medicine as that discipline which most extensively serves primary care functions.

12 Scheffler, R.M. et al. "Physicians and New Health Practitioners: Issues for the 1980s," INQUIRY, 16:3 (September 1979) p. 195-229.

In an overview of health care issues challenging America, the authors discuss potential directions for health policy. Projections of health needs are considered faulty since they do not adequately account for factors which influence productivity or use of services. A general lack of incontestable data calls for scrutiny of present policymaking. Particular attention needs to be given to more exact definition of policy goals and criteria for those goals, especially relating to the issues of physician distribution. With regard to primary care, the authors suggest there is a lack of primary care services, not necessarily practitioners. The roles of new health professionals (Nurse Practitioners, MEDEX) and the recruitment and retention of minority and women in the medical profession are examined as important considerations for the future delivery of primary care.

13. Starfield, B. "Measuring the Attainment of Primary Care," Journal of Medical Education, 54:5 (May 1979) p. 361.

Characteristics commonly used to describe primary care are not quantifiable. The author proposes a model which defines these characteristics as specific interrelationships among separate aspects of the structure, process, and outcome of care. The structure-process-outcome model is presented as superior to the empirical and normative approaches in measuring the attainment of primary care. (See also: Starfield, B. "Measuring the Uniqueness of Primary Care," The Journal of Ambulatory Care Management, 2:3 (August 1979) p. 91-99).

14. Taylor, M. et al. "Medical Students' Attitudes Toward Rural Practice," Journal of Medical Education, 48:10 (October 1973) p. 885-895.

Approximately 200 medical school students (and spouses) from predominantly rural states were surveyed. Personal and professional characteristics were examined as possible correlates with practice location plans. Students' backgrounds were directly correlated to location plans, with spouse's background having particular influence on those students planning rural practices (but not those planning urban practices). A strong relationship existed between the interest in family practice and plans for rural practice. The year in medical school and/or the availability of courses in Family Medicine did not appear to influence orientation toward rural practice.

APPEND1 X H

PERFORMANCE INDICATORS

APPENDIX H(1)

POLICY GROUP WORK SHEET*--POLICY GROUP AVERAGE

MEASUREMENT POINTS		INDICATORS/MEASURES	USES/USERS OF DATA	RATING
Activities	outcomes			
		(1)		
Bureau of Health Manpower Plans, Implements, and Administers General Internal Medicine and General Pediatrics Grant Program		. Time required for planning/ implementation activities		2.0
		. Information base(s) utilized		3.1
		. Criteria for decisions made		3.6
		(2)		
General Internal Medicine and General Pediatric Grants for Residency Programs are Awarded to Eligible Schools of Medicine or Osteopathy		. Number and type of residency programs awarded grants		4.1
		. Time/cost required for grant award activities		1.8
		. Number and characteristics of funded approvals, unfunded approvals, and disapprovals		3.8
		. Criteria for decisions made during grant award process		4.1
		(3)		
General Internal Medicine and General Pediatrics Grants Are Monitored to Assess Progress Toward Achieving the Goals of the 784 Grant Program		. Number and types of monitoring activities		
		- Planned		2.5
		- Performed		3.0
		. Number and types of recommendations resulting from monitoring activities		3.5
		. Number and types of actions		
		- Possible		2.1
		- Taken		2.8
		. Number and percent of files containing evidence of monitoring activity		2.5

* Please rate the importance and appropriateness of each indicator/measure using a scale of o-5; 0=least important/appropriate; 5=most important/appropriate.

MEASUREMENT POINTS		INDICATORS/MEASURES	USES/USERS OF DATA	RATING
Activities	outcomes			
Schools of Medicine or Osteopathy Implement Programs in General Internal Medicine and General Pediatrics		(4) Curriculum Development		
		. Nature and content of curriculum, pre- and post-grant award		4 . 1
		. Nature, content, and schedule of mandatory and elective curricular offerings		
		- Required for accreditation		3.8
		- Required by the 784 Grant		
		. Degree to which grant requirements regarding curriculum are met		
		- Continuity of care experience		4.1
		- Other ambulatory care training		4.5
		- Psychosocial training		4.0
		- Non-clinical training		3.8
		Faculty Recruitment/Selection		
		. Composition/characteristics of faculty		4.6
		Resident Recruitment/ Selection/Training		
		. Number of residents trained in primary care, pre- and post-grant award		4.6
		. Criteria used for resident selection		3.8
		. Number of resident positions available		3.8
		. Number of residents trained		
		- Year 1		4.0
		- Year 2		3.8
		- Year 3		es---
		. Characteristics of residents trained		
		. Number of residents graduated		4 . 5

MEASUREMENT POINTS		INDICATORS/MEASURES	USES/USERS OF DATA	RATING
Activities	Outcomes			
schools of Medicine or Osteopathy Implement Programs in General Internal Medicine and General Pediatrics (continued)		Evaluation . Resources available/needed for evaluation activities . Number/type of evaluation activities undertaken, by year . Number/type of changes attributable to evaluation activities 5) **		2 . 6 3 . 1 3 . 1
	Increased Numbers of General Internal Medicine and General Pediatrics Residency Program Graduates Specialize/Work in Primary Care	. Post-training activities of graduates, over time - Number in practice - Number in primary care practice - Number in subspecialty practice - Number in research - Number in academic positions -Number in other activities . Practice characteristics of graduates providing primary care, over time - Setting - Modality - Location . Activities/practice characteristics of nongraduates, over time - Number in practice; practice type (primary care, subspecialty) - Practice setting - Practice modality - Practice location . Factors influencing activities of graduates and nongraduates, over time		4.6 4.6 4.3 3.6 4.0 3.6 4.6 4.3 4 * 4 . 3 4.1 4.1 4.1 4.5
	General Internists and General Pediatricians Are Better Able to Practice Primary Care	As stated, this outcome (i.e., objective) is not measurable; no indicators/measures developed		

** These measures should also be utilized to compare graduates of General Internal Medicine and General Ped trics residencies with graduates f traditional tracts.

MEASUREMENT POINTS		INDICATORS/MEASURES	USES/USERS OF DATA	RATING
Activities	Outcomes			
	An Adequate Number of Primary Care Physicians Are Practicing Primary Care	As stated, this outcome (i.e., objective) is not measurable; no indicators/measures developed		
	Primary Care Physicians Are Equitably Distributed on a Geographical Basis	As stated, this outcome (i.e., objective) is not measurable; no indicators/measures developed		
	Access to and Quality of Primary Care Health Services Are Improved	As stated, this outcome (i.e., objective) is not measurable; no indicators/measures developed		

ANALYSIS OF PERFORMANCE INDICATORS/MEASURES OF THE SECTION 784 PROGRAM

Objectives	Measures	Expected Values	Information Sources	Uses of Information	Priority Measures ccording to Work Group.
Bureau of Health Manpower plans, implements and administers General Internal Medicine and General Pediatrics Grant Program	Time required for planning/ implementation activities	None	ZBB; S. Johnson/ T. Wright	Track staff time	o preference stated
	Information bases utilized	Descriptive	Who was contacted; literature	Justify decisions made	
	Criteria for decisions made	Descriptive	Not available	Understand rationale for decision	
General Internal Medicine and General Pediatrics Grants for Residency Programs are awarded to School of Medicine or Osteopathy	Number and type of residency programs awarded grants	None	INPAC system	Accountability	umber and characteristics f funded approvals, nfunded approvals, and dis pprovals
	Time/cost required for grant award activities	None	Not known	Program management of resources	
	Number and characteristics of funded approvals, unfunde approvals, and disapprovals	None	Not known	Assess effectiveness of review process to "translate" legislative intent correctly	
	Criteria for decisions made during grant award process	None	Not known	Assess review process ability to determine "capable" grantees according to regulations and guidelines	
General Internal Medicine and General Pediatrics Grants are monitored to assess progress toward achievement of objectives of Section 784 grants requirements	Number and types of monitoring activities -Planned -Performed	At least one sit visit during grant cycle and as warranted/ requested (planned)	Not known (planned) -Grant Files, although not inclusive (performed)	Budget justification; accountability	onitoring activities performed (all are interrelate
	Number and types of recommendations resulting from monitoring activities	None	Grant files	Use in review process and guidelines	
	Number and types of actions -Possible -Taken	None	Grant files	Accountability	
	Number and percent of files containing evidence of monitoring activity	None	Grant files	Accountability	
Schools of Medicine o Osteopathy implement programs in General Internal Medicine and General Pediatrics	Nature and content of curriculum, pre- and post-grant award	None	Grant files	Assess impact of award	preference stated
	Nature, content, and schedul of mandatory and elective curriculum offerings require for accreditation	None	Grant files	Assess compliance with grant requirements; planning	

Objectives	Measures	Expected Value	Information Sources	Uses of Information	Priority Measures According to Work Group
Schools of Medicine or Osteopathy implement	Degree to which grant requirements regarding curriculum content are met		Grant files	Assess compliance with grant requirements: planning	
Internal Medicine and General Pediatrics (continued)	-Continuity of care experience	-25% total time			
	-Other amublatory care training	-Descriptive			
	-Psychosocial training	-Descriptive			
	-Nonclinical training	-Descriptive			
	Composition/characteristics of faculty	Descriptive	Grant files	Assess variables affecting qualit of training	
	Number of resident positions available	Conditions of award	Grant files	Comparison with projected needs/ objectives	
	Criteria used for resident selection	Descriptive	Grant files	Assess variables affecting practice activities; compliance with grant requirements	
	Number of residents trained -Year 1 -Year 2 -Year 3	Conditions of award	Grant files	Compliance with grant requirements; effectiveness of grant program	
	Characteristics of residents trained	Descriptive	Not known	Develop database	
	Number of residents trained in primary care, pre- and post award	Descriptive	Not known	Assess impact of award	
	Number of residents graduated	Conditions of award; ZBB	Grant files (as graduates emerge)	Assess effectiveness of grant program	
	Resources available/needed for evaluation activities	None	Grant files	Assess capability of grantees to evaluate projects	
	Number/types of evaluation activities undertaken, by year	None	Grant files	Assess evidence of evaluation activities	
	Number and types of changes attributable to evaluation activities			Assess impact/appropriateness of evaluation activities	

Objectives	Measures	Expected Values	Information Sources	Uses of Information	Priority Measures According to Work Group
Increased number of General Internal Medicine and General Pediatrics residency program graduates specialize/work in primary care Graduates of General Internal Medicine and general Pediatrics residency programs are better able to practice primary care Practicing General Internists and General Pediatricians are appropriately distributed over the geographic base	Post-training activities of graduates over time -Number in practice -Number in primary care practice -Number in subspecialty practice -Number in research -Number in academic positions -Number in other activities	None	No database existing; simllar databases available, but may have diminished value for this group	Assess effectiveness of grant program	No preference stated
	Practice characteristics of graduates providing primary care over time -Setting -Modality -Location -Other	None	See above comment		
	Activities/practice characteristics of program non-graduates over time -Number in practice -Practice type -Practice modality -Practice setting -Practice location	None	See above comment		
	Factors influencing activities of graduates and non-graduates over time	None	Research is in formative stages		