

I. PROJECT IDENTIFICATION

<p>1. PROJECT TITLE</p> <p style="text-align: center;">MEDEX Phase II</p>		<p>APPENDIX ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO (63)</p> <p>2. PROJECT NO. (M.O. 1095.2)</p>
<p>3. RECIPIENT (specify)</p> <p><input type="checkbox"/> COUNTRY _____</p> <p><input type="checkbox"/> REGIONAL _____</p> <p><input checked="" type="checkbox"/> INTERREGIONAL <u>TA Bureau</u></p>	<p>4. LIFE OF PROJECT</p> <p>BEGINS FY <u>76</u></p> <p>ENDS FY <u>79</u></p>	<p>5. SUBMISSION <u>7/25/75</u></p> <p><input checked="" type="checkbox"/> ORIGINAL DATE</p> <p><input type="checkbox"/> REV. NO. DATE</p> <p>CONTR./PASA NO. _____</p>

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ US _____ (U.S. OWNED)		
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) COOP COUNTRY	
										(A) JOINT	(B) BUDGET	
1. PRIOR THRU ACTUAL FY	*											
2. OPRN FY <u>76</u>	<u>607</u>							<u>607</u>	<u>194</u>			
3. BUDGET FY <u>77</u>	<u>750</u>							<u>750</u>	<u>270</u>			
4. BUDGET +1 FY <u>78</u>	<u>662</u>							<u>662</u>	<u>216</u>			
5. BUDGET +2 FY <u>79</u>	<u>686</u>							<u>686</u>	<u>216</u>			
6. BUDGET +3 FY												
7. ALL SUBQ. FY												
8. GRAND TOTAL	<u>2705</u>							<u>2705</u>	<u>896</u>			

9. OTHER DONOR CONTRIBUTIONS	(B) KIND OF GOODS/SERVICES	(C) AMOUNT
(A) NAME OF DONOR	RSSA with OIH/HEW	

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER	TITLE	DATE
TA/H, <u>Donn Hooker</u>	<u>Program Coordinator</u>	<u>7/25/75</u>
2. CLEARANCE OFFICER <u>M.M. Shutt, M.D.</u>	TITLE <u>Chief, HDS</u>	DATE
TA/H, <u>Lee M. Howard, M.D.</u>	<u>Director</u>	<u>7/25/75</u>

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

* The funding of a previous project which laid the ground work for this proposed project was as follows: FY 74, \$300,000 and FY 75, \$115,300.

2. CLEARANCES					
BUR/OFF.	SIGNATURE	DATE	BUR/OFF.	SIGNATURE	DATE
3. APPROVAL AAs OR OFFICE DIRECTORS			4. APPROVAL A/AID (See M.O. 1025.1 VI C)		
SIGNATURE		DATE	SIGNATURE		DATE
TITLE			ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT		

I. INTRODUCTION

This project is designed to provide a resource to assist developing nations^{to}/utilize a systematic method for the rapid expansion of health services through a new technology for the accelerated training and deployment of mid-level health manpower. The theory and practice of this system, called MEDEX, has been developed and successfully applied in 36 states of the United States and in the developing country setting of Micronesia. The term MEDEX refers to "Medicine Extension" and equates with physician's extension. When the term appears in capital letters, reference is to the training program or the system of health manpower expansion. The term in lower case letters (Medex) refers to the trainee or to the graduate of MEDEX.

An initial impact evaluation of this system in the U.S. completed six months ago by the National Council of MEDEX Programs indicated attainment of the major objective to rapidly train and deploy into areas of rural and urban need a new middle-level provider of health services. A recent General Accounting Office study on physician extenders corroborated these findings and urged adoption of some of the major elements of the MEDEX system by American medicine. While the total evaluation of this experience has not been completed, the basic elements of the system have been shown to satisfy the differing needs of both developing and developed communities alike, and to fulfill an important link in the delivery of not only primary care, but also preventive medicine and public health in general.

A. Background

The initial pilot demonstration of the MEDEX concept was begun in 1969 in a joint effort of the University of Washington School of Medicine and the Washington State Medical Association's Education and Research Foundation. The first class comprised fifteen trainees. The training consisted of three months of intensive instruction at the University followed by a twelve month preceptorship under the direction of pre-selected physicians in rural general practice. The objective of the demonstration was to test the feasibility of two suppositions. The first supposition, now termed STEM in MEDEX terminology, System for Teaching Essentials to Medex, was that educational training could be greatly accelerated if the base of instruction was shifted from diseases and body systems to competent skills in recognizing and managing problems, e.g., signs and symptoms. The second supposition was that the capabilities and productivity of a physician could be measurably expanded if he were provided "another pair of skilled hands under his supervision."

B. The MEDEX Concept

The concept behind MEDEX as originally visualized in the U.S. was the belief that there is a reservoir of separated or retired military health professionals and others with health training whose potential capabilities have been virtually untapped by the civilian health care system. The conceptual model envisioned a collaborative educational experience involving the potential users of MEDEX, e.g., the physician preceptors; the educators through the sponsoring universities; and the students themselves in a combined effort to unite

existing resources to meet growing needs for health care in a specific geographic area. Instruction was to be provided on a one-to-one basis and individually tailored to complement each student's existing capabilities and the needs of the preceptor-physician. Students and physicians were to be pre-matched before the training began, and the objective of a preceptorship phase was to train both the physician and his Medex to function as a team in providing primary medical care including preventive care to the patients of a community.

This basic model while still valid has been expanded in ways which have relevance to its utility in the developing world. Experience gained in a variety of rural and remote communities in a number of States and in Micronesia showed that previous health training was not a critical pre-condition for the selection of trainees. Present knowledge indicates that individuals with a basic interest and empathy for other people and who have appropriate psychomotor skills are readily trainable in MEDEX technology.

The one-to-one training prerequisite has similarly been modified. The demands of geography in Alaska and Micronesia presented opportunities to test the capability of physicians to supervise several Medex simultaneously based upon practical application of an effective span of control. One physician supervising three or more Medex has been shown to be feasible even when the Medex are in supervised remote practices, hundreds of miles away. In one instance, fifteen Medex are supervised by a single physician through several Supervisory Medex. In Alaska the preceptor physician and his Medex are often separated by up to 300 miles. In Micronesia similar distances have been successfully

bridged both by the use of radio and the traditional outrigger canoe. The greatest contribution of this approach lies in its "multiplier effect"; i.e., the sophisticated background and abilities of a fully trained physician are geographically multiplied several times over by a systematic delegation of responsibility to Medex who are capable of solving up to 90 percent of the recurring health problems of the community they serve. The general conclusion is that in both theory and practice MEDEX technology is adaptable and transferable to LDC environments.

C. Location of MEDEX Expertise in the U.S.

Since the completion of the pilot project in Seattle, the MEDEX concept has been replicated as a continuing program by additional medical schools throughout the U.S. The nine centers of training now established are: MEDEX New England, Dartmouth Medical School; MEDEX Pennsylvania, Pennsylvania State University College of Medicine; MEDEX Howard, Howard University College of Medicine; MEDEX South Carolina, Medical University of South Carolina; MEDEX Intermountain, University of Utah College of Medicine; MEDEX North Central, University of North Dakota School of Medicine; MEDEX California, Charles Drew Post Graduate Medical School; MEDEX North West, University of Washington School of Medicine; and MEDEX Pacific, University of Hawaii School of Medicine. As a result of DHEW funding and support for the various state programs, there is considerable knowledge of MEDEX theory and experience in that Department. This expertise is positioned in the Bureau of Health Services Research and Evaluation, the Bureau of Health Resources Development and in the Office of International Health (OIH).

D. Project Framework

To capitalize on the institutional expertise available, this project is designed to be implemented under the terms of a RSSA with OIH. Under these terms, that office provides general monitoring, backstopping and certain reporting and review functions for AID. Other Bureaus within HEW will provide assistance on a need basis. OIH will contract with the University of Hawaii for the Basic design, organizational and developmental tasks required.

The contracting university carries an organizational responsibility the task of coordinating and building the institutional linkages for the involvement of other Universities with MEDEX expertise as partners in the U.S. effort. A joint effort is considered necessary both for the exchange of project related technical information, and for the provision of skilled manpower. These coordinative relationships and institutional linkages will also ensure that (1) standards of training methodology, curricula, candidate selection, MEDEX deployment systems, etc., follow an acceptable and achievable criteria which can be monitored, and that (2) measures used in evaluation will have comparability between the programs conducted in different LDC environments.

In brief terms this joint effort is envisioned as being carried out in the following manner. For a period of approximately four years, the Health Manpower Development Staff (HMDS) at the University of Hawaii School of Medicine will undertake the developmental tasks and planning needed to adapt and install MEDEX systems into LDC settings. This will include, among other outputs, field

visits to LDC governments to explain the system and training technology; the basic planning, design and monitoring of up to six implementation projects in six LDCs wanting to embark on MEDEX programs; and the conduct of extensive evaluation studies of those six programs.

Semi-concurrently the six implementation projects alluded to here will, if approved, be undertaken by three or more U.S. medical schools who are part of the MEDEX linkages, with each school managing one, or at most two, projects each. These implementation projects would be separate and distinct activities with their own justification and funding arrangements with each case negotiated mutually between the host LDC, the U.S. university, the AID mission or other donors concerned and the interested Regional Bureau.

At this time the University of Washington, the University of Utah and the University of South Carolina are interested in managing up to two implementation projects each, once the LDC countries are identified, the program approved, and the planning completed. The University of Hawaii has a similar interest, and is capable of managing two such projects with expert manpower which is apart from the HMDS staff group.

The budget of this PROP provides the HMDS staff with consultant assistance on specialized developmental tasks and country planning. It is envisioned that consultants in most instances will be drawn from those schools in the MEDEX linkage that are expected to participate in implementation projects. The process thus provides a mechanism for the early involvement and familiarization of these other schools in the basic planning and developmental tasks required.

E. Project Funding

With regard to funds utilization, this project is to fund the RSSA monitoring services by OIH and the contractual services of the University of Hawaii School of Medicine for core staff and consultation costs by the University. The costs which will be financed include the following three categories of activities:

1. Basic design, organizational and developmental work as enumerated in Project Outputs.
2. The planning and monitoring of MEDEX type programs in up to six LDC countries as mutually agreed between OIH, TAB, and the Regional Bureaus or other donors.
3. Costs necessary to respond to requests from Regional Bureaus and/or Missions for analytical and technical services for a 3 - 4 man team up to 30 calendar days to assess individual LDC governmental interest in and a plan for MEDEX projects. Longer term requirements for implementation might be funded by the requesting Regional Bureau, the Mission, the host country itself, or by other donors.

F. Follow-on Projects

The need for aggressive programs to train and deploy mid-level health manpower is recognized as a continuing problem that will extend into the next several decades. In these terms, this project or projects similar to this one are foreseen as likely after this phase of the MEDEX project is completed. It is anticipated, however, that future projects which might follow could be at reduced funding levels and would focus primarily on train-

ing and forward planning. It is believed that the design and developmental work envisioned in this project represents basic research that will be adaptable to later programs at modest cost.

G. Progress to Date

Under the terms of an AID/HEW Resources Support Agreement and thereunder by contract implemented in June 1974, the University of Hawaii School of Medicine through its Health Manpower Development Staff (HMDS), has to date provided technical assistance and support for the tasks of planning, staff recruitment, program implementation and management, training and evaluation of MEDEX type manpower development. Although further refinement is anticipated, the basic format and processes to be used in the STEM modules has been designed. The design that was selected was one of six alternative approaches examined in detail by the HMDS staff in its first year of operation. A number of STEM modules have reached the draft stage and of these, those concerning Nutrition; Maternal and Child Health; and Dermatology have been field tested in the HEW-funded, MEDEX program in Micronesia. In advisory assistance apart from MEDEX technology the HMDS staff has designed a health manpower training program as a component of the DEIDS Thailand project managed by APHA. The implementation of this plan is funded by a sub-contract between Hawaii and the APHA utilizing Hawaii School of Medicine personnel who are separate from the HMDS staff. Advisory assistance in aspects of manpower development apart from MEDEX technology was similarly given to the Government of Liberia by the HMDS staff.

Communications with the worldwide health community have begun, including the National Council of MEDEX programs, WHO and several voluntary agencies. Officials of a number of countries have expressed interest in a MEDEX type program, including Iran, Guyana, Ghana, Nigeria, Liberia, Sudan, Ethiopia and Lesotho. Additionally AID Mission officers in Afghanistan, Dominican Republic and Haiti have also conveyed their interest to the HMDS staff.

Linkages between the HMDS staff and U.S. Medical Schools training Medex in Washington, South Carolina and Utah have been formed. Moreover, there has been a constant flow of valuable project-related, technical information from these Medical Schools to the HMDS staff in Hawaii. The kinds of information conveyed include: a) materials relating to the development of evaluation tools which were used to analyze the MEDEX experience in America; b) educational methods both for training Medex and for training preceptor-physicians how to teach; c) approaches to patient simulation techniques that engender realism in training programs; and d) application of cross-cultural experience of other MEDEX staffs to the basic planning strategy for MEDEX LDC programs.

II. LOGICAL FRAMEWORK NARRATIVE

A. The Goal

1. Goal Statement

The goal of this project is to improve the quality of life by making basic health services, particularly those related to maternal and child health, nutrition and family planning available

and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.

A secondary goal is to promote acceptance of a new way of delivering primary health services, e.g., one that does not require the direct presence of a physician. In this instance the challenge is to find ways to transfer the trust LDC populations have in the trained physician to mid-level health workers. This is necessary because the relative availability of adequate physician and skilled nursing manpower to directly deliver health care when compared with population growth is diminishing globally, and not generally available to the rural poor in LDC's.

2. Measurement of Goal Achievement

- a. A decrease in the death rate among new mothers and children under five. Infant and maternal mortality statistics reported by WHO/Geneva and LDC governments will be used as the means of verification.
- b. A decrease in the prevalence of communicable diseases. Statistics, particularly those concerning childhood diseases, reported by WHO and LDC governments will be used to verify results.
- c. A positive increase in nutritional status. Verification to be by analysis of statistics gained by special surveys promoted by AID and LDCs.
- d. A reduction in population growth rates. Family planning statistics which are available through special surveys and a variety of annual demographic and

statistics reports series will be used to verify results.

e. An increased percentage of the population has access to health services as measured through special surveys and project reporting systems.

3. Assumptions About Goal Achievement

a. LDC governments are interested in improving the health status of their populations.

b. Increasing the availability of health services will increase their use.

c. Increasing and improving the delivery of health services will improve health status.

d. Improving health status will foster national development.

e. Maternal and child health is the appropriate intervention point.

B. Statement of Project Purpose

1. The Purpose

The purpose of this project is to provide a new approach and methodology for the accelerated training and deployment of mid-level health manpower, and to provide guidance and project design assistance in installing the methodology in selected LDCs.

2. Conditions Expected at End of Project

Conditions that will indicate the purpose of this project has been achieved may be summarized as follows:

a. The existence of not less than six LDCs train-

ing and utilizing Medex manpower in an integrated program within their national health delivery system, and in each instance delivering an increase in coverage of primary and preventive care proportional to the number of Medex trained.

b. The existence of a cooperative network for MEDEX training between three to four U.S. universities and at least six LDC universities or other MEDEX training institutions in multiple geographic regions.

3. Project Purpose Assumptions

a. LDC populations in pilot countries will accept primary health services from a new category of health worker.

b. Legal constraints to MEDEX utilization in pilot countries are amenable to adjustment or alteration.

c. The MEDEX system is sufficiently flexible to be adapted for use in many LDCs.

d. Established health providers will accept Medex as part of the delivery systems.

e. Other elements of a health delivery system are available: physician supervision, logistics support, minimal facilities and auxiliaries.

f. A MEDEX project must cover a wide population and geographic base to be effective.

C. Statements of Project Outputs

1. Outputs and Output Indicators

Outputs

A. Organization and Development of HMDS Staff

B. STEM Modules

A curriculum for problem oriented training of Medex and Preceptors dealing with both sickness and administrative procedures not related to sickness per se. (See para. II, E. 4, Page ___ for a description of STEM).

C. Reconnaissance visits, network and linkages building and maintenance of linkages.

Visits for analytical and technical services provided by a 3-4 man HMDS team up to 30 calendar days to assess individual LDC governmental interest in a general plan for MEDEX projects will be undertaken. U.S. Universities having MEDEX training expertise are expected to participate in a number of LDC MEDEX programs.

D. MEDEX Programs

MEDEX programs are expected to be established in up to six LDC's. The outputs of each such activity are with respect to planning: a basic country plan which identifies; 1) U.S. resources required; 2) the magnitude of LDC resources required in terms of organization, fiscal support, logistics and manpower; 3) the LDC institution around which training will be conducted; 4) the

Output Indicators

Recruitment of expanded core staff according to phased plan.

- 1) Refinement of format design and process for health related modules by end of 1st year. Refinement of administrative modules by end of 2nd year.
- 2) Seven STEM Modules comprising of 50 training packages completed by end of 3rd year.
- 3) Fifteen STEM Modules comprising of 50 training packages (cumulative) completed by end of 4th year.

- 1) Visits to eighteen or more countries will be undertaken during the 1st year.
- 2) Visits to twelve or more countries will be undertaken in the 2nd year.
- 3) Formal program linkages between 2-3 U.S. Universities and up to six LDC MEDEX programs are to be established prior to December 1977.

- 1) Two LDC MEDEX programs planned during 1st year.
- 2) Up to four LDC MEDEX programs planned during the 2nd year.
- 3) Continuous monitoring of country training projects and reports or progress.

Outputs

Medex selection criteria to be followed; 5) a detailed plan in outline for Medex and preceptor training; and 6) an identification of the steps necessary to achieve Medex Certification within the cultural and legal tradition of the country. b. With respect to projects underway: Consultative assistance on all aspects of training and the overall country program. c. With respect to projects completed: Follow-up guidance and encouragement for a period of 1 to 2 years as required.

E. Consultative Assistance to LDC's on questions of Health Manpower apart from MEDEX Technology.

F. MEDEX Model: Guidelines and Operational Procedures. The elements of the model are to be applicable to the LDC environment. It will contain a detailed explanation of the MEDEX system and guidelines detailing how this technology can be integrated into health delivery.

G. Evaluation

The cost effectiveness and impact of four aspects of the MEDEX Implementation projects are to be measured including: the training performed by U.S. contractor personnel; the training performed by LDC teachers-trainers; the impact of the program on health delivery; and the impact of the program on health status. In these terms not less than four and up to six LDC programs are to be measured in detail.

Output Indicators

Specialized assistance to up to twelve or more LDC's is expected. The number of assignments undertaken will depend upon LDC receptivity, initiative and local opportunities.

Guidelines and procedures covering: 1) health manpower selection; 2) general administration; 3) communications, supervision and referral; 4) continuing education of MEDEX graduates; and 5) field operations, management and logistics support. Statements will be produced in draft during the second year and refined statements will be produced during the fourth year of the project.

1) A conceptual framework for the cost analysis of MEDEX training and for the assessment of the impact of MEDEX graduates on health delivery in terms of community health, nutrition and family planning will be produced during the first year.
2) Progress will be reported in quarterly reports.
3) A final statement covering all elements to be evaluated will be produced in the fourth year.

Outputs

H. Information Dissemination

Project literature and other materials generated during the conduct of implementation projects and developed as a result of research on STEM and the MEDEX model are to be given wide distribution. In addition, a number of conference-clinics will be conducted to disseminate project experience and exchange information. The recipients of the literature and the participants to the conference are to be LDC decision making officials directly responsible for health delivery, and will include officers of those LDCs that sponsored MEDEX programs and those that are neighbors of such countries. The theme of the conferences will be discovery of the positive and negative universals and lessons provided by the MEDEX implementation projects.

Output Indicators

- 1) Reports and materials distributed when available.
- 2) Intra-regional conference-clinic:
2nd year, one; 3rd year, three;
4th year, three.

2. Output Assumptions

- a. Adequate indigenous human resources can be identified and available to train as Medex in LDCs sponsoring pilot programs.
- b. The indigenous professional physician will accept the concept of MEDEX as a technology worthy of support and will actively support candidate trainees in the program.
- c. STEM modules and training protocols will be produced in part by LDC MEDEX program personnel to promote collaboration among the various MEDEX programs, but more important to enhance LDC participation and preparation for replication.

*MEDEX
assumption*

D. Project Inputs

1. Inputs

a. Manpower

The HMDS staff operates as an interdisciplinary task group and individual members will be assigned to a variety of program elements throughout each year. Although there is a considerable overlap in functions, the arrangement will be conducive to greater efficiency in staff utilization. The principal areas of expertise associated with each staff position may be summarized as follows: (1) Staff Director. Overall technical and administrative responsibility for the program. (2) Deputy Staff Director. Responsible for operations

and fiscal policy; for administrative relationships with participating MEDEX universities; and for the development of training protocols when management skills are required (e.g., administrative medicine).

(3) Administrative Assistant. Office manager coordinating all operations, supervision of clerical staff, and fiscal accounting requirements. (4) Associate Director (Planning). Responsible for accumulating and collating statistical data and information regarding the systems for delivering health services in countries proposed for pilot projects. This will include basic feasibility studies, determining what facets of the health system need strengthening or expansion in order to utilize Medex manpower and the developing of plans and strategies for integrating MEDEX type personnel into those systems. Will assist in explaining and stimulating LDC medical communities and others to adopt the MEDEX technology. (5) Associate Director (Training Technology). Overall responsibility for all phases of design of training programs and the development, implementation, testing, refinement and operation of STEM. (6) Assistant for Preceptorship Operations (TBR). Responsible for assisting the development of LDC overall preceptor programs, including establishment of preceptor criteria, preceptor selection, training systems and

procedures for utilizing Supervisory Medex, and evaluation of the preceptorship element in the program. Will assist in explaining and promoting the MEDEX technology to interested LDCs. (7) Education Communication Specialist (TBR). Will assist in developing "training trainers" programs designed to train the teachers of Medex and the teachers of preceptors. This will include the development of modalities for getting STEM teaching materials across multiple cultural barriers, the design and testing of effective learning activities, and completion of a special module designed to train LDC teachers how to design, test and refine STEM modules. (8) Medex. Will assist in providing clinical input into the STEM protocols, e.g., adapting clinical materials into a form suitable for Medex utilization. Will also assume primary responsibility for STEM protocols concerning Community Health, Health Education and protocols dealing with water, waste disposal and food handling. (9) Medex. Responsible for the initiation and development of systems and training materials for the continuing medical education of MEDEX graduates. In addition, will assist in the development of STEM modules. (10) Curriculum Specialist - Designs the educational components of the STEM packages. (11) Health Manpower Specialist I - Design and develop layouts of medical algorithms, protocol charts and other components of programmed learning packages. Organize physical format of programmed lessons. (12) Audio-Visual Technician - Will produce and

reproduce multimedia material components of STEM modules. (13) Associate Director (Evaluation).

Responsible for evaluation protocols for assessing effectiveness of all aspects of the program including: 1) training performed by project personnel; 2) LDC replication programs; 3) the impact of the program on health delivery services; and 4) the impact of the program on health status. Responsible for other specialized studies as required.

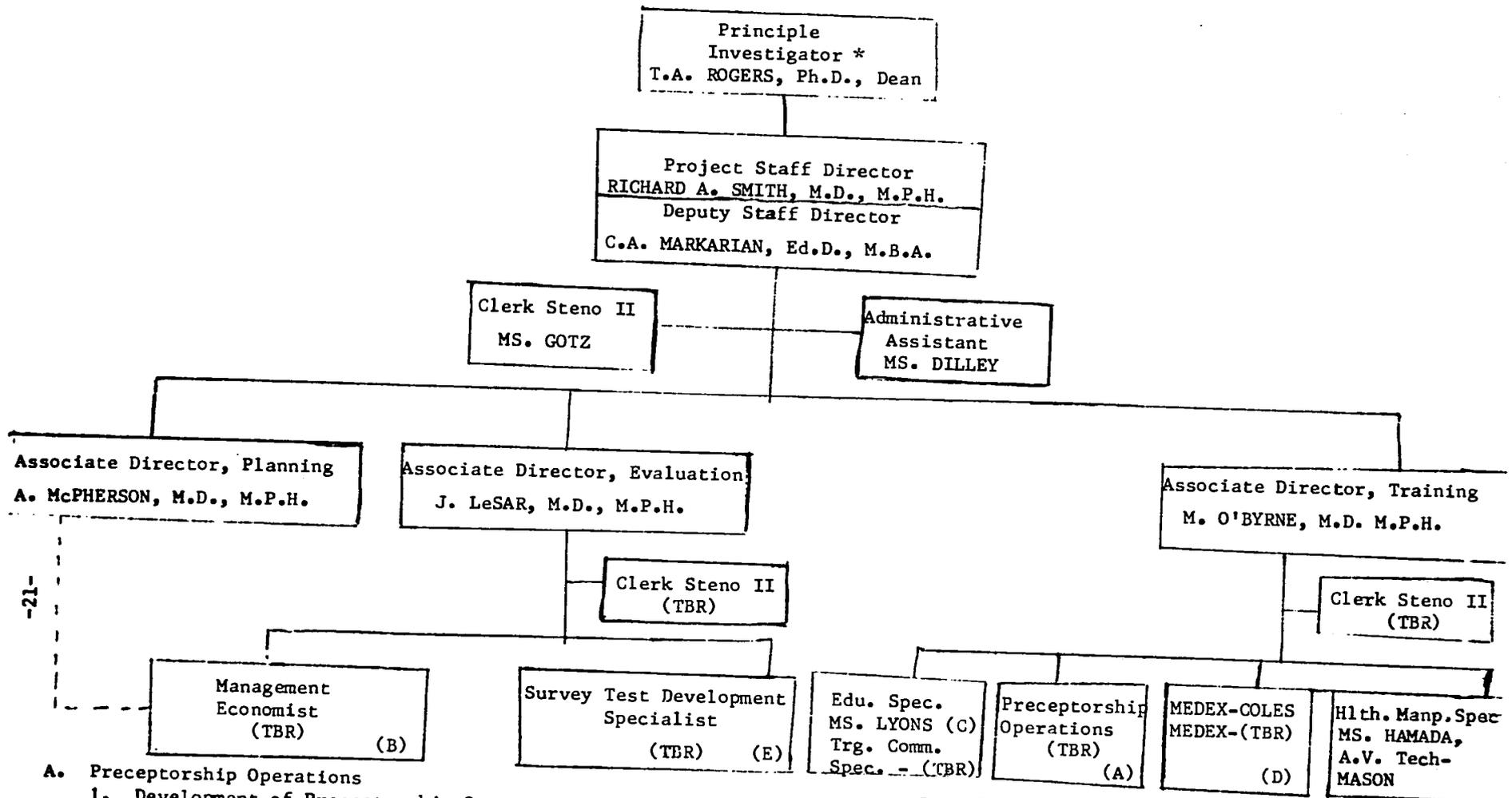
(14) Economist/Management Specialist (TBR) will assist in developing STEM administrative medicine modules and Supervisory Medex training components. Responsible for developing a conceptual framework and the gathering of baseline data for cost analysis of MEDEX program and its impact on health delivery. Will provide input and training competence to countries to strengthen MEDEX administration and related health systems management competence.

(15) Survey/Test Construction Specialist (TBR) - Assist in developing tools for design, field testing, implementation and analysis of data regarding training and program impact. Will plan and administer field surveys, questionnaires and interviews for impact evaluation and will have major responsibility for validation of educational testing instruments. (16) Stenographer II (17) Stenographer II (TBR) (18) Stenographer II (TBR).

b. Consultants, Expert Consultant manpower will be utilized on specialized aspects of the MEDEX program on a need basis. This specialized expertise will be avail-

able through networks and institutional linkages existing between the contracting university (Hawaii) and other MEDEX training universities in the U.S.

- c. Special training and development technology (MEDEX) pilot tested and installed in a variety of environments within the U.S.
- d. Curricula research.



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- A. Preceptorship Operations
 1. Development of Preceptorship Operations.
 2. Development of Receptive Frameworks for implementation of MEDEX overseas.
- B. Management/Economist
 1. Implement cost/benefits analysis of programs
 2. Develop administrative training modules
- C. Training Communication Specialist
 1. Adapting STEM Modules across cultural barriers.
 2. Developing STEM learning activities.

- D. MEDEX
 1. Develop continuing education training system
 2. Adapt STEM Modules for basic (village) health worker level.
 - E. Survey/Test Construction
 1. Development of impact measurement tools.
 2. Plan and administer field surveys.
- * This position is funded by the University of Hawaii.

2. Budget

<u>PERSONNEL</u>	<u>01 Year Analysis of Cost</u>			<u>02 Year</u>	<u>03 Year</u>	<u>04 Year</u>	
	<u>SALARY</u>	<u>BENEFITS</u>	<u>TOTAL</u>				
Staff Director	36,415	3,878	40,293	42,307			
Deputy Staff Director	26,592	6,116	32,708	39,249			
Administrative Assistant	12,012	2,763	14,775	17,729			
Associate Director - Planning	30,000	6,900	36,900	44,280			
Associate Director - Training	25,000	5,750	30,750	36,900			
Preceptorship Operations (TBR)*	30,000	6,900	27,675 ^{2/}	44,280			
Educational Specialist	10,656	2,451	13,107	15,728			
Medex	15,360	3,533	18,893	22,671			
Medex (TBR)	15,360	3,532	18,892	22,671			
Training Communication Spec. (TBR)	18,000	4,140	11,070 ^{3/}	26,568			
Health Manpower Specialist - I	8,124	1,868	9,992	11,991			
Audiovisual Technician	11,080	2,548	13,628	16,354			
Associate Director - Evaluation	25,000	5,750	30,750	36,900			
Management/Economist (TBR)	20,000	4,600	12,300 ^{3/}	29,520			
Survey & Test Construction Spec. (TBR)	18,000	4,140	22,140	26,568			
Stenographer - II	6,600	1,518	8,118	9,742			
Stenographer - II (TBR)	6,600	1,518	8,118	9,742			
Stenographer - II (TBR)	6,600	1,518	8,118	9,742			
* (TBR) to be Recruited	321,399	69,423	358,227				
20% increase ^{1/}	56,996	13,110	63,586				
			Totals:	421,813	462,942 ^{4/}	488,402 ^{4/}	515,264 ^{4/}
			Rounded Totals:	<u>421,900</u>	<u>462,950</u>	<u>488,450</u>	<u>515,300</u>

1 Anticipated 20% salary increase effective 7/1/75 for all project personnel except the Staff Director.

2 For 9 months of service

3 For 6 months of service

4 Totals shown includes salary and benefits and an assumed increase at 5.5%

2. Budget (Continued)

	<u>PRIOR PROJECT FUNDED FY 1974</u>	<u>01 Year (July 75-June 76)</u>	<u>02 Year (July 76-June 77)</u>	<u>03 Year (July 77-June 78)</u>	<u>04 Year (July 78-June 79)</u>
<u>PERSONNEL</u>					
Salary	167,000	346,600	380,200	401,150	423,200
Benefits	38,410	75,300	82,750	87,300	92,100
<u>CONSULTANTS</u>					
Training, adm./eval. @ \$125/day	10,000	25,000	25,000	20,000	15,000
<u>TRAVEL AND PER DIEM</u>					
<u>International:</u>					
18 (Multiple) site visits, plus consultant travel (30 trips @ \$1,500)		45,000			
Per diem for 200 days @ \$30.00/day		<u>6,000</u>			
<u>Domestic:</u>					
Coordination & visits to potential collaborating universities; Washington, D.C.; and consultant travel (36 trips)		19,800			
Per diem @ \$30.00/day	<u>31,340</u>	<u>5,200</u>	<u>76,000</u>	<u>75,000</u>	<u>75,000</u>
<u>OTHER DIRECT COSTS</u>					
Office Supplies, Books, etc.		7,200			
Office Rental @ \$7/sq. ft.		14,000			
Telephone (3 lines)		6,000			
Printing and Reproduction	<u>18,400</u>	<u>6,000</u>	<u>33,200</u>	<u>33,200</u>	<u>33,200</u>
<u>Office Equipment:</u>					
Executive Desks @ \$300.00		1,500			
Executive Chairs @ \$150.00		750			
Stenographers Desks @ \$200.00		400			
Stenographers Chairs @ \$100.00		200			
Files @ \$150.00		300			
Electric Typewriters @ \$600.00		1,800			
Various	<u>9,150</u>	-	<u>4,950</u>	-	-
Audiovisual Equipment			<u>4,500</u>	-	-
Contracting & Contingencies	<u>3,700</u>	-	-	-	-
	<u>SUB-TOTAL</u>	<u>278,000</u>	<u>565,550</u>	<u>596,150</u>	<u>616,650</u>
	<u>OVERHEAD @ 8%^{1/}</u>	<u>22,000</u>	<u>42,020</u>	<u>44,307</u>	<u>45,757</u>
	<u>TOTAL</u>	<u>300,000</u>	<u>607,570</u>	<u>640,457</u>	<u>662,407</u>
				<u>662,407</u>	<u>685,810</u>

^{1/} Calculation excludes the salary and benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 01 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF		CONSULTANTS		TRAVEL & PER DIEM
		MM	\$	MD	\$	\$
(1) Organization & Development of HMDS Staff	12,700	4	8,800			3,900
(2) STEM Modules						
a) Format design & process	4,850	2	4,850			
b) Construction of modules in draft	127,975	77	117,600	35	4,375	6,000
c) Test draft modules						
d) Development of refined modules						
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	152,875	34	108,500	75	9,375	35,000
(4) MEDEX Programs						
a) Country Planning & Design	70,950	23	53,700	50	6,250	11,000
b) MEDEX & Preceptor Training Design	16,750	8	15,500	10	1,250	
c) Consultative Assistance to Training Projects	15,500	6	12,400			3,100
d) MEDEX Certification						
e) Follow-up Guidance for Replication Programs						
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	23,000	6	15,000			8,000
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection	9,675	4	8,150	5	625	900
b) General Administration						
c) Communication Systems, Supervision & Referral						
d) Continuing Education of MEDEX Graduates						
e) Field Operations Management & Logistics Support						
(7) Evaluation						
a) Design of Protocol	42,175	14	36,700	15	1,875	3,600
b) Field Test of Evaluation Tools	33,500	11	29,900	10	1,250	2,350
c) Collection of Baseline Data	12,950	5	10,800			2,150
d) Analyses of Data						
(8) Information Dissemination						
	SUBTOTALS	194	421,900	200	25,000	76,000
	OTHER DIRECT COSTS		42,650			
	OVERHEAD @ 8%		42,020*			
	TOTAL FOR YEAR		607,570			

* Calculation excludes the salary & benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 02 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF		CONSULTANTS		TRAVEL & PER DIEM \$
		MM	\$	MD	\$	
(1) Organization & Development of HMDS Staff						
(2) STEM Modules						
a) Format design & process	2,500	1	2,500			
b) Construction of modules in draft	95,300	55	89,200	20	2,500	3,600
c) Test draft modules	26,500	12	21,400			5,100
d) Development of refined modules	15,100	8	15,100			
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	97,850	20	63,400	50	6,250	28,200
(4) MEDEX Programs						
a) Country Planning & Design	66,525	21	53,200	55	6,875	6,450
b) MEDEX & Preceptor Training Design	15,300	8	12,800	20	2,500	
c) Consultative Assistance to Training Projects	34,000	11	24,000			10,000
d) MEDEX Certification	5,475	2	3,600	15	1,875	
e) Follow-up Guidance for Replication Programs						
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	34,400	7	23,900			10,500
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection	7,900	4	5,800	10	1,250	850
b) General Administration	7,750	4	6,500	10	1,250	
c) Communication Systems, Supervision & Referral	6,500	4	6,500			
d) Continuing Education of MEDEX Graduates	9,850	9	9,850			
e) Field Operations Management & Logistics Support	13,400	8	13,400			
(7) Evaluation						
a) Design of Protocol						
b) Field Test of Evaluation Tools	66,050	23	58,100	10	1,250	6,700
c) Collection of Baseline Data	32,550	11	27,700	10	1,250	3,600
d) Analyses of Data						
(8) Information Dissemination	26,000	8	26,000			
	SUBTOTALS	216	462,950	200	25,000	75,000
	OTHER DIRECT COSTS		33,200			
	OVERHEAD @ 8%		44,307 *			
	TOTAL FOR YEAR		640,457			

* Calculation excludes the salary & benefits
of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 04 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF		CONSULTANTS		TRAVEL & PER DIEM \$
		MM	\$	MD	\$	
(1) Organization & Development of HMDS Staff						
(2) STEM Modules						
a) Format design & process						
b) Construction of modules in draft	13,600	6	13,600			
c) Test draft modules	7,250	13	31,800	10	1,250	4,200
d) Development of refined modules	64,800	28	64,800			
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	54,950	15	43,100	10	1,250	10,600
(4) MEDEX Programs						
a) Country Planning & Design						
b) MEDEX & Preceptor Training Design						
c) Consultative Assistance to Training Projects	25,900	11	20,900			5,000
d) MEDEX Certification	6,350	2	3,300	10	1,250	1,800
e) Follow-up Guidance for Replication Programs	56,200	18	36,700	20	2,500	17,000
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	26,900	6	19,500			7,400
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection						
b) General Administration	8,650	8	8,650			
c) Communication Systems, Supervision & Referral	13,600	11	13,600			
d) Continuing Education of MEDEX Graduates	23,550	12	18,700	10	1,250	3,600
e) Field Operations Management & Logistics Support	15,200	7	10,350	10	1,250	3,600
(7) Evaluation						
a) Design of Protocol						
b) Field Test of Evaluation Tools						
c) Collection of Baseline Data	70,900	22	55,900			15,000
d) Analyses of Data	69,750	25	56,700	50	6,250	6,800
(8) Information Dissemination	117,700	32	117,700			
	SUBTOTALS	216	515,300	120	15,000	75,000
	OTHER DIRECT COSTS		33,200			
	OVERHEAD @ 8%		47,310*			
	TOTAL FOR YEAR		685,810			

* Calculation excludes the salary & benefits
of the Staff Director.

3. Input Assumptions

Members of the LDC professional medical community will participate from the beginning in MEDEX programs.

E. Rationale

1. Relation of Project to Agency Goals

A general characteristic of developing nations, faced with the struggle for social and economic improvement, is that they are ill equipped to cope with the challenge of designing their health delivery systems to ensure that an acceptable quality of life is accessible to the majority of their populations. Indeed, the most informed studies now available indicate that only 10% to 15% of LDC populations are being reached by simple, elementary primary care. A major constraint within the context of national health delivery is the shortage of trained, mid-level health workers. Reforms and innovative methods for creating this manpower are essential if the related and corollary needs for improvement in maternal and child health including nutrition status and family planning are to be met. Most LDC's lack the internal mechanisms necessary to reorient or redirect the country's medical and public health community upon a road of change and innovation. However, there is in most LDCs an important reservoir of individuals whose skills, temperament or interests are complementary to the physician, who with moderate amounts of external advice, training and assistance can be an integral part of a new technology for creating trained mid-level health manpower. In view of the varied role played by intermediate health worker in implementing programs effecting

the quality of life of a nation's citizens, the accelerated development and placement of this manpower is seen as meeting a fundamental long term goal of the Agency in general, and specifically the key Bureau programs Health Delivery Systems, Reaching the Pre-School Child, and Family Planning Delivery Systems.

2. The RSSA Mode for Project Implementation

The implementation of this PROP through a RSSA with HEW and thereunder by contract with the University of Hawaii satisfies several important considerations. The first is that utilizing the RSSA mode will strengthen and help build several institutional linkages that are worthy of the Agency support and which are now in being and capable of further expansion. An aspect of this is that any AID funded MEDEX programs launched in LDCs will have program outputs which will be significant and potentially beneficial to all countries and populations including the United States. The transfer of this information through formal networks is most appropriate for this project and the kinds of information to be conveyed. Another consideration is the value to AID of the expertise and experience available in DHEW and the nine state medical schools previously cited. The value of these centers of knowledge to this program are mentioned in turn.

OIH/HEW has a commissioned Public Health Officer working in the University of Hawaii under the terms of an AID RSSA to which this PROP pertains. This Officer and the MEDEX staff in the University of Hawaii supervised the planning and implementation of the MEDEX program in Micronesia. Other HEW offices and bureaus are, under a variety of contract and grant arrangements, providing assistance

to nine American universities involved in MEDEX programs within the various states. HEW Bureaus provided the funds necessary for the pilot project in Seattle in 1968, for the programs in the other States and Micronesia which followed later, and are currently supporting evaluation activities which provide the basic knowledge for measuring the medical, social and economic impact of MEDEX programs. The total HEW support to date exceeds six million dollars. The nine U.S. medical schools now training Medex for U.S. programs offer a potential resource for providing the project inputs for this project, e.g., each of the universities cited is capable of becoming a training institution for MEDEX programs sponsored in LDCs. Their potential role in this context would be to replicate overseas adaptations of the kinds of programs each is responsible for in their geographical areas within the United States. In short, each of these Universities have in being a group of professionals capable of providing the management and technical guidance required.

Another consideration with respect to project implementation pertains to the National Council of MEDEX Programs. With the rapid expansion of the MEDEX programs in the United States, the nine participating universities determined there was need for a representative national body to serve as a focal point for the movement. A National Council of MEDEX Programs has recently been created to serve this purpose. The Council functions as a clearing house for information and as a forum for the determination of basic policy. Although

the Council is not a legal entity, its responsibility for leadership is recognized by the participating institutions. The Health Manpower Development Statt (HMDS) at the University of Hawaii functions as the recognized overseas training component of the Council. The selection of the University of Hawaii as the planning contractor for LDC programs is thus in step with the policy of the Council and its constituent medical schools.

3. Factors Favoring the Selection of MEDEX as the Intervention Technology

In terms of technical assistance, a significant aspect of the MEDEX concept is that it takes into account the positive and negative experiences, frustrations and failures of paraphysician training projects conducted in the past. With few exceptions, these earlier programs were not institutionalized nor grounded on indigenous skills; rather, western personnel were placed in key operational positions as a means of gaining effectiveness. A result was a loss of skills, incentives and leadership when the experts departed. If attempts were made to inculcate the concepts and vision necessary to continue installed training systems, the depth of penetration was insufficient to result in acceptance of improvements as part of the fabric of health delivery. Since such programs were not integrated into existing health systems, through attrition, trained personnel disappeared from the health scene by retirement and other mechanisms.

While the number of factors that could be considered in judging the merits of alternative training technologies is perhaps endless, those factors that are most supportive of the

MEDEX system may be summarized as follows:

- a. It can be readily adapted to a wide variety of socio-economic, cultural, and geographic situations.
- b. It can fit into the existing medical care system and can be controlled by organized medicine or government through the physicians who are responsible for its supervision. Further, the number of graduates corresponds directly to the demonstrated need for manpower. The problem of over production or under utilization of trained personnel is largely avoided.
- c. Training is tailored to meet specific requirements to ensure that skills taught are relevant to the area in which they are used. The preceptor model using physicians or Supervisory Medex insures orientation of the student toward primary care rather than to a specialty. Since physicians are involved in the planning of the curriculum process, the training is subjected to reality testing on an ongoing basis.
- d. Trainees are drawn from LDC indigenous manpower pools and the candidate selection process itself is geared to accept and build upon the personal preferences of trainees for rural, peri-urban or urban life styles with their differing value and reward patterns. The findings of recent studies in the U.S. show MEDEX graduates tend to stay within the community for which they were trained, 70% remaining in "medically deprived" areas.

e. Characteristics of the MEDEX programs in U.S. which may have some analogous merit in the developing world are numerous. Since practicing physicians do most of the training on location, he, as the preceptor, has a stake in the development of the student. Recent studies show the physician is likely to find more time for his more critically ill patients, more time for continuing education, more uninterrupted leisure, and more satisfaction in fulfilling a larger community role in spreading his influence and skills to a much broader geographic coverage. There is a positive impact of the MEDEX program leadership on the physician's own education. He learns to supervise, to identify tasks that can be safely delegated, and he is challenged to reorganize his responsibilities to make them more efficient and productive for delivering health care to an extended service area in which physician services are not ordinarily available. He also is made aware of one of the national goals of his nation and his role in supporting that goal.

f. The technology can offer significant savings in overall costs and time to the host LDC. Training costs and salary remuneration is much less than that of the physician. Depending on locale and disease prevalences, a Medex can generally handle approximately 90 percent

of the routine diagnostic and therapeutic problems encountered by physicians in outpatient settings.

g. The system can be demobilized in controlled phased steps if a community increasingly fulfills its need for physicians or Medex from traditional sources.

4. Systems for Training Essentials to MEDEX (STEM)

A research oriented task (of the HMDS staff at Hawaii) is the design and developmental work on STEM. The purpose of this component is to develop, field test, evaluate and refine a competency based training technology for MEDEX. The training is oriented toward the problem solving of complaints, that is an analysis of signs and symptoms, rather than a focus on diseases and body systems. It is oriented towards the performance of skills needed to solve these problems. It is also oriented toward skills that are not related to sickness per se, such as preventive measures including immunizations; sanitation practice for safe water and sewage disposal; methods for adequate nutrition using local foods; family planning methods, etc.

Typical STEM training modules that might be produced are as follows: Medical History Recording; Conducting Physical Examinations; Dental Problems; Nutrition; Ob-Gyn Problems; Supervision; Maternal and Child Health; Community Health; Skin Complaints; Community Sanitation; and Gastrointestinal Problems. Each such module would be in turn presented to students through a varying number of more specific training components. In the case of the

STEM Gastro-intestinal module problems dealt with would include: diarrhea, abdominal pain, abdominal pain with fever, vomiting, etc. STEM modules are thus generic groups organized around problems pertinent to specific types of complaints, categories of symptoms, or techniques and procedures including those emphasizing prevention.

F. Course of Action

1. Implementation Plan - Performance Target

a. First Year

- 1) Recruitment and Organization of expanded core staff according to phased plan.
- 2) Refine the process, format and testing of STEM modules pertaining to health training.
- 3) Construct STEM modules in draft.
- 4) Conduct reconnaissance visits to up to 18 LDC's and formalize linkages with 2-3 U.S. universities experienced in MEDEX training.
- 5) Complete basic planning for MEDEX programs in two LDC's.
- 6) Provide consultative assistance on specialized questions to support those MEDEX training projects that are established.
- 7) Begin consultative assistance to LDCs on questions of health manpower apart from MEDEX technology as requested.

- 8) Prepare a conceptual framework, e.g., a protocol for the evaluation of MEDEX projects.
- b. Second Year
- 1) Design and refine the process, format and testing of STEM modules pertaining to MEDEX administration.
 - 2) Continue construction of modules in draft and begin testing and refinement of modules that have been produced. Seven STEM modules comprising 20 training packages are to be completed.
 - 3) Conduct reconnaissance visits up to 12 LDCs.
 - 4) Complete basic planning in MEDEX programs in up to four LDCs.
 - 5) Begin monitoring and provide consultative assistance to two MEDEX pilot projects planned during year 1.
 - 6) Begin information dissemination and conduct one small regional conference.
 - 7) Prepare guidelines and procedures in draft covering: (a) health manpower selection; (b) general administration; (c) communication, supervision and referral; (d) continuing education MEDEX graduates; and (e) field operations, management and logistics support.
- c. Third Year
- 1) Continue construction, test and refinement of STEM modules.
 - 2) Continue information dissemination and conduct

three small regional conferences.

3) Begin monitoring and provide consultative assistance to up to four additional MEDEX pilot projects planned during year 2.

d. Fourth Year

1) Produce finalized version of guidelines and operational procedures, and statements.

2) Fifteen STEM modules comprising 50 training packages (cumulative) completed.

3) Continue to provide monitoring and consultative assistance to up to six MEDEX pilot projects and provide follow-up guidance to those projects that are nearing completion.

4) Continue information dissemination and conduct three small regional conferences and one larger inter-regional conference.

5) Complete final statement concerning project evaluation.

2. Narrative Statement

Project outputs concerning a published conceptual model of MEDEX, the evaluation protocols, Medex certification, and a variety of planning and special guidelines and operational procedures will be the responsibility of the HMDS staff as part of their basic assignment.

In the interest of time and overall quality, the developmental work for a published, detailed curriculum, e.g., STEM module

with accompanying training packages, will be a responsibility shared with affiliated U.S. MEDEX Schools under the overall leadership, guidance and ultimate responsibility of the HMDS staff. Contributions to this work will also be expected from the LDC MEDEX training institutions involved in individual MEDEX projects this PROP hopes to promote. This arrangement will provide opportunity for the program to capitalize on the different areas of specialized knowledge and experience inherent in the various U.S. schools and at the same time permit LDC institutions to contribute on what they know best: the specific health problems and remedies within their own environment. In addition, a pooling of effort will strengthen the institutional linkages and communication networks that are desired. In a similar way, accountability for producing trained Medex and Physician leadership to carry and conduct LDC replication programs will be shared on an equal basis by each school and institution involved in any joint program.

Evaluation

An annual project review by TAB and CM/PAS is to be in accordance with TA - 1026.1 Manual Order on "Instructions and Guidelines for the Annual Evaluation of TAB General Technical Services Projects.

Quarterly reports by OIH/HEW on the activities to be performed under this project are to be prepared by the Health Manpower Development Staff (HMDS) at the University of Hawaii School of Medicine

and distributed to TA/H, the regional bureaus and CM/PAS. The current overall status of the project and all sub-activities are given with actual results and/or output of activities. This will also include a fiscal report of expenditures during that period.

Project design and progress are further assessed during the preparation of each forthcoming fiscal year program presentation by TA/H to TA/PPU and AA/TA.

**PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK**

Life of Project: _____ to FY _____ 79
 From FY _____ to FY _____
 Total U. S. Funding \$2,705,000
 Date Prepared: 7/25/75

Project Title & Number: MEDEX Phase II

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																		
<p>Program or Sector Goal: The broader objective to which this project contributes: To improve the quality of life by making basic health services, particularly those related to maternal and child health, nutrition and family planning available and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.</p> <p>Secondary goal: To promote acceptance of a new way of delivering primary health services, e.g., one that does not require the direct presence of a physician.</p> <p>Project Purpose:</p> <p>The purpose of this project is to provide a new approach and methodology for the accelerated training and deployment of mid-level health manpower, and to provide guidance and project design assistance in installing the methodology in selected LDCs</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. A decrease in death rate among new mothers and children under five. 2. A decrease in the prevalence of communicable diseases. 3. A positive increase in nutrition status. 4. A reduction in population growth rates. 5. An increased percentage of the population having access to health services. 	<ol style="list-style-type: none"> 1. Infant and maternal mortality statistics; surveys; school and industrial attendance records. 2. WHO and LDC communicable disease statistics reports. 3. WHO Demographic and Statistics Year-book. 4. Special nutrition surveys promoted by AID and LDCs. 5. Surveys and project reporting systems. 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. Availability of services will increase their use. 2. Receiving basic health services will improve health status. 3. Improving health status will foster development. 4. LDCs are interested in improving the health status of their populations. 5. Maternal and child health is the appropriate intervention point. 																																																		
<p>Outputs:</p> <ol style="list-style-type: none"> 1. A published, detailed curriculum for problem oriented training (STEM). 2. Reconnaissance visits, networks and linkages. 3. In-depth LDC country plans & supervisory guidance for MEDEX programs in selected LDCs. 4. A model including guidelines & procedures describing MEDEX technology. 5. Evaluation studies on cost effectiveness and other measures of the MEDEX system. 6. Info dissemination incl literature 	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>The existence of not less than six LDCs training and utilizing MEDEX.</p> <p>The existence of a cooperative network for MEDEX training between at least four U.S. universities and six LDC universities or other MEDEX training institutions.</p>	<ol style="list-style-type: none"> 1. Site visits and surveys. 2. Medex deployed in 6 HDS reaching a majority of target population. 3. Indigenous institution, personnel and logistics identified to train additional Medex (e.g., host LDC replication) beginning in 4th year of contract. 4. Records of Medex personnel, facilities and project programs. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. LDC populations will accept primary health services from a new category of health worker. 2. Legal constraints to MEDEX utilization are amenable to adjustment or alteration. 3. The MEDEX system is sufficiently flexible to be adapted for use in most LDCs. 4. Established health providers will accept MEDEX as part of delivery system. 5. Other elements of a health delivery system are available. 																																																		
<p>Inputs: distribution & conf. activities.</p> <p>AID: Project design, monitoring, funding. DIH/HW: Contract management, consultative services and HMDS staff director.</p> <p>U. of Hawaii: Manpower (15 prof., 3 clerical staff), special training tech., curriculum research, and training.</p> <p>Other U.S. Universities: specialized expertise, training support & research assist.</p> <p>LDCs: Medex & preceptor trainees, training cadre, physical facilities, transportation & other in kind support, and research support.</p>	<p>Magnitude of Outputs: (1) 15 STEM modules include 50 training packages. (2) Visits to 30 LDCs to assess interest in MEDEX and program linkages with a 2-3 U.S. universities. (3) MEDEX pilot programs established on up to six LDCs. (4) MEDEX model and eval. statements published. (5) MEDEX model and literature given wide distribution 7 small regional conference-workshops and one interregional conference completed.</p>	<ol style="list-style-type: none"> 1. Site visits, project records and reports. 	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> 1. Adequate indigenous human resources can be identified & available to train as Medex in LDCs sponsoring pilot program 2. The indigenous professional physician will accept the concept of MEDEX as a technology worthy of support & will act. support candidate trainees in the program 3. STEM modules & training protocols will be produced in part by LDC MEDEX program personnel to promote collaboration among the various MEDEX programs, but more important to enhance LDC part. & prep for <p>Assumptions for providing inputs: replication.</p>																																																		
	<p>Implementation Target (Type and Quantity)</p> <table border="1"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2*</th> <th>Year 3</th> <th>Year 4</th> </tr> </thead> <tbody> <tr> <td>Personnel</td> <td>347</td> <td>380</td> <td>401</td> <td>423</td> </tr> <tr> <td>Fringe Benefits</td> <td>75</td> <td>83</td> <td>87</td> <td>92</td> </tr> <tr> <td>Travel</td> <td>76</td> <td>75</td> <td>75</td> <td>75</td> </tr> <tr> <td>Consultants</td> <td>25</td> <td>25</td> <td>20</td> <td>15</td> </tr> <tr> <td>Supplies</td> <td>7</td> <td>7</td> <td>7</td> <td>7</td> </tr> <tr> <td>Equipment</td> <td>8</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other Direct Costs</td> <td>27</td> <td>26</td> <td>26</td> <td>27</td> </tr> <tr> <td>Overhead</td> <td>42</td> <td>44</td> <td>46</td> <td>47</td> </tr> <tr> <td>TOTAL</td> <td>607</td> <td>640</td> <td>662</td> <td>686</td> </tr> </tbody> </table> <p>* Year 2 + 1.Q. = 750</p>		Year 1	Year 2*	Year 3	Year 4	Personnel	347	380	401	423	Fringe Benefits	75	83	87	92	Travel	76	75	75	75	Consultants	25	25	20	15	Supplies	7	7	7	7	Equipment	8				Other Direct Costs	27	26	26	27	Overhead	42	44	46	47	TOTAL	607	640	662	686		<p>Members of the LDC professional medical community will participate from the beginning in planning country programs for training Medex.</p>
	Year 1	Year 2*	Year 3	Year 4																																																	
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INFORMAL MINUTES OF THE RESEARCH AND DEVELOPMENT
Committee Meeting April 29, 1975 and May 6, 1975

PROJECT TITLE: MEDEX PROJECT PLANNING

TECHNICAL OFFICE: TA/HEALTH

PROJECT MONITORS:

April 29, 1975 Meeting

Dr. James Banta, TA/H, summarized the MEDEX project. He stated that this project is designed to provide mid-level health manpower for the rapid expansion of health services in LDCs. He pointed out that through a RSSA with the Department of Health, Education and Welfare's DHEW/OIH, the expertise of Dr. Richard Smith, led to the development of the basic design of University of Hawaii's MEDEX model. Under the terms of the RSSA approved in FY 74 for one year duration, DHEW/OIH is providing general monitoring, backstopping and certain review functions for A.I.D. The Office of International Health contracts with the University of Hawaii for the design, organizational and developmental tasks required for the MEDEX program.

Highlights of the Discussion:

- LA/DR (Feldman): Queried about the U.S. institution physician assistance program.
- TA/H (Banta): Responded that the MEDEX program does provide physician assistance for primary care.
- AFR/DP (Moore): Stated that the program should include the midwife level, and questioned whether this was too low for the MEDEX target.
- TA/H (Florio): Pointed out that the Thailand MEDEX model does address the mid-wife level; and is included in the contract with Harvard University.
- AFR/DP (Moore): Raised the questions on (1) whether it is a safe assumption that the activity will be covered by mission (2) the extent to which it is possible to mobilize traditional effort and tap the local setting; and (3) research in this area and the need for a feasible study to find out about the involvement of local governments.

- TA/H (Hooker): Stated that the University of Hawaii has explained to LDC governments what is required for implementation of the MEDEX program.
- NESA/TECH (Dalton): Queried about the amount of funds required for the project; the available market for the system; and the selection of six countries for implementation. A marketable situation for MEDEX in this geographical area is not expected at this time. It would seem more appropriate to set a lower target for implementation.
- TA/H (Florin & Banta): Pointed out that a lot of money is being spent in developing basic concepts and modules which can be set in one country or another, and that the funds would not greatly alter this level. The major cost is for the training modules.
- NESA/TECH (Dalton): Modules can be devised for several activities. What is the evidence so far that countries would be interested in this?
- TA/H (Banta): Stated that Dr. Richard Smith has visited several countries in the last few months at their request and interest.
- NESA/TECH (Dalton): Raised the question of the level of expenditures so far.
- TA/H (Hooker): This activity was initiated in FY 74 with one year funding approved based on the PIO/T dated April 19, 1974, supported by memoranda from TA/H, Africa Bureau and Asia Bureau. The Africa and Asia Bureaus each provided \$100,000 or a total of two-thirds of the funds for the initial year. The amount of \$270,000 has been spent so far.
- SER/ENG (Rixse): Stated that there appears to be a gap in communication between TA/H and the regional bureaus. There needs to be determined what are the bona fide requests for assistance.
- NESA/TECH (Dalton): The cost should be scaled down.
- AFR/DR (Moore): Stated that the function of the staff were unclear and whether they are full-time jobs.
- TA/H (Hooker): Made reference to the job descriptions stated in the PROP.

- TA/H (Hooker): The project review brought out whether consultants could be used. It was the consensus of the group that it would be more costly over a period of time. It was concluded that additional people should be added for the evaluation component.
- TA/PPU (Fritz) and
LA/DR (Feldman): Raised the question on ways of reducing the budget.
- LA/DR (Feldman): Queried about the modules being prepared in different languages.
- TA/H (Hooker): Stated that modules are now being prepared in English and later will be translated into the foreign language.
- LA/DR (Feldman): Requested an evaluation of the project in Micronesia.
- TA/H (Banta): Stated that this was being done by the General Accounting Office.
- SER/ENG (Rixse): Raised the question on whether it is the assumption that AID continue this project indefinitely and the acceleration of activities without having the appropriate data.
- TA/PPU (Fritz): Questioned whether this included the evaluation of the project (after two years). That the project should provide for an evaluation after a period of time.
- LA/DR (Feldman): Raised the issue of salaries and how they compare with those of the East West Center @ the University of Hawaii. Suggested that these three elements be added in the PROP: (1) demand expressed; (2) utilization; (3) evaluation.
- SER/ENG (Rixse): That extension of present project be provided at this time until further development of new elements.
- TA/PPU (Fritz): That TAB insist on an evaluation of the project after two years.
- PPC/DPRE (Malley): There are three basic questions that need to be addressed: (1) the audit of the present activity in Micronesia; (2) Africa Bureau's comment; and (3) the marketability of the project.

Action Required

That TA/H provide answers to these issues: (1) audit, (2) Africa Bureau's comments; and (3) availability of funds at the increase level. These will be discussed at the next R & DC meeting scheduled for May 6, 1975.

May 6, 1975 Meeting

The major topics discussed by the R & DC members were the following:

- a. Audit Report
- b. Marketability of the Project
- c. Budget Level
- d. Course of Action
- e. Africa Bureau's Comments

Audit Report

TA/H (Hooker): Summarized the main parts of the audit report, pointing out that it covers nineteen physician assistant training programs and allows for comparison between the different programs. A series of recommendations have been included which are irrelevant to the MEDEX project. It does cover activities of four MEDEX programs.

Demand for the Project

TA/H (Florio): Stated that there are two countries, Liberia and Iran, that are interested in a MEDEX program. There may be a question about Iran since it is an AID graduate country.

LA/DR (M. Brackett): Suggested a proposed plan beyond FY 76 which would require greater demand in health and nutrition areas.

Queried about the evaluation of the Truk proposal.

TA/H (Dr. Florio): Stated that TA/H was not involved with this. Mr. Dalton pointed out that he had discussed Truk with Dr. Richard Smith, University of Hawaii, and was informed that it has gone beyond the operational stage.

Budget Level

TA/PPU has reviewed the funding level and is providing assistance to TA/H in scaling down project cost. Mr. James Dalton, NESATech, questioned whether it is possible to approve the project for less than four years.

Africa Bureau's Comments

AFR/DS (Crosse): The Africa Bureau highly supports the project and its concepts, and that it is closely in touch with the Lesotho project.

Queried about the following :

1. the training of the preceptors and where this would take place;
2. the system of certification and whether it would be more relevant to domestic programs rather than IDC programs;
3. the overlap and duplication in responsibilities for the staff;
4. HEW funding of the Micronesia project, and the trade - offs;
5. the benefits directly received from the consortium.

TA/H (Newman): Stated that the training would take place at the University of Hawaii and in-country.

LA/DR (Brackett): Added that Harvard University has a general program.

AFR/DS (Crosse): Suggested that training should be at the institutions that make up the consortium.

Course of Action

NESA/TECH (Dalton): Raised the issue of buying a manpower system for health. Suggested that TAB should buy in on a small scale and evaluate that part before proceeding with the other proposed activities; and that there be a work plan for the first eighteen months. A mechanism is needed for monitoring the project and the R & DC function needs to be determined after one year of project activities.

TA/H (Newman): Emphasized that regional bureaus recommended additional staff to carry out the activities that need to be included as a part of the project. This was brought out during the project review of the pre-planning phase in March, 1975.

TA/PPU (Fritz): Suggested that a thorough evaluation take place after two years of project activities.

Action Required

TA/H and TA/PPU to revise draft PROP incorporating the comments/suggestions of the R & DC members.

URGENT

~~FILE~~

MEMORANDUM

DATE: August 12, 1975

TO : Research and Development Committee Members
FROM : TA/PPU, Carl R. Fritz *C.R.F.*
SUBJECT: MEDEX Project Paper

*Let's get the
assessments
done*

On April 19, and May 6, 1975, the Research and Development Committee met to discuss this proposed project. The purpose of the project is to provide a new approach and methodology for the accelerated training and deployment of mid-level health manpower, and to provide guidance and project design assistance in installing the methodology in selected LDCs. It will be carried out under a RSSA with HEW/OIH at a proposed funding level of \$2.7 million.

The Office of International Health (OIH), through its collaborative arrangement with the University of Hawaii, has been responsible for the development of a Health Manpower Development Staff to serve as a resource and response capability for USAIDs in the planning and development of mid-level health manpower who will be trained to provide basic health services. For the proposed project, OIH will provide general monitoring, backstopping and certain reporting and review functions for AID. OIH will contract the University of Hawaii for the basic design, organizational and development tasks required; and for advisory services and field programs using the MEDEX principles. The University of Hawaii will be responsible for coordinating and building the institutional linkages for the involvement of other universities with MEDEX expertise as partners in the U.S. effort.

The implementation of projects will be separate and distinct activities with their own justification and funding arrangements. Each case will be negotiated mutually between the host LDC, the U.S. university, the AID mission or other donors concerned and the interested regional bureau.

The draft project paper has been revised based upon the committee discussion and follow-on comments by the regional bureaus. (See Attachment A: Informal Minutes of R & DC Meeting, 4/29/75 & 5/6/75). I believe that this revision incorporates your suggestions and concerns.

If you have further suggestions/ comments, please forward them to me by August 19, 1975 so that TAB may include them in its discussion with Dr. Richard Smith, the RSSA project monitor, on August 22. Comments not received by that date will confirm your concurrence.

Attachments: a/s

URGENT

October 31, 1975

MEMORANDUM FOR: AA/TA, Mr. Curtis Farrar
THRU: AA/TA, Ms. Marjorie Belcher *B*
FROM: TA/PPU, John N. *JN* Gunning

SUBJECT: MEDEX Phase II Project Proposal

The redesigned MEDEX Phase II Project Proposal represents significant changes in the scope and specific work plan from the original version. We commend TA/H for the tremendous improvement of the PP and recognize that much time and effort were given to the development of the proposed project.

The proposed activity is designed to develop and evaluate a new approach for training mid-level health manpower. The duration of the project is three years at a total funding level of \$1.2 million. TA/H believes that a three year project, with an eighteen month evaluation, is the best option.

After careful review of the PP, we feel that: (1) the project requires a R & DC review to discuss the redesigned project and country specific projects for field testing the basic modules; and (2) that approval of the project for three years at the proposed funding level of \$1.2 million appears unrealistic at this time given the present status of country interest and commitment. Also we must take into consideration whether or not development of the 15 basic modules will be on target and achieved within the two years.

As the project now is proposed, TAB would finance the University of Hawaii for testing 7 of the 15 basic modules in three countries in the third year assuming two other country projects besides Thailand (DEIDS) are operative. This is spelled out in Howard's memorandum to Ms. Belcher, 10/28/75, paragraphs 4 - 7. This is predicated on the findings of an evaluation after 18 months. We question whether testing in three countries is adequate. Moreover, Thailand cannot be the basis for a full test since their modules are being developed *pari passu* with development of basic modules by Hawaii.

Because there are two major elements of the proposed activity, development and field testing, it seems more appropriate to have a two-phased project: Phase I, the development of the 15 basic modules, principles and operational procedures plus planning, reconnaissance visits to LDCs and technical assistance for MEDEX manpower development; and Phase II, the field testing of the modules and procedures in a number of LDCs. Funding would be provided for Phase I at this time to cover a two year period, FY 76 - FY 77 including the Interim Quarter. There would be a logical point, somewhere between 15 and 18 months, within this period for an in-depth evaluation before moving into Phase II. The evaluation might extend the testing period to cover all 15 basic modules but not necessarily at a greater cost. It might find regional bureaus willing to build in and finance the testing of the basic modules in their projects, thus reducing TAB's input. Since testing of basic modules involves first the extent to which they provide a useful base for development of country specific modules and then testing the teaching effectiveness of the country module, country project testing seems entirely possible. However, we cannot initially anticipate regional bureaus' input.

The PROP is silent as to the expected duration of TAB support for a core Hawaii staff. In the absence of such a discussion and with 100% support through the three year period, we must assume that TA/H expects a follow-on project phasing out TAB's support. We recognize it is difficult at this time to anticipate the logical terminal date. However, our two phase recommendation would permit an evaluation and redesign after 30 months of TAB-financed experience. (This includes FY 74 activities as well.) The follow-on phase two could then be designed with much more confidence about regional bureau demand for services and the possible duration for which TAB support would be required. This cannot be done now. Even if the PROP is approved now, we believe that negotiation of the new contract should be taken very seriously and TA/H should be involved as well as HEW and Hawaii. (A new PIO/T scope of work will be based upon the approved PROP.)

Therefore, we recommend a two-phased project with funds provided for Phase I at this time for a duration of two years plus the Interim Quarter. Additional funding will be contingent upon a favorable review of the results of Phase I and the information available in the spring of 1977 regarding planned country projects which could be the areas for field testing the basic modules - Phase II.

We further recommend that, to alleviate crash processing of this PROP, scope of work preparation, and contract negotiation, an extension of the current MEDEX Phase I - Pre-Planning activity until December 31, 1975, at an estimated cost of \$75,000.

I. PROJECT IDENTIFICATION

1. PROJECT TITLE: **MEDEX Program**

APPENDIX ATTACHED: YES NO

2. PROJECT NO. (N.O. 1): **931-11-599-07**

3. RECIPIENT (specify):
 COUNTRY _____
 REGIONAL _____ INTERREGIONAL **TA Bureau**

4. LIFE OF PROJECT
 BEGINS FY: **74**
 ENDS FY: **76**

5. SUBMISSION
 ORIGINAL
 REV. NO. **1** DATE: **11/3/75**

CONTR./PASA NO. _____

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ US (U.S. OWNED)	
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) COOP COUNTRY (A) JOINT (B) BU
1. PRIOR THRU ACTUAL FY	75 415										
2. OPN FY	75										
3. BUDGET FY											
4. BUDGET +1 FY											
5. BUDGET +2 FY											
6. BUDGET +3 FY											
7. ALL SUBQ. FY											
8. GRAND TOTAL	490										

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT
<i>225,9161</i>		

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER: Donn Hooker TA/H: Merrill Shutt, M. D.	TITLE: Program Coordinator Chief, HDS	DATE: 11/3/75
2. CLEARANCE OFFICER: LEE Howard, M. D.	TITLE: Director	DATE: 11/3/75

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL: This project was briefly extended and \$115,000 in FY 1975 funding provided to permit final design and approval of a new, Phase II MEDEX Project. That new project was approved on 11/3/75. The purpose of this PROP revision is to further extend this project for a final two months at an estimated cost of \$75,000 to permit orderly development of a scope of work, negotiation of a RSSA with HEW/OIH, and follow-on contract negotiations with the University of Hawaii. It is anticipated that the new project will be initiated prior to the end of December, 1975.

TA/PPU: John Gunning	DATE: 11/3/75		
TA/PPU: Earl R. Fritz	DATE: 11/3/75		
3. APPROVAL A/ID OR OFFICE DIRECTORS		4. APPROVAL A/AID (See N.O. 1025.1 VI C)	
SIGNATURE: Kenneth Levick	DATE: 11/3/75	SIGNATURE: _____	DATE: _____
TITLE: Acting Deputy Assistant Administrator		ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT	

February 4, 1975

ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR FOR
TECHNICAL ASSISTANCE

THRU: TA/PM, Mr. Carl Fritz

FROM: TA/H, Lee M. Howard, M.D.

Problem: Through the interagency PASA and RSSA mechanism, the Office of International Health, HEW, has been providing the Agency with technical consultation and professional support services in a variety of priority areas including health sector studies and health planning. During TAB program reviews last July, a funding level of \$821,000 was approved for the current year. The Office of Health first sought formal approval of funding at this level in late September 1974. We are now seeking your approval of funding at a slightly lower level (\$750,000) for the current year. This latter amount is an increase of approximately \$350,000 over FY 1974 funding.

Discussion: As AID moved in new policy directions in the health sector and with the Administrator's directive requiring sector analysis in all principal functional sectors, a technical assistance staff in health planning and sector assessment was developed at OIH. This staff has participated in the development of scopes of work and implementation of almost all the health sector assessments, studies or analysis carried out under AID initiative since 1972. The staff has provided technical advice to TA/H and Regional Bureaus on a continuing basis, carried out special health economics studies for LDC Governments, and developed protocols for health economics research.

Even before AID's recent renewed interest in health program activities, TA/H financed OIH to do preparatory work by identifying LDC health problems through the production of Syncrisis studies (country health profiles). Our analysis shows that DAPs prepared subsequent to and based upon Syncrisis studies reflect marked improvement in health content over previous DAP submissions. These studies have provided an advanced start for later sector assessments, and serve as concise relatively complete sources of current information for project pre-planning consultant briefing, etc. The value of these studies in influencing private sector institutions and individuals has not yet been fully evaluated, but from the large number of requests received we can conclude that the studies are used widely by those who have an active interest in international health.

With the continuing rapid expansion of AID's health sector planning and assessment requirements, the OIH staff has become significantly over-committed and required expansion if they are to respond to regional bureau initiatives and be able to provide continuity of experience and knowledge gained among AID countries and projects. The following functions are included in the RSSA budget, a copy of which is attached.

1. Syncrisis Studies (\$83,486 funding for 81 mm)

It requires four to six man-months of effort to complete one study. To date, 12 have been completed, ten are in process and there is a backlog of six which have not been started. These figures do not include four requests which were cancelled when it became evident OIH could not respond in less than one year.

OIH has repeatedly drawn on their personnel assigned to the Syncrisis staff to meet regional bureau calls for other pressing assignments. Five examples are: the development of the Africa Bureau Health Strategy, health sector assessments in both the Dominican Republic and Bolivia, and the basic preparation of the DAP for both Zaire and Liberia. The increases provided in this activity are not designed to accomplish all the Agency needs but will allow an increase in the service area to a minimally acceptable level.

2. Health Planning (\$241,775 funding for 132 mm)

Requirements for health sector assessment and planning follow DAP review where health is identified as a priority area. Regional bureaus and TA/H then consult with OIH to determine RSSA health assessment requirements. Although the demand varies from year-to-year, FY 1975 requests to date include the Dominican Republic, Bolivia, Haiti, Chile (nutrition assessment), Nicaragua and Egypt.

In anticipation of increased health program activity consequent to Sec. 104 of the Congressional Mandate, it is anticipated that additional requests for assistance will occur during FY 75 and 76.

The HEW Office of International Health is currently the only organization in the United States which has developed, in collaboration with AID, a Planning Division which specifically addressed AID health sector assessment requirements. Continuity of this resource is crucial if the Agency is to meet the short term demand for sector analysis. Since HEW has a temporary freeze on hiring additional manpower this year, it will be necessary for AID to authorize HEW/OIH to contract for the additional personnel. OIH has already initiated discussions with a potential contractor (National Council for International Health) and it has been agreed that

contractor will provide services in the form of manpower rather than contract for a product. The cost of this proposed contract is \$150,000 and will provide approximately 60 man months of professional staff and 24 man months of secretarial support. We are making use of an OIH contractor rather than a direct contract with AID because AID depends upon OIH expertise in health planning. OIH will be able to integrate their own personnel with those of the contractor to give a unity of purpose and scope that would not be the case if AID had to look to both OIH and a contractor for necessary technical support in this important program activity. Since OIH does not charge AID overhead, there will be no possibility of dual charges for contractor overhead.

3. Professional Services (\$100,273 funding for 50 mm)

This element provides a variety of resources. While we pay salaries of specific people, we may receive services from personnel other than those listed. In effect, we are purchasing man-months of professional services that are defined as particular needs arise during the year, primarily from the Regional Bureaus. Examples of use of this funding are: consultations to Liberia; review of various project documents; representation at the Caribbean Minister of Health Meeting; review of various project documents and supervision of various professional activities and services.

4. Medex (\$38,758 funding for 18 mm)

The major costs of Medex (University of Hawaii contract) are funded under a separate project. The costs of the OIH direct hire staff will be increased this year to provide a secretary.

5. Administration (\$48,911 funding for 48 mm)

Costs of administrative personnel have been increased in a proportion roughly equivalent to increases made in professional staffing.

6. Other Costs

As noted above, OIH does not charge overhead. Other costs are itemized in the attached budget. It should also be noted that since July 1, 1974, we have funded travel of OIH personnel on consultation of 30 days or less, formerly funded by Regional Bureaus or USAIDs.

Review of Performance: We will have a formal review of OIH performance, with regional bureau participation, in late February or early March of this year. This date will be set as soon as current year funding has been negotiated. The resulting PAR and a draft Project Proposal (PROP) will be submitted for your approval after R&DC review. We anticipate the PROP will recommend the standard pattern which is evolving for technical support projects: i.e., three-year approval (FY 76, 77 and 78) with provision of annual approval of project performance.

Recommendation: That you approve funding of OIH for the current year at \$750,000.

Attachment: a/s

Approved: [Signature]

Disapproved: _____

Date : 2/24/74

Clearances:
LA/DR: CJStockman [Signature]
EA/TD: HDodge (4011/10/74) phone
NESA/TECH: JDalton [Signature]
AFR/DR: FMoore phone
PPC/DPRE: AHandly [Signature]
TA/PM: CRFritz [Signature]

APPENDIX A
BUDGET AGREEMENT

RESOURCES SUPPORT SERVICES AGREEMENT BETWEEN
THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND

ORIGINAL AMEND NO. _____
RSSA NO. _____
FISCAL YEAR _____

1. BUDGET BY OBJECT CLASS. THE AMOUNT BUDGETED FOR ANY OBJECT CLASS SHALL NOT BE EXCEEDED BY MORE THAN 15 PERCENT UNLESS THERE HAS BEEN PRIOR APPROVAL BY A.I.D.			2. STAFFING (OBJECT CLASSES 11 AND 12) - DETAILS					
OBJ. CLASS	DESCRIPTION	AMOUNT	TITLE/NAME	GRADE (GS)	MAN-MONTHS	SALARY	BENEFITS	TOTAL
			<u>Syncrisis Studies</u>					
			Research Assistant, Anderson	7/1	12	9,963	-	
1.	PERSONAL COMPENSATION	363,203	Student Intern, Fischer	6/1	12	8,977	-	
			Public Health Analyst, Holland	13/1	12	20,675	-	
12	BENEFITS (AT _____ PERCENT)	45,584	Public Health Analyst, Lashman	12/1	12	17,493	-	
			Student Intern, Pielemeier	6/1	12	8,977		
21	TRAVEL AND TRANSPORTATION OF PERSONS (EXPLAIN BELOW)	70,189	Secretary, Sullivan	6/1	12	8,746		
			Research Assistant	11/3	6	7,825		
23	RENT, COMMUNICATIONS, AND UTILITIES	12,600	Summer Intern	4/1	3	830		
			<u>Health Planning</u>					
24	PRINTING AND REPRODUCTION (EXPLAIN BELOW)	61,500	Medical Officer/Economist, Davis	05+	12	26,309		
			Public Health Advisor, Daly	15/1	12	29,205		
25	OTHER SERVICES (SPECIFY BELOW)	150,000	Public Health Advisor, Ahmed	14	6	13,138		
		45,000	Public Health Advisor	06	6	15,073		
26	SUPPLIES AND MATERIALS	2,200	Clerk Typist, Auerbach	5/1	12	8,050		
			<u>Professional Services</u>					
31	EQUIPMENT (EXPLAIN BELOW)	5,000	Associate Director, Uhrich	05+	12	34,733		
			Public Health Analyst, Pease	12/1	8	12,803		
			Secretary, Shivers	7/9	12	12,626		
	TOTAL	750,276	Public Health Admin. Adv.	13/1	6	10,908		

3. EXPLANATION OF OBJECT CLASSES AND SPECIAL PROVISIONS

363,203

24. Includes publication of Syncrisis studies semi-annual operations report to AID and annual report on AID Health, Population and Nutrition Activities.

25. IBM Contract	855.50	Job Orders	\$ 1,000.00	Consultants	2,000.00
Procurement Services	600.00	Training	2,000.00	Institutional Contract	
Up-date Haiti Syncris Study	2,500.00	Check Charges	3,000.00	\$150,000 (1-year)	
Accounting Charges	24,000.00	Transportation of	1,000.00	5 Public Health Analysts	
Machine Repairs	1,000.00	Effects		(under Negotiation)	
Security Clearances	2,400.00	Data Gathering	6,000.00	2 Secretaries	
		Computer Costs			

APPENDIX A BUDGET AGREEMENT	RESOURCES SUPPORT SERVICES AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND	<input type="checkbox"/> ORIGINAL <input type="checkbox"/> AMEND NO. _____ <hr/> RSSA NO. _____ <hr/> FISCAL YEAR _____
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1. BUDGET BY OBJECT CLASS. THE AMOUNT BUDGETED FOR ANY OBJECT CLASS SHALL NOT BE EXCEEDED BY MORE THAN 15 PERCENT UNLESS THERE HAS BEEN PRIOR APPROVAL BY A.I.D.			2. STAFFING (OBJECT CLASSES 1! AND 12) - DETAILS					
	DESCRIPTION	AMOUNT	TITLE/NAME	GRADE (GS)	MAN-MONTHS	SALARY	BENEFITS	TOTAL
1.	PERSONAL COMPENSATION		Public Health Advisor <u>MEDEX</u>	15/2	12	29,203		
12	BENEFITS (AT _____ PERCENT)		Medical Director, Smith	06+	12	34,733		
21	TRAVEL AND TRANSPORTATION OF PERSONS (EXPLAIN BELOW)		Secretary <u>Administration</u>	5/1	6	4,025		
23	RENT, COMMUNICATIONS, AND UTILITIES		Administrative Assistant, Bowman	9/4	12	13,395		
24	PRINTING AND REPRODUCTION (EXPLAIN BELOW)		Office Service Supervisor, Hodge	7/4	12	10,965		
25	OTHER SERVICES (SPECIFY BELOW)		Accounting Technician, Rutkoski	9/4	12	14,671		
26	SUPPLIES AND MATERIALS		Secretary, Yabroff	6/4	12	9,880		
31	EQUIPMENT (EXPLAIN BELOW)							
	TOTAL							

3. EXPLANATION OF OBJECT CLASSES AND SPECIAL PROVISIONS

April 22, 1974

MEMORANDUM TO: TA/H, James Banta, M.D.

FROM: TA/PM, Mary E. Mozynski

SUBJECT: MEDEX Program Proposal

The purpose of this memorandum is to confirm the following in regard to the MEDEX program proposal:

1. AA/TA approved the project for one year on the basis of the PIO/T dated April 19, 1974, the supporting memoranda from TA/H and the African and Asian Bureaus. TA/H is to develop a PROP covering the longer term utilization of the MEDEX capabilities in active collaboration with the African and Asian Bureaus and to the extent appropriate with the other Bureaus.
2. The allotment for \$300,000 was issued on April 19.
3. The PIO/T is being processed simultaneously with the preparation of the Resources Support Services Agreement.
4. The Asia Bureau has transferred \$100,000 to TAB and the Africa Bureau \$97,500. The remaining \$102,500 for the MEDEX program was released from the escrow account.

cc: TA/PM, Evelyn McLeod
AA/TA, Curtis Farrar
TA/PM, Carl R. Fritz
TA/PM, Alfred Bisset

TA/PM:MMozynski:alr

This approval is based on the PIO/T dated April 19, 1974, and covers one year's services, essentially the fiscal year 1975. During that time ~~an~~ ^{copy of memo} a PROP will be developed covering the longer term utilization of ~~the~~ ^{of AFR &} the MEDEX capabilities. This will be done in active collaboration with the Africa and Asia Bureaus and if they wish with the other Bureaus as well. ^{ASIA.} ₂₆

The submission of the University of Hawaii dated February 8, 1974 is background for this proposal, but ~~it~~ is not approved by this action.

I. PROJECT IDENTIFICATION

1. PROJECT TITLE <p style="text-align: center; font-size: 1.2em;">MEDEX Program</p>		APPENDIX ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO
3. RECIPIENT (specify) <input type="checkbox"/> COUNTRY _____ <input type="checkbox"/> REGIONAL _____ <input type="checkbox"/> INTERREGIONAL _____		2. PROJECT NO. (M.O. 1095.2) 4. LIFE OF PROJECT BEGINS FY <u>74</u> ENDS FY <u>75</u>
5. SUBMISSION <input checked="" type="checkbox"/> ORIGINAL <u>4/18/74</u> DATE <input type="checkbox"/> REV. NO. _____ DATE CONTR./PASA NO. _____		

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMOD- ITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ US _____ (U.S. OWNED)			
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN		(2) COOP COUNTRY	
										(A) JOINT	(B) BUDGET		
1. PRIOR THRU ACTUAL FY													
2. OPRN FY <u>74</u>	<u>300</u>	<u>241</u>					<u>59</u>						
3. BUDGET FY													
4. BUDGET +1 FY													
5. BUDGET +2 FY													
6. BUDGET +3 FY													
7. ALL SUBQ. FY													
8. GRAND TOTAL													

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER <p style="text-align: center; font-size: 1.2em;">James Banta, MD</p>	TITLE _____	DATE _____
2. CLEARANCE OFFICER _____	TITLE _____	DATE _____

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

The attached proposal is for five years at a cost of \$2.0 million. This PROP approves \$300,000 for one year only. Support beyond FY 1975 will be dependent upon clear prospects for the utilization of the MEDEX program in the LDCs.

2. CLEARANCES

BUR/OFF.	SIGNATURE	DATE	BUR/OFF	SIGNATURE	DATE
ASIA/DP	Frank Correl <i>MC M</i>	4/9/74	TA/PM	Mary Mozynski <i>MC M</i>	
AFR/DS	Princeton Lyman <i>Approved memo.</i>	3/12/74	TA/PM	Carl R. Fritz <i>Cy</i>	
TA/PM	Alfred Bisset <i>AB</i>	4/18/74			

3. APPROVAL AAS OR OFFICE DIRECTORS

SIGNATURE <i>Chris Jones</i>	DATE 4/19/74
TITLE _____	

4. APPROVAL A/AID (See M.O. 1025.1 VI C)

SIGNATURE _____	DATE _____
ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT	

MEMORANDUM TO: Curtis Farrar
THRU: Carl R. Fritz *CF*
FROM: Mary E. Mozynski *MEM*
SUBJECT: Approval of the MEDEX program

TA/H is requesting approval of \$300,000 to fund the MEDEX program for one year. The justification is contained in the TA/H memorandum dated April 15, 1974 with the following attachments:

1. Proposal from the University of Hawaii
2. Memorandum from Princeton N. Lyman, AFR/DS
3. Memorandum from John Alden to Alfred White approving Asian participation in the MEDEX program.

The proposal from the University of Hawaii is in a PROP form and can serve as an internal document. We have attached a PROP face sheet for your signature.

The OYB change will transfer the \$200,000 from the Asian and African Bureaus to TAB. The remaining \$100,000 is already in the escrow account which is part of the OYB level for TAB.

Please indicate your approval by signing:

1. The OYB request, and
2. The PROP.

AGENCY FOR INTERNATIONAL DEVELOPMENT

OPERATIONAL YEAR BUDGET: PROGRAM REVISION REQUEST

TO: AA/PPC, Mr. Philip Birnbaum

Date: April 18, 1974

No.: TA

FROM: AA/TA, Curtis Farrar

Category/Funding: Population Planning and Health

	(1) Country/Program	(2) Original OYB	(3) Prev. Total (if dif. from (2))	(4) Amount of Change (+ or -)	(5) New Tot
Total	TAB	5,087		+200	5,287
Increase	GTS - Non-			+	
	Title X	2,065		+ 200	2,265
Decrease				+	
				-	
				-	
				-	
For Use By AA/PPC			-200		

Amount for increased program in Congressional Presentation \$

Summary justification of change: The purpose of this OYB change is to increase the non-Title X program for GTS by \$200 thousand. The African and Asian Bureaus are releasing \$100 thousand each of Non-Title X funds as their contribution to the MEDEX program. TAB is contributing an additional \$100 from the Escrow account which is already within the OYB as approved by PPC. The \$300 thousand will be transferred to HEW/OIH to implement the MEDEX program under contract with the University of Hawaii.

Drafting Officer: Mary E. Mozyzski
Mary E. Mozyzski

Concurrence: TA/PM, Carl R. Fritz

Reg/DP Office TA/PM, Alfred Bisset

PPC/RB W. T. Oliver

AA/PPC _____

Other _____

Approve _____

Disapprove _____

Date _____

AA/PPC, Mr. Philip Birnbaum

Date: April 18, 1974

No.: TA-74-4

AA/TA, Curtis Farrer

Category/Funding: Population Planning and Health

	(1) Country/Program	(2) Original OYB	(3) Prev. Total (if dif. from (2))	(4) Amount of Change (+ or -)	(5) New Total
1	TAB	5,087		+200	5,287
				+	
2	GTS - Non- Title X	2,065		+ 200	2,265
				+	
				+	
				-	
				-	
				-	
				-	
Use AA/PPC				-200	

Request for increased program in Congressional Presentation \$

Primary justification of change: The purpose of this OYB change is to increase the Non-Title X program for GTS by \$200 thousand. The African and Asian Bureaus are releasing \$100 thousand each of Non-Title X funds as their contribution to the GTS program. TAB is contributing an additional \$100 from the Escrow account which is already within the OYB as approved by PPC. The \$300 thousand will be transferred from HEW/OIH to implement the MEDEX program under contract with the University of Hawaii.

Requesting Officer: Mary E. Mozymski
Mary E. Mozymski

Approve _____

Source: TA/PM, Carl R. Fritz

Disapprove _____

Office: TA/PM, Alfred Bisset

Date _____

By: W. T. Oliver

PPC

PPC