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**CAMBRIDGE CONSULTING CORPORATION**



## **END OF CONTRACT REPORT**

**October 21, 1992 - July 31, 1995**

**Contract No. 263-0170-C-00-3017-00**

**Prepared for:**

**The Cost Recovery for Health Project of  
the Egyptian Ministry of Health (MOH)**

**and**

**U.S. Agency for International Development**

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## TABLE OF CONTENTS

EXECUTIVE SUMMARY . . . . .	i
INTRODUCTION . . . . .	1
BACKGROUND . . . . .	2
<b>PURPOSE OF TASKS: IMPROVE THE ABILITY OF PILOT MOH HOSPITALS AND POLYCLINICS TO MANAGE AND GOVERN THEMSELVES . . . . .</b>	<b>5</b>
TASK B.2: Develop and Implement Financial Management System . . . . .	5
TASK B.3.a: Develop and Implement Personnel Management System . . . . .	7
TASK B.3.b: Develop and Implement Governance Restructuring and Hospital Management Systems . . . . .	9
TASK B.3.c: Hospital Business/Conversion Plans . . . . .	15
TASK B.8: Medical Staff Development . . . . .	16
Task F: Develop Facility Performance Reporting System . . . . .	18
TASK 1, MOD 4: Develop Facility Implementation Plans . . . . .	19
TASK 3, MOD 4: Provide Technical Assistance to Facilities . . . . .	20
<b>PURPOSE OF TASKS: IMPROVE THE MANAGEMENT AND ADMINISTRATIVE SKILLS OF PERSONNEL IN THE PILOT HOSPITALS AND POLYCLINICS AND THE PROJECT DIRECTORATE . . . . .</b>	<b>22</b>
TASK B.6.a: Conduct and Update Training Needs Assessment . . . . .	22
TASK B.6.b: Assist with CRHP Training Plan . . . . .	24
TASK B.6.c: Provide Specialized Training . . . . .	25
TASK B.6.d: On-the-Job Training . . . . .	27
Methods of Work . . . . .	29
TASK B.6.e: Medical Partnership (Sister Hospital) Program . . . . .	30
TASK B.6.f: Facility Training Center Resources . . . . .	32
<b>PURPOSE OF TASK: PROVIDE PILOT MOH HOSPITALS AND POLYCLINICS WITH MEDICAL EQUIPMENT NEEDED TO DELIVER BASIC MEDICAL SERVICES . . . . .</b>	<b>33</b>
TASK C.15: Provide Biomedical Equipment Support to Pilot Facilities . . . . .	33
<b>PURPOSE OF TASKS: PREPARE PILOT FACILITIES FOR COMPUTER AUTOMATION AND INTRODUCE APPLICATIONS IN PRACTICAL MANNER . . . . .</b>	<b>38</b>
TASK B.4 and C.12: Prepare Information Systems Plan for Pilot Facilities and the Project Directorate . . . . .	38
TASK B.5: Develop and Implement Management Information Systems in Pilot Facilities . . . . .	39

<b>PURPOSE OF TASKS: ASSIST THE PD DEVELOP A CAPABILITY TO SUPPORT THE EXPANSION OF COST RECOVERY . . . . .</b>	<b>42</b>
TASK B.7: Architectural and Engineering Support . . . . .	42
TASK C.9: Project Directorate Support . . . . .	43
TASK C.10: Human Resource Development in the PD . . . . .	45
TASK C.14: CRHP Newsletter . . . . .	46
TASK E: Develop MOH Hospital Survey Instrument . . . . .	47
MOD 4, Task 2: Assessment of PD's 1995 AIP . . . . .	49
MOD 4, Task 4: Prepare Weekly Work Schedules . . . . .	50

<b>PURPOSE OF TASKS: INCREASE AWARENESS OF HEALTH SECTOR LEADERS IN EGYPT TO THE CURRENT STATUS OF HEALTH CARE AND FINANCING ALTERNATIVES . . . . .</b>	<b>50</b>
TASK B.1: Conduct an Assessment and Analysis of Health Sector in Egypt . . . . .	50
TASK C.16.b: Social Financing of Health Care Services Conference . . . . .	51
TASK C.16.c: Health Care Financing Status in Pilot Facilities . . . . .	53

<b>PURPOSE OF TASKS: PREPARE SUEZ CANAL UNIVERSITY FOR POSSIBLE ENTRY INTO A MANAGED CARE HEALTH SYSTEM . . . . .</b>	<b>54</b>
TASK D.1: Plan and Conduct Seminar in Managed Care . . . . .	54
TASK D.2: Review Financial System at FOM SCU Hospital . . . . .	55
TASK D.3: Conduct a Feasibility Study . . . . .	57

STAFFING . . . . .	59
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BUDGET/EXPENSE SUMMARY . . . . .	61
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CONCLUSION . . . . .	63
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APPENDICES:

- 1 Status of Contract Deliverables

## EXECUTIVE SUMMARY

This report overviews the work accomplished, staffing and funding under the contract period covering November 1992 through July 1995. During this time, 49 of the 51 contract deliverables were completed with USAID relieving Cambridge of responsibility for the other two.

This contract has been a bridging contract between the work of Abt Associates under the Health Financing and Sustainability Project and the recently awarded contract to University Research Corporation. The contract chronology follows:

Original Contract	November 1992 - January 1994
Modification Two	Through February 1995
Modification Three	Through May 1995
Modification Four	Through July 1995

When Cambridge started work on this contract, the perception of the hospital and polyclinic directors and the Project Director was that too much time had been devoted to studies and planning without any visible results. During Cambridge's contract, tangible results have been achieved -- the directors no longer question why the contractor hasn't done anything. Some of the major accomplishments include:

- Legislation has been enacted to create independent autonomous hospitals and polyclinics under Cost Recovery and decrees have been issued for four of the facilities;
- Some improvement is occurring in the management of the facilities as the application of modern management principles are being better understood;
- Critical management systems have been developed and most of these systems have been implemented at Kafr Dawar -- thereby providing the first conversion model -- many have been implemented in Shark El Madina and selective systems have been implemented at other facilities;
- 4,000 participants from the five facilities have attended 485 courses/training sessions including on-the-job, formal classroom, and participant training in the United States;
- Computer automation plans were developed for both the facilities and PD and two priority computer applications (DSME and BEIPM) were implemented in Kafr Dawar and Shark ElMadina;
- An international conference was conducted in Cairo for the key health care leaders in Egypt to review the social financing of health care systems of eight other countries;

- A managed care workshop and HMO feasibility study was conducted for Suez Canal University;
- Nearly 1,100 items of medical equipment costing \$5.9 million have been procured and delivered to the pilot facilities; and
- Renovation and construction programs are 60 % complete with contract procurements conforming to USAID regulations.

The best evidence that the above accomplishments are producing positive results is Kafr Dawar Polyclinic. As a result of these measures and others, Kafr Dawar has been able to increase their total monthly revenues from LE 12,500 to LE 35,000. Even greater improvement (on a percentage basis) has been realized in the pharmacy where monthly revenues have increased from LE 1,150 to LE 7,500.

While significant progress has been achieved, challenges and problems remain. Some of those appear below.

- The Project Directorate should be "re-engineered" to improve the decision-making process, dedicate the time and energy of all PD personnel to CRHP tasks particularly work inside the facilities, and create the proactive involvement of all PD departments in support of implementing cost recovery into the facilities;
- A process for institutionalizing the Project into MOH and the Governorates should be identified and integrated into the work plans;
- Effective incentives do not exist to encourage facility personnel to commit their time and energy to implementing and particularly sustaining cost recovery systems and measures; and
- An assessment should be conducted to determine whether all pilot facilities should continue under cost recovery in order to focus limited project resources on those facilities which are committed to the project.

As expected, staffing throughout the Project was predominantly technical local hires rather than U.S. expatriates. The contract and actual staffing summary appear in Section 10 of this report. During the contract period, most staffing involved local (Egyptian) personnel. Of the total 797 months of contracted effort, 490 months or 61.5% was worked by Egyptian personnel. Technical work consumed 535 months or 67.1 percent of the total months worked.

A number of changes in actual staffing occurred between the original contract and Mod Two. In the original contract, two resident advisors were identified. The Logistics Advisor departed Egypt less than two months into his assignment and was not replaced. In Modification Two, it was decided that more advisors were needed. In addition to the Chief of Party, advisors were added for Finance, Personnel and Training. The large decrease in full-time Egyptian personnel resulted from the transfer of numerous PD personnel including all department heads from Cambridge's payroll to the PD payroll. Increased staffing in all other categories was the result of continuing tasks from the original contract (into Mod Two) plus significant new tasks.

While Modification Three was a no cost extension, staffing remained very aggressive in support of the re-opening of Kafr Dawar and support to the new Boards of Trustees and medical staff organization. In Modification Four, staffing was limited to provide on-going skeletal support to the Project until the new contractor is mobilized. All advisors returned to the U.S. except for the Chief of Party. The only U.S. consultants retained were those already living in Egypt, and their effort was limited to completing their assignments.

The total amount expended by Cambridge under the contract was \$5.9 million plus another \$5.9 million for the medical equipment. With the exception of some small purchases (paid from Cambridge's budget), the medical equipment was funded via a Letter of Commitment and Letters of Credit -- with USAID paying the bank directly. An overview of the actual expenses versus budget appears in Section 11 of this report.

In general, 1994 was an extremely busy year as Cambridge re-focused its efforts on implementation as indicated by 47 percent of the entire project budget being expended. The efforts of 1994 carried over through May, 1995 as expenses for that five-month period nearly equaled all of 1993.

Cambridge Consulting Corporation is appreciative of USAID/Egypt giving us the opportunity to participate in this effort. Man's most prized possession is his health. Cambridge takes pride in knowing that we have helped forge improvements in the health care for current and future generations in Egypt. We wish the leadership and staff of the PD and the facilities the best of success.

## 1. INTRODUCTION

Under its contract with USAID, Cambridge Consulting Corporation is required to submit this end-of-contract report. It covers the contract period, November 1992 through July 1995. This contract started out as a bridging mechanism through January 1994 until USAID was able to complete a competitive procurement for a long-term technical assistance contractor. Because of delays in the procurement, the contract was extended three times.

The remainder of the report comprises 11 (2 - 12) sections as follows:

### Section # Content

- |       |   |
|-------|---|
| 2     | Background - Provides an explanation of the environment, phases, and problems surrounding the work.   |
| 3 - 9 | Task summaries within purpose - The 30 tasks included in the contract have been grouped into seven "Purpose of Tasks". The grouping of tasks into purpose categories has no contractual significance. Each task is divided into four or five sections -- description, accomplishments, methods of work, problems (if any) and recommendations. Accomplishments include contract deliverables as well as other notable activities. Methods of work discusses the approaches (i.e., surveys, interviews, etc.) used in conducting the work. |
| 10    | Project staffing - Presents level of effort for the initial contract and subsequent modifications divided into Egyptian and U.S. staff.   |
| 11    | Project budget and expenses - Reviews project budget and expenses over the life of the contract.  |
| 12    | Conclusion - A summary of pertinent remarks concerning the project.   |

## 2. BACKGROUND

For more than five decades, the Government of Egypt has promised free health care to its population. Because of ever-increasing economic and inflationary pressures, the government has provided less and less funding to its 260 Ministry of Health hospitals, polyclinics and other public health programs. As a result, a three-tiered health system has developed. In terms of quality, at the top are private practitioners and hospitals including university hospitals; in the middle are smaller private hospitals and those of the Health Insurance Organization (HIO) and Curative Care Organization (CCO); with the Ministry of Health facilities at the bottom.

Funding has decreased to a level where MOH hospitals and polyclinics are no longer able to provide a reasonable standard of care, and the reputation of these facilities is extremely poor. As a result, personal income and/or access to insurance has become the deciding factor for the selection of health services, and only those with no other alternative go to MOH facilities. This severe decline of health services for a large portion of the population required that action be taken. In 1988, the Governments of Egypt and the United States signed a bilateral agreement to work together to improve the health care situation in Egypt via USAID's Cost Recovery for Health Project.

The goal of the Cost Recovery for Health Project (CRHP) is to enhance the quality, sustainability, accessibility, and affordability of health services for the Egyptian people. The purpose of the project is to broaden and diversify approaches for financing personal health services in Egypt. Overall, CRHP comprises four distinct projects within three components. The purpose of Component One is to develop and test cost recovery systems in MOH facilities as a model for country-wide application. Component Two is intended to improve the efficiency, utilization and management of existing quasi-government cost recovery organizations. Component Three is to expand private sector financing of individual, group and pre-paid care practices. Cambridge's work and this paper focuses almost exclusively on Component One. The lone exception is the work performed for Suez Canal University which is part of Component Three.

The approach to Component One has been to assist the Government of Egypt in implementing policy changes, and management and quality of care improvements in selected Ministry of Health (MOH) hospitals and polyclinics to pilot test and demonstrate the use of a rational economic basis for the provision and financing of medical services based on cost recovery. Because of USAID's and GOE's lack of experience in implementing such a program, it was decided to focus on five pilot facilities. Conversion of the pilot facilities will be determined in part by the public's perception that the quality of care has improved to a level where they are willing to pay some amount for services provided. Once that success is demonstrated, the conversion process would be expanded to other MOH hospitals and polyclinics.

The original Project Paper envisioned a long-term technical assistance contractor to directly conduct much of the work under the Cost Recovery for Health Project and to closely coordinate with other contractors working on CRHP. Until recently, this long-term contractor was not identified. In its absence, short-term technical assistance was provided initially through the centrally-funded Health Financing and Sustainability Project (HFS), and then by Cambridge. HFS is a worldwide technical assistance and applied research project under the Population, Health and Nutrition (PHN) Center of USAID/Washington Global Bureau. Abt Associates Inc. was the prime contractor for HFS, with Management Sciences for Health, Urban Institute and Clark-Atlanta University as subcontractors. They provided short-term technical assistance to the CRHP between 1990 and October 1992.

The HFS/Abt role was to provide the guidance and technical assistance necessary for planning and decision-making in the planning of the conversion process. They worked to develop and structure a framework (the Project Directorate) to support the system of Cost Recovery; developed management training modules; criteria for facility selection, facility assessment instrument and facility standards and initiated training of Project personnel in the procedures and tasks necessary for undertaking the conversion to Cost Recovery.

To confront the many complex and interrelated issues involved in the Cost Recovery conversion process, what could be viewed as a two phase approach was adopted. The first phase focused primarily on design, while the second was generally a training and testing phase. During the first phase, HFS assisted the Project in the establishment of the Project Directorate and with the standards and systems necessary for conversion. The second phase emphasized Project Directorate staff training and continued development of models and systems which could be utilized during the conversion process.

As HFS funding for Egypt was approaching its end in mid-1992, USAID/Egypt approached Cambridge concerning a bridging contract for Component One until a competitive procurement could identify the long-term contractor. The initial contract covered the period of November 1992 - January 1994. In Mod Two, the contract was extended through February 1995. Mod Three extended the contract through May 1995. Mod Four covers the period of June and July 1995.

While the initial contract period included many accomplishments, most accomplishments occurred over the final 18 months. This is due primarily to three factors:

1. Greater resources particularly resident advisors were devoted to the project after the initial contract -- one advisor during initial contract versus four thereafter;

2. Differences in personalities and management styles between Jeffrey Sanderson, Chief of Party (COP) during the initial contract period and the Project Director impaired progress while the excellent relationship between Charles Gustafson (COP after Mr. Sanderson) and the Project Director facilitated progress; and
3. Legislation was enacted in September 1994 and subsequent facility decrees issued in November 1994 and January 1995 thereby providing a legal "springboard" for diving aggressively into implementation work in the facilities.

The work performed by Cambridge over the life of its contract is described in Sections Three through Nine of this report. Of the 51 contract deliverables, Cambridge was able to complete 49 of them. This is quite good considering the environment in which the work was performed. A full list of contract deliverables is contained in Appendix One.

### **3. PURPOSE OF TASKS: IMPROVE THE ABILITY OF PILOT MOH HOSPITALS AND POLYCLINICS TO MANAGE AND GOVERN THEMSELVES**

#### **3.1 TASK B.2: Develop and Implement Financial Management System**

##### **3.1.1 Description**

Assist the Project and the pilot facilities in developing policies and procedures for a hospital financial management (FM) system which will adequately support Cost Recovery activities. It is expected that the FM system would include financial planning and budgeting; monitoring capabilities for revenues and expenses for both technical and support departments; a simple but workable cost accounting system, including a Chart of Accounts which serves the hospital setting; and a system for financial analysis and data reporting.

##### **3.1.2 Accomplishments**

Two deliverables were realized -- a plan for developing the financial management system for the pilot hospitals, and a hospital financial management system policy and procedure manual. Additionally, Cambridge consulted on the new Arabic system. Cambridge also raised the awareness level of the Board of Trustees as to the importance of business plan development, budgeting and employing qualified personnel in financial management.

##### **3.1.3 Methods of Work**

- Early work focused on researching GOE laws and procedures and adapting an English system to fit;
- In late 1993, the Project hired the services of four consultants from Ain Shams University, Faculty of Commerce to develop an accounting system (in Arabic);
- In mid-1994, Mr. Carroll McNeely, Cambridge's Resident Advisor in Finance, along with Mr. Sid Aly of USAID, reviewed the new Arabic system and certified that it included the needed functions, met Uniformed Accounting Standards and could be adapted for use in the facilities with the addition of departmental cost accounting procedures -- USAID and the consultants agreed and USAID approved the system;
- A training plan was developed and several workshops were conducted to introduce the new system to finance personnel in the facilities; and
- The system was implemented in Kafr Dawar and Shark ElMadina.

#### 3.1.4 Problems

Work in this area was particularly difficult for several reasons including:

- The first Resident Advisor of Finance left his assignment after only six weeks;
- PD's Finance responsibility for "PD finance" has resulted in limited resources being available for "financial systems work";
- Facilities do not have personnel qualified in finance;
- Differences of opinion (concerning the role of Cambridge) between USAID and MOH delayed Cambridge's involvement in this area from mid-1993 until early 1994; and
- The Project developed its own accounting system -- written in Arabic -- thereby limiting Cambridge's contribution.

#### 3.1.5 Recommendations

Financial systems are a critical element to the success of cost recovery and remains a major concern. The new contractor should actively support the implementation of the new Arabic system through the assistance of Egyptian and U.S. financial consultants with expertise in hospital cost accounting. Other recommendations include:

- Facilities need to hire personnel with accounting and finance skills;
- Move responsibility for "PD finance" into MOH and focus PD finance personnel on financial systems work in support of the facilities;
- Improve coordination of financial systems work between PD Finance and Management Systems personnel;
- Maintain a facility monitoring system to track performance against success criteria;
- Intense on-the-job training is required to ensure that financial personnel in the facilities understand the costing principles and know how to apply them in the new system; and
- Consider computer automation of the new system once the manual system stabilizes and is better understood.

### **3.2 TASK B.3.a: Develop and Implement Personnel Management System**

#### **3.2.1 Description**

Develop a transitional hospital personnel management system which complies with GOE laws. This system shall include at a minimum, personnel selection, staffing levels, the organizational structure for personnel management, job definition and the use of job descriptions, performance appraisal, payroll mechanism and incentives.

#### **3.2.2 Accomplishments**

Contract deliverables include a wage and salary study, staff planning models and job descriptions. Work in this area was initiated by Mr. Shel Hulac, a consultant to Cambridge, and followed by Mr. Frank Gibson, Resident Advisor since May 1994.

Completion of the job descriptions was a major effort. In total, there are 160 unique positions; job descriptions have been translated into Arabic. From the beginning, a wide range of staff from each facility were involved in contributing to the job descriptions. As a result of their involvement, the job descriptions have been accepted by the facilities.

#### **3.2.3 Methods of Work**

The wage and salary study involved a limited survey and extensive analysis of the compensation schemes available to employees of the MOH, HIO and CCO. Therefore, data collection did not require much time, but considerable time was devoted to understanding, clarifying and presenting the information collected.

Developing facility staff planning models was quite time-consuming both in terms of data collection and analyses. Data was gathered from scratch because no organization or staffing data was readily available in any of the facilities. An analysis of organizational structure was performed to clarify relationships between existing positions. Organization charts for the transitional Decree period were developed in conjunction with Hospital Directors and senior staff. Interviews were conducted with department and section heads to review current staffing and determine optimal staffing levels.

Preparing job descriptions required intensive interviews with MOH, HIO, CCO, but mostly pilot hospital and polyclinic personnel. Great effort was expended to ensure that each job description matched the actual work performed.

### 3.2.4 Problems

The work was more time-consuming than planned because of the absence of accessible and official job descriptions, absence of formal organization structure, and no assigned counterpart from the PD or MOH. A review of MOH, HIO and CCO job descriptions revealed limited information on education and experience requirements and provided almost no description of the responsibilities and duties of the position. Hence, this latter information had to be created from scratch. The absence of a PD counterpart caused Cambridge to employ an Egyptian consultant in this role.

### 3.2.5 Recommendations

The success of Cost Recovery will depend in part on introducing meaningful personnel management changes in the facilities. Specific recommendations include:

- **Facilities must be able to select and assign their own personnel** - The problem of over- and under-staffing must be within the power of the hospital director to control. Otherwise, an efficient level of skill will not be available to provide needed services.
- **Facilities must be able to discipline employees** - Current disciplinary practices (i.e., absenteeism is routine and goes unpunished, difficult to fire an employee) are not only ineffective but detrimental to fostering an environment which encourages and rewards personnel who perform well.
- **Job responsibilities and expectations must be clear** - Many employees can not explain their job responsibilities and have no idea what is expected from them. Management must take the time to implement the new job descriptions and to ensure that each person understands his/her responsibilities and the job performance expected.
- **Performance pay** - Current pay is inadequate, in the form of monthly salary for most employees, with no accountability for actual hours worked. Management should tighten controls to pay only for time worked and use the "box of improvements", to pay incentives based on work performance not on basis of seniority.
- **Facility and equipment maintenance** - For too long, hospital personnel have operated with the attitude that it is acceptable for the hospital to be dirty, and equipment to be inoperable. Through intensive on-site training, each person needs to understand that s/he is responsible for improving quality and "how to do it" as a part of their daily routine. Facility and equipment maintenance programs need to be activated with the hospital directors committed to funding them.

- **MOH and Governorate Approval** - The facilities are more likely to adopt and use the new Personnel System if MOH and Governorates approve the system and authorize facilities to use it.

### **3.3 TASK B.3.b: Develop and Implement Governance Restructuring and Hospital Management Systems**

#### **3.3.1 Description**

Develop an action plan for governance changes and select management systems for the hospital departments and services, and assist the pilot facilities with the implementation of these new methods and processes. Each departmental system shall include policies, procedures, processes and guidelines which direct the operational activities of these departments and services. These management systems included governance, medical staff, nursing for inpatient and outpatient services, physical plant maintenance (support and repair), materials management (central sterile supply, logistics, procurement, inventory/stores, and distribution) and medical records.

#### **3.3.2 Accomplishments**

Contract deliverables included:

- Organizational changes and new legislation;
- Management systems in emergency management, facility maintenance (seven volumes), material management, medical records, outpatient services, radiology, pharmacy and surgical services; and
- Organizational development programs in three facilities.

The effort devoted to this task was considerable. Numerous meetings and drafts were prepared before Ministerial Decree 304 was issued in September 1994, thereby providing the legal framework for implementation of cost recovery in MOH facilities. Subsequent decrees were issued in October 1994 for Kantara Gharb and January 1995 for Kafr Dawar, Shark ElMadina and Embaba. The decree ordered that an independent Board of Trustees be established to be responsible for each facility. Cambridge invested significant resources in three workshops (April and October 1994 and April 1995) to educate Board members and key MOH and PD personnel concerning the issues to be addressed and actions to be taken in establishing these new Boards. Each workshop was attended by 60 - 80 participants. This effort was further supported with two full-time senior hospital consultants who guided the implementation and actions of the new Boards. Cambridge worked closely with the Legal Advisory Committee of the PD to institutionalize work with Boards.

Upon Cambridge's recommendation, a PD Legal Advisory Committee was formed to provide guidance to the entire legislative reform process. Dr. Abdel Moneim Fouad and Chancellor Mahmoud Mohamed of MOH have provided leadership and are responsible for institutionalizing this work into MOH.

The organizational development (OD) program was designed to facilitate implementation of the management concepts and principles which had been included in the nine-module management training program. The purpose of the OD program was to convert the classroom theory into practice. The program comprised four interventions, each being two weeks, utilizing one U.S. trainer paired with an Egyptian trainer. All work was conducted inside the facilities -- Embaba, Shark ElMadina and Kafr Dawar participated.

Management systems have been developed in all of the required areas plus others. Implementation of these key systems is shown in the following table where each facility is identified with abbreviations -- Kafr Dawar (KD), Shark ElMadina (SD), May 15 (M15), Embaba (EM) and Kantara Gharb (KG). Implementation status is shown by a letter where I = fully implemented, S = started but not fully implemented, T = tested but implementation not started, E = some education provided, N/A = not applicable, and \* = requires resources (i.e., forms, shelving) to implement. A blank mean no work has been performed.

<u>System</u>	<u>KD</u>	<u>SD</u>	<u>M15</u>	<u>EM</u>	<u>KG</u>
Medical Records	I	I	I*	I*	I*
Governance & Boards	I	I	E	I	I
Medical Staff	I	I	E	I	I
Finance	I	S	E	S	S
Personnel	S	S	E	S	E
Nursing	I	S	S	S	S
Building Maintenance & Eng.	S				I
Biomedical Maintenance & Eng.	I	I	S	I	I
Materials Management	I	I	E	E	E
Outpatient	I	S	E	S	E
Radiology	I	S	E	E	S
Laboratory	I	S	E	E	
Emergency	N/A	N/A	S	E	E
Housekeeping	I	S			
Security	I	S			
Pharmacy	I	I	E	E	E
Infection Control	I	I	S	S	E
Social Services	S	S	E	E	E

### 3.3.3 Methods of Work

**Governance** - Methods involved formal and informal workshops, meetings and consensus building. The roots of legislative reform was in the form of a November 4, 1992 meeting of MOH, Governorate, hospital, polyclinic, USAID and Cambridge personnel. The meeting reviewed current legislation relating to how MOH hospitals were operated and identified problems caused by the legislation. As a follow-on to this meeting, Cambridge grouped similar related problems into categories and drafted legislation intended to overcome these problems. This legislation draft was refined and submitted to the Project Directorate in various iterations, but did not become law until September 1994.

**Management Systems** - Management systems work generally followed a standard process which employed the following seven step approach:

- Develop the first draft based on western materials and models, modify to fit the Egyptian MOH environment, review by hospital staff and translate to Arabic;
- Develop training materials, conduct overview workshops for hospital personnel, and modify the system based on feedback;
- Determine need for start-up funds, develop system implementation plan, prepare implementation training materials, conduct on-site training, procure start-up funds and monitor implementation;
- Obtain approval of GOE agencies to implement the new system;
- Assess system operation and propose modifications;
- Implement system changes; and
- Institutionalize the new system.

**Organizational Development** - A two-tiered approach was used in planning and conducting the OD interventions. Embaba was the first site for each of the four interventions. This team was lead by Mr. James Carney and supported in Egypt by Mr. Amr Moussa. They would design the intervention and share it with the consultants working on the other OD teams to refine the design. The design would be reviewed by Cambridge's COP and key PD personnel. After the Embaba intervention, Mr. Carney would meet with Messrs. Graeme Frelick and Al Rollins, the other OD team leaders, to review the outcome of the intervention and to modify the format and content of the intervention as needed. Messrs. Frelick and Rollins would then use that same design in Kafr Dawar and Shark ElMadina.

Each intervention lasted two weeks. The first week was used to prepare for the intervention. Upon arrival in Egypt, the U.S. team leader and his Egyptian counterpart would meet with PD's training personnel and selected facility personnel to review and explain the agenda. Meetings and interviews would be conducted to gather data needed for use in the intervention. The consultants would prepare materials and exercises. The actual intervention was conducted during the second week.

#### 3.3.4 Problems

**Governance** - It took a long time (nearly two years) from the initial discussions and draft legislation until a decree was issued. During this period, Cambridge prepared seven refined versions of legislation and issues, with little feedback from MOH. Had legislation been issued earlier, implementation of cost recovery would be further along today.

**Management Systems** - As one of the key tasks throughout Cambridge's contract, developing and implementing management systems has experienced its share of problems including:

- The PD, hospitals and polyclinics do not have personnel in key positions to be responsible for new systems. Examples include finance, personnel, material management and facility engineering.
- The PD has been unable to attract MOH personnel into this function. As a result, support of new systems and replication of systems to future MOH facilities will likely expire along with the contractor's contract.
- System implementation has been hampered by delays in PD administration and the processing of start-up funds. Some examples include printing of medical records forms, shelving to store medical records, translation of materials from English to Arabic, and approval of expenses for PD personnel to travel to the facilities.

#### Organizational Development -

- PD's Management Systems personnel were not involved enough in the OD interventions occurring inside the facilities. As a result, some OD work conflicted with the work of Management Systems. For example, one OD assignment in the facilities dealt with the production of a medical record which was largely different from the same work being developed by Management Systems.

### 3.3.5 Recommendations

Governance recommendations are divided into short-term and long-term. In the short-term, the recommendations are to:

- Continue support of the contractor to PD's Legal Advisory Committee;
- Continue on-site contractor support to Boards of Trustees as they need on-going assistance and guidance from personnel who are experienced in working with Boards;
- Two or three members of the Board of Trustees in each facility should be involved in a U.S.-based participant training program to experience "Board work" in a U.S. hospital;
- Implement the Facility Performance Reporting System designed under Task F of Cambridge's contract;
- Boards should re-affirm their Annual Implementation Plans (AIPs) and revise as necessary to focus technical assistance;
- Continue support to the facilities in strategic planning and Hospital Director evaluation; and
- Replace formal workshops with facility-level assistance tailored to the needs of each institution such as purchasing groups, managed care/capitation, and philanthropy.

Long-term, the Project should focus on the following governance improvements:

- Year-end 1995, Decree 304 should be reviewed by the Legal Advisory Committee for needed revisions by the decreed facilities to further empower the Boards of Trustees;
- Increase the credibility of cost recovery by expanding each Board with three more non-government community members, and by adding more women to the Board;
- Eliminate the idea and wording in the Decree and other legal documents to the "Board of Directors" and replace it with a "Management Committee" -- under the new structure the Board of Directors creates confusion and interferes with hospital management;
- MOH must provide each Board of Trustees with the freedom to create autonomy and ownership in the community; and

- Senior PD managers (Drs. Hassan ElKalla, Mohamed Edrees and Afaf Othmaan) should maintain their visibility inside the pilot facilities particularly at Trustee meetings as a demonstration of their commitment to the Boards and hospital management.

The effort started for management systems should continue and implementation should be accelerated. Specific recommendations include:

- The key systems implemented in Kafr Dawar should be implemented in all facilities;
- Following implementation, PD staff should maintain a proactive presence and provide on-going support to ensure that the new systems are used;
- Systems having central or governorate GOE interfaces should be closely coordinated to facilitate institutionalization;
- MOH personnel are needed in the PD to build a sustainable capability to address system implementation and support after contractors complete their work; and
- The hospitals and polyclinic need to hire capable personnel to be responsible for key functions and systems.

Organizational Development recommendations are both general and specific. Generally, OD is a hands-on approach to working with personnel inside the hospitals and polyclinics to help them institute better management and administrative practices. More simply, OD is an approach to creating change. Creating effective organizational change takes time and requires that the people "being changed" are involved, understand the change and are committed to it.

The following specific recommendations came from the OD work in Shark ElMadina and Kafr Dawar:

- Sustainability of management and operational change can not occur in the facilities without an on-going presence of well-trained contractor personnel in the facilities to transfer skills to and to create new habits in the personnel working in the hospitals and polyclinics;
- If PD personnel are to be active supporters, they must keep their agreements to facility personnel to follow-up and provide assistance;
- Facility personnel need to provide PD personnel with feedback (positive and negative) concerning the PD's work in the facility;

- Each facility should conduct a briefing every other month at the PD to share past accomplishments as well as current and future needs; and
- The PD support team should be well-prepared before visiting the facility in terms of the purpose of the visit, responsibility of each PD person, and approach to be used so that resources can be maximized and confusion minimized.

### 3.4 TASK B.3.c: Hospital Business/Conversion Plans

#### 3.4.1 Description

Review and revise the hospital business plans (developed by the Health Financing and Sustainability Project) with the facilities, and update or complete as needed. The primary purpose of these plans at this stage is to reinforce the strategic planning process with senior management of the hospital or polyclinic.

#### 3.4.2 Accomplishments

Cambridge assisted the Management Systems staff in preparing revised business plans for each of the five pilot facilities. Draft versions of the business plans were shared with USAID, the PD and the facilities including presentations (by Carroll McNeely) to all facilities except May 15 Hospital.

#### 3.4.3 Methods of Work

This task utilized interviews and numerous reviews to validate the data to be included in the business plan particularly the financial projections. Specific steps included:

- Reviewing prior work on business plans and developing a plan of action;
- Interviewing all hospital directors and finance managers in the facilities;
- Educating hospital directors and finance managers (via OD workshop) on the elements comprising a business plan and how various external and internal factors can influence utilization;
- Gathering utilization statistics from Monitoring & Evaluation, CAPMAS and the facilities;
- Constructing the financial computer models and fine tuning the projections through a series of meetings with facility personnel to validate the data; and
- Writing the narrative of the report.

#### 3.4.4 Recommendations

There are five specific recommendations related to business planning:

- PD Finance should assume an active role in business planning which should be closely coordinated with Management Systems;
- The ability, responsibility and accountability for business planning should be transferred gradually from the contractor to the hospital or polyclinic;
- Based on the annual facility implementation plan, each facility should develop its business plan which is intrinsic to the Facility Performance and Evaluation System (see Section 3.6);
- The finance committee of each Board of Trustees should be actively involved in the process of developing business plans and reporting results routinely at Board meetings; and
- Utilization statistics should be standardized in content and format preferably to utilize a computerized spreadsheet since all pilot facilities have computers; and

#### 3.5 TASK B.8: Medical Staff Development

##### 3.5.1 Description

Assist the medical staffs of the CRHP facilities to develop more ownership of their key areas of responsibility, and in turn, move away from their historic involvement in operational and management activities. Assist the facilities develop a self-governing medical staff organization with by-laws, officers, committees, etc. to execute the responsibilities for quality, clinical care standards, the monitoring and evaluation of physician performance (peer review), and the development of clinical standards.

##### 3.5.2 Accomplishments

Contract deliverables included a plan of action and medical staff profiles. The plan of action report was really much more than that. It included materials used in and outcome of a Medical Staff workshop, a survey form to collect information to support the medical profiles, and medical staff bylaws, rules and regulations. The information from medical staff profiles was incorporated into the organization chart and staffing plans, a deliverable of Task B.3.a.

### 3.5.3 Methods of Work

A workshop was used to educate Hospital Directors, Deputy Directors and medical staff leaders of the five facilities on the role, functions, structure and organizational activities of the medical staff in a hospital.

A generic medical staff organizational structure was developed and presented to the participating physicians at the workshop. Discussion occurred both as a full group and in smaller breakout sessions to ensure that participants understood the model, the importance of establishing lines of authority, clarification of roles, and providing leadership to the institution. The model was accepted and approved by the participants. A physician survey had been completed prior to the workshop. This information was analyzed, summarized and presented during the workshop.

### 3.5.4 Recommendations

Implementing effective medical staffs in MOH facilities requires on-going assistance in a variety of areas including:

- Hospitals and polyclinics need contractor assistance in understanding the concept and principle of the medical staff being self-governing and regulating, and assistance in implementing it in their facilities;
- Duties and responsibilities of staff officers and committees should be refined and implemented;
- The Legal Advisory Committee should continue its oversight of this development;
- On-site assistance of trained consultants is necessary to work with the medical staff so they can "learn by doing" in a supervised environment;
- Newly appointed chief's of staff would greatly benefit from a participant training experience in the U.S. where they could experience how a medical staff functions;
- Secretarial/clerical support is required in the hospitals and polyclinics to coordinate medical staff meetings and to record and distribute minutes of the meetings; and
- Enhance the Clinical Training program begun by the PD to address the educational needs of the medical staffs.

### 3.6 Task F: Develop Facility Performance Reporting System

#### 3.6.1 Description

Develop a system to collect and report practical information that will allow each facility to measure its operational performance, and allow CRHP to measure the individual and comparative progress of Cost Recovery in the facilities. A common data repository will be established drawing on the critical information generated by the various Hospital/Polyclinic departments and functions. Performance criteria and standards will be developed for use in measuring progress.

#### 3.6.2 Accomplishments

The major contract deliverable was a report entitled, Facility Monitoring and Evaluation System. The report assesses the current reporting system, explains the types of performance reporting, lists performance criteria and provides a plan for implementing the system.

#### 3.6.3 Methods of Work

Because so much related data was collected previously, there was no need to conduct a large number of interviews for this task. Data was reviewed from the Monitoring and Evaluation function in the PD, Decision Support and Monitoring and Evaluations System (DSME), Preliminary Integrated Information Flow (IIF), interview results from the Information System Plan, and experiences related to DSME implementation at Kafr Dawar. Interviews were conducted with Cambridge's Resident Advisors in Finance, Personnel and Training to obtain their perspective on key data available from these areas and what data would be most useful to the Board of Trustees and Hospital or Polyclinic Directors. All of these inputs were analyzed to produce a draft report. The draft report was presented to and discussed with Dr. Mohamed Edrees, and his comments were incorporated into the final report.

#### 3.6.4 Recommendations

Recommendations focus on implementation. Specific points include:

- Boards of Trustees need to be educated as to the importance and use of performance reporting as a management tool;
- The AIP serves as a major input to the Facility Performance Reporting System -- thereby requiring the AIP to be an active living document, not to be put on the shelf and ignored;
- Implementation of the financial management system is critical as it will provide key revenue, expense and utilization data to the performance reporting system;

- Implementation requires contractor supervision and full-time attention of one person in each facility possessing good management and analytical skills and knowledgeable of management systems and computers;
- Minimal computer automation is required to effectively control and report the quantitative information;
- Additional MIS staff are needed particularly in each facility; and
- Reports should be produced in Arabic to facilitate system use.

### 3.7 TASK 1, MOD 4: Develop Facility Implementation Plans

#### 3.7.1 Description

The Facility Implementation Plan is a listing of major activities required to implement the cost recovery process. The plan is designed around 10 functional objectives that must be met for full conversion. A chart is designed to include objectives supported by tasks and tasks supported by activities. Each designated work activity is assigned to a responsible party. Work schedules are determined by time frames. Progress status is also indicated. The summary charts are combined into a booklet form. It is considered a "living document" to be updated quarterly until all conversion activities are complete.

#### 3.7.2 Accomplishments

The contract deliverable was completed as required for Kafr Dawar Polyclinic and Shark ElMadina Hospital. This work was performed by Charles Gustafson and Mar-Jan Ostrowski. The plan is built around the following 10 conversion areas:

- Board of Trustees Governance
- Administration
- Medical Services
- Nursing Services
- Ancillary Services
- Finance Services
- Support Services
- Personnel Services
- Marketing and Public Relations Services
- Quality Assurance (this section of FIP was coordinated with and approved by the QA contractor)

### 3.7.3 Methods of Work

The process began in November 1994 when Cambridge personnel acted as facilitators in a week-long workshop to develop the 1995 PD annual implementation plan (AIP). Mr. Gustafson prepared an outline and work plan for himself and Mr. Ostrowski identifying activities, responsibilities and due dates. Each conducted site visits and interviews to gather the needed data for the plan.

### 3.7.4 Problems

Implementation of the plan will be difficult because facility personnel do not have the time (their words) or the inclination to deal with such details. Unless the plan is translated into Arabic, the English copy will pose problems.

### 3.7.5 Recommendations

- Each facility should have a person (provided by the facility) fluent in English assigned to be responsible for coordinating implementation of the plan and ensuring that it is routinely updated;
- Facility directors are responsible for implementing these plans and they should be actively involved in the process; and
- The Board of Trustees should approve and monitor the implementation of the plan.

## 3.8 TASK 3, MOD 4: Provide Technical Assistance to Facilities

### 3.8.1 Description

During Mod Four, a reduced level of technical assistance is being provided to maintain some level of support to selected facility activities and the PD.

### 3.8.2 Accomplishments

Activities were concentrated at four decreed facilities.

The Board of Trustees were formed and oriented at Embaba Hospital. Future work plans including agendas, bylaw review and committee assignments were accomplished. Trustee meetings also continued at Shark ElMadina and Kafr Dawar. Cambridge assisted site management with agenda and materials for Board use.

Medical staff development continued at Kafr Dawar and Shark ElMadina. Some of the issues and decisions were related to privileges, officer and committee appointments.

Several meetings were held by the CRHP legal advisory committee. The purpose was to continue review of facility by-laws and provide guidance on the issues and questions arising out of the Board Of Trustee workshop held in April 1995.

Consultants continued to assist Kafr Dawar and Shark ElMadina with conversion activities support. As outlined under the facility's AIP material management, medical records, nursing, housekeeping and security systems support was provided by six Cambridge consultants. Facility engineering and maintenance programs were implemented at Kantara Gharb Hospital.

### 3.8.3 Methods of Work

Following USAID approval of the tasks and activities to be carried out during the Mod Four period, Cambridge prepared work schedules for the ten consultants. A level of effort of 313 days was approved by USAID. The consultants were phased out over the two month period. A heavier level of effort was required in June. Technical assistance was required for the CRHP, Board of Trustees, Medical Staff development, Nursing [out-patient and operating room], medical records, housekeeping, security, engineering and maintenance. Additionally, project management was provided by CCC's home and Cairo offices. Included in home office support was assistance toward completion of responsibilities for bio-medical equipment.

### 3.8.4 Problems

Conversion activities are impaired by the lack of resources including start-up funds. Although USAID start-up funds have been allocated to the CRHP, the flow of goods and services to the facilities is quite slow. The Day Surgery program at Kafr Dawar could not be fully implemented because equipment was not installed and supplies were not available.

The nurse consultant ended her assignment period early and frustrated with site personnel disappointed. The same scenario happened at Shark ElMadina. Housekeeping and security systems training was initiated with the promise that training supplies were being provided momentarily. This never occurred and much of this training was a wasted effort. The maintenance program at Kantara Gharb was hindered because key tools and equipment manuals were missing. The Project agreed to provide a chief engineer from MFAR funding. To date, no funds have been provided for a chief engineer.

### 3.8.5 Recommendations

The procurement process at the PD should be streamlined to improve the flow of start-up goods and services to the facilities.

The Day Surgery program at Kafr El Dawar Polyclinic needs to be implemented as soon as possible. Considerable resources will be lost if this program is delayed for several months. The contractor should provide a surgery consultant to continue this work.

CRHP should resolve any differences with the Waste Water Plant contractor so he will release operating manuals to allow operation of the plant.

#### **4. PURPOSE OF TASKS: IMPROVE THE MANAGEMENT AND ADMINISTRATIVE SKILLS OF PERSONNEL IN THE PILOT HOSPITALS AND POLYCLINICS AND THE PROJECT DIRECTORATE**

##### **4.1 TASK B.6.a: Conduct and Update Training Needs Assessment**

###### **4.1.1 Description**

A critical element to achieving sustainability of cost recovery is having personnel who are well-trained to perform their work. To that end, Cambridge conducted the initial training needs assessment in February 1993. This assessment was updated in 1994. In both cases, the assessments served as input to developing the training plans.

###### **4.1.2 Accomplishments**

Under the original contract, a training needs assessment was conducted of personnel in the pilot facilities and the PD. As part of the PD assessment, particular attention was devoted to the PD Training Department. In Mod Two, the needs assessment was updated in September 1994. A "Training Kit" was developed to provide a logical framework for and to facilitate the planning and evaluation of training sessions.

###### **4.1.3 Methods of Work**

The initial assessment was conducted by Drs. Barbara Pillsbury and Soheir Sukkary-Stolba. They performed their work by reviewing project materials, developing a data collection approach, and interviewing selected personnel before writing their reports.

The assessment of the PD Training function involved three phases:

1. Designed and administered a self-assessment questionnaire, conducted interviews to assess the capabilities of each member of the training staff, and held individual and group discussion of questionnaire and interview findings with training staff;
2. Explored with PD training department staff alternatives for streamlining training operations and the design of a training system to help training managers in the hospitals and polyclinics assume responsibility for identifying training needs, writing training plans and coordinating training programs; and
3. Designed a training system using the input and data collected from phase two.

The 1994 work related to updating the needs assessment was performed by Mr. Keith Mitchell, Cambridge's resident advisor in training. His work built on and was closely linked to the initial assessment. The work approach involved reviewing prior training materials including the 1993 Training Needs Assessment report; developing an approach and form for use in updating the needs assessment; interviewing PD and facility personnel; surveying (in Arabic) hospital and polyclinic personnel; observing training activities; analyzing and collating data; and writing the report.

#### 4.1.4 Recommendations

The initial training needs assessment and the 1994 update made the following recommendations which continue to be valid:

- The training department is understaffed. Technical assistance should be devoted to empowering PD trainers to be able to design, implement and evaluate training. The lack of skilled PD training personnel has resulted in training being conducted by U.S. consultants and/or PD department heads.
- Training should be conducted in Arabic. Over the past year, most training has been conducted both in Arabic and English. Arabic training is more effective. However, it imposes considerably greater time and cost for preparation and the training itself.
- Training should be varied to include workshops, seminars, on-the-job, retreats, and short-term courses; and
- Training methods should be diversified to include discussion, role-playing, case studies, brainstorming utilizing adult learning principles.

The following key recommendations are provided in the updated needs assessment:

- The overwhelming need expressed by personnel in the facilities was to receive training that would allow them to properly operate the new medical equipment procured by Cambridge under the Project. Although Cambridge has made a concerted effort to ensure training is provided, this need continues for two reasons. First, some people who received training don't know how to operate the equipment and others who were trained are no longer working in the hospital. For example, the success of the day surgery program at Kafr Dawar depends on physicians who are trained in the use of endoscopic and other scope equipment. Second, because equipment is still in storage in Embaba and May 15 Hospitals, clinical training will be needed once this equipment is installed.

- Personnel need to be exposed to training materials which present a model for "how things should be" reinforced by on-the-job training led by skilled consultants.
- While progress has been made in introducing management and administration concepts and principles through class room training and on-site OD training, the progress achieved represents only a beginning. Learning and applying these concepts and principles occurs slowly in Egypt. Therefore, this type of training must continue until hospital personnel have integrated these concepts and principles into their thinking and behavior.

While considerable training has been delivered over the past 2 1/2 years, the PD training function has not evolved to assume a proactive role in developing and conducting training programs; their major contribution remains in the area of logistics related to training. The assessment of the Training function in early 1993 identified the importance for this department and its personnel to be active in leading the planning and delivery of training. Subsequent work of Cambridge's resident advisor and consultants were not successful in actively involving the PD Training function in the planning, design and delivery of training. Without an effective PD Training department capable of planning and conducting training, replication and long-term sustainability of cost recovery in MOH hospitals is highly unlikely. Consideration should be given to appropriate changes in this area and the necessary contractor support to help make this function an effective contributor to the project.

#### **4.2 TASK B.6.b: Assist with CRHP Training Plan**

##### **4.2.1 Description**

The training plan was developed under the initial contract and modified under Mod Two. The plan identifies specific types and focuses of training to support Project objectives and emphasize management development, hospital operations (management systems), financial management, personnel management, nursing, clinical equipment use, and participant training programs in the U.S. and other countries.

##### **4.2.2 Accomplishments**

The initial and revised training plans were published in November 1993 and December 1994 respectively. Whereas the initial plan is presented only along functional lines, the revised training plan reviewed the needs both along functional and site needs.

#### 4.2.3 **Methods of Work**

The initial training plan was developed as a result of the initial needs assessment. Subsequent discussions with PD, hospital and polyclinic personnel identified specific training in management, finance, quality assurance, marketing, medical equipment for technicians, nurses and physicians. Additional content in the plan included participant training, PD staff training, and development of the training centers in each pilot hospital and polyclinic.

The revised training plan was prepared under the guidance of Keith Mitchell with the assistance of PD training and hospital and polyclinic personnel. The approach involved a review of the initial training plan and 1994 training needs assessment, 1994 Biomedical Equipment Training Plan, 1994 Medical Staff Organization and Development report, and meetings with facility training committees to agree on site training activities.

#### 4.2.4 **Recommendations**

Training is a key to achieving sustainability of the Cost Recovery for Health Project. Only through constant reinforcement will local personnel learn to apply improved management principles and practices. The new contractor and the PD Training function must be actively and continually involved in helping facility personnel develop and execute a practical plan to meet their training needs.

### 4.3 **TASK B.6.c: Provide Specialized Training**

#### 4.3.1 **Description**

Based on the needs assessment, Cambridge was to plan and/or coordinate the training programs. Training programs of a special nature include participant training, observational tours, invitational travel, etc. Because all participant training was conducted as part of the Medical Partnership Program (Task B.6.e), participant training is not discussed here.

#### 4.3.2 **Accomplishments**

Observational tours were conducted for the Suez Canal University (SCU) to the United States and select members of the PD to the Philippines. Drs. Fathi Maklady, Dean of the Faculty of Medicine at SCU and Atef ElAkhras, Director General of SCU's hospital visited the U.S. in July 1994. They were at the University of Missouri, Center for Managed Care for one week, and at Mercy International Health Services (MIHS) for another week where they visited a variety of managed care organizations and discussed the myriad of issues and problems in starting a managed care health system.

For two weeks in December 1994, four CRHP (Dr. Samir Shafie, Deputy Director Embaba Hospital; Dr. Mohamed Aly Edrees, Deputy Director of CRHP; Dr. Sameh Saleeb, Manager CRHP Management Systems; and Dr. Mohamed Abdel Aziz Mustafa, Manager CRHP Training) and one USAID/Egypt staff (Mr. Richard Ainsworth) traveled to the Philippines where they visited numerous Ministry of Health facilities. The purpose was through dialogue and observation to gain an understanding of the methods, approaches, successes and problems associated with the Philippine Cost Recovery for Health Project.

Cambridge coordinated USAID debriefings after the SCU and Philippine tours.

Cambridge prepared the P/IOP and coordinated other logistics (TOEFL testing, medical exams, reserved space in the seminar) for three CRHP staff to attend a six-week program on hospital administration at the University of Connecticut Feb. 15 - Mar. 29, 1995.

At USAID's request, Cambridge coordinated the schedule and provided logistics support for an observational tour for the Egyptian Minister of Health to Washington, D.C. The trip was scheduled three different times, and finally did occur in May 1995.

#### 4.3.3 Methods of Work

For the SCU trip, Cambridge interviewed Drs. Maklady and ElAkhras as well as the USAID Project Officer to determine the objectives of the trip. Based on the objectives, Cambridge contacted a number of U.S. health care organizations to determine their interest in and approach to conducting such a tour. Once the University of Missouri and MIHS were selected, Cambridge worked with them to develop a detailed agenda for the visit.

For the Philippine tour, Cambridge interviewed the USAID Project Officer and select senior PD managers to determine the objectives of the trip. Cambridge worked through USAID/Philippines health office who identified Mr. Rhais Gamboa (Carra/MSH) as the technical contact to develop an agenda that would meet the objectives. Cambridge contacted a travel agent in the Philippines who made all hotel and travel reservations.

Prior to personnel traveling, Cambridge's Cairo office completed all the necessary USAID paperwork, visas, medical exams, etc. and conducted a brief orientation in Cairo covering agenda, logistics and distributed per diems.

For the Minister of Health's visit to Washington, Cambridge worked closely with USAID/Washington and Health and Human Services as these agencies were primarily responsible for making the Minister's appointments. At the Minister's request, Cambridge was able to arrange his visit to Washington Hospital Center's shock trauma unit. The Center stated a willingness to provide a six-week training program in shock trauma in Washington D.C. for selected MOH physicians.

#### 4.3.4 Recommendations

Observational tours and participant training provide participants with "first-hand" experience which can only be achieved by having them visit other countries. Programs which are well planned around specific learning objectives can prove quite valuable to helping local personnel understand the application of concepts and principles which short of experiencing them remains theoretical. The training exposure can provide materials and create an excitement to support implementation and sustainability of Project activities. For these reasons, this type of targeted (to Project objectives) training should be continued.

The future of cost recovery lies with the middle managers. Therefore, training should be focused on the middle managers. Contractors and USAID should play an active and decisive role in the selection of personnel for participant training and observational tours. Emphasis should be on selecting personnel who have the interest and ability to serve as "change agents" in their respective facilities. In the past, selection has been too political with little or no change resulting from the trips.

#### 4.4 TASK B.6.d: On-the-Job Training

##### 4.4.1 Description

Based on the updated 1994 training plan, a specific program of on-the-job (on-site) training shall be implemented to provide practical hands-on direction and coaching in hospital management, financial management, personnel administration, and other areas where management systems have been implemented in the pilot hospitals.

##### 4.4.2 Accomplishments

Cambridge's Resident Advisors and consultants provided substantial assistance to the training department of the PD in developing its 1995 annual implementation plan. This effort entailed preparation and participation in a week long workshop. Considerable investment has been devoted to on-the-job training.

Throughout 1993, mid-level managers received training in leadership, organizational change, productivity and performance, managing and using data, and communication. Other workshops were conducted in Human Resources and Management Information Systems. In the finance area, training was provided in chart of accounts, budgeting, and "finance for non-financial managers".

During the contract period, over 4,000 participants attended nearly 500 courses. The table on the next page summarizes training conducted for personnel in the five facilities.

FACILITY TRAINING SUMMARY  
November 1992 - July 1995

Training Discipline	Embaba		May 15		Kantara Gharb		Shark ElMadina		Kafr Dawar		Total	
	No. of Courses	No. of Prtcpnrs										
Hospital Management	36	389	34	253	33	191	40	418	37	385	180	1,636
Financial Management	4	9	4	24	4	10	5	40	5	20	22	103
Hospital Marketing	11	67	10	25	11	75	10	78	10	41	52	286
Quality Assurance	1	2	23	282	4	35	1	2	1	2	30	323
Medical Nursing	10	156	14	140	9	154	6	106	5	82	44	638
Medical for Physicians	12	73	13	113	7	10	8	18	4	36	44	250
Infection Control	10	162	5	110	2	9	10	140	3	26	30	447
Skills Development for Technicians	4	19	4	11	2	5	4	11	2	9	16	55
Emergency Cardiac Care	10	47	8	12	5	9	10	40	10	20	43	128
Computers	3	18	3	20	4	22	7	35	6	31	23	126
Training of Trainers			1	10							1	10
<b>TOTALS</b>	<b>101</b>	<b>942</b>	<b>119</b>	<b>1,000</b>	<b>81</b>	<b>520</b>	<b>101</b>	<b>888</b>	<b>83</b>	<b>652</b>	<b>485</b>	<b>4,002</b>

#### 4.4.3 Methods of Work

On-the-job training was mostly in support of facility-based management systems. Under Keith Mitchell's guidance, a standard approach was developed and implemented for OJT. That process entailed 5 steps:

- Identify training outcomes, objectives to meet the outcomes, tasks to meet the objectives and a schedule for the training;
- Identify position(s) needed to support the management system;
- Develop job description(s);
- Identify qualified personnel already working in the facility or hire from outside; and
- Conduct the training.

In some cases, training was conducted in functional areas or specific topics which did not relate to a single management system. During the summer of 1994, James Carney, a Cambridge consultant, conducted a one-day session for PD personnel focused on "consulting skills" and the importance of PD personnel being consultants to the facilities to assist them in the transition to cost recovery. The four styles of consulting were presented and a questionnaire was administered to the participants. The results of the questionnaire identified the type of consulting style best suited to each participant. Mr. Carney also gave examples of "how to" facilitate training sessions using the different consulting styles.

The approach used in completing the above training did not employ a standard approach but rather varied widely based on the consultant presenting the training.

In late 1994, Cambridge provided three O.J.T. consultant facilitators (Ahmed Mohab, Ahmed Pierce and Jacqui Sherbini) to assist the Resident Advisor, Training and the CRHP training staff in the areas of equipment user training and on the job training programs. The Resident Advisor developed a model for programs, including OJT task analyses and teaching schedules to assist in documenting and evaluating OJT participants during training programs.

#### 4.4.4 Recommendations

The PD Training department has not been able to function proactively in a training role beyond providing logistics support. As a result, consultants and PD departments have assumed responsibility for their own training. This independence has created conflicts as there has been poor coordination of training schedules. As discussed in Section 4.1.1, the new contractor should assess this function for necessary changes and provide support to transform this department into an active planner and provider of training services.

#### 4.5 TASK B.6.e: Medical Partnership (Sister Hospital) Program

##### 4.5.1 Description

Subcontract with a U.S. hospital system to develop and conduct a series of training interventions to provide CRHP participants with first-hand experiences in the planning, operation and management of U.S. hospitals. The intent of the program is to expose CRHP participants to practical hospital management and health care concepts, principles, techniques and approaches which can be applied in CRHP facilities in Egypt.

##### 4.5.2 Accomplishments

The most important accomplishment was the actual training experience received by the participants. Three major contract deliverables were achieved -- a memo of understanding, the training programs and an evaluation report. Cambridge entered into a subcontract with Mercy International Health Services (MIHS) to plan and conduct the actual training program.

The Memo of Understanding (MOU) described Mercy's intent to prepare and conduct the experiential training program for the CRHP participants. The MOU was signed by MOH/CRHP, USAID, Mercy and Cambridge.

The experiential training program was conducted for three groups -- Matrons, Hospital/Clinic Directors and Deputy Directors. Twenty MOH and PD personnel participated in the training programs. The Matrons and Hospital/Clinic Directors each received three weeks of training in Mason City, Iowa. The Deputy Director group received two weeks of training in Michigan. All training occurred between October 2 - November 23, 1994. Prior to the technical training, each group participated in a two-day orientation program in Washington, D.C. Because this was the first visit to the U.S. for most participants, the purpose of this program was to ease them into the culture and set their expectations for adapting to and living in the U.S. for a few weeks.

MIHS prepared an evaluation report of the training, and the participants also evaluated the training program. Copies of both reports were delivered to USAID.

Cambridge coordinated a debriefing of the three groups for USAID.

##### 4.5.3 Methods of Work

In preparation for participant training, Cambridge and USAID agreed that a planning session was needed to focus the thinking of the participants -- to help them understand the purpose of the training and to have them develop a training plan. Dr. Kelley Moseley, a Cambridge consultant, conducted a two-day workshop in August 1993 for this purpose. In preparation for this workshop, Dr. Moseley prepared and Cambridge distributed two documents. One was "Sample Mission, Goals and Objectives for a Community

General Hospital" and the other was "A Guide to U.S.-based Management Training for CRHP Hospital Directors". These documents served as the basis for much discussion throughout the workshop.

Messrs. Gregory Beattie and Mark Bombyk, Mercy International personnel, traveled to Egypt for two weeks starting in late-July 1994 to obtain knowledge of the operating environment and issues in order to prepare a meaningful training program. They visited all five pilot facilities and met with all CRHP personnel identified to participate in the training program. Questionnaires were administered to all participants as a means of identifying common needs and developing participant profiles. The outcome of this process identified 19 participants from the Hospitals and Polyclinics including a few from the Project Directorate. From the visit, a detailed agenda was developed identifying the timing of each of the three visits and the general content of each training program. This information was reviewed with the Project Directorate prior to Mercy's departure from Cairo in August. This information was used in preparing the P/IOPs for each group.

In support of Mercy's training programs, Cambridge completed the P/IOP paperwork, prepared briefing books, and conducted a pre-trip briefing in Cairo for each group.

#### 4.5.4 Problems

The vast disparity of financial resources available to GOE MOH hospitals versus Mercy hospitals made it difficult for the participants to transfer and implement many improvements. There was limited sharing of information once participants returned from their Mercy training; boxes of Mercy materials were collected and shipped back to the project, but they remain in boxes unused. Cambridge requested that each returning group debrief the PD staff to share their experience and identify how the PD may be able to better support the facilities, but it never happened.

#### 4.5.5 Recommendations

The training sessions in the United States are potentially very effective. Prior to visiting Mercy, few participants had ever been to the U.S., and therefore were unable to visualize or understand how a U.S. hospital functioned differently than one in Egypt. As a result of their visit, almost without exception, the participants returned to Egypt with an improved awareness of what the Cost Recovery Project was about. They understand that the Project is not going to convert their MOH facilities into "Mercy-like" hospitals. At the same time, the participants now appreciate the importance of a clean facility and treating patients as customers -- that patients deserve a certain quality of service, dignity and respect.

Personnel returning from training abroad should be required to share their information and lead the implementation of

appropriate new practices and procedures in their facilities. Consideration should be given to having them sign a contract which makes them accountable for implementation upon their return from training -- with some penalty if they fail to uphold their agreement.

#### **4.6 TASK B.6.f: Facility Training Center Resources**

##### **4.6.1 Description**

Develop a management and clinical library and resource center to improve management, clinical and administrative skills of facility personnel in the five pilot hospitals and polyclinics. Specific assistance to the facilities and the CRHP should include guidance in identifying appropriate materials for purchase, procurement of these materials, shipment of these materials to Egypt and delivery to the PD.

##### **4.6.2 Accomplishments**

Cambridge worked with PD, hospital/polyclinic and USAID personnel to identify books, periodicals and other training aids for use in the five pilot facilities. These goods were procured and shipped to Egypt. Periodicals continue to be shipped through the end of the contract period.

##### **4.6.3 Methods of Work**

Cambridge's resident advisor in training worked closely with the PD training department and hospital and polyclinic directors in organizing a training center and establishing a medical library. Training materials were selected based on the Brandon-Hill Guide and a review with each hospital or polyclinic director. After obtaining all approvals in Egypt, Cambridge/McLean contacted sources, received bids, ordered the materials, received and inventoried them and shipped them to Egypt. Materials are inventoried and packaged by facility (in McLean) to provide control and organization of the process.

##### **4.6.4 Problems**

Most facilities have not received all of their materials either because they're still under renovation (with no training room identified) or shelving has not been procured for use in the training room to accommodate the materials. In any case, the materials have been delivered to the PD until the facilities are ready to receive them.

#### 4.6.5 Recommendations

USAID has invested \$100,000 in this effort. Now, the Project and facilities must demonstrate their resolve to efficiently and effectively utilize the materials already acquired. Future funding of books and periodicals should be based on the value of the recent investment. To that end, a method should be implemented to quantify usage of these materials and the value of any future investment. The new contractor should continue to receive periodicals directly from the publishers, record materials received, package by facility and ship to the PD.

#### 5. PURPOSE OF TASK: PROVIDE PILOT MOH HOSPITALS AND POLYCLINICS WITH MEDICAL EQUIPMENT NEEDED TO DELIVER BASIC MEDICAL SERVICES

##### 5.1 TASK C.15: Provide Biomedical Equipment Support to Pilot Facilities

##### 5.2 Description

Cambridge has served as the procurement services agent to USAID in planning and coordinating the acquisition, delivery, installation and training of biomedical equipment for the five MOH hospitals and polyclinic. With the exception of limited funding for small purchases contained in Cambridge's budget, the funding for the equipment was provided via a \$5.9 million Letter of Commitment and Letters of Credit. The strategy was to separate the procurement into three phases based on the priority order of Kantara Gharb, Embaba and the third group was May 15, Shark ElMadina and Kafr Dawar.

##### 5.3 Accomplishments

Approximately 1,075 items have been procured and delivered at a total cost of \$5.9 million. A summary of the Letter of Commitment for bio-medical equipment follows.

Total Value of Letter of Commitment		\$5,982,732
Cost of Equipment	\$5,564,001	
Bank Charges thru 5/31/95	84,710	
Est. Bank Charges after 5/31/95	2,500	
Shipping Costs	212,826	
Container Costs	<u>68,800</u>	
	Total Costs	<u>(5,932,837)</u>
	Balance of Letter of Commitment	\$49,895

All five contract deliverables have been achieved.

- Procurement, shipment and installation or storage of all equipment;
- Technician training has been conducted;
- A model training plan for biomedical equipment has been published and distributed;
- A model biomedical equipment maintenance plan has been published and distributed; and
- An inventory of all equipment has been prepared for each of the five facilities including description, quantity, manufacturer, model, serial number, cost, source and origin, and installation and training status.

Above and beyond the required contract deliverables, Cambridge was able to accomplish the following:

- Seven weeks of training for three biomedical engineers was provided in the United States at the training facilities of the following manufacturers:

A-dec, Newberg, OR  
American Medi-Matic Inc, Addison, IL  
Analog Devices Inc, Norwood, MA  
CIRCON ACMI, Stamford, CT  
Continental X-Ray Corporation, Broadview, IL  
Marquette Electronics, Inc, Jupiter, FL  
Medical Data Electronics, Arleta, CA  
OEC-Diasonics, Inc, Salt Lake City, UT  
Zoll Medical, Woburn, MA

- In addition to operator/technician training on the equipment, professional seminars were conducted for physicians and nurses by the manufacturers' representatives on the following equipment:

Anesthesia equipment including ventilators  
Infant Incubators  
Scopes  
Phototherapy Units  
Blood Gas Analyzers  
Oximeter  
Servo Infant Care Centers  
Ventilators  
Warming Units  
Flame Photometers  
Fetal Heart Detectors and Monitors  
ECG Monitors  
Operating Room Tables and equipment  
X-Ray units

- Special arrangements were made through three local Egyptian companies for two training sessions each year for two years after the end of the equipment warranty period. These companies are Amar International, Delta Medical and Negm Company.
- For equipment in storage, agreements were obtained from suppliers that they would provide installation and user training.

#### 5.4 Methods of Work

Assisted by Cambridge, a group composed of Dr. Ramses Mina, Dr. Bassel Tawfik and Engineer Mohamed Kassem reviewed and revised the equipment specifications prepared by Abt Associates to result in a final specification book of medical equipment for each of the five facilities. Gerald Hawkins, Cambridge's Senior Procurement Specialist, and the group held meetings with each hospital and polyclinic director and their department heads to finalize the lists as to equipment needs, quantities needed and basic equipment specifications.

After the lists were approved by each facility director, the lists were submitted to and approved by the PD and USAID, and equipment procurement procedures were initiated in compliance with AID Handbook 11. A priority list of facilities was furnished by USAID/Egypt; advertising was placed in accordance with AIDAR; Invitation for Bids (IFB) were issued; bids were awarded; equipment was received and inspected in the U.S. where it was temporarily stored; and then shipped to Egypt where it was delivered to the facility and installation and training was arranged.

Authorization was received from USAID's Contracting Officer to purchase equipment from the Federal Supply Schedules (FSS). This reduced the time required to acquire the equipment as well as the requirement for advertising, IFB issuance, etc. Where possible, FSS purchases were made from U.S. companies with local Egyptian representatives. Items which could not be procured from FSS were issued in Invitation For Bids (IFB). Items were procured from the lowest bid which was responsive to the terms and conditions of the IFB. In a few cases, where no bids were received, Cambridge contacted vendors directly to identify acceptable sources.

Equipment was gathered in the U.S. freight forwarder's warehouse and packed into containers for shipment to Egypt. Most equipment was shipped via surface with the exception of a few items which shipped via air with USAID's permission.

Equipment requiring installation and training was procured only through U.S. suppliers having local Egyptian representatives. Arrangements for equipment installation and training in Egypt were part of the procurement. This requirement was included in the IFBs and separate arrangements were made with the supplier for the items procured through the FSS.

Cambridge and PD Biomedical Engineering personnel worked together in developing the model training plan for user and clinical training and the model biomedical equipment maintenance plan. Each plan started with an outline and personnel were assigned to write certain sections. Biomedical Engineering personnel reviewed the plans with the maintenance personnel in each facility to ensure that the plans were understandable and practical.

The final inventory report was developed from the shipping documents received from the supplier and a physical inventory conducted in each facility.

## 5.5 Problems

Medical equipment has been the most tangible aspect of this Project, facility personnel easily relate to it, and in some cases, it represents new technology for the hospitals and polyclinic. By far, medical equipment is the response given by the hospital/polyclinic directors when asked, "What has the Cost Recovery for Health Project done for your facility?" For these reasons, activities related to medical equipment have been very visible -- both positively and negatively. Numerous problems occurred throughout the process of acquiring and coordinating equipment for the Project. Most of these problems can be categorized into four areas:

- Lack of knowledge on the part of facility personnel:
  - Although all specifications were reviewed and approved by hospital and polyclinic personnel, in some cases, key accessories were omitted from the specifications.
  - On many occasions, items were reported to be missing from the shipment, and subsequently located because personnel didn't recognize them.
  - When equipment specifications were being developed, physicians were consulted to ensure that they knew how to operate the equipment. When the equipment was delivered, physicians did not know how to use the equipment. This happened many times. In some cases, the physicians who reviewed the equipment specifications subsequently left the facility.
  - In numerous cases, the facilities would change the specifications sometimes after the equipment had been ordered. For example, a piece of equipment specified and ordered for diagnostics was subsequently changed to be used for surgery.

- Insufficient funding:
  - When equipment was delivered to the hospitals and crews unloaded the trucks, it was common for the hospital director to request that Cambridge pay the crews because the hospital didn't have any funds.
  - Installation of equipment was often delayed because funds were not available to complete the plumbing or electrical preparations necessary to install the equipment.
  - The absence of minor accessories prevented the installation of some equipment which could've been completed with spare parts and an organized biomedical engineering department in the facilities. Items like connectors, pipe adapters, etc. were not available thereby causing a delay in installation.
- Lack of management control - It seems that as equipment arrived at a hospital or polyclinic, total chaos ensued. It was difficult to inventory the equipment in an orderly manner because of all the physicians and technicians "grabbing and touching" the items as they were unpacked from the containers. As a result, small accessories were frequently separated from basic components thereby creating "perceived" missing items and creating confusion in identifying items.
- Insufficient training - Too often only one or two personnel were trained in the use of the new equipment. In some cases, the personnel were still not capable of operating the equipment after the training. In other cases, personnel who had been trained, left the facility thereby leaving no one capable of operating the new equipment.

## 5.6 Recommendations

In response to the problems described above, the following recommendations are offered:

- Any future equipment needs should have the input of the nurse and technician in developing the specifications and quantities. Having the input and approval of the director and department head is not enough.
- No clinical personnel should be allowed in the area where equipment is being unpacked and inventoried. As items are unpacked, inspected, and inventoried greater care should be exercised to return all items into the original containers and ensure they are well sealed. Equipment in storage should be organized, in a secure area with restricted access. All of these measures should be enforced by the hospital or polyclinic director.

- Procurement schedules should be established based on when the equipment can be installed and used inside the facility. This means all necessary plumbing, electrical work, etc. has been completed before the equipment is shipped. This will reduce storage requirements as well as problems with warranty extensions. On numerous occasions, Cambridge was directed by the PD and facility directors to ship equipment, when in fact the facilities were not ready for it.
- The biomedical equipment maintenance program should be funded and supported as a priority by each facility. Without medical equipment in good operating condition, patients can not receive needed medical services.
- Training on the use of new equipment should include as many personnel as possible (who will use the equipment) and should be repeated numerous times to re-enforce previous training and ensure proper utilization of the equipment.

## **6. PURPOSE OF TASKS: PREPARE PILOT FACILITIES FOR COMPUTER AUTOMATION AND INTRODUCE APPLICATIONS IN PRACTICAL MANNER**

### **6.1 TASK B.4 and C.12: Prepare Information Systems Plan for Pilot Facilities and the Project Directorate**

#### **6.1.1 Description**

The information systems plan is a guide to computer automation activities for use in the hospitals and polyclinics. The plan identifies and outlines high priority computer applications and incorporates system acquisition and implementation strategies.

#### **6.1.2 Accomplishments**

The information systems plan work was performed primarily by Mr. Gerald Giebink, a consultant to Cambridge. The major output of this task was two information systems plans -- one for the hospitals and polyclinics and one for the PD. Both plans were published in December 1993.

#### **6.1.3 Methods of Work**

Preparation of the information systems plans employed a traditional approach to collecting needs assessment data, priorities, analyses of the data and packaging the information into a logical report. Interviews, questionnaires, discussions and workshops were all used in conducting this study. Major steps involved the following:

- Oriented to project and review of materials, prepared outline of information system plan, questionnaire and interview instruments;

- Developed methodology for data collection and forms for data collection, and test questionnaire and interview instruments;
- Visited facilities, administer questionnaires, conduct interviews;
- Analyzed results of questionnaires, interviews and discussions to identify findings and prepare for workshop;
- Conducted one-day workshop to present findings and build consensus among hospital directors as to priorities;
- Gathered additional data on specific application objectives, functions, inputs and outputs, and cost-benefit; and
- Drafted the plan including implementation schedule.

#### 6.1.4 Problems

There were no major problems encountered in completing this work.

#### 6.1.5 Recommendations

The following recommendations were contained in the plans:

- The limited computer resources of the Project should be devoted to the hospitals and polyclinics not the PD; and
- The hospital/polyclinic plan identified four high priority applications for automation consideration with the top priority being Decision Support Monitoring and Evaluation (DSME).

### 6.2 TASK B.5: Develop and Implement Management Information Systems in Pilot Facilities

#### 6.2.1 Description

Improve the efficiency of selected area of the facilities through the use of computer applications. This task comprises the actions needed to move from the Information Systems plan (delivered in December 1993) to having two key applications operating in at least one facility.

#### 6.2.2 Accomplishments

The contract required three deliverables -- a preliminary integrated information flow analysis, and DSME and Biomedical Equipment Inventory Preventive Maintenance (BEIPM) application prototypes operating in a training and early operational mode in one or more facilities. All deliverables were completed. The

preliminary integrated information flow analysis focused on identifying gaps and duplications in data -- to improve the quality and completeness of information. The DSME and BEIPM applications have been implemented at Kafr Dawar and Shark ElMadina.

In addition to the contract deliverables, Mr. Giebink's work included two other accomplishments. First, he developed a generic methodology for conducting requirements analysis for use by the PD's Information Systems group in the future. Second, he worked closely with PD Information Systems on organizational, management and technical activities to improve the performance of the department. At the end of each consultancy, Mr. Giebink would develop an action plan identifying work activities, start and end dates, assigned responsibilities, etc. This work plan was always reviewed with PD Information Systems prior to Mr. Giebink's departure from Egypt. Between trips, he continued to provide assistance via fax and telephone.

### 6.2.3 Methods of Work

PD's Management Systems and Information Systems departments were greatly involved in the task of developing the preliminary integrated information flow (IIF). Management Systems (MS) is generally responsible for developing forms, registers and reports for their various systems. Information Systems (IS) was responsible for extracting relevant data from MS sources and summarizing it. This close working relationship between MS and IS personnel utilized the following approach:

- Identify relevant MS documentation for use in the study based on priorities for system implementation;
- Review selected MS documentation (i.e., forms, registers, reports);
- Develop and refine the format for the IIF document;
- Perform data analyses on selected MS documentation;
- Review and validate data analyses and IIF documentation; and
- Prepare the IIF report.

An iterative prototyping process was utilized to develop the DSME and BEIPM applications. Prototyping, in the context of developing computer applications, involves user and computer personnel working together to define the functional requirements of an application and develop it into a working computer model. Through these on-going joint working sessions, the model develops to a point where the user accepts it as meeting the specified requirements. More specifically the steps are as follows:

- PD IS personnel and Mr. Giebink interviewed users (key PD and selected hospital/polyclinic personnel who would use the computer applications once they were developed) to understand the functional requirements for the DSME and BEIPM applications;
- Relevant documentation was collected and analyzed;
- Based on the interviews and documentation, IS personnel and Mr. Giebink developed the first version of the prototype applications on the computer;
- The prototype applications were demonstrated to the users to receive their feedback concerning the functions which appear to be operating correctly and those which need improvement with particular attention to specifying the required improvements;
- The prototype applications were enhanced on the computer and re-demonstrated to the users -- this process was repeated until the users were satisfied that the prototype demonstrated the functions needed.

#### 6.2.4 Problems

Developing and implementing computer applications in this Project has been extremely difficult. Specific problems include:

- Promises were routinely made by the Project to provide Information Systems personnel and computer equipment and software in a timely manner to support this task, but actions lagged the promises by many months;
- Personnel in the hospitals and polyclinic do not want to share their computers even though DSME, BEIPM and pharmacy stock utilization could all be accomplished within an eight hour day with scheduling; and
- PD personnel assigned to work on the task have been extremely slow in making progress because they're frequently diverted to non-Project activities.

#### 6.2.5 Recommendations

Partially in response to the problems experienced in this task and in order to support current and future computer work in the Project, the following recommendations are offered:

- Because computers are just being introduced into the hospitals and polyclinics and personnel are generally not knowledgeable in their use, "batch transaction based" applications are the only affordable effective design.

- Computer specialists are needed inside each hospital and polyclinic to provide assistance and perform regular preventive maintenance. Without this support, the applications and computers themselves will ultimately stop being used.
- PD IS personnel should not be diverted to non-Project assignments and additional personnel should be hired to support new requirements.
- Basic financial information is critical to the future success of the Project. Therefore, the highest priority new application for hospitals and polyclinics should be a financial application (i.e., general ledger).
- A "computer sharing" policy is needed in the facilities to promote the affordable effective use of their limited computer resources.

**7. PURPOSE OF TASKS: ASSIST THE PD DEVELOP A CAPABILITY TO SUPPORT THE EXPANSION OF COST RECOVERY**

**7.1 TASK B.7: Architectural and Engineering Support**

**7.1.1 Description**

Assist the Project Directorate in following USAID procurement regulations while completing the renovations in the pilot facilities, and helping develop an effective engineering and construction management office within the Directorate (PD).

**7.1.2 Accomplishments**

The three contract deliverables (below) were all accomplished:

- Monthly progress reports to USAID, CCC's COP and the Project Director to address the major progress, issues and status of the architecture and engineering (A&E) and construction work in each facility;
- Participation in MFAR for Kantara and Embaba; and
- Participation in the development and review of construction contracts for Kantara and Embaba.

In late 1992 and early 1993, there were problems in the procurement process being used in the PD and significant confusion and disagreement between engineers in the PD and those in USAID concerning the scope, schedule and cost to complete construction and renovation work in each pilot facility. Cambridge was fortunate to be able to hire Mr. Mohamed Fawzi, recently retired engineer from USAID to work on this task. Mr. Fawzi has been quite effective in "bridging the gap" between USAID and PD engineers and helping PD engineers understand USAID procurement regulations.

### 7.1.3 Methods of Work

Mr. Fawzi's approach involved frequent visits to the sites and working closely with PD, hospital and polyclinic directors, and USAID personnel to keep everyone informed. Specific activities included:

- Assisting the PD's A&E Manager in all contract administration matters related to the design and/or implementation of the renovation work in the five pilot facilities.
- Advising the Project Director and his staff in all renovation matters to help assure that implementation is in accordance with USAID rules, regulations and policies and established Fixed Amount Reimbursement (FAR) financing procedures, where applicable.
- Assisting in the development and implementation of an effective system to monitor the work of the A&E and construction contractors during their work.
- Assisting in the inspection, acceptance and payment phases of the renovation work and the closeout of contracts for A&E services.
- Assisting in all stages of the procurement process for materials, equipment and services, including the selection of general construction and/or renovation contractors.

### 7.1.4 Recommendations

As long as the Project is utilizing USAID funding for construction or renovation of facilities, USAID should ensure the participation of Mr. Fawzi or someone of equivalent knowledge to assist the PD and ensure adherence to USAID procurement rules and regulations.

## 7.2 TASK C.9: Project Directorate Support

### 7.2.1 Description

Assist PD personnel in planning and monitoring their work to improve the efficiency and effectiveness of operations in the PD. With the differences between Mr. Sanderson and the Project Director, he instructed Cambridge to focus on work in the facilities and not in the PD. USAID agreed thereby relieving Cambridge of the contract deliverables -- departmental and individual work plans, and an updated manual of operational and administrative policies and procedures -- for this task.

### 7.2.2 Accomplishments

Starting in July 1994, Cambridge was able to assist the PD and improve the efficiency and effectiveness of PD operations primarily through the efforts of Mr. Mar-Jan Ostrowski.

Some areas of work included:

- Involved MOH in finance, personnel and nursing work to explain our work, obtain MOH's input and begin a process of institutionalization;
- Reviewed departmental work plans, clarify work task identification and identification of personnel responsible for its implementation and execution;
- Assisted the PD in preparing budget, planning and reporting information for submission to USAID; and
- Reviewed job descriptions and scopes of work for each PD employee and consultant. Also, the Project organization chart was revised.

### 7.2.3 Methods of Work

Mr. Ostrowski observed PD operations and worked closely with PD department managers to understand their responsibilities and identify and implement improvements.

### 7.2.4 Recommendations

The PD has been re-organized to include a Senior Deputy Director and a Deputy Project Director for Administration. If this proves effective by streamlining the decision-making process, the contractor should not have to be involved in providing any support to PD administration. However, if this organization proves to be ineffective, it may impact the contractor's ability to execute its work, and contractor involvement in PD administration would be appropriate.

Drs. Mohamed Edrees and Afaf Othmaan should be granted authority to approve administrative and logistical support (i.e., travel, purchasing, etc.) to facilitate assistance to the facilities.

Consideration should be given to "downsizing" the PD by transferring routine administrative duties to MOH to focus limited available resources to technical assistance in the PD in support of the facilities. At a minimum, the finance function should be divided into administration and systems to devote resources to supporting the implementation of the new financial system into the hospitals and polyclinic.

### 7.3 TASK C.10: Human Resource Development in the PD

#### 7.3.1 Description

Improve the skills, teamwork and job performance of Project Directorate managers, consultants, and staff by assisting in the development of a human resource planning/appraisal system and planning the work of its personnel and monitoring employee performance. In coordination with the annual goals, objectives and activities of the PD (the annual implementation plan), assist with the creation and implementation of a training plan for skills development in technical, managerial and training areas.

#### 7.3.2 Accomplishments

Utilizing the services of Dr. Constance Savage, Cambridge planned and conducted a "training of trainers" (TOT) program in February 1994. A total of 32 participants attended the 3-day workshop.

Because of other priorities during fourth quarter 1993, USAID relieved Cambridge of the responsibility for completing a human resource needs assessment and training plan for PD managers, selected consultants, and key staff. This action occurred at the height of the differences between Mr. Sanderson and the Project Director. To minimize their interaction, the Project Director instructed Cambridge to focus its work on the facilities not the PD. With more than enough work to be done in the facilities, USAID agreed.

Additional work included guidance to the Project Director with staff planning and role definition to enhance job clarity and job performance. Also, Cambridge assisted the PD by providing training in job description preparation, developing scopes of work and establishing routine reporting.

#### 7.3.3 Methods of Work

Prior to traveling to Egypt, Dr. Savage prepared a draft agenda for the TOT workshop. While in Egypt, her work process was to:

- Review the draft agenda with Cambridge, PD and USAID personnel;
- Conduct meetings with PD Training Department Manager to finalize agenda, content and materials for the workshop;
- Prepare final materials; and
- Conduct the three-day workshop.

The first two days of the workshop were devoted to the adult learning model, learning styles, types of training, program design and presentation skills. Day three was devoted to mini-presentations by the participants so that they could practice the materials presented in days one and two. Half of the participants chose to have their presentations video-taped. Tapes were viewed by the participants to critique the presentations.

General assistance was provided by Cambridge to Project Deputies and USAID in establishing work plans and support materials for PD departments.

#### **7.3.4 Recommendations**

The PD needs considerable assistance in developing its personnel, but in particular the following three areas:

- Selection and use of appropriate training methods;
- Design and development of training programs; and
- Every position should have a job description.

#### **7.4 TASK C.14: CRHP Newsletter**

##### **7.4.1 Description**

Assist the PD with a quarterly newsletter for Component One of the Cost Recovery for Health Program. The newsletter audience shall be key Ministry of Health personnel, health industry leaders, Governors and other key government officials, the staffs of the pilot facilities, HIO and CCO leaders, USAID staff, and key business and community leaders. PD's Marketing Department shall be responsible for the development, production and distribution of the newsletter. Between 2500 and 3000 copies will be produced quarterly.

##### **7.4.2 Accomplishments**

Cambridge personnel provided direct assistance to the preparation of all three newsletters -- April 1993, July 1994 and March 1995. Cambridge's role has included contributing articles and training PD staff in the logistics (layout, budgeting, selection of printer) of producing a newsletter.

##### **7.4.3 Methods of Work**

The Newsletter Editorial Review Board (NERB) would meet periodically to discuss Project progress and possible content for the next newsletter. This information would be reviewed with the Project Director for his approval before proceeding. With his approval, the NERB would make writing assignments and establish a schedule.

#### 7.4.4 Recommendations

Newsletters represent a valuable tool for communicating Project progress and plans while serving as a visual reminder of the Project and people associated with it. More newsletters should have been produced as they were always well received. In the future, more attention should be placed on the importance of newsletters as a means of disseminating Project information.

#### 7.5 TASK E: Develop MOH Hospital Survey Instrument

##### 7.5.1 Description

Develop a survey instrument that provides information on MOH hospitals and polyclinics to enable a reasonable determination of success for the Cost Recovery conversion of each facility. Analyze baseline data from existing CRHP facilities and based on experience and industry standards, identify other operating indicators and factors (to add to the baseline data) to create a facility profile. Develop conversion success criteria and a ranking measurement to identify the facilities which represent the best chance for conversion success.

##### 7.5.2 Accomplishments

Cambridge completed the required contract deliverables of a facility survey instrument, conversion success criteria and ranking measurements. The system will utilize a two-step assessment process. The presurvey questionnaire, which is a "preliminary qualification" process, would be administered to all MOH hospitals and polyclinics. If the results are positive, the hospital or polyclinic would be included in the more extensive on-site assessment.

##### 7.5.3 Methods of Work

A variety of interview, questionnaire, survey and review techniques were utilized in performing this task. Specific steps included:

- Reviewed Facility Assessment Instrument developed under HFS and existing facility baseline data available in PD's Monitoring and Evaluation department;
- Interviewed Joint Commission on Accreditation of Health Care Organizations (JCAHO) to obtain survey materials, including guidelines for evaluating, scoring and reporting;
- Developed presurvey questionnaire to collect baseline data (i.e., services, staffing, number of beds, equipment, utilization, budget) about each MOH facility and its personnel;

- Using U.S. accreditation standards as a guide, developed an evaluation mechanism to determine the compliance of each service or department against the standard;
- Field tested the presurvey questionnaire at Medinat Nasr Hospital, a 600-bed HIO hospital, then enhanced the presurvey questionnaire based on the outcome of field testing;
- Developed the on-site assessment survey instrument;
- Developed the format of the "hospital survey report"; and
- Developed a plan for implementing the presurvey questionnaire and on-site assessment survey.

#### 7.5.4 Recommendations

Considering there are 260 MOH facilities and the amount of data to be collected and analyzed, implementation of this survey instrument will be a major effort. Specific recommendations include:

- Survey instruments and instructions should be translated into Arabic.
- An MOH agency should be identified to be responsible for administering the surveys and reporting the results. It should also be responsible for deciding which facilities are selected for Phase "B". It is suggested that the monitoring and evaluation function under Dr. Hassan ElKalla may be an appropriate location.
- As documented in the Task E report, a computer application should be implemented to accept, analyze and report the large volume of data collected from the surveys. This system should be operational by the time the presurvey questionnaires are administered.
- Survey team members should be identified in each Governorate based on an agreed team configuration (i.e., physician, engineer, nurse, etc.) and selected based on an agreed upon set of criteria.
- Teams should be trained before they're sent into the field to administer any surveys.
- Surveys should be administered at the Governorate level to provide efficiency.
- The selection of Phase "B" facilities should be based on the use of this survey.

## **7.6 MOD 4, Task 2: Assessment of PD's 1995 AIP**

### **7.6.1 Description**

The purpose of this effort was to assist the PD with an assessment of the first six months (January - June) progress relative to the 1995 Annual Implementation Plan (AIP). A second part of this effort was to assist the PD in identifying key implementation priorities, issues and problems to be addressed over the remainder (July - December) of the year.

### **7.6.2 Accomplishments**

Messrs. Charles Gustafson and Mar-Jan Ostrowski assisted the PD in reviewing the status of each department's major objectives under the AIP. Following this review, work priorities for the final six months of the 1995 plan were determined by the responsible department heads. The results of this review were documented by revising the major objectives charts in the 1995 plan. Copies of these changes were provided to the Project Directorate and to USAID.

### **7.6.3 Methods of Work**

Mr. Gustafson met with Dr. Afaf Othmaan, Sr. Deputy Project Director and Mr. Rich Ainsworth at USAID to clarify the work to be performed and the end product to be produced. Mr. Gustafson explained to both of them the approach that he was intended to follow in performing the work. It was agreed that only the major objectives and selected sub-objectives (time did not permit inclusion of all sub-objectives and task/activities) of the departmental plans would be reviewed. Forms were designed for data collection. Department interview schedules were established. Interviews were conducted with each department head to review progress, identify problems and establish priorities. Copies of the collected data were distributed to Dr. Afaf, USAID and Ms. Iman ElAasar, PD's MIS Manager. Ms. ElAasar is responsible for ensuring that the data is entered into the Project Management software and revised AIP reports are printed and submitted to USAID and the PD department heads.

### **7.6.4 Recommendations**

The project, under Dr. Afaf Othmaan's leadership, needs to now follow-up and complete the 1995 AIP plan review for all sections including the tasks and task activities. The AIP should be reviewed within the first few weeks by the new contractor. Drs. Mohamed Edrees and Afaf Othmaan should work closely with the new contractor in ensuring that their technical approach fits within the AIP or the AIP is revised to fit the new technical approach.

## **7.7 MOD 4, Task 4: Prepare Weekly Work Schedules**

### **7.7.1 Description**

Because of the short duration of Mod Four, USAID wanted to understand how the proposed staffing would be assigned to complete the other three tasks. For that reason, this task prepared a work schedule for each person for each week of the extension.

### **7.7.2 Accomplishments**

The work schedules were provided to USAID and approval was received.

### **7.7.3 Methods of Work**

Mr. Gustafson designed a schedule format which showed the estimated number of days to be devoted to each task by each person and when the work would occur. With USAID's approval of the format, Mr. Gustafson met with each Cambridge person to design his or her schedule. The final schedules were entered into the computer and a final report was produced and delivered to USAID and the PD.

### **7.7.4 Problems**

None.

### **7.7.5 Recommendations**

None.

## **8. PURPOSE OF TASKS: INCREASE AWARENESS OF HEALTH SECTOR LEADERS IN EGYPT TO THE CURRENT STATUS OF HEALTH CARE AND FINANCING ALTERNATIVES**

### **8.1 TASK B.1: Conduct an Assessment and Analysis of Health Sector in Egypt**

#### **8.1.1 Description**

As a backdrop to future Project work in health care financing, this task is to conduct a review and write a report of health care financing in Egypt.

#### **8.1.2 Accomplishments**

The study was completed and report issued in October 1993. This task was performed by Ms. Louise Kemprecos, a consultant to Cambridge. As background material, a copy of the report was distributed to each participant attending the Social Financing of Health Care Conference. The study was quite thorough and represents a comprehensive review of health care coverage, services, prices and costs. The report provides information on a range of health financing options and identifies areas where additional data is needed to support cost-effective decisions.

### 8.1.3 Methods of Work

The approach to conducting this study was:

- Reviewed previous Project materials and agree on an outline of the report;
- Developed data collection forms to gather information concerning a description of the health sector, services provided, and health financing alternatives;
- Conducted interviews with HIO, CCO, CAPMAS, Suez Canal University, EJMDA, Cabinet Information and Decision Support Center personnel and others; and
- Prepared draft report and incorporated comments into the final report.

### 8.1.4 Recommendations

The study concludes with a series of recommendations. Rather than repeat them here, see pages 74-78 of Health Care Financing in Egypt. Most of these recommendations have not been followed, and remain valid.

## 8.2 TASK C.16.b: Social Financing of Health Care Services Conference

### 8.2.1 Description

Organize and coordinate a conference for the health care leaders in Egypt to expose them to the approaches and experiences of other countries in financing health care services.

### 8.2.2 Accomplishments

Both contract deliverables -- the conference and conference proceedings -- were accomplished.

Prior to the conference, an abstract was prepared to overview the speakers and the content of their papers. The abstract was distributed to each participant at conference registration.

"The Social Financing of Health Care Services Conference" was conducted in Cairo on January 9 - 12, 1994. Approximately 100 participants attended the conference held at the Nile Hilton Hotel. Speakers representing eight countries (Canada, Chile, Egypt, Indonesia, Mexico, Morocco, Philippines and the United States) presented their health care systems' experiences. Additionally, personnel participated in breakout group discussions on a variety of topics including: payment mechanisms; regulating demand for services -- equity and cost containment issues; financing -- sources of funds; solutions for rural populations; and approaches to quality assurance and quality improvement.

After the conference, a formal booklet of proceedings was prepared. In total, 150 copies were printed and sent to participants, MOH, USAID, speakers, and the PD. Whereas the abstract contained an overview of speakers' papers, the proceeding contained the full text of each paper.

#### 8.2.3 **Methods of Work**

Planning and coordinating the conference was a team effort between Cambridge's headquarters office and our office in Cairo. Cairo was responsible for identifying countries to be represented, obtaining MOH and USAID agreement on the agenda, preparing conference brochures, and handling all logistics with the hotel. Headquarters was responsible for all aspects of working with conference speakers -- obtaining commitments and draft copies of papers, arranging travel, and post-conference accounting for expenses and per diem.

The proceedings were prepared by our staff in Cairo based on the materials and information gathered during the conference.

#### 8.2.4 **Problems**

After reading the following problems one might think the conference was confounded with problems and, therefore, not worthwhile. It was a success, but such an effort does not occur without its anxious moments as categorized below.

**Communication** - It was many months into planning before the theme and objectives were agreed upon. Obtaining consensus on numerous conference matters was not easy as it required contacting personnel in USAID, MOH/PD and Cambridge.

**Speakers** - Speakers generally did not follow any instructions they were given concerning required materials, format and due dates. As a result, the final packaging of the conference was unnecessarily chaotic. For example, presentations were to include pros, cons and lessons learned of each country's health care financing system. In reality, some failed to do so and instead used it as a public relations forum. Due dates (for submission of material) were ignored.

**Participants** - There was no final list approved by USAID and MOH. After USAID approved the list, MOH deleted some people and added others. Some personnel arrived at the conference with hand-printed invitations from MOH; it was later learned that some of these people were not even in the health field. Unexpected participants impacted availability of seating and meals.

**Publicity** - Participants requested conference information that they could include in their newsletters or newspapers, but nothing had been prepared.

**Materials** - Although we thought plenty (150) of abstracts had been printed, they were all gone on the first night. Some speakers gave us poor (several generation old) copies of their papers and provided no disk or incompatible software -- although clear instructions had been given.

**Moderators** - The use of several moderators was not effective. Some did not bother to show-up at all while others were ill-prepared. As a result, continuity and quality suffered.

#### 8.2.5 Recommendations

Future conferences would benefit from the following:

**Communication** - The conference theme and objectives should be written early and approved (signed) by all parties before work proceeds. A "conference committee" should be formed with one person from each organization.

**Speakers** - Instructions to speakers should state that their failure to follow instructions will result in a loss of compensation. This should be enforced. Plan social activities in advance.

**Participants** - A single list of participants should be approved by USAID and MOH. Personnel not on the list should be turned away at the door.

**Publicity** - Prepare a press release of the conference and have copies of it available at the conference.

**Materials** - Print extra abstracts as the incremental cost is minor. Enforce instructions to speakers -- reduce or eliminate their compensation if they fail to provide papers in the required format and of good quality.

**Moderators** - Use one moderator who is well prepared and knowledgeable of the subject matter.

### 8.3 TASK C.16.c: Health Care Financing Status in Pilot Facilities

#### 8.3.1 Description

Collect data on health financing mechanisms currently in use by patients at the pilot facilities. More specifically, collect baseline data regarding the number of patients covered fully or partly by employer contracts, HIO insurance, private insurance or other types of insurance or financial schemes (if available).

#### 8.3.2 Accomplishments

A report detailing the source of payments for medical services delivered in the five pilot facilities. Mr. Mar-Jan Ostrowski was responsible for coordinating and completing this task.

### 8.3.3 Methods of Work

The approach followed in completing this work involved:

- Reviewing the scope of work and discussing the task with the Chief of Party and USAID;
- Developing data collection instruments and instructions for use in the facilities;
- Meeting with the hospital or polyclinic director in each facility and their selected staff to discuss the purpose of the study and the data collection instruments;
- Collecting the data in the facilities;
- Analyzing the data and extrapolating it into 12-month projections; and
- Writing the report.

### 8.3.4 Recommendations

Embaba, May 15 and Shark ElMadina Hospitals provide 98, 90 and 83 percent respectively free service according to the study. Cost recovery interventions including implementing marketing strategies to increase not only private pay but also third party payment must be introduced to reduce the amount of free care delivered.

## 9. PURPOSE OF TASKS: PREPARE SUEZ CANAL UNIVERSITY FOR POSSIBLE ENTRY INTO A MANAGED CARE HEALTH SYSTEM

### 9.1 TASK D.1: Plan and Conduct Seminar in Managed Care

#### 9.1.1 Description

Educate the leaders of the Faculty of Medicine, Suez Canal University (FOM SCU) concerning the concepts, principles and alternative forms of managed care. To that end, organize and conduct a three-day seminar on managed care to be held at SCU. The seminar shall address alternative models (HMO, PPO, IPA, PHO) of managed care and their advantages and disadvantages for SCU considering their future plans as well as the impact of legislation and the financing of health care in Egypt. Estimated attendance is 20 - 25 of the leaders at FOM SCU.

#### 9.1.2 Accomplishments

Contract deliverables included a three-day seminar on managed care and a report of seminar proceedings, conclusions and recommendations. Both were accomplished. The seminar was conducted March 28-30, 1994.

### 9.1.3 Methods of Work

Two consultants, Messrs. Leo McGarry and John Atkins, prepared and conducted the three-day seminar. The process entailed some preparation in the U.S., a review of these materials and discussions in Egypt, preparation of materials for use in the seminar and conducting the actual seminar itself. Specific steps included:

- Reviewed Project materials and prepared introductory managed care materials before departing U.S.;
- Met with Chief of Party, USAID and SCU leaders to discuss the proposed content of the seminar;
- Met with SCU personnel for a week prior to the seminar to understand the status of health care within the SCU system, determining the specific needs to be addressed during the seminar, establishing the format of the seminar (single group and/or break-out groups sessions) and preparing the content of the seminar and handout materials;
- Revised and clarified materials, as needed, in presenting the seminar;
- Recorded discussion points, issues, and recommendations raised throughout the seminar; and
- Prepared and issued Seminar Proceedings to document the seminar content as well as findings, issues, and conclusions drawn from seminar discussions.

### 9.1.4 Recommendations

All in all, the seminar was a success. Assuming USAID deems managed care feasible at SCU, additional education will be needed to support the implementation process. Personnel who attended the seminar have expressed the need for more education in managed care.

## 9.2 TASK D.2: Review Financial System at FOM SCU Hospital

### 9.2.1 Description

A review of the hospital's financial system shall be conducted with particular emphasis on the adequacy of the fee schedule. A report shall be prepared documenting the work performed and making appropriate recommendations.

### 9.2.2 Accomplishments

The required (by contract) report was prepared describing the adequacy of the current financial system and recommending changes to the fee schedule, and other feasible improvements.

### 9.2.3 Methods of Work

Most of the work conducted on this task was performed by Mr. Robert Puglisi, a consultant to Cambridge. As background for the assignment, he participated in the Task 9.1 Seminar and immediately began work on this task. The review encompassed the financial system, finance personnel, and the interaction of medical records with the financial system. Specific actions included:

- Reviewed the hospital's financial system to include revenues, expenses, reporting and current fee schedule;
- Interviewed the Director General of the hospital, acting Chief Administrator, Finance Manager, Medical Records Manager, and key members of their staffs;
- Reviewed required government controls and their presence or absence in the system;
- Compared and analyzed the fee schedules of HIO and CCO hospitals against SCU's fee schedule;
- Traced transactions through the system to verify their treatment; and
- Reviewed reports and the use of their information by management.

### 9.2.4 Recommendations

The report included the following recommendations which remain valid:

- Hire a skilled finance manager;
- Establish departmental cost centers and an operating business plan including revenue and expense budget;
- Implement a financial system to support both a fee-for-service and managed care system to include unit cost of services, revenues and expenses by cost center and comparison to budget, cost allocation methodology, utilization of services, revenues and costs per member per month, and monitoring physician prescription patterns;
- Adopt the fee schedule of Ain Shams University Hospital until a thorough cost analysis can be conducted;
- Obtain a waiver (from GOE) for the accounting system, and work with the Ministries of Education and Finance to define a single system that will meet their requirements; and

- Consider acquiring and implementing a modular turn-key computer information system for the hospital/managed care system.

### 9.3 TASK D.3: Conduct a Feasibility Study

#### 9.3.1 Description

Explore the legal, organizational, market, health care and financial feasibility of managed care at SCU. A team of specialists shall conduct a study to analyze the feasibility of managed care, and to make general and specific recommendations in the optimal managed care plan/program design concerning legal/organizational issues, marketing mix, health services delivery system, and financial issues.

#### 9.3.2 Accomplishments

This study was conducted by Dr. Michael Wood (team leader and marketing), Dr. Gordon Brown (service delivery), Ms. Margaret Marchak, Esq. (legal) and Mr. Carroll McNeely (finance).

#### 9.3.3 Methods of Work

The process varied somewhat in each of the four areas. For example, much of the legal work was performed by researching the legislation available and determining its relevance to this task. Finance work mostly involved working closely with SCU's finance department and reviewing HIO financial data. Marketing and service delivery required field visits to neighboring employers to understand how their health services are currently delivered, satisfaction with those services, cost to employers and potential desire to change or consider another alternative service provider. In general, the following process was followed:

- Each team member gathered relevant materials prior to departing the U.S.;
- Chief of Party provided Project overview and discussed the task with the team;
- Team traveled to SCU where they participated in introductory meeting with key leaders of the Faculty of Medicine and the hospital to discuss the scope of the task;
- Individual team members worked with their counterparts, and conducted interviews to gather data for the report;
- Each person wrote his/her section of the report and submitted it to Dr. Wood for consolidation into the report; and
- Draft report was distributed to USAID and SCU with their feedback incorporated into the final report.

#### 9.3.4 Recommendations

The study concluded that a HMO was feasible, but pointed out the significant work required. Specific recommendations include:

- The HMO would be structured as a Unit of Special Nature;
- Avoid incorporating the HMO under the normal insurance laws of Egypt, and attempt to license it as a medical institution under Law 51 of 1981;
- Develop a prepaid Group Practice model plan which would contract on a capitated basis with the HMO;
- Obtain HIO's commitment to assign another 30,000 beneficiaries to receive services from SCU; and
- Improve the quality of management and management systems to better support business and clinical functions.

## 10. PROJECT STAFFING

As expected, staffing throughout the Project was predominantly technical local hires rather than U.S. expatriates. The contract and actual staffing summary (on the next page) supports this point. The contract and actual staffing appear on the left and right side of the page respectively. The contract staffing for the modifications was in the form of an adjustment based on the original contract, previous modifications and actual effort expended.

During the contract period, most staffing involved local (Egyptian) personnel. Of the total 797 months of contracted effort, 490 months or 61.5% was worked by Egyptian personnel. Technical work consumed 539 months or 67.7 percent of the total months worked.

A number of changes in actual staffing occurred between the original contract and Mod Two. In the original contract, two resident advisors were identified. The Logistics Advisor departed Egypt less than two months into his assignment and was not replaced. The Chief-of-Party (COP), Mr. Jeff Sanderson was changed after the original contract period (15 months). Differences between Mr. Sanderson and the Project Director impaired their ability to work together and Cambridge replaced Mr. Sanderson with Mr. Charles Gustafson as the new COP. In Modification Two, it was decided that more advisors were needed. In addition to the Chief-of-Party, advisors were added for Finance, Personnel and Training. The large decrease in full-time Egyptian personnel resulted from the transfer of numerous PD personnel including all department heads from Cambridge's payroll to the PD payroll. Increased staffing in all other categories was the result of continuing tasks from the original contract (into Mod Two) plus significant new tasks.

While Modification Three was a no cost extension, staffing remained very aggressive in support of the re-opening of Kafr Dawar and support to the new Boards of Trustees and medical staff organization. In Modification Four, staffing was limited to provide on-going skeletal support to the Project until the new contractor is mobilized. All advisors returned to the U.S. except for the Chief of Party. The only U.S. consultants retained were those already living in Egypt, and their effort was limited to completing their assignments.

CAMBRIDGE CONSULTING CORPORATION  
 LEVEL OF EFFORT WORKSHEET (IN MONTHS)  
 CONTRACT NUMBER: 263-0170-C-00-3017-00  
 FOR THE PERIOD: 11/01/92 - 07/31/95

AS OF: JUNE 1995

STAFF CATEGORY	----- C O N T R A C T -----					----- A C T U A L -----					REMAINING CONTRACT MONTHS
	ORIGINAL CONTRACT 11/01/92 - 01/31/94	MOD # 2 02/01/94 - 02/28/95	MOD # 3 03/01/95 - 05/31/95	MOD # 4 06/01/95 - 07/31/95	TOTAL # OF MONTHS	ORIGINAL CONTRACT 11/01/92 - 01/31/94	MOD # 2 02/01/94 - 02/28/95	MOD # 3 03/01/95 - 05/31/95	MOD # 4 06/01/95 - 07/31/95	TOTAL # OF MONTHS	
<b>US PERSONNEL</b>											
RESIDENT ADVISORS	30.00	28.42	14.66	0.31	73.39	15.56	43.92	12.16	2.19	73.83	(0.44)
HOME OFFICE STAFF	41.00	60.57	21.36	13.91	136.84	53.38	63.60	15.00	4.00	135.98	0.86
SHORT-TERM EXPATRIATES	40.00	38.31	23.30	(5.06)	96.55	26.62	46.85	23.81	0.00	97.28	(0.73)
<b>EGYPTIAN PERSONNEL</b>											
LOCAL ADMINISTRATION	23.00	47.71	40.81	9.41	120.93	21.57	61.27	29.82	13.06	125.72	(4.79)
FULL-TIME	255.00	(79.75)	(51.62)	5.12	128.75	106.85	11.36	0.00	2.27	120.48	8.27
SHORT-TERM	163.00	29.42	29.30	18.75	240.47	79.35	135.27	19.55	9.37	243.54	(3.07)
<b>TOTAL LEVEL OF EFFORT</b>	<b>552.00</b>	<b>124.68</b>	<b>77.81</b>	<b>42.44</b>	<b>796.93</b>	<b>303.33</b>	<b>362.27</b>	<b>100.34</b>	<b>30.89</b>	<b>796.83</b>	<b>0.10</b>

\* Actual for June, estimate for July.

50

## 11. BUDGET/EXPENSE SUMMARY

The status of actual expenses versus budget is summarized on the next page. The format provides a review of each major line item showing the budget and the actual expenses by year along with the "burn rate" which is the percent of budget spent during the year. For example, the burn rate for direct salaries was 27 and 44 percent for 1993 and 1994 respectively.

In general, 1994 was an extremely busy year as indicated by 47 percent of the entire project budget being expended. The efforts of 1994 carried over through May, 1995 as expenses for that five-month period nearly equaled all of 1993. A year-to-year comparison of selected line items explains some of the major changes.

Starting with Mod Two in 1994, there was a recognition that significantly more resources, both local and expatriate, were needed to support the desired project activities. The number of resident advisors increased from one to four. The level of effort for consultants increased significantly as well. Travel and related indirect costs increased proportionately. The issuance of Ministerial Decree 304 in September 1994 provided the impetus for the facilities to move ahead more aggressively with implementation. For example, two full-time consultants worked for six months in support of implementing independent Boards of Trustees and developing medical staffs in the facilities. Commodities increased significantly, with nearly the entire project budget spent in 1994 and early 1995. The timing of these expenses is attributed to funding resource center libraries and computer equipment and software for the five facilities, small purchases of medical equipment from Cambridge's budget rather than using letters of credit, and three vans for contractor and project use.

The estimated expenses for the period June 1 - July 31, 1995 represent the Mod Four budget plus fixed fee withheld (fee amount above 85 % of total fee) from billings. Travel and per diem exceeded budget because the actual expenses for April and May 1995 totaled nearly \$15,000 more than was estimated when Mod Four was submitted.

CAMBRIDGE CONSULTING CORPORATION  
 CONTRACT No. 263-0170-C-00-3017-00  
 BUDGET AND EXPENSE SUMMARY  
 CONTRACT PERIOD 10/21/92 - 07/31/95

LINE ITEM	CONTRACT BUDGET *	ACTUAL EXPENSES										Total Expenses **	Estimated Balance 07/31/95	
		10/21/92 - 12/31/92	1993		1994		01/01/95 - 05/31/95		Estimated 06/01/95 - 07/31/95					
Direct Salaries	\$1,046,397	\$29,142	3%	\$287,511	27%	\$455,630	44%	\$226,744	22%	\$46,090	4%	\$1,045,117	100%	\$1,280
Fringe Benefits	393,154	9,779	2%	96,304	24%	179,113	46%	66,586	17%	18,836	5%	370,617	94%	22,537
Overhead	326,177	13,186	4%	130,036	40%	158,686	49%	(16,808)	-5%	16,482	5%	301,583	92%	24,594
Travel and Per Diem	597,355	27,131	5%	147,991	25%	284,706	48%	124,215	21%	26,015	4%	610,058	102%	(12,703)
Other Direct Costs	412,215	11,802	3%	96,353	23%	183,751	45%	90,217	22%	19,037	5%	401,160	97%	11,055
Consultants	1,009,052	16,677	2%	236,901	23%	452,724	45%	278,193	28%	23,686	2%	1,008,181	100%	871
Subcontracts/Training	545,220	0	0%	28,642	5%	314,186	58%	133,615	25%	0	0%	476,442	87%	68,778
Commodities	525,393	14,143	3%	12,815	2%	249,199	47%	249,385	47%	0	0%	525,542	100%	(149)
General & Admin.	769,334	20,460	3%	174,037	23%	387,259	50%	77,097	10%	25,695	3%	684,548	89%	84,786
Fixed Fee	448,630	11,386	3%	96,847	22%	213,220	48%	48,697	11%	78,479	17%	448,630	100%	0
<b>TOTALS</b>	<b>\$6,072,927</b>	<b>\$153,706</b>	<b>3%</b>	<b>\$1,307,437</b>	<b>22%</b>	<b>\$2,878,473</b>	<b>47%</b>	<b>\$1,277,941</b>	<b>21%</b>	<b>\$254,320</b>	<b>4%</b>	<b>\$5,871,877</b>	<b>97%</b>	<b>\$201,050</b>

\* Includes proposed budget for Modification Four. L.E. 214,998.70 is included in "subcontracts/training" item.

\*\* This total may not equal the sum of annual % due to rounding.

62

## 12. CONCLUSION

This section provides some final thoughts both in terms of Cambridge's past experience and the future of the Project. While this report has identified and discussed many problems and provided many recommendations for improvement, it has also discussed many accomplishments. Sometimes it is difficult to remember the achievements when so much work remains. Yet it is healthy and appropriate to acknowledge some of the major progress achieved over the past 2 1/2 years:

- New legislation was enacted to facilitate cost recovery in participating MOH hospitals and polyclinics with decrees issued for four of the five facilities and Boards of Trustees formed and operating in the four decreed facilities;
- Kafr Dawar and Shark El Madina have implemented 14 and 7 management systems respectively with selected systems implemented in the other three facilities;
- Medical staff by-laws have been implemented in the four decreed facilities providing for officership, committees, privileging and other administrative affairs enabling the staff to be self-governing and execute its quality of care responsibilities;
- 4,002 participants from the five facilities have attended 485 courses/training sessions including on-the-job, formal classroom, and participant training in the United States;
- Nearly 1,100 items of new bio-medical equipment were procured for the five facilities thereby improving the quality of services available to patients;
- Computer automation plans were developed for both the facilities and PD and two priority computer applications (DSME and BEIPM) were implemented in Kafr Dawar and Shark ElMadina;
- An international conference was conducted in Cairo for the key health care leaders in Egypt to review the social financing of health care systems of eight other countries; and
- A managed care workshop and HMO feasibility study was conducted for Suez Canal University.

Cambridge's COPs have always had their office located inside the Project Directorate and all Cambridge personnel have worked closely with their PD counterparts, as assigned. As a result of this close working relationship, Cambridge has been affected by certain problems in the PD. For the future progress of the project, solutions should be found to the following problems which Cambridge has experienced:

- The evolution of the Project Directorate has resulted in a mini-bureaucracy within a larger bureaucracy, the Ministry of Health. The Project Director's span of control is too large. His MOH responsibilities consume almost all of his time leaving almost no time for Cost Recovery -- this is neither fair to the Project Director or the Project. Additionally, Drs. Mohamed Edrees and Afaf Othmaan do not have the necessary authority to manage all aspects of the project. Consequently planning, organizing and directing activities to accomplish assignments are impaired.
- Aside from its own, Cambridge had no control over Project Directorate personnel and resources. As a result, PD personnel were often assigned to activities unrelated to Cambridge's scope of work and unrelated to Cost Recovery.
- Absence of some PD counterparts to work with Cambridge advisors and consultants meant these people were greatly slowed in accomplishing their work, and sustainability of their effort is unlikely.
- In general, some PD personnel are not willing or able to spend much time in the hospitals and polyclinics particularly outside of Cairo. Their reluctance to be in the facilities placed a much greater burden on Cambridge personnel, and hampers sustainability.

The roles of USAID and the Project Steering Committee could have been more effective. USAID has had difficulty in influencing solutions to Project problems and issues which particularly impacted Cambridge. Examples include a safe and sufficient amount of work space, assignment of more MOH resources to the PD and PD counterparts to work with resident advisors and consultants, and availability of vehicles for contractor use. The Project Steering Committee has been inactive, and therefore of no benefit to the Project.

As Cambridge's work is finished, the following thoughts are offered for consideration by the Project.

***What is Cost Recovery?***

After four plus years into this Project, there is no shared understanding of "what is cost recovery". The process and outcomes need to be agreed upon (by USAID, MOH, PD and existing facility directors) and disseminated by the PD's IEC function. It should be discussed as part of the opening remarks and background of every formal project meeting and training session for the next year.

### ***Why Aren't the Facilities Further Along with Cost Recovery?***

There is no simple answer to this question. The conventional thinking is the facilities should have progressed more than they have. This is a complex project and there is no quick fix. Creating and implementing change in Egypt is particularly difficult. With this type of project in this environment, you learn what works and what doesn't. Cambridge believes most of the pilot facilities can be successful in raising their quality of service and increasing revenues -- see discussion of Embaba and Kafr Dawar below. At this point, what is needed most are dedicated contractor personnel who are knowledgeable in hospital management, operations and administration to work inside the facilities, everyday, side-by-side with facility personnel to help them implement improved systems and management practices.

After selection of the phase "B" facilities and based on the outcome of an assessment, an implementation conversion plan should be developed identifying the interventions and systems to improve the financial condition of each facility. The conventional wisdom has been that the facilities all need the same systems and interventions. This is true to a point. At the same time, each facility is unique in terms of its market, management, strengths and weaknesses. Therefore, a single "cookie cutter" approach is not the best solution for all facilities.

### ***Is Cost Recovery Replicable by MOH?***

At this point, the answer is clearly no and it may never be replicable unless certain changes are made over the coming years. Existing pilot facilities continue to require intensive technical assistance to implement the required changes to improve their services. Only through such intensive on-site assistance will the local hospital team modify their thinking and behavior. If cost recovery is to be sustainable, MOH (rather directly or indirectly through the PD) needs to gradually assume responsibility for the technical assistance to the facilities. This institutionalization will be a major effort for the new contractor.

Sustainability is not just a function of the PD, but also the role of the Government of Egypt in subsidizing care for those unable to pay, and policies to be imposed on decreed facilities to provide free beds, emergency care and specialized services. Unless a government subsidy is provided to support these policy decisions, facility-generated revenues will not be sufficient to cover the cost of these services. The market niche that MOH facilities are moving toward is the lower socio-economic levels. Patient fees will not sustain quality levels unless a social insurance mechanism is implemented for all citizens -- even then a government subsidy will be required.

### What Do Patients Perceive as Improvements in Quality?

MOH facilities do not have and will likely never have the resources to compete with private sector health care in Egypt. However, MOH facilities can create (and in some respects exceed) a quality of health care approaching that now available from HIO and CCO through an integrated strategy of new management systems, low-cost/no-cost improvements coupled with the availability of medical equipment, basic medical supplies and drugs.

Low-cost and no-cost measures include maintaining a clean hospital; uniforming personnel who are clean and neat; maintaining the new medical equipment; signage; staffing service areas; and smiling at, talking to, caring for and respecting patients.

Services should be targeted to the basic medical needs of the community. A product which is in demand (basic medical services), presented well (low-cost/no-cost improvements) and at an affordable price should be a success. Increased revenues will allow the hospital to stock a reasonable level of basic medical supplies, drugs and provide salary enhancements.

Kafr Dawar and Embaba are good examples of how their quality has improved and revenues as well. Kafr Dawar has implemented the following changes:

- 14 key management systems;
- Medical records and a computerized admission, discharge and transfer system;
- New medical equipment for diagnostic testing;
- Patient reception and escort service within the clinic;
- Clinic appointments and multiple cashier stations to reduce "wait time";
- Uniformed personnel wearing name tags; and
- Adequate supply of drugs and medical supplies.

All of these measures are viewed by patients as "improved quality of care". As a result of these changes, Kafr Dawar's monthly patient revenues have increased dramatically as follows:

	-- Avg. Monthly Revenue --	
	<u>Pharmacy</u>	<u>Total</u>
Prior to CRHP conversion	LE 1,150	LE 12,500
After conversion (May + June)	LE 7,500	LE 35,000

During the week of July 16, 1995 an all-time high of LE 2,500 was collected in a single day. It should be noted that this increase has been achieved without day surgery, endoscopy, special procedures and with limited xray. We can expect further revenue increases once these services are operational.

A patient satisfaction survey was completed at Kafr Dawar the week of July 16, 1995. As this report is being finalized, the final results are not yet available. However, it is the opinion of those who conducted the survey that the results are very positive.

Embaba has implemented the following changes:

- Effective June 1, 1995 service hours were extended to include afternoon and evening clinics;
- Because of incentives, these clinics are fully staffed by senior physicians only;
- Medical and administrative records are operational;
- Service is by appointment; and
- Meet, greet and escort services within the clinic.

All of these improvements are viewed as a better quality of service by the patients. As a result of these changes, Embaba has been able to increase its outpatient visit fee from LE 1.5 to LE 3. The fee was increased from LE 1.5 to LE 5 in June 1995, and there was an immediate decrease in the number of patients. As a result, the fee was reduced to LE 3. As word spread of the improved services, the patient flow is back to the level prior to the increase. Effective June 1, 1995 personnel (physicians, nurses, technicians, etc.) working during the new clinic hours will begin sharing in incentives from the increased revenues. As a result of these improvements, Embaba's revenues are projected to increase from LE 60,000 per month to LE 75,000 starting this month.

# **APPENDIX 1**

## **STATUS OF CONTRACT DELIVERABLES**

DATE: July 31, 1995

**STATUS OF CONTRACT DELIVERABLES**

Page 1

CONTRACTOR: Cambridge Consulting Corporation (MOD 3)

PROJECT: Cost Recovery for Health/MOH

Task No.	Deliverable		Date Due	Method of Documentation	Current Status: Delivered Overdue In Progress	Percent Complete	Date Delivered/ Expected Delivery Date
	No.	Description					
B.2	1	Overall plan for development of financial management system for pilot facilities	5/31/94	PLAN	DELIVERED	100%	12/31/94
B.2	2	Hospital financial management system Policy & Procedure Manual	7/31/94	MANUAL	DELIVERED	100%	12/31/94
B.2	3	Finance training for CRHP and facility financial staffs	on-going	TRAINING	DELIVERED	100%	5/10/95
B.3.a	4	Transitional Personnel System	10/31/94	MANUALS	DELIVERED	100%	5/31/95
B.3.a	5	Wage & salary report	8/31/94	REPORT	DELIVERED	100%	9/30/94
B.3.a	6	Staff planning models for five CRHP Facilities	9/30/94	REPORT	DELIVERED	100%	12/31/94
B.3.b	7	Plan for organizational structure changes/proposed legislative package	3/31/94	DECREE	DELIVERED	100%	8/30/94
B.3.b	8	Select management systems for key hospital departments	7/31/94	REPORT	DELIVERED	100%	5/31/95
B.3.b	9	Organizational Development process	10/31/94	REPORT	DELIVERED	100%	12/1/94
B.3.c	10	Finalize Business Plans & Financial Projections	4/30/94	PLAN	DELIVERED	100%	3/31/95
B.5	11	Integrated information flow design	7/31/94	REPORT	DELIVERED	100%	2/28/95
B.5	12	Two computer applications operating in CRHP facilities	phased over contract period	DISKETTE & REPORT	DELIVERED	100%	3/15/95
B.6.a	13	Updated training needs assessment report for CRHP & 5 facilities	6/30/94	REPORT	DELIVERED	100%	9/30/94

DATE: July 31, 1995

**STATUS OF CONTRACT DELIVERABLES**

Page 2

CONTRACTOR: Cambridge Consulting Corporation (MOD 3)

PROJECT: Cost Recovery for Health/MOH

Task No.	Deliverable		Date Due	Method of Documentation	Current Status: Delivered Overdue In Progress	Percent Complete	Date Delivered/ Expected Delivery Date
	No.	Description					
B.6.b	14	CRHP Training Plan	7/31/94	PLAN	DELIVERED	100%	12/31/94
B.6.c	15	Specialized training to CRHP participants	on-going	TRAINING	DELIVERED	100%	3/31/95
B.6.d	16	Separate program plans for on-the-job training	on-going	PLAN	DELIVERED	100%	6/30/95
B.6.e	17	Cooperative agreement with partnership program	4/15/94	AGREEMENT	DELIVERED	100%	4/15/94
B.6.e	18	Memorandum of Understanding between US & CRHP partners	4/15/94	MEMO	DELIVERED	100%	4/15/94
B.6.e	19	Profile of US partner given to partnership program	2/28/94	REPORT	DELIVERED	100%	2/28/94
B.6.f	20	Assistance to CRHP & facilities in the selection & shipment of training resources center materials	on-going	REPORT/ MATERIALS	DELIVERED	100%	7/4/95
B.7	21	Architectural & Engineering support progress reports	monthly	REPORT	DELIVERED	100%	5/31/95
B.7	22	Participation in MFAR for... Kantara: Embaba:	4/30/94 7/31/94	REPORT REPORT	DELIVERED DELIVERED	100% 100%	4/14/94 7/31/94
B.7	23	Participation in the development and review of construction contracts for... Kantara: Embaba:	4/30/94 7/31/94	REPORT REPORT	DELIVERED DELIVERED	100% 100%	4/30/94 7/31/94
B.8	24	Medical staff "plan of action"	7/31/94	PLAN	DELIVERED	100%	9/30/94
B.8	25	Assist with development of medical staff profile for each CRHP facility	10/31/94	REPORT	DELIVERED	100%	12/31/94
C.9	26	Departmental & individual work plans & updated manual of operational & admin. policies & procedures	on-going	REPORTS	RELIEVED		

10

DATE: July 31, 1995

**STATUS OF CONTRACT DELIVERABLES**

Page 3

CONTRACTOR: Cambridge Consulting Corporation (MOD 3)

PROJECT: Cost Recovery for Health/MOH

Task No.	Deliverable		Date Due	Method of Documentation	Current Status: Delivered Overdue In Progress	Percent Complete	Date Delivered/ Expected Delivery Date
	No.	Description					
C.10	27	Human resource needs assessment & training plan for PD managers, selected consultants & key staff	on-going	REPORTS	DELETED		
C.10	28	Presentation of a "training of trainers" program	2/28/94	REPORT	DELIVERED	100%	2/15/94
C.14	29	Technical input to the CRHP promotional and informational newsletter (issue dates)	3/15, 6/15, 9/15, 12/15/94	TECHNICAL NOTES	DELIVERED	100%	6/94
C.15	30A	Procurement of all biomedical equipment within approved equipment lists	9/30/94	REPORT	DELIVERED	100%	6/27/95
C.15	30B	Shipment and/or storage of all biomedical equipment	4/15/95	REPORT	DELIVERED	100%	6/27/95
C.15	30C	Installation and/or storage of all biomedical equipment	2/1/97	REPORT	DELIVERED	100%	6/27/95
C.15	31	Completion of user training	10/31/94	REPORT	DELIVERED	100%	6/27/95
C.15	32	Model training plan which includes user and clinical training requirements for all equipment	4/30/94	PLAN	DELIVERED	100%	8/14/94
C.15	33	Model biomedical equipment maintenance plan	4/30/94	PLAN	DELIVERED	100%	5/17/94
C.15	34	Final list by facility of equipment and accessories delivered, installed and/or stored to each CRHP facility	5/1/95	EQUIPMENT LISTS	DELIVERED	100%	6/27/95
C.16.b	35	Final proceedings report on the conference on social financing of health care services	2/28/94	REPORT	DELIVERED	100%	2/28/94
C.16.c	36	Report on social & health insurance mechanisms utilized by patients at the 5 pilot facilities	7/31/94	REPORT	DELIVERED	100%	12/31/94
D	37	Three-day seminar on managed care at SCU	3/30/94	REPORT	DELIVERED	100%	3/31/94

DATE: July 31, 1995

**STATUS OF CONTRACT DELIVERABLES**

Page 4

CONTRACTOR: Cambridge Consulting Corporation (MOD 3)

PROJECT: Cost Recovery for Health/MOH

Task No.	Deliverable		Date Due	Method of Documentation	Current Status: Delivered Overdue In Progress	Percent Complete	Date Delivered/ Expected Delivery Date
	No.	Description					
D	38	Report of SCU seminar proceedings, conclusions and recommendations	4/20/94	REPORT	DELIVERED	100%	4/28/94
D.2	39	Report & action plan, on current SCU financial system, recommended changes & improvements	6/30/94	PLAN	DELIVERED	100%	9/30/94
D.3	40	Draft SCU feasibility report	7/31/94	REPORT	DELIVERED	100%	12/10/94
D.3	41	Final SCJ feasibility report	8/31/94	REPORT	DELIVERED	100%	5/12/95
E	42	Facility survey instrument	3/1/95	REPORT	DELIVERED	100%	3/31/95
E	43	Conversion success criteria and ranking measurement	3/15/95	REPORT	DELIVERED	100%	3/15/95
F	44	Monitoring & Evaluation System Review	4/1/95	REPORT	DELIVERED	100%	4/30/95
F	45	Monitoring & Evaluation System Materials	4/30/95	REPORT	DELIVERED	100%	4/30/95
F	46	Monitoring & Evaluation Training	5/15/95	REPORT	DELIVERED	100%	4/30/95

12

DATE: July 6, 1995

**STATUS OF CONTRACT DELIVERABLES**

Page 5

**CONTRACTOR: Cambridge Consulting Corporation (MOD 4)**  
**Contract Extension Status (June 1, 1995 - July 31, 1995)**

**PROJECT: Cost Recovery for Health/MOH**

Task No.	Deliverable		Date Due	Method of Documentation	Current Status: Delivered Overdue In Progress	Percent Complete	Date Delivered/ Expected Delivery Date
	No.	Description					
1	47	Development of an Annual Implementation Plan for Shark El Medina and Kafr El Dawar Facilities	7/31/95	AIP REPORTS	DELIVERED	100%	7/6/95
2	48	Assessment of P.D.'s 1995 Annual Implementation Plan	7/31/95	REPORT	DELIVERED	100%	7/27/95
3		Provide On-Going Technical Assistance to Decreed Facilities	7/31/95	TRAINING	I.P.	75%	7/31/95
4	49	Complete Cambridge Consultant's Weekly Work Schedule for Acceptance by USAID	6/7/95	REPORT	DELIVERED	100%	6/5/95