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SUEZ COMMUNITY PERSONNEL TRAINING PROJECT(263-0136)

EVALUATION REPORT

LOCATIONS

CAIRO, ISMAILIA AND SUEZ CANAL ZONE,
EGYPT

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PREFACE

Preparation for this evaluation began in the United States during May, 1981.

Dr. George Gardner spent May 11-12 collecting and reviewing background documents pertaining to the project. During May 13-14 he interviewed project personnel at Boston University.

Dr. Anthony Vuturo spent the period May 20-23 interviewing project personnel at McMaster University (Hamilton, Ontario) and Boston University. He reviewed project documents during May 24-26.

Dr. Gardner arrived in Egypt on June 2 and spent three days interviewing USAID/Cairo personnel associated with the project and reviewed USAID documentation pertaining to the project. Dr. Vuturo arrived in Egypt June 5.

Interviews and site inspections were conducted during June 6-15 in the Ismailia area and Cairo. Analysis and report writing were completed during June 16-20.

Appreciation is expressed to all of the individuals, both Egyptian and American, who generously allocated their time to the interviews conducted by the evaluation team.

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1.0 BACKGROUND DATA ON EVALUATION TEAM

Anthony F. Vuturo M.D., M.P.H., is Professor and head of the Department of Family and Community Medicine at the University of Arizona College of Medicine in Tucson. Dr. Vuturo was previously Associate Dean for the College of Medicine, responsible for special projects in health care development, continuing medical education and planning. In his present capacity as head of Family and Community Medicine, he is responsible for approximately 180 faculty and staff operates a 40-man multidisciplinary group practice, five ambulatory care centers and two in-patient units. The Department of Family and Community Medicine provides 56,000 student contact hours in 35 urban and rural sites throughout the state of Arizona. In the formative years of the College of Medicine, Dr. Vuturo served as the school's first curriculum coordinator in undergraduate education.

Internationally, Dr. Vuturo has worked for both public sector and private corporations in health care and medical education development. He has participated, planned, developed and directed projects valued in excess of US\$400 million. Major commitments have been in South America, Japan, Ryuku Islands, Saudi Arabia, Lebanon, United Arab Emirates, Canada and England.

Dr. Vuturo is the author of over 150 technical reports, publications and presentations. He is both a fellow and diplomat of the American Board of Family Practice and the American Board of Preventive Medicine as well as being a member of the American College of Physicians.

George R. Gardner, M.S., Ph.D., is a General Development Officer in the Near East Bureau (NE/TECH/SARD), AID/Washington. Prior to joining AID he served as Assistant Director of International Programs at New Mexico State University. Dr. Gardner previously held teaching and research appointments at Cornell University and Auburn University. He has worked with various rural development projects in Chile, Nicaragua, Mexico and El Salvador. His professional experience with rural health care delivery systems began with a two-year assignment with Project HOPE in Washington, D.C. during 1968-70. Dr. Gardner's international experience dates from his service as a Peace Corps Volunteer in Chile during 1965-67. Dr. Gardner's Ph.D. degree from Cornell University is in the fields of economics and rural sociology.

2.0 PROJECT OVERVIEW AND PHILOSOPHY

The overview and philosophy of the Suez Health Personnel Training Project has been expressed in various formats. In the project paper, dated December 1979, it is stated that:

"the purpose is to continue the development, within Boston University, of a capacity to assist the GOE in improving health services and to assist BU and the GOE in improving health services; particularly primary care, by introducing an integrated medical education and health services program which relates educational investment directly to the health needs of the population."

The project paper was developed in response to an unsolicited proposal by Boston University Health Policy Institute (BUHPI) and resulted in a cooperative grant agreement (#263-0136) between the Agency for International Development and BUHPI, dated and signed May 15, 1980. The purpose of this agreement is:

"...to provide partial support to Boston University for its participation in a program of assistance to Suez Canal University. The objective of this project is to establish a program for medical education and health services in the Suez Canal area. The project will develop a new curriculum and a new mode of teaching for training health personnel to plan, manage and provide preventive and community based primary health services..."

Dr. Zohair Nooman, founding Dean of the Faculty of Medicine at Suez Canal University, writes in an article entitled "Medical Education and Primary Care: The Suez Experiment"

"There is a unique experiment in medical education underway in Egypt. The new faculty of medicine is preparing to train primary care physicians to meet Egypt's most basic and pressing health needs"

In a report presented at the second meeting of the Network of the Community-Oriented Institutions of Health Sciences in April 1981, Dr Nooman states the following goals of the medical school:

"to qualify physicians whose primary objective will be to provide health care in a combined hospital community system with a major emphasis on primary care

- to relate medical education to the needs of society so that physicians will be able to diagnose community health problems.
- to develop and implement, with the Ministry of Public Health and other health care bodies, an integrated system of comprehensive health care delivery and manpower development....Such systems (will) consider the limited per capita health expenditure at present (U.S.\$40 per person/year estimate) and in the foreseeable future. Regional health service facilities will be used as the locus for education and training.
- to develop and provide for health personnel programs of post graduate training; and
- to develop research programs that address, primarily, actual health needs of the community."

The overview and philosophy of this program is further elaborated by Dr. William Bicknell who succinctly states as the goal of the proposed Phase II document (dated 6/4/81):

"to assist in the integration and improvement of an enduring, free-standing (not dependent on donor support) system of medical education and health services in the Suez area."

Contained within the excerpts cited above are the basic tenants of the project. The philosophy ranges from very specific elements (e.g. a new curricular process) committing a focus of attention on the needs of people in the Suez and addressing a basic need of primary or first contact care and hopes, to the creation of a regional system that integrates the educational system of the university with the service responsibility of the Ministry of Health and the needs of people of that area. These activities are viewed within the context of an experiment.

3.0 EVALUATION AUTHORIZATION

In addition to the internal evaluation specified in the grant agreement, the present "special evaluation" was requested by USAID/Cairo. This "special evaluation" is independent of any evaluation which the grantee may undertake in the future.

3.1 SCOPE OF WORK

The initial scope of work for the evaluation team was proposed in a cable (Cairo 07334) to NE/TECH in Washington. The terms of reference are described in this document and can be summarized as follows:

- a) determine project progress to date;
- b) state outstanding major issues; and
- c) prepare recommendations on continued funding of the project.

The scope of work of this evaluation is further clarified in the American Public Health Association Contract of Dr. Anthony Vuturo (#583080) in response to a request by Ms. Barbara Turner, M.PH. of NE/TECH in AID/Washington.

3.2 DATA BASE AND METHODOLOGY

Two senior evaluators were selected with previous experience in the Middle East and possessing complimentary professional backgrounds in the fields of medicine, education, group practice management, economics and evaluation. (See background data on evaluation team 1.1). A cross-sectional evaluation format, occurring twelve (12) months after signature of the Cooperative Agreement and approximately six (6) months before the completion of Phase I, was employed.

In actuality, preliminary activities for this project were operational prior to 15 May, 1980, and reimbursed to BU by AID. The elements of the evaluation, that were identified as benchmarks of project progress, were drawn from sources in 3.2.1. Verifiable objectives, components of objectives and specific documentable activities were specified so that the evaluation process would be systematic and comprehensive.

Personnel involved in the BU/SCU have been identified. These include the Project Officer in AID/Washington and AID/Cairo; senior faculty, junior faculty and administrative personnel of Suez Canal University and its Faculty of Medicine; senior directors of the Ministry of Health of GOE; regional and district representatives of the

MOH at urban and rural hospitals and health centers; and personnel not involved operationally in this project. Personnel with no direct relationship either to the principals or the operational elements were selected independently by the evaluation team.

All interviews were structured, open-ended and direct questioning was utilized. All elements for focus were identified prior to the interview. Two evaluators were present for all incountry interviews*, one questioning and the other observing and recording data. Post-interview conferences were held on the evaluations. This ensured that all non-verbal communication were identified, consistencies and inconsistencies noted, and in turn clarification obtained.

All sites related to Phase I of this project were visited. Key personnel were interviewed at each site. Discussion regarding their knowledge of the project and potential involvement in it was recorded. Complete tours of the facilities occurred. Where the project is to have an impact on physical structures, sites were inspected and discussed.

Senior BU contract personnel at SCU were interviewed. Filing systems, accounting systems, equipment, etc. were inspected. Key files of this project in AID were reviewed in detail.

* With the exception of one telephone interview.

Multiple point verification procedures were utilized to ensure uniformity of information. For example, questions on a curricular element, an interpretation of a component or an issue relating to the group practice were similarly stated to different people in different settings under varying circumstances while holding constant the question theme. This procedure was instituted to ensure that the evaluators did not hear the "party line" thus biasing the validity of information.

3.2.1 Background Material

All pertinent background material was made available to the evaluation team. Background material consisted of curricular material, project papers, contracts, cooperative agreements, internal and external correspondence, working drafts, job descriptions, purchase orders, equipment lists, budget and accounting reports, design specifications, curriculum vitae, all recent WHO regional reports on primary health care in the region. Also, selected editorials on health from the Egyptian Gazette, US Government/GOE technical agreements, AID/MOH agreements, monthly reports, semi-annual reports, health survey designs, and the group practice by-laws and plan were reviewed.

Content analysis of these materials revealed that the great majority of project documentation originated in the Boston offices of BU. The approximate breakdown of project materials with respect to point of origin follows:

● Boston University Project Office (USA)	85%
● AID/Cairo files	5%
● Suez University Project Office	8%
● Other	2%
	<hr/>
	100%

The great majority of project materials (approximately 95%) are available in English only.

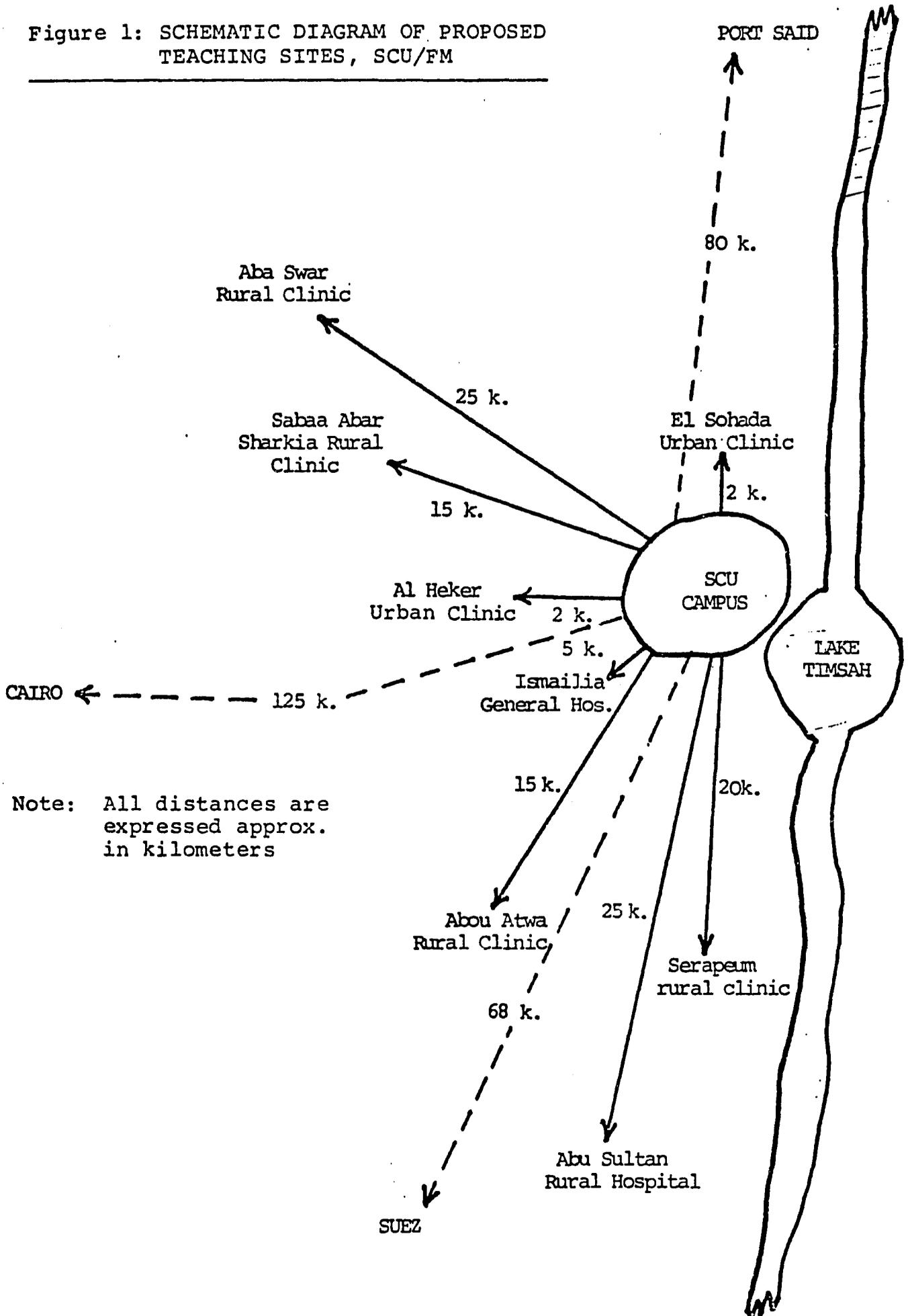
3.2.2 Interviews

All personnel interviewed are listed by name and title in Appendix Table 1.

3.2.3 Site Visits

All project sites visited are listed in Appendix Table 2. A diagrammatic representation of rural and urban health centers and principal teaching sites are described in Figure 1. Distances of each site in kilometers from the main campus of SCU are approximate.

Figure 1: SCHEMATIC DIAGRAM OF PROPOSED TEACHING SITES, SCU/FM



Note: All distances are expressed approx. in kilometers

3.3 ANALYTIC METHOD

Review of the documents in Section 3.2 coupled with an analysis of the cooperative agreement, project paper and the USAID/GOE Agreement, enabled the evaluation team to identify the following key objectives that appear rather consistently in all documents. While it is reasonable to assume significant technical/legal differences between grants, contracts, and cooperative agreements and the need for some flexibility in the course of Phase I; the consistency of stated commitment by all parties can, nevertheless, be verified.

3.3.1 Major Program Objectives

Extracted from the program documents and listed below are the following:

- | | |
|--|-------|
| A. Major Program Objectives | 3.3.1 |
| B. Technical Specifications
for each Objective | 3.3.2 |
| C. Variables against which
the technical specifications
of each objective
can be measured | 3.3.3 |
| D. Assumptions upon which
the objectives are based | 3.3.4 |

A,B,C, and D are summarized in the following tables (1-7). The following section will analyze each of the above elements and its current status. The tables appear as Appendix Tables 3-9.

4.1 OBJECTIVE: CURRICULUM DEVELOPMENT

Curricular development for the new Faculty of Medicine at SCU is one of the major themes addressed by Boston University. Several institutions with established track records in problem-based learning, competency-based curriculum, and evaluation design have had input into the preliminary curriculum development process. These include Boston University, McMaster University, University of Illinois, Royal College of General Practitioners in England and Maastricht University in the Netherlands. The majority of faculty interviewed are conversant with the basic principles of curriculum design.

Of some concern to the evaluation team is the decision to not provide a full-time curriculum development specialist to assist SCU/FM in orchestrating the various educational inputs from the international array of prestigious institutions so far identified. It would appear that the concentration on the process and focus on educational concepts (for example, "community based, primary care, tutors, learning modules, self instruction, problem solving, teaching the teachers, independent learning", etc.) without on-site technical assistance for continued interpretation and refinement of these concepts may become a distraction for the entire curriculum development process.

The educational philosophies of all institutions involved and the selected utilization for each educational component in part may lead to a distorted final product. One interpretation of the process to date may be international multidisciplinary cooperation. Another interpretation, however, might be termed educational fragmentation.

At this time a complete curriculum format for the entire first year has not been assembled. Approximately 70% of the task has been completed, all in various draft formats. No significant documentation of second year curriculum has been seen. A very general skeletal framework for all six years has been reviewed. The concern of the evaluation team is that the faculty has underestimated the educational task at hand. SCU/FOM has been permitted a luxury of more than two years of development time; the other medical institutions in Egypt will expect to see organized educational materials reflecting the inputs received. The evaluation team recognizes that without the first-year students in place, and the inability to effectively use the new curricular materials with the student, curricular development per se becomes a fruitless exercise. It is expected that significant changes will occur in the proposed first-year curriculum during its implementation and evaluation. This process will likely lead to extensive curricular redesign for the second admitted class.

In curricular design, faculty interviewed have yet to agree on what the final product will be like -- in educational terms, what will be the specification for optimal physician performance? At the end of six years of training, the SCU/FOM will at least be expected to say how their product differs from graduates of other medical institutions in Egypt. It should be noted that for practical purposes, following graduation from SUFOM, the student will still be expected to do an internship, serve a period of obligatory national service and compete with other graduates for entry into other kinds of post-graduate practice.

In summary, curricular development activities are moving forward. Institutional capacity for education is being developed. Key faculty of SCU/FOM are addressing the curricular development process with diligence and enthusiasm. Grantee inputs have been helpful especially in the use of short-term educational consultants. The assumptions upon which this objective is based remain valid. The first-year curriculum should be implemented and activated in September. Funding should be continued and expanded, particularly in the area of securing in-country technical assistance for curriculum development.

4.2 OBJECTIVE: IDENTIFICATION & PREPARATION OF
CLINICAL TRAINING SITES

Within the scope of this objective, BU proposed to assist with the selection and preparation of "a minimum of six rural health units" as clinical teaching sites. The sites were to include locations in three governorates: Ismailia, Port Said and Suez. The sites were to have been ready to receive students by September 1981. Furthermore, alternate clinical teaching sites were to have been identified.

To date, there has been significant progress toward this objective. Four rural health clinics in the Ismailia governorate have been identified: Aba Swar, Serapeum, Abou Atwa, and Sabaa Abar Sharkia. Architectural plans for the construction of teaching space at each of the four facilities have been completed, specifications offered and bids received. Construction is scheduled to begin in the near future, but the exact completion date is uncertain. For reasons that were not entirely clear to the evaluation team, this construction -- plus the refurbishing of certain rooms at Ismailia General and Abul Sultan Rural Hospitals -- was removed from the grant agreement and funded under a separate agreement between USAID/CAiro and the Ministry of Health.

Unfortunately, no bids were received on the tenders for the refurbishing at Ismailia General Hospital and Abul Sultan Rural Hospital. The evaluation team was told that a public sector construction firm will be ordered to do the work by the Governor of Ismailia. To date, however, no construction activities have begun and it is highly unlikely that these clinical teaching sites will be ready by September 1981.

As a contingency, two urban-based clinical teaching sites have been identified in Ismailia - El Sohada and Al Hekr. It is not clear which rooms, if any, will be made available to SCU/FM for teaching at these sites.

Less progress has been made in the identification of clinical teaching sites in Suez and Port Said, and no refurbishing has been done.

The grant agreement specifies that BU "will be expected to assist in providing on-site inspection and supervision of all renovation and construction work". At the time the evaluation team visited the four rural clinics in the Ismailia area, no member of the BU team in Egypt had previously visited any of the sites. However, consultants from BU have visited the sites. Furthermore, the BU staff in Egypt was not familiar with the general aspects of the construction and refurbishing activities.

4.3 OBJECTIVE: PRIMARY CARE GROUP PRACTICE

Of all the project elements, the primary care group practice provides the most uncertainty and is the highest risk activity. The evaluation team clearly understands the assumptions and rationale of the plan. The evaluation team recognizes the major contribution of time and effort made by the BU consultant, Mr. Ken Bloem, in the planning of group practice.

It is generally accepted that the need for some type of physician practice plan that supplements university salaries is reasonable and desirable. In educational institutions, it is understood that the market levels for faculty salaries are generally substantially less than physician salaries in the private sector. The evaluation team has been unable to determine, with any precision, the total income expectations of the clinical teaching faculty members. Based on the evaluation team's information, the range for physician salary expectations is between six and twenty times the current university-provided salary adjusted for rank and experience. Administrative officials and BU planners tend to assume that physician salary expectations and satisfactions are near the lower end of this income spectrum. However, the clinical faculty interviewed appear to have much higher income expectations.

Faculty practice plans in the U.S. are characterized by the ability of the Dean to receive a portion of the earning for discretionary educational purposes. The plan proposed returns 20% of the revenues to the University. According to the faculty's interpretation of the group practice proposal, 10% of net earnings will go to each department for "research" and 10% will return to the physicians as "bonus". Of particular concern to the evaluators is the calculation of "above the line expenses" (i.e. those expenses attributable to the cost of the practice) and the "below the line" expenses -- that proportion from which the university will receive its share.

As currently proposed, the group practice financial structure encourages consumption of income (in the form of salaries, equipment, renovations, and personnel expansion) rather than capital creation for broader educational purposes. Furthermore, there is no incentive for the group practice to minimize expenses while receiving the AID operating subsidy.

The concern of the evaluation team relates to the need for self-sufficiency, not only in salaries for the physician staff, but also to support non-clinical faculty in basic sciences and general educational costs of the new curriculum. In order to meet faculty salary expectations, the Dean will have little if any funds to support the educational program in its broadly conceptualized state unless special provisions are formulated.

The evaluation team is concerned that the preliminary income projections are inflated and speculative. There are too many unknowns to calculate with any precision future revenues. A number of observations follow:

- Faculty continue to hedge their bets by operating private practices outside of Ismailia.
- The estimation of the Ismailia market demand for group practice health services is questionable. For example:

Population available for care.....	400,000
Population covered by MOH (75%).....	(300,000)
Ismailia Pop.covered by Suez Canal Authority ($\frac{1}{2}$ x 13,000 employees x 5 people per family).....	(32,500)
Population covered by military and police plans	(10,000)
Population served by existing private fee-for-service system (including MOH physicians, etc; estimate 100 available physicians and a physician population ratio of 1 per 500 people who can afford some "additional" expenditure for health services	(50,000)
	<hr/>
	392,500
Net potential population available to be served by SCU group practice	7,500

One may envisage a number of scenarios based upon the above hypothetical model. The point the evaluation team would like to make is the great uncertainty of developing an economically viable practice of sufficient size to support fully faculty expectations and needs. Additionally, as the faculty grows in size, the paying population to support the total group will diminish. Inevitable conflict between the private sector (including Ministry of Health physicians) and University based physicians will increase. A significant number of faculty will be required in Ismailia to support at least the first three years of the curriculum.

• A brief survey of pharmaceutical outlets was conducted by the evaluation team. It has been postulated that funds from the pharmacy would be available to support non-clinical services at the discretion of the dean. Pharmaceutical prices are fixed and subsidized in Egypt. In general, drugs are significantly lower in cost than in the United States and the average cost of prescription services estimated in the planning document is high. Furthermore, a 100% compliance for prescription purchase is assumed. Assume the following: Average cost to the patient of a prescription 1.5 pounds; assume a 50% mark-up on a drug item to cover cost, storage, wastage etc. 133,333 prescriptions must be written and purchased from the group practice pharmacy to generate a potential "profit" of 100,000 Egyptian pounds! Again, a speculative postulate of concern to the evaluation team.

- The evaluation team is concerned about the interaction of tradition and law on group practices. During the majority of interviews, the sacredness and right of the physician to be involved as an independent individualist (although polyclinics do exist in Egypt) from the private practice point of view was emphasized by the physicians. From the most minimally trained physician to the graduate in training, all have some type of private practice. To expect this tradition not to continue in some form -- thus undermining the required availability of both senior and junior faculty to meet the unique educational demands -- is unrealistic.
- By most expert's interpretation, the group practice that has been established and has enrolled approximately 12 faculty does not truly emphasize primary care or first-contact oriented care. It is, for all practical purposes, a multi-speciality, heavily surgically focused practice. It is expected to cater substantially to the elite and financially prosperous elements of the community.

The inputs to date to support the renovation and partial equipping of the group practice appear adequate. Coordination difficulties have arisen between AID/Cairo/BU/MOH/SCU/FOM and architects regarding the nature of the renovation. By-laws of the group practice, especially the English translation, appear to not conform with the Arabic equivalent. The intent of exclusiveness of all patient care earning, regardless of source, being contributed to the group plan may not be fully understood by the participating physicians.

4.4 OBJECTIVE: DESIGN & EQUIPPING OF BUILDING 29

Within the scope of this objective, BU proposed to: (a) provide a U.S. architect to draw up alternative approaches to the renovation of the building (a bombed-out factory); (b) develop an equipment list and specifications for the equipment; and (c) assure that the renovated building and specified equipment are integrated (e.g. adequate wiring and plumbing).

Significant progress toward this objective has been achieved. It appears that Building 29 may be ready for occupancy in September 1981. At the time of the evaluation team visit, workers were installing doors, windows, light fixtures and other items. Plumbing and wiring installation appeared to be nearing the final stage.

Building 29 is designed to provide classrooms, laboratories, faculty offices, administrative offices and a library/audio visual center. No furniture or equipment has yet been installed, but the general layout of the building appears to be functional and adequate.

It is not clear exactly how much of the laboratory equipment has arrived, but the evaluation team was assured that all equipment has been ordered. Judgement on the adequacy of building/equipment integration cannot be made until the equipment is installed.

Likewise, the appropriateness of the library and audio-visual center cannot be assessed until they are completed.

The evaluation team is concerned about the Glasgow subcontract for maintenance and training of personnel to support equipment in Building 29. In a discussion with Mr. David Porter a number of concerns were highlighted:

- Mr Porter will be completing his final year with the British equivalent of AID. He will have been in-country 5 years. Continuity of management is questionable.

- To date, 40 applicants have responded to an advertisement placed in local Egyptian newspapers for the above mentioned training program. Three (3) people are possible candidates for training. None have been hired or selected to date.

In summary, it appears at this stage that Building 29 will provide adequate facilities for the SCU/FM faculty, staff, and projected student enrollment.

4.5 OBJECTIVE: CONTINUING EDUCATION & STAFF DEVELOPMENT

The component of the program that deals with this objective appears to be progressing satisfactorily. The measurement variables and assumptions are balanced and realistic. Activities appear to be reasonable. However, the evaluation team is concerned about the following aspects of this component of the project:

- (1) Short-term training programs in the U.S. have been predominantly "show and tell" experiences. In itself, this experience is useful. However, follow-up visitations by the same personnel would appear advantageous.
- (2) Little, if any, staff (non-faculty) education appears to have been activated.
- (3) A clear needs assesment for ongoing CME for the faculty should be developed.
- (4) Future training programs must address the unique needs of junior faculty. It is apparent that at present junior faculty account for about 85% of total faculty. While programs for training the teachers are projected, due attention must be given to ensure that skills in research and those areas that would permit junior faculty to be promoted in the academic environment are addressed.

- (5) Long-term training in the U.S., especially for periods greater than one year, appears to have significant disadvantages: Faculty are lost from being involved in the evolution of the new curriculum for significant periods of time. Research oriented Ph.D. degrees in the U.S. are not necessarily suited for research in the present SCU/FOM environment. The evaluation team is aware of potential in-country linkages with NAMRU in developing a research focus at SU/FOM and the interest of the University of Washington in infectious diseases, but no formal agreements have yet been developed.

4.6 OBJECTIVE: STRENGTHENING OF MANAGEMENT SYSTEMS

Within the scope of this objective, BU generally proposed to "develop systems and train personnel for successfully managing the new medical school." The language used in the grant document to describe tangible indicators of progress toward this objective is vague.

Progress to date in the management strengthening area has not been as significant as progress in other areas. Indeed, Dr. William Bicknell himself described this lack of progress as one of the major shortcomings of the project.

With the opening of classes only three months away, many specific aspects of systematic management should be in place. For example, the following components are needed:

- a) Operational budgets;
- b) Student records system;
- c) Personnel records system;
- d) Procurement system;
- e) Organizational charts

The evaluation team found little evidence to suggest that BU personnel have been actively engaged in such planning. A management counsellor to the Dean was hired and posted to SCU in January 1981. However, it appears that the management of the grant itself consumes most of the time of the management expert and his entire staff.

An analysis of "targeted technical assistance" provided to SCU/FOM by BU may reveal why the management strengthening objective is not being achieved. As seen in Table 1, technical assistance in the form of both consultant travel and BU project staff travel has been very light. The main focus of "targeted technical assistance" appears to have been in the area of medical staff development and continuing medical education.

Figure 2 depicts the organizational representation of SCU/FOM - BU/AID project. This chart is based on the evaluation team's sense of organization derived from numerous interviews. The evaluation team feels that the organization chart may imply more orderliness than actually exists. As seen from the management point of view, a number of major problems exist:

Table 1 : SUMMARY AND ANALYSIS OF PROJECT-FUNDED TECHNICAL ASSISTANCE THROUGH
JUNE 15, 1981^a

PROJECT OBJECTIVE	Consultant time in Egypt (man-days)	PROJECT STAFF TIME		SCU/FOM and MOH travel outside Egypt (man-days)	TOTALS (man-days)
		BU Sen.Staff assigned to Egypt	BU home off. staff travel to Egypt		
Curricular Development	115	22 ^b	-	-	137 (9%)
Clinical Site Identification & Preparation	42	-	-	-	42 (3%)
Group Practice	37	-	-	-	37 (2%)
Building 29 Renovation & Equipping	10	-	-	-	10 (.7%)
Management Strengthening	40	280	119	-	439 (30%)
Staff Development and Continuing Education	19	44 ^b	-	668	731 (50%)
Recruitment	54	-	-	-	54 (4%)
TOTALS (man/days)	317 (22%)	346 (24%)	119 (8%)	668 (46%)	1,450 (100%)

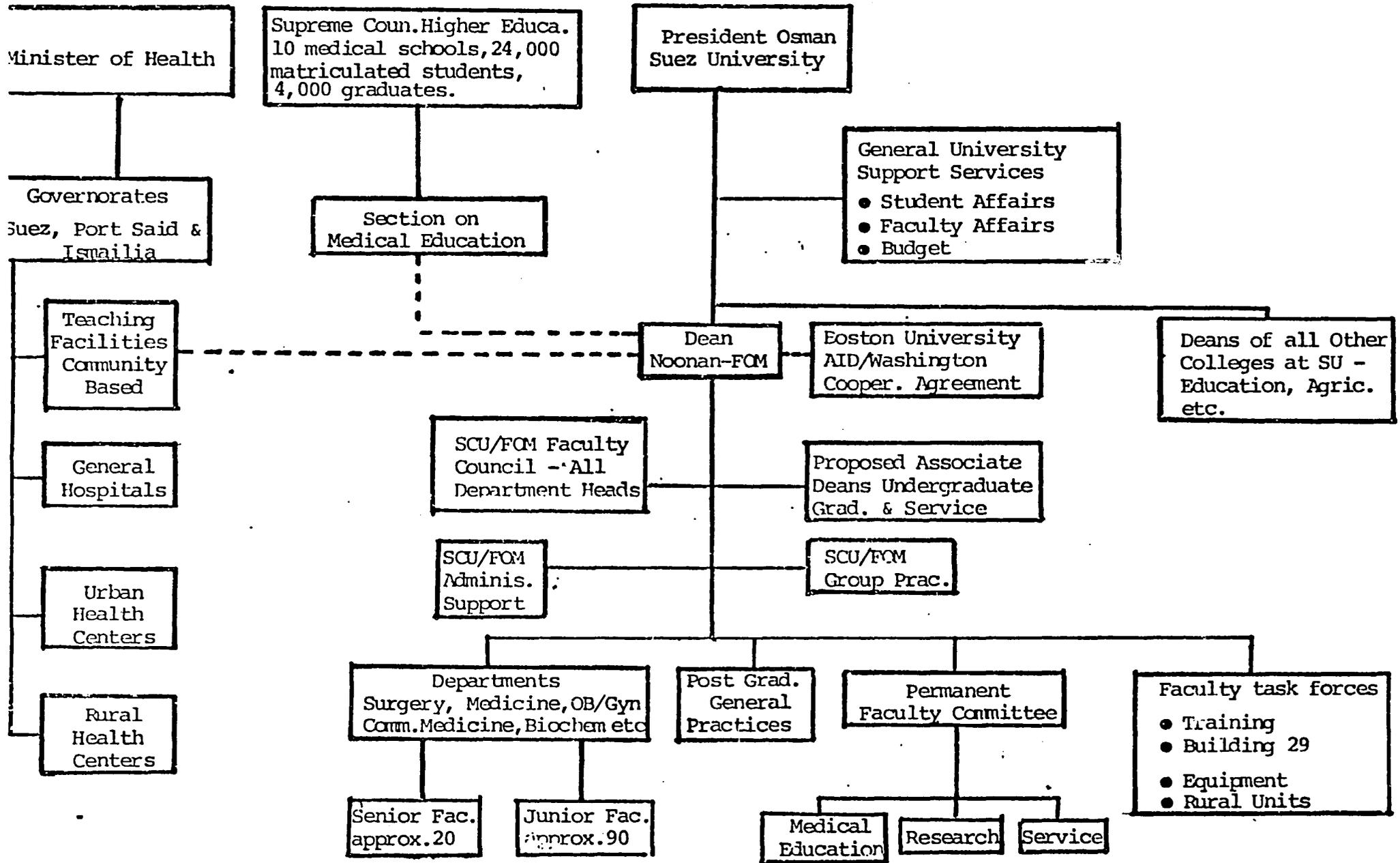
Note: a) Assumes 6-day work week and one-day travel time each for arrival and departure; derived from data provided by Boston University.

b) Represents Dr. Anand's appointment which is split 70%-30% between teaching & curricular development in the Department of Community Medicine

- Clear delineation between staff and line functions and their responsibility are vague;
- Conflicting responsibilities between developing departments, task forces, and standing committee;
- Relative weak position of BU/AID cooperative agreement in relation to decision makers;
- Obvious problems of university views of centralization and SCU/FOM needs for decentralization;
- Relative power base of SCU/FOM Faculty Council;
- The office of the Dean must be capable of responding to three different higher levels of organization, each with its own goals: The SCU Office of the President, accrediting bodies, and the Ministry of Health.

In summary, the BU management personnel and resources assigned to SCU/FOM appear to focus almost entirely on management of the grant funds and project-funded travel.

Fig.2. ORGANIZATIONAL STRUCTURE CHART* SCU/FOM - BU/AID COOPERATIVE AGREEMENT



* constructed by evaluation team based on numerous interviews

4.7 OBJECTIVE: PHASE II

Two draft documents outlining the proposed objective components of the Phase II program activities have been submitted to the evaluation team. The principle elements include:

- Management and Evaluation
- Planning
- Finances
- Services
- Curriculum
- Administration and Support

Observations of the evaluation team on the Phase II suggested outline include:

- A. A minimal input by Egyptian side into the document is evident.
- B. A minimal input by USAID/Cairo into the proposal is evident.
- C. The management component is quite vague and lacks focus:
 - management support for the university administration?
 - management support for the FOM administration?
 - management support for the BU in-country staff?
 - Issues of how, under what circumstances, method of evaluation, etc.

D. A long range evaluation system is not defined.

E. The planning component assumes that sufficient expertise exists within BU -- with sufficient knowledge, language capability and depth -- to provide technical assistance in the planning area. Such has not yet been demonstrated.

The evaluation team believes that activities proposed including farmers insurance, group practice extension, area wide planning, incentives and nursing are sufficiently expansive, time consuming and potentially peripheral that serious dilution of competence would result if the scope of Phase II were to include these activities.

F. The discussion on finances is simply a set of questions. It is not at all clear what BU proposes for an answer.

G. The improvement of services and expansion of primary care sites for Phase II needs further analysis. The use of senior and junior faculty actually teaching undergraduates and general practice trainees in such a setting may appear rational on paper. But the actual implementation and utilization of the sites must be demonstrated. The issues of manpower training at the proposed sites of midwives, home visitors, nursing staff, lab technicians, medical records clerks, etc. should be considered as a co-element. The proposal fails to address who will be responsible for the plan to redesign Ismailia General Hospital.

The evaluation team is concerned with the lack of specificity in regard to infectious diseases, equipment maintenance, group practice, and environmental health. Specifically, the grantee intends to "assist to identify" a spectrum of issues. An attempt at priority setting is recommended. It would seem well within the MOH and the SCU/FOM capability to identify issues.

- H. The curriculum consortium appears to be a useful mode in the proposal. However, it appears that from the leadership point of view at the SCU/FOM this arrangement is an "on-request system" with the grantee and consortium responding to the perceived needs of SCU/FOM. It is not the intent of USAID to have the contractor serve in retainment for potential ad hoc services. The evaluation team believes significant attention will be required to adequately develop all phases of the undergraduate curriculum. It is further noted that this cooperative agreement is due to terminate approximately three years before the first class graduates.

The grantee should be more specific regarding post-graduate training in general practice. The general practice training at SCU/FOM program is one of three such programs in the country.

- I. Project administration and support need strengthening. In Phase I, project management has focused almost entirely on grant management and provided very little support to the SCU/FOM administration and faculty (other than arranging transportation, visas, tickets, etc.) Professional, competent, relatively continuous management support in its broadest sense is necessary.

In summary, the Phase II proposed planning document is too broad, diffuse and does not identify quantifiable outputs. No budgets were submitted. Significant questions involving rationale, local, national and political implications are raised. It would appear that the effort proposed and the initiation of new avenues of pursuit suggested (e.g., the implementation of a health care insurance scheme for farmers residing in the Suez Canal region) expands the scope of work well beyond the capabilities of the Boston University and the level of capabilities of the faculty at SCU.

5.0 ISSUES, PROBLEMS AND IMPLICATIONS FOR AID

The evaluation team has observed issues and actions that have both short and long term implications for AID. In general these topics have not been addressed in the previous sections. For the sake of completeness these issues are listed:

- A. The goals addressed by this project are not particularly new or innovative. Principles of community-based education, primary care education, training and management have been enunciated by numerous groups in the region, especially projects under WHO sponsorship. Curricular changes are occurring in other medical schools in Egypt.

- B. The strategy of committing major resources to train such a small group of physicians may not be cost effective. The population of Egypt is approximately 40 million. With a 3 percent growth rate, extension of life expectancy, improvement in neonatal and perinatal mortality on the basis of environmental modification, pure water and better nutrition, one can reasonably expect the population to double in 15 to 20 years. The

extravagance of training a few physicians while the needs of so many exist must be weighed against alternative approaches to improving rural health care delivery.

- C. Reasonably stable leadership is required for any successful project. The founding dean is completing his first 3-year term, and expects to be elected/appointed for a final 3-year term. Within the existing system no infrastructure of associate deans, or senior department heads at the professional level, with the drive, commitment, and experience of Dr. Nooman exist.
- D. If AID chooses to fund Phase II of the project, funding will terminate approximately three years before the first class graduates. This will correspond to a time when the first clinical years will be beginning -- a very vulnerable time for any new medical school.
- E. Incentives for group practice development are a very sensitive area. On one hand, the philosophy underlying the project goals embraces primary care to meet the needs of the people; this can be interpreted to meet needs of most of the people, most of the time. The use of AID funds to support

projects that will enhance the income of physicians in the upper five percent of the Egyptian income distribution (i.e. faculty of medicine salary supplements) either directly or in kind is questionable at best.

- F. On one hand, this project is based on the assumption that Boston University will fully commit its expertise to the fulfilment of the cooperative agreement. In actuality, during the first year a total of 119 man-days of the contractor's senior personnel have provided in-country and technical assistance. The two personnel recruited for permanent duty in-country were not previously associated with BU, and have had limited contact with senior faculty at BU.
- G. It should be noted that despite the endorsement of senior officials both of the University and Ministry of Health, successful implementation and integration of a service program and an educational program may not be mutually beneficial -- especially at the hospital interface level. The real task of implementation at middle management level and at the professional level---where benefits differ---may cause difficulty.

H. There are indications that the political support currently bestowed on the SCU/FOM by the MOH and the Supreme Council may not endure. The supreme council will change and deans of schools will change.

I. An assumption of the new school with its new curriculum is that the students will be ready mentally and emotionally for an experience unlike any previous educational experience. At a time when they will be expected to learn a new language and move into a new learning environment, the students will obviously compare their experience with their colleagues in traditional medical schools. Student acceptance of this challenging learning environment is by no means certain.

J. It is of concern that no back-up for the current Project Director exists at Boston University. The project office does not appear to have experienced depth of senior personnel in the event of transfer or reassignment.

1. Condition the continuation of the USAID cooperative agreement on the enrollment of a class in September 1981.
2. Complete Phase I and expend authorized funding.
3. Review internally (AID Washington and AID Cairo) the scope of work as initially proposed in Phase I.
4. If scope of work as initially proposed in the Project Paper and Cooperative Agreement remain unchanged;
 - a. require grantee to submit a more specific and complete Phase II proposal;
 - b. if scope of work changes, rework proposal for Phase II.

If Phase II is funded, a Phase III component is recommended, at least until the first class graduates; (about June 30, 1987).

5. Support funding for curricular design, continuing education, primary care and rural and urban health center development.

6. Expand training elements to include support and in-service training for non-physician rural and urban health center personnel (i.e. nurses, sanitarians, mid-wives, lab technicians, etc.) at those sites to be used for undergraduate education.
7. Support the development of general practice training at the masters' degree level. Do not support post-graduate training in medical and surgical specialities.
8. Do not support future group practice development until the prototype group practice has been tested. Do not use grant funds to subsidize physician salaries as currently proposed for the group practice. Alternative forms of attracting and compensating full-time teaching faculty should be considered (e.g., such as faculty housing provided by SCU).
9. Strengthen significantly BU management-technical contributions to Egypt.
10. Before additional clinical teaching sites are developed with project funds, the effectiveness of the presently-identified six sites should be demonstrated.

11. Formal documentation (i.e. course outlines and content, objectives, evaluation methods, teaching plans, faculty assignments, site schedules, class hours, etc.) of first year curriculum and the first term of second year curriculum should be submitted as a condition precedent for any Phase II funding. This should be in a form for distribution to the Supreme Council, MOH senior officials and WHO technical representatives for comment and review.

12. Reconsider the current mechanism of supporting the Phase II scope of work. Relative merits of host country contracts and cooperative agreements should be reviewed.

7.0 SUMMARY

The evaluation team has reviewed in detail a project unique in the history of medical education in Egypt. Under the remarkable leadership, foresight and imagination of the Founding Dean, Dr. Zohair Nooman, with the continuous support and assistance of Dr. Esmat Ezzat, the concept of a community-based, primary care focused Faculty of Medicine has been developed. New educational technology is being assembled and modified to meet the objectives of the SCU/FOM.

The evaluation team has reviewed in detail the nature of the AID/BU cooperative agreement. It has seen the spirit and commitment of Egyptian academic personnel to this new experiment. It has observed the initial steps taken on the road to improving health care for the Egyptian people.

In the spirit of scientific inquiry, the evaluation team has carefully explored the progress, issues and intent of this project. Recommendations are given in the hope that mutual benefit will occur for all parties concerned and in the spirit of constructive criticism.

Appendix Table 1 - List of Persons Interviewed

NAME	TITLE	LOCATION
Dr. Abdel Meguid Osman	President	Suez Canal University
Dr. Zohair Nooman	Dean	SCU/FOM
Dr. Esmat Ezzat	Prof. of Medicine	SCU/FOM
Dr. Saad Fouad	Undersecretary	Ministry of Health
Dr. M.Khallaf	Undersecretary &	Ministry of Health
	Co-Project Director	Ministry of Health
Dr. Ahmed Khazindar	Director General	MOH - Ismailia
Dr. Michel Dawood	Deputy Director	MOH - Ismailia
Dr. Youssef Abdel Hamid	Director	Ismailia General Hos.
Dr. Fikry Goubran	Lecturer/Clinical	SCU/FM
	Pathology	SCU/FM
Dr. Abdel R. Bassyouni	Field Manager &	BU Staff
	Management Couns.	BU Staff
Dr. Dharm Anand	Resident Advisor	BU Staff
Dr. Hassan Abu-Zeid	Prof. Public Health	SCU/FOM
Dr. Nabil El-Ennah	Lecturer/Anesthesi-	SCU/FOM
	ology,	SCU/FOM
" " "	Director	SCU Group Practice
Dr. Moh. Hossam Hamdy,	Assis. Prof. Surgery	SCU/FM
	Curriculum Develop.	SCU/FM
Dr. M. Ezz-el-din Azzan	Assis. Prof. OB/Gyn.	SCU/FM
Mr. Ismail Abdel Fattah	Health Assistant	MOH, Serabrum Rural
Ismail	Health Assistant	Health Clinic
Dr. Abdel Fattah Gasser	Attending Physician	MOH, Aba Swar Rural
	Attending Physician	Health Clinic
Prof. Fawzi Gadallah	Chairman, Dept. of	El Azhar University,
	Community Medicine	Cairo
Dr. Wafik Houssona	Senior Advisor for	Institute of National
	Planning & Develop.	Planning, Cairo
	-Minister of Health	Planning, Cairo
	Prof. Health Plann.	Planning, Cairo
Dr. Moh. Ibrahim Shehata	Director General	SU/FOM
	Practice Program	SU/FOM

Appendix Table 1 - List of Persons Interviewed (cont.)

NAME	TITLE	LOCATION
Mr. Moh.Sirsirag Al Dim	Health Assistant	MOH, Sabaa Abar Sharkia Rural Health Clinic
Dr. Nagui Said	Dentist	MOH, Abou Atwa Rural Health Clinic
Dr. Nassar Abdel Malik	Assis.Lecturer in Clinical Chemistry, Chief/Lab.Services	Specialized Medical Center Group Practice (Governor's Project)
Dr. Adel Nessim Abu Saif	Assis.Lecturer of Radiology	Clinical Day Teaching Block
Dr. Youssef M.Ali Ebeed	First Year General Practice Resident	SCU
Dr. Abdul Wahid M.Mahene	Director	Abul Sultan Rural Hos.
Dr. A.S. Serry	Assis.Lecturer	
Dr. Fatahalla M.Hassan	Lecturer/Biochemistry	Suez Canal University
Dr. Fathey Maklady	Lecturer/Internal Medicine, Fellow in Medical Education	McMaster Unit
Dr. Taymour Yassin Khattab	Lecturer/OB-Gyn: & Fellow in Medical Education	McMaster Unit
Dr. William Oldham	Chief, Health Office	AID/Cairo
Mr. David Porter	Responsible for Glasgow Contract	British Overseas Develop. Commission
Mr. Doug Palmer	Project Officer	AID/Egypt
Dr. William Bicknell	Project Director	Boston University
Ms. Julia Terry	Project Manager	Boston University
Mr. Ken Bloem	Assis.V.P. for Health Affairs,	Boston University
Dr. Victor Neufeld	Director, Program Educational Develop.	McMaster University
Dr. Brian Haynes	Coordinator, Grad. Programs Design & Measurement	McMaster Univeriity

Appendix Table 2 - Locations of Site Visits

Doctor Gardner and Doctor Vuturo are indebted to the personnel who so graciously gave of their time to review their views, aspirations and plans for this project. Interviews took place in the following locations:

- Cairo, Egypt and surrounds
- Suez Canal University, Ismailia
- Ismailia General Hospital
- Abul Sultan Rural Hospital and health center
- U.S. Embassy/AID Mission, Cairo
- Ministry of Health district offices, Ismailia
- Rural Health Centers:
 - a) Aba Swar
 - b) Sabaa Abar Sharkia
 - c) Abou Atwa
 - d) Serapeum
- Boston, Massachusetts
- McMaster University, Hamilton, Ontario
- Washington, D.C.
- Group practice offices ; Governorate Project, Ismailia
- Department of Medical Equipment & Technical Services, MOH, Cairo
- Urban health centers :
 - a) El Sohada
 - b) Al Hekar
 - c) Ismailia

Appendix Table 3
Curricular Development (3.3.1a)

Specifications (3.3.2)	Measurement for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Full time in-country specialist 2. Institutional capacity for curriculum develop. 3. Develop suitable curriculum 4. Train SCU/FM faculty 5. Procedures for curriculum development 6. Organizational structure for curriculum 7. SCU/FM faculty assume increased educational development 8. Specifications for optional physician performance 9. Institutional goals for SCU/FM 10. Six year curriculum 11. Detailed curriculum year 01 and one half of year 02. 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road block Constraint. C. Validity of Original Assumptions D. Adequacy of Input E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Curriculum required II. Overall planning document needed III. Curricular Development skills req. for SCU/FM Faculty IV. Carefully planned library needed

Appendix Table 4
 Selection & Renovation of 6 Clinical Rural Sites
 (3.3.1b)

Specifications (3.3.2)	Measurement for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Site identification - minimum 6 rural sites 2. Alternative site development 3. Creation of additional space for student need 4. Two urban centers for primary care 5. Status of renovation & revision of selected components of Ismailia General Hospital 6. Technical supervision of construction of above including connection 7. Periodic reports on renovation 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Clinical training sites needed for student training

Appendix Table 5

Primary Care Group Practice (3.3.1c)

Specifications (3.3.2)	Measurements for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Test feasibility of primary group practice (PGG) 2. What will be costs of group practices 3. Market analysis and managment system proposal 4. Estimates of short-term and multi year subsidies 5. Development technical agreements/bylaws 6. Technical relationship of PGG with Ministry of Health 7. Reimbursement schedules 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Substantially, full time faculty and. limitation of solo private practices are necessary for the success of the school

Appendix Table 6

Design and Renovation of Building 29 (3.3.1d)

Specifications (3.3.2)	Measurements for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Architectural plans 2. Equipment lists 3. Integration of building and equipment/wiring 4. Classroom space ready 5. Laboratories ready 6. Library and AV Center complete 7. Laboratories complete 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Building 29 has adequate space for faculty and students and can be renovated

Appendix Table 7.

Continuing Education and Staff Development (3.3.1e)

Specifications (3.3.2)	Measurements for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Need definition for CME 2. Plans for physician and CME 3. Plans for staff CE 4. Training plan for approval 5. Short-term training for eight faculty with primary care focus 6. Medium term training for 2 groups of faculty 4 to 6 personnel each for 3-4 months 7. Long term training for advanced degrees for 6 SCU/FM faculty 8. Local CME in management planning. Clinical activities, basic science, primary care 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Continuing education could strengthen faculty and staff

Appendix Table 8

Management Plan for SCU/FM (3.3.1f)

Specifications (3.3.2)	Measurements for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Dean's Assistant functioning 2. Plan to develop management system 3. Organizational chart 4. Budgets for 1st year 5. Student record system 6. Personnel system 7. Procurement system 8. Examples of targeted technical assistance 9. Equipment inventory system 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. Data availability will improve planning II. Management and Evaluation Plan will be useful in working toward project goals III. Contractor has unique experience & special capability necessary to carry out project

Appendix Table 9
Plan for Phase II (3.3.1g)

Specifications (3.3.2)	Measurements for Variables (3.3.3)	Assumptions (3.3.4)
<ol style="list-style-type: none"> 1. Planning for Phase II began 6 months into project (Nov, 1980) 2. Multi-year development plan for SCU Faculty prepared - Phase II 3. Specific Phase II funding proposal 4. Background data base on status of present EMS system and relationship to project elements 	<ol style="list-style-type: none"> A. Progress to date B. Major Issues/Road Block Constraint C. Validity of Original Assumptions D. Adequacy of Inputs E. Appropriateness of Project Design F. Recommendations for Funding 	<ol style="list-style-type: none"> I. That a 3½ year project extension is necessary II. Emergency medical system requires evaluation III. Adequate completion of Phase I