HFS Technical Note No. 14

Beneficiary Analysis of
Five CRHP Facilities

15 May, El Kantara, Shark El Medina,
Embaba Hospitals and
Kafr El Dawar Polyclinic

By
Eltigani Eltahir Eltigani, Ph.D.
Consultant, Abt Associates Inc.

Marty Makinen, Ph.D.
Abt Associates Inc.

September 1992

Health Financing and Sustainability (HFS) Project

Abt Associates Inc., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, Maryland 20814 USA
Tel: (301) 913-0500 Fax: (301) 652-7791
Telex: 312636

Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor

A.I.D. Contract No. DPE-5974-Z-00-9026-00
ABSTRACT

This report offers a beneficiary analysis of five public-sector health facilities that are targeted in the first phase of the Egypt Cost Recovery for Health Project: Embaba Hospital, in the Giza Governorate; 15 May Hospital, in the Cairo Governorate; El Kantara Gharb Hospital, in the Isamailia Governorate; Kafr El Dawar Polyclinic, in the El Bahira Governorate; and Shark El Medina Hospital, in the Alexandria Governorate. Four of the facilities are currently operating; El Kantara Gharb Hospital is expected to begin operations in October 1992. Profiles of the communities in the catchment areas of the five facilities are presented, as well as information on the currently operating facilities, including staffing, patient visits, common health problems served, and problems impacting the quality of care. Other health facilities in the four catchment areas are also briefly discussed.

The report attributes the decline in out-patient visits at the four currently operating facilities to inefficiency and poor quality of care. Greater autonomy of the management of each facility in the areas of staffing and procurement of medicines and supplies is recommended, as is an improved system of subsidies for indigent patients. It is estimated that 40 to 65 percent of the population served by these facilities may require some form of subsidy. The report concludes by suggesting improvements to the current patient registration system in order to develop reliable profiles of the beneficiary populations and gather data on usage of the health services offered at each facility.
# TABLE OF CONTENTS

EXECUTIVE SUMMARY ........................................ iii

1.0 INTRODUCTION ........................................... 1

2.0 METHODS AND DATA SOURCES .............................. 1

3.0 BRIEF ON EACH HOSPITAL AND CATCHMENT AREA .......... 2
   3.1 EMBABA HOSPITAL (Giza Governorate) .................. 2
      3.1.1 The Community of Giza ............................ 2
      3.1.2 Embaba Hospital ................................. 3
      3.1.3 Other Health Service Facilities in Embaba ........ 3
   3.2 15 MAY HOSPITAL (Cairo Governorate) ................ 3
      3.2.1 The Communities of 15 May and El Tebeen ........ 3
      3.2.2 15 May Hospital .................................. 5
      3.2.3 Other Health Services Facilities in 15 May ...... 6
   3.3 EL KANTARA GHARB HOSPITAL ............................ 6
      3.3.1 El Kantara Gharb and Its Surrounding Communities.. 6
      3.3.2 El Kantara Gharb Hospital ........................ 7
      3.3.3 Other Health Services Facilities in the El Kantara Area .... 7
   3.4 KAFR EL DAWAR POLyclINIC (El Bahira Governorate) .... 9
      3.4.1 The Community of Kafir El Dawar .................. 9
      3.4.2 Kafir El Dawar Polyclinic ........................ 9
      3.4.3 Other Health Service Facilities in Kafir El Dawar Area .... 10
   3.5 SHARK EL MEDINA HOSPITAL (Alexandria Governorate) ..... 11
      3.5.1 The Community of Shark El Medina ................ 11
      3.5.2 Shark El Medina Hospital ........................ 11
      3.5.3 Other Health Facilities in the Shark El Medina Area .... 11

4.0 GENERAL OBSERVATIONS ................................ 12
   4.1 CONSUMER BEHAVIOR ................................... 12
   4.2 DECLINING UTILIZATION OF CRHP FACILITIES ........... 12
   4.3 SOCIAL FINANCING ..................................... 14
   4.4 TREATMENT OF THE POOR ................................ 14

5.0 CONCLUSIONS AND RECOMMENDATIONS ..................... 14
EXECUTIVE SUMMARY

The Egypt Cost Recovery for Health Project

The goal of the Cost Recovery for Health Project (CRHP) is to convert 40 hospitals and 10 polyclinics from entirely government financing to financing shared between government and user payments. The CRHP will suggest ways to renovate and revitalize the facilities in order to raise the quality of care that they provide. The additional resources generated by cost recovery through user payments will be used to sustain the higher-quality care.

The success of this approach is predicated on the ability of the beneficiary populations to pay for the medical services they receive. A beneficiary analysis of the populations served is therefore essential.

Study Objectives

This study provides a beneficiary analysis for five facilities slated to be included in the first phase of the CRHP: Embaba Hospital (Giza Governorate), 15 May Hospital (Cairo Governorate), El Kantara Gharb Hospital (Isamailia Governorate), Kafr El Dawar Polyclinic (El Bahira Governorate), and Shark El Medina Hospital (Alexandria Governorate). Four of these facilities are currently operating; El Kantara Gharb Hospital is expected to begin operations in October 1992.

Methodology

Socioeconomic data on the catchment area populations were drawn from the Egyptian Government's 1986 population census reports and from interviews with governorate personnel and community members. Information on patient utilization of the four currently operating facilities was obtained from reports prepared by the CRHP staff. For three of the facilities, this information was supplemented by interviews with the management and staff. Informal interviews with selected groups of patients, community members, and health providers were also conducted.

Study Findings

The study addresses each of the five facilities in turn, describing the catchment area and, for the four currently operating hospitals, offering information on staffing, patient visits, common health problems served, and problems impacting the quality of care delivered. Other health facilities in each catchment area are also described.

1. Embaba Hospital

Embaba Hospital serves a densely populated urban area that is a 10-minute car ride from downtown Cairo. There is a wide variation in types of employment and in levels of household income.
The Hospital provides both inpatient and outpatient services, the latter charging lower fees from 8:00 to 11:00 AM than from 11:00 to 12:00 AM. It is expected that the majority of the population served by Embaba Hospital could pay for hospital services if aided by social financing systems.

Four public sector hospitals, two private sector hospitals, and two private voluntary organizations compete with Embaba Hospital in this catchment area. A CRHP survey indicated that Embaba Hospital is the most important provider of services in the area.

2. 15 May Hospital

Located 15 miles south of Cairo City in the Cairo Governorate, 15 May Hospital serves the town of 15 May and the adjacent community of El Tebeen. Although the appearance of 15 May Town seems to indicate prosperity and homogeneity, the standard of living varies greatly. Most of the population of El Tebeen is poor. The town’s proximity to the Helwan industrial complex and its crowded housing conditions pose major public health problems for residents.

Although the hospital is relatively new, the physical structure of 15 May Hospital is in need of extensive repair. Another major problem is that this hospital has in essence become a dumping ground for staff who have performed poorly at other facilities. Low staff morale and absenteeism are widespread. As a result, both out-patient visits and admissions to the facility have declined over the past three years.

The quality of care delivered at 15 May Hospital is severely affected by budget misallocations. Seventy-eight percent of the annual budget is spent on wages and salaries, leaving only 22 percent for medicines, supplies, and building and equipment maintenance.

Three public-sector hospitals, a private-sector hospital, two public-sector polyclinics, and several private-sector clinics also serve the 15 May Hospital catchment area.

3. El Kantara Gharb Hospital

When operational, El Kantara Gharb Hospital will serve the trading town of El Kantara Gharb and several small, surrounding villages in Ismailia Governorate. Sixty percent of the catchment area population are farmers, mostly sharecroppers and wage laborers. Fully two-thirds of the population is in the low-income category.

The opening of Suez University Hospital will bring the number of other public-sector hospitals serving the area to three. A company-owned hospital and six public-sector health units are also operating, along with a private hospital, three private clinics, and nine pharmacies.

Many residents of El Kantara Gharb and its surrounding villages choose to travel to Ismailia Town for medical services, which they perceive as superior to those offered in the El Kantara Gharb catchment area.
4. Kafr El Dawar Polyclinic

Kafr El Dawar Polyclinic serves the town of Kafr El Dawar, located 22 kilometers west of Alexandria City. The area's economy is dominated by agricultural and industrial activities. Sixty percent of residents are in the low-income group.

The polyclinic, part of a yet-to-be-completed hospital, is generally well organized and the staff appear to be well motivated. The facility's wide scope of services attracts patients from outside the immediate catchment area.

The revenue generated through user charges covers all the clinic’s non-wage operating cost. Further, non-wage operating expenditures make up 50 percent of the total budget, a much higher percentage than the comparable figures for 15 May Hospital and Shark El Medina Hospital.

Also serving the catchment area are one public-sector hospital, a health insurance organization, a company hospital, two small private hospitals, two private polyclinics, and some 200 to 300 private clinics.

5. Shark El Medina Hospital

The catchment area for Shark El Medina Hospital is the El Montazah section of Alexandria City, a resort area. Most of the hospital's patients come from other parts of Alexandria and surrounding villages. Forty percent of the resident population is low income.

Shark El Medina Hospital is well patronized, mainly by women and children, as is the case at the other facilities. Seventy percent of the budget goes toward wages and salaries. The revenue generated by patient charges during 1991/92 represented 37 percent of the non-wage operating budget.

Two other public-sector hospitals and 16 private hospitals also operate in the catchment area.

General Observations

Patients’ major complaints about the facilities are that physicians spend insufficient time with them, waiting periods are long, physicians are not always available during regular service hours, medical services are not coordinated, and hours of operation are inconvenient.

Most patients pay for medical treatment on an out of pocket basis, primarily because four of the five facilities do not have contracts with Health Insurance Organization (HIO) companies. In addition, health insurance benefits provided by public and private sector employers rarely cover the employee’s dependents; those which do often use facilities which are inconvenient for the family to visit. Lastly, even those patients who should be receiving ‘free’ care, often do not because of inadequate exemption mechanisms.
A number of steps should be taken to improve the quality of care delivered at these facilities:

- The management of each facility should be given autonomy in personnel and purchasing decisions.
- The system of personnel incentives should be tied to actual performance.
- User charges should be competitive with those at other facilities.
- Subsidies should be set for the indigent populations in the four catchment areas based on socioeconomic characteristics.
- The system of exemption from payment should be clearly outlined and not left to the sole discretion of social workers.
- More effort should be made to attract insured patients, particularly workers.
1.0 INTRODUCTION

The Cost Recovery for Health Project (CRHP) is to develop and test model cost-recovery systems in five Ministry of Health (MOH) facilities. These facilities are expected to be able to market their services so that they will recover a substantial part of their costs. They are to be able to offer services to people too poor to be able to pay for them as a result of a combination of continued, but perhaps reduced, government subsidies and some cross-subsidization from those able and willing to pay for their services. To market the services of the facilities to those able to pay will require an improvement in the quality of the services offered.

The purpose of this analysis is to provide a profile of each of the communities in the catchment areas of the five facilities (15 May Hospital/Cairo Governorate, El Kantara Gharb Hospital/Ismailia Governorate, Kafr El Dawar Polyclinic/El Bahira Governorate, and Shark El Medina Hospital/Alexandria Governorate, and Embaba Hospital/Giza Governorate), that are to be included as CRHP pilot facilities. In addition, information is provided about the services offered by each facility and about other facilities in the area of each which may compete for patients.

2.0 METHODS AND DATA SOURCES

The data on which this analysis is based were collected from various sources. The data on the socioeconomic background of the population of the catchment area of each of the facilities were collected from the 1986 Egypt Arab Republic population census reports, through interviews conducted in September 1992 with governorate personnel, and community members. In February and March 1992 the CRHP, with the assistance of the Health Financing and Sustainability (HFS) Project and Integrated Development Consultants (IDC), collected detailed information about the community around Embaba Hospital, including competing health service providers.

Information on the background and patients' utilization of each of the currently operating health facilities was obtained from reports prepared by the staff of the CRHP. These reports were based on data provided by the management of each facility to CRHP. This information was supplemented by interviews with the management and personnel of each facility (except in the case of Shark El Medina Hospital) as well as by reviewing some of the records of these facilities. The information on the facilities, communities, and competitors is reported in the section called BRIEF ON EACH HOSPITAL AND CATCHMENT AREA.

Information on the determinants of individuals choice of particular health facility was collected through informal interviews with selected groups of patients who patronize these facilities, community member, and with health providers. The section called GENERAL OBSERVATIONS covers comments and conclusions about consumer behavior.

The final section, CONCLUSIONS AND RECOMMENDATIONS, summarizes the findings from this analysis and recommends steps to be taken in converting the cost-recovery facilities.

3.0 BRIEF ON EACH HOSPITAL AND CATCHMENT AREA

This section provides information on the catchment areas of the five CRHP pilot facilities. The section is divided into five subsections. Each subsection is devoted to the discussion of the community within the catchment area of the facility, a brief on the facility, and a brief on potential competitor public and private sector health facilities in each catchment area.

3.1 EMBABA HOSPITAL (Giza Governorate)

3.1.1 The Community of Giza

Embaba Hospital’s community is located a 10-minute car ride from downtown Cairo. It is a densely populated urban area. There is a wide variation in types of employment and in levels of household income. The population includes both long-time residents and recent arrivals.

The population of the catchment area around Embaba Hospital is estimated to be around 860,000. The survey conducted by the CRHP Directorate\(^2\) provides rich and detailed information about the beneficiary population in the Embaba catchment. Summary information from the survey is provided here.

The distribution of employment by household heads is shown below:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muwazzafs</td>
<td>18 percent</td>
</tr>
<tr>
<td>Professionals</td>
<td>18 percent</td>
</tr>
<tr>
<td>Skilled workers</td>
<td>30 percent</td>
</tr>
<tr>
<td>Unskilled workers</td>
<td>21 percent</td>
</tr>
<tr>
<td>Agriculture</td>
<td>&lt;1 percent</td>
</tr>
<tr>
<td>Shopowner/merchant</td>
<td>7 percent</td>
</tr>
<tr>
<td>Other</td>
<td>5 percent</td>
</tr>
</tbody>
</table>

The survey found that the highest three quintiles of households in terms of the distribution of reported expenditures, reported annual expenditures of more than US$ 1,440. This is regarded as enough to be able to pay for hospital services, if aided by social financing systems. All of the households headed by muwazzafs and professionals and most of those headed by skilled workers and shop-owners or merchants are expected to be able to pay for hospitalization insurance, as well. Thus, it should be expected that the majority of the population served by Embaba could pay cost-recovery charges.

3.1.2 Embaba Hospital

Embaba Hospital is a general hospital which provides both inpatient and outpatient services. It has 355 beds and employs 322 doctors. The hospital performs about 500 deliveries and sees 12,000 outpatients per month and has a bed-occupancy rate of about 60 percent.

The outpatient clinic charges lower fees from 8:00 to 11:00 AM (LE 0.60\(^3\) in February-March 1992) than in the 11:00 to 12:00 AM period (LE 1.00).

3.1.3 Other Health Service Facilities in Embaba

The CRHP survey identified a large number of competitors for Embaba for both inpatient and outpatient services. Households identified 131 alternate inpatient providers they had used and 403 alternate outpatient providers. The survey also revealed that Embaba is the most important provider of both types of services, with 16 percent of inpatient admissions and 6 percent of outpatient visits. Agouza Hospital is the second most important source of inpatient care in the community, with 7 percent of admissions. A private voluntary organization (PVO)\(^4\) is the second most important provider of outpatient services, with 2.4 percent of visits. The large number of competitors for meeting the health needs of the Embaba community is indicated by the share of admissions and visits accounted for by the ten most-frequently mentioned hospitals other than Embaba, 18 and 11 percent.

The following are the numbers of beds in the most-frequently mentioned competitor hospitals to Embaba:

Public hospitals:
- Tahrir General  168 beds
- Boulaq General  275 beds
- Galaa Maternity  450 beds
- Agouza  533 beds

Private hospitals:
- Hospital A  25 beds
- Hospital B  22 beds
- PVO A  70 beds
- PVO B  6 beds

\(^3\) US$ 1.00 = LE 3.31.

\(^4\) The survey results preserved the anonymity of private providers.
3.2 15 MAY HOSPITAL (Cairo Governorate)

3.2.1 The Communities of 15 May and El Tebeen

15 May town is located 50 kilometers south of Cairo City in Cairo Governorate. The town was developed during the last ten years. It consists of low-priced condominium-style buildings. Because of its relatively low-priced dwellings it attracted many residents from other parts of Cairo, as well as Egyptian emigrants who invested in property in the town. It is estimated that only 30 percent of the dwellings are currently occupied. This is mainly due to the fact that the town is still considered "far" by many people despite the existence of public transport (bus and metro) system that links the town with other parts of Cairo City.

The population of 15 May town is estimated to be around 50,000. Of the adult population of the town (people who are 15 years or older) 61 percent are economically active. The occupational distribution of the economically active adults is as follows⁶:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>34 percent</td>
</tr>
<tr>
<td>Clerks &amp; Administrators</td>
<td>20 percent</td>
</tr>
<tr>
<td>Traders</td>
<td>2 percent</td>
</tr>
<tr>
<td>Services Workers</td>
<td>3 percent</td>
</tr>
<tr>
<td>Workers (skilled and unskilled)</td>
<td>33 percent</td>
</tr>
<tr>
<td>Un-classified</td>
<td>8 percent</td>
</tr>
</tbody>
</table>

The relatively high proportion of professionals, clerical and administrative occupations, and workers among the town's adult population is due to its proximity to Cairo, the administrative center of the government, and to Helwan, the site of a major industrial complex.

The physical appearance of 15 May town conveys an image of prosperity and homogeneity in the standard of living of the population. However, as shown by the above data and information collected through interviews with community members, there are large variations in the standards of living among the town's population. The group of professionals represents the top of the economic and social ladder, followed by the group of high ranking administrators, and skilled workers. The group of petty traders, clerks, service workers, and unskilled workers represents the poorest segment of the community's population.

Adjacent to 15 May town is the community of El Tebeen. El Tebeen area is composed of four subsections (El Tebeen, El Giblia, El Tebeen Social Housing Units, Medinat El So1b, and Hekr El Tebeen). The total population of El Tebeen is estimated at 40,000-45,000 people. The majority of the population is poor.

The proximity of the area to Helwan industrial complex, coupled with the crowded housing conditions in the area, significantly affect environmental conditions in the area. Air pollution caused by factories' smoke emissions constitutes a major public health problem to the population of the area, particularly for children.

---

The occupational distribution of the economically active adult population of El Tebeen is as follows:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>14 percent</td>
</tr>
<tr>
<td>Clerks &amp; Administrators</td>
<td>6 percent</td>
</tr>
<tr>
<td>Traders</td>
<td>3 percent</td>
</tr>
<tr>
<td>Services Workers</td>
<td>6 percent</td>
</tr>
<tr>
<td>Farmers and Fishermen</td>
<td>3 percent</td>
</tr>
<tr>
<td>Workers (skilled and unskilled)</td>
<td>51 percent</td>
</tr>
<tr>
<td>Un classified</td>
<td>16 percent</td>
</tr>
</tbody>
</table>

There are 22 public-sector and 11 private-sector industrial establishments in the 15 May, El Tebeen, and Helwan areas. The public-sector establishments employ 241 to 26,586 employees per factory. The private-sector establishments employ between 28 to 817 employees per establishment. Steel, textile, car, and cement factories represent the major industrial activity in the area.

Based on the occupational profile of the economically active population and the general economic structure of the 15 May and El Tebeen communities, it is estimated that about 54 percent of the population are in the middle-income and above category and 46 percent are in the lower-income category.

3.2.2 15 May Hospital

15 May hospital was built in 1987. The hospital is a 174-bed (137 free and 37 pay) facility that was designed to provide general medical and surgical services to the community. Out-patient, in-patient, and emergency services are important components of the hospital's mission. Despite the fact that the hospital is relatively new, the building appears to be in need of extensive renovation.

The hospital offers medical services that include general surgery, internal medicine, OB/GYN, ENT, orthopedics, pediatrics, and urology. In addition, there are specialized services for burns and plastic surgery.

Among the out-patient services offered by the hospital, internal medicine, ENT, surgery, ophthalmology, orthopedics, and OB/GYN are the most popular.

The number of out-patient visits and admissions to the facility has been consistently declining over the past three years. Out-patient visits declined from 74,739 in 1989 to 60,701 in 1991. Admissions declined from 3,280 in 1989 to 2,979 in 1991.

The hospital charges a registration fee of LE 1.10 for consultation with a general practitioner, and LE 2.20 for consultation with a specialist. Charges were also levied on small operations (LE 3.00), dressings (LE 1.10), and for different types of diagnostic analyses.

The revenues raised from these charges (called the Maintenance Fund) amounted to LE 82,549 during 1990/91. This revenue represented 57 percent of the operating

---

budget during 1990/91. However, the revenue generated from the hospital charge declined to LE 81,147 during 1991/92. The decline in hospital’s revenue was due to the increase in the registration fee from LE 0.60 to LE 1.10. The increase in the fee led to a decline in patients visits to the facility.

The social worker at the hospital estimated that 5 percent of the patients who reported to the hospital are medically indigent. Those patients are mostly are mostly burn victims. Burns usually occur in poorer households which use kerosene for lighting and cooking.

3.2.3 Other Health Services Facilities in 15 May

15 May Hospital faces the following competitors in its catchment area:

Public Sector Hospitals:

- Helwan General 70 beds
- New Helwan General 150 beds
- El Tebeen 23 beds

Private Sector Hospital:

- Dar El Shefa 6 beds

Public Sector Polyclinics: 2

Private Sector Clinics:

- There are a number of private clinics in 15 May and El Tebeen areas. There is also a private clinic operated by a voluntary organization affiliated with a mosque in 15 May town.

3.3 EL KANTARA GHARB HOSPITAL

3.3.1 El Kantara Gharb and Its Surrounding Communities

El Kantara Gharb is a thriving small trading town that is located 28 kilometers north of Ismailia in Ismailia Governorate. Most of the trading activity in the town involves wholesale and retail trade of commodities bought from the free trade area of Port Saeed that are resold to merchants from other parts of Egypt.

The occupational distribution of the economically active adult population of the area reflects the importance of trade to the economy of the town?

<table>
<thead>
<tr>
<th>Professionals</th>
<th>9 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerks &amp; Administrators</td>
<td>8 percent</td>
</tr>
<tr>
<td>Traders</td>
<td>33 percent</td>
</tr>
<tr>
<td>Farmers and Fishermen</td>
<td>18 percent</td>
</tr>
</tbody>
</table>

---

Workers (skilled and unskilled) 15 percent  
Un-classified 16 percent 

El Kantara Garb is surrounded by a number of small villages that constitutes the catchment area for El Kantara Gharb hospital. These villages are El Kantara Shark, El Ryah, El Rowda, Abu Khalifa, and Kilo 17. The villages of Abu Swayer El Balad, Abu Swayer El Maharaa, and Wasfia, that are stated to be within the catchment area in fact closer to Ismailia town. It is unrealistic to consider them part of the catchment area of El Kantara Gharb. 

The population of El Kantara Gharb and its surrounding areas is estimated to be 88,000 persons. Farming represents the main economic activity for the villages' populations where 60 percent of the economically active adults are farmers, followed by workers (16 percent) and traders (6 percent). 

The major crops grown in the area are fruit (mangos), sorghum, sesame, groundnut, and hops. 

Among the population involved in farming activities almost 60 percent are sharecroppers and wage labor. The sharecropping arrangement is such that the owner of the land provides all the agricultural inputs in return for three-quarters of the output, while the sharecropper and his family provides all the labor requirements in exchange for a quarter of the output. The sharecropper usually uses his share of the output for his family's consumption needs. To generate cash for other food and non-food needs, the sharecropper cultivates small plots of groundnuts and sesame. The yield from the sale of these crops is estimated to amount to LE 1,000-1,200. The farm workers and sharecroppers represent the poorest segment of the population in this area. Almost two-thirds of the population is estimated to be in the low-income category (65 percent), while the remaining 35 percent are in the middle- and high-income category. 

3.3.2 El Kantara Gharb Hospital 

El Kantara Gharb hospital is a 218-bed secondary care facility servicing El Kantara Gharb, El Kantra Shark, Ismailia, rural areas between Ismailia and El Kantara Gharb, and the area of Sinia near Kantara. The hospital is yet to function. 

The hospital will provide general out-patient and in-patient care to adults, with significant levels of pediatric and obstetric care. 

3.3.3 Other Health Services Facilities in the El Kantara Area 

El Kantara Gharb Hospital faces the following competitors in its catchment area: 

Public Sector Hospitals: 

- El Kantara Shark Hospital (12 beds)  
- Ismailia General Hospital  
- Suez University Hospital (under construction)
Company Owned Hospitals:

- Suez Canal Hospital

Public Sector Health Units:

- El Kantara Gharb Health Unit
- El Ryah Health Unit
- Abu Khalifa Health Unit
- El Rowda Health Unit
- Kilo 17 Health Unit
- Suez University Family Health Centre (Abu Khalifa)

Private Sector Health Facilities:

- One private hospital in El Kantara Gharb (6 beds)
- Three private clinics in El Kantara Gharb
- Nine pharmacies in El Kantara district

All of the competitor health units provide out-patient care. All of the health units, with the exception of El Kantara Gharb Health Unit, are staffed by a physician, a nurse, and a lab technician. The physician of the health unit doubles as a pharmacist. El Kantara Gharb Health Unit is staffed by three physicians who also have private practices during the evening hours. There are an average of 15 patients per day for El Kantara Health Unit and an average of 40 patients per day for Abu Khalifa Health Unit.

The health units charge a registration fee of LE 0.50 between 8:00 AM and 2:00 PM. All lab analysis and prescriptions are provided free of charge. However, the unit physician stated that the free prescription issued the patient does not necessarily match the patient's ailment. This practice is made to make the patient 'happy'. After 2.00 PM the consultation fee is LE 3.00. The evening patients have to pay for medication and diagnostic tests. Almost all the patients who patronize the health units are drawn from among the poorest segment of the population.

The Suez University Family Health Center provides out-patient treatment. It charges a fee of LE 3.00 for consultation with a general practitioner and LE 7.00 for consultation with a specialist. The Center also runs a family health insurance plan that is priced at LE 35 every three months. All family members are eligible for treatment with no additional charge and for as many visits as necessary. Currently there are 275 families enrolled in the plan. The number of enrolled families is declining, however, because some families preferred to pay for each visit instead of paying a lump-sum amount that they might not get to use.

---

9 N.B., it is well recognized that outpatient visits often are not "insurable" events, since charges for them are relatively low and the need for them fairly regular. By contrast, charges for hospitalizations often are high and the need for them highly variable, making hospitalization quite "insurable".
The private hospital charges a fee of LE 3.50 per visit. The patient pays for medicines and diagnostic tests. The private clinics charge LE 5.00 per visit.

The major health problems in the area are schistosomiasis, skin diseases, and malnutrition.

Many patients from El Kantara Gharb and its surrounding villages travel to Ismailia town for consultation with public and private sector health providers. This is because of the perceived superior quality of health services in Ismailia compared to those offered in the El Kantara area.

3.4 KAFR EL DAWAR POLYCLINIC (El Bahira Governorate)

3.4.1 The Community of Kafr El Dawar

Kafr El Dawar is located 22 kilometers west of Alexandria City. The estimated population of the area is 625,000. It is mostly rural — 62 percent of the population lives in rural areas.

The economy of the area is dominated by agricultural and industrial activities. There are 12 large industrial establishments (mostly textile factories) and 46 other light industrial establishments. The largest single employer in the area is the Misr Fine Textile Factory which employs around 35,000 workers. The occupational distribution of the economically active population of the area is as follows:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>7 percent</td>
</tr>
<tr>
<td>Clerks &amp; Administrators</td>
<td>5 percent</td>
</tr>
<tr>
<td>Traders</td>
<td>2 percent</td>
</tr>
<tr>
<td>Services Workers</td>
<td>4 percent</td>
</tr>
<tr>
<td>Farmers and Fishermen</td>
<td>37 percent</td>
</tr>
<tr>
<td>Workers (skilled and unskilled)</td>
<td>35 percent</td>
</tr>
<tr>
<td>Un-classified</td>
<td>10 percent</td>
</tr>
</tbody>
</table>

Approximately 40 percent of the population is in the middle-income and above category, while 60 percent is in the low-income group.

3.4.2 Kafr El Dawar Polyclinic

The Kafr El Dawar polyclinic was constructed to be a part of a general hospital. The construction of the polyclinic was completed by 1979. The rest of the hospital has yet to be finished. The polyclinic provides out-patient services in the areas of internal medicine, dentistry, dermatology, orthopedics, pediatrics, ENT, ophthalmology, gynecology, general surgery, and urology. The facility is generally well organized and clean and the staff appear to be well motivated.

The polyclinic attracts patients from Kafr El Dawar as well as from other surrounding areas. Patients come from villages as far as 20 kilometers from Kafr

---

*CAPMAS, Census of Population of Egypt Arab Republic: Cairo Governorate, Cairo, 1990.*
El Dawar. The main attraction is that most services, particularly diagnostic tests, are available in the facility. This reduces both the money and time the patient has to spend to have the required tests performed and to consult with the physician.

The polyclinic provides services in two sessions. The morning session (8:00 AM-11:00 AM) and the evening session (12:00 PM-3:00 PM). The fee charged to patients of the morning session is LE 1.00. The evening session patients are charged a fee of LE 1.50. In addition to the registration fee, patients pay for all surgical operations, diagnostic tests, and medication. The fee for minor surgical operations is LE 10.00, it is LE 1.00 for large dressings and LE 0.50 for small dressings. The diagnostic-test charges have been raised steadily to reach a level of LE 4.00 for routine tests and LE 9.00 per X-ray.

The increase in charges for diagnostic tests has led to a decline in the use of these services from an estimated daily level of 150 tests to 30 tests. This decline may be attributed to a decline in unnecessary tests. However, part of the decline may be because some patients elect to go without the tests if they cannot afford to pay, especially if the treating physician does not insist on performing the test.

The director of the polyclinic, however, can exempt indigent patients from paying registration and diagnostic-test fees, based on the recommendation of the polyclinic’s social workers. According to the polyclinic’s records only 89 patients declared their inability to pay for treatment during 1991. Most of these patients were housewives, children, or retired and elderly people.

### 3.4.3 Other Health Service Facilities in Kafr El Dawar Area

Kafr El Dawar Polyclinic faces the following competitors in its catchment area:

**Public Sector Hospitals**

- Kafr El Dawar District Hospital. This is an old hospital that provides overlapping services with that of Kafr El Dawar polyclinic. Some patients from the polyclinic are referred to the District Hospital for hospitalization. The hospital also refers patients to the polyclinic for diagnostic tests, mainly for X-rays.

**Health Insurance Organization (HIO):**

- El Mubara hospital (80 beds)

**Company Hospitals:**

- Misr Textile Company Hospital (50 beds). This hospital serves mainly the company employees. The company also operates an outpatient clinic that serves the company employees and their dependents.
Private Sector Hospitals, polyclinics, and clinics:

- 2 small private hospitals
- 2 polyclinics
- 200-300 private clinics

The consultation fees are between LE 2.00-3.00 for general practitioners, and LE 5.00-12.00 for specialists at the private clinics.

3.5 SHARK EL MEDINA HOSPITAL (Alexandria Governorate)

3.5.1 The Community of Shark El Medina

Shark El Medina hospital is located in El Montazah section of Alexandria City. The total population of El Montazah area is estimated at 610,091.

Like other parts of Alexandria, El Montazah is mostly a summer resort area. The area surrounding the hospital consist of high rise apartment buildings. However, most of the patients who patronize the hospital come from other parts of Alexandria and surrounding villages (e.g., Sidi Gabir and El Awaied).

Approximately 60 percent of the population can be considered middle-income, while 40 percent of the population can be classified as low-income.

3.5.2 Shark El Medina Hospital

The hospital has been operating as an outpatient facility since 1979. The rest of the hospital building is still under construction. The completed hospital is expected to accommodate 200 beds.

The hospital provides a variety of medical services. The most patronized services are pediatrics, dermatology, internal medicine, dentistry, and OB/GYN.

Services at the hospital are provided in two sessions. The morning session (8:00 AM-12:00 PM) and the evening session (12:00 PM-5:00 PM). The morning session patients are charged LE 1.00. Diagnostic tests and medicines are provided free of charge whenever available. During the afternoon session, patients are charged LE 1.50 for registration and are expected to pay for diagnostic tests and medication.

The patients of the hospital share a common feature with patients of other hospitals: they are overwhelmingly women and children. They are mostly drawn from households headed by a clerk, a worker, a small trader, or a farmer.

The facility is well patronized. During 1989 there were 496,387 out-patient visits to the hospital. The number of visits declined, however, during 1990 to 393,431 before it rebounded again to 437,260 visits during 1991. The number of patient visits during 1991 were still lower than during 1989, however.
3.5.3 Other Health Facilities in the Shark El Medina Area

Shark El Medina Hospital faces the following competitors in its catchment area:

Public Sector Hospitals:

- Abu Kir General 60 beds
- Maamoura Chest (specialized) 550 beds

Private Sector Hospitals:

- There are at least 16 private hospitals in the catchment area of the hospital. These private hospitals range in size from 4 beds (Siklam and Dr. Farouk Abrah) to 195 beds (Smouha Medical Center).

4.0 GENERAL OBSERVATIONS

The following represents general observations about consumer behavior with respect to the CRHP facilities, declining utilization of the facilities over the last three years, social financing possibilities, and how the poor are treated by the facilities.

4.1 CONSUMER BEHAVIOR

The patients who patronize the five facilities under consideration can be grouped into four categories:

- Those who are satisfied with the type of care they receive at the facility and continued to patronize the facility every time they experience a health problem.

- Those who had a bad experience with other public sector facilities and believe that they are receiving a better care in these facilities compared to other public sector facilities.

- Those who wanted to get as many 'free' medicines and diagnostic tests as possible and then move to a private practitioner to complete medical treatment. This type of patient aims at reducing the total cost of treatment by saving on the supplies they obtain from public sector facilities. However, this type of patient may actually end-up incurring more expenditures per episode because the private provider may insist on repeating the tests and prescribe a new set of medications.

- Those who would rather consult a private practitioner but cannot afford the charges. Public sector health care facilities represent the last resort for treatment for this group.
4.2 DECLINING UTILIZATION OF CRHP FACILITIES

As shown by Exhibit BA-1 three of the health facilities under consideration are experiencing a downward trend in patient visits.

Exhibit BA-1

Number of out-patient visits to 15 May Hospital, Kafr El Dawar Polyclinic, and Shark El Medina Hospital, 1989/91.

<table>
<thead>
<tr>
<th>Name of Facility</th>
<th>1989</th>
<th>1990</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 May Hospital</td>
<td>74,739</td>
<td>62,583</td>
<td>60,701</td>
</tr>
<tr>
<td>Kafr El Dawar Polyclinic</td>
<td>73,529</td>
<td>52,584</td>
<td>45,293</td>
</tr>
<tr>
<td>Shark El Medina Hospital</td>
<td>496,387</td>
<td>393,431</td>
<td>437,260</td>
</tr>
</tbody>
</table>


15 May Hospital also experienced a decline in the number of admissions, from 3,230 during 1989 to 2,979 during 1991. For Kafr El Dawar polyclinic the number of out-patient visits reached its peak during 1986 (142,591 patient visits). This was due to the fact that during the period 1986-88 Kafr El Dawar District Hospital was closed for repairs. When the hospital reopened its regular patrons stopped visiting the polyclinic.

The reasons behind the consistent decline in patient visits to the three facilities can be inferred from the interviews with patients and non-patients:

- Physicians do not spend enough time with the patient to perform the necessary diagnosis. This is particularly evident during the morning "free" session of these facilities. Since there are more patients during this session, the amount of time the physician can devote to each one is extremely limited. This leads some patients to opt for private care to receive the required attention from the doctor.

- Poor treatment by physicians and other hospital staff. Patients wait for long periods of time and are sent back and forth between offices before they start to receive the consultation and diagnostic tests.

- Physicians are not always available when needed. This is particularly true for 15 May Hospital. Patients often elect to go to an alternative facility after finding care providers absent.

- Unavailability of medicines, supplies, or diagnostic-test facilities. Many patients prefer paying a higher price for the convenience of obtaining these services in a single place rather
than to receive consultation in one place, have diagnostic tests performed in a second place, and fill the prescription in a third place. All of the three health facilities under consideration is experiencing a shortage in at least one of these services.

- Accessibility of the patient’s relatives and neighbors to the hospital, in the case of in-patient care. This is to reduce transport cost for the visiting relatives and neighbors to the hospital.

- Some patients are familiar with a particular provider based on previous encounter(s). They generally follow that provider to a public or private facility.

- The hours of operation of the facilities (during the evening session which targets the working members of the community) are inconvenient. People are still at work or just got off work when these facilities close (Kafr El Dawar closes at 3:00 PM, Shark El Medina at 5:00 PM). However, even if the facility is still open there may not be a physician to receive patients (15 May hospital).

4.3 SOCIAL FINANCING

Patients of all four facilities pay for medical treatment on an out-of-pocket basis. This is because none of these facilities, with the exception of 15 May hospital, has a contract with an HIO company. 15 May hospital has contracts with two companies (Nasr Car Factory, and The Oil Pipes Company). However, most of the employees of these two companies elect to go for treatment to other HIO facilities because of perceived better quality compared to care they would obtain from 15 May.

It is also important to note that the health insurance that is offered by public and private sector employers covers only the employees and not their dependents. Further, insurance plans offered by employers specify the health facility the employee may consult for treatment. Some workers' syndicates offer health insurance to workers' dependents, however, the facilities contracted by them often may not be near where the families live.

4.4 TREATMENT OF THE POOR

All the patients who patronize public sector medical facilities pay for care, even when they are supposedly receiving 'free' medical care. Hospitals records showed that only a small fraction of patients claimed to be indigent. The four currently operating hospitals have developed mechanisms to handle these cases. 15 May hospital requires blood donation in exchange for exemption from payment. However, if the patient does not comply he/she is referred to the social work department to determine the authenticity of the claim. Some who are not declared indigent cannot afford to pay for tests, and some people elect to go without the service if they cannot afford to pay for it. Sometimes, especially in case of accident victims or patients who need expensive operations, neighbors and relatives collect donations to meet the charges.
4.5 CONCLUSIONS AND RECOMMENDATIONS

The management of these health facilities should be given more autonomy in pharmaceutical and supplies procurement as they see fit to meet the requirements of quality performance of these facilities. Availability of supplies and medicines is a determining factor in attracting patients to a facility.

The system of incentives to personnel should be tied to performance. This is to ensure the effectiveness of incentives in increasing productivity and improving quality of care to patients.

The level of user charges should be competitive with other health providers. This is not to attract patients away from private providers, but to ensure quality treatment at relatively low prices to patients of both CRHP facilities and private sector facilities. The user charges should be implemented after the facility establishes itself as a "quality" health care facility. As the experience of 15 May Hospital shows, a small increase in registration fee (from LE 0.50 to LE 1.10) that is not accompanied by quality improvement resulted in a decline in total revenue.

Approximately 40-65 percent of the population in catchment areas if each CRHP facility may require some form of subsidy to be able to meet the charges of treatment in the CRHP facilities. The amount of subsidy needed may be determined by the general socio-economic characteristics of each of the catchment areas' population. The proportion of indigent patients may be higher than those who currently declare their inability to pay. Many now may not declare indigence because of ignorance of existence of administrative procedures for exception from charges in case of real need, or lack of assertiveness. It may also be the case that indigent patients simply resort to self-treatment or other cheaper providers. Further, some of the current patients, who are able to afford the current treatment charges, may not be able to afford the cost of treatment offered by these facilities in the future, particularly when the user charges are fully implemented. The groups that should be targeted for subsidy are households headed by unskilled workers, farm workers, small traders, and low-level clerical and administrative staff.

The system of exemption from payment for treatment should be clearly outlined and should not be left solely to the discretion of the social workers.

More efforts should be made to attract insured patients, particularly workers. This task might be easier after the anticipated improvement in quality of care following the implementation of cost recovery. The system of health insurance offered by employers should be expanded to include employees dependents.